INTERNATIONAL JOURNAL OF RESEARCH IN COMMERCE & MANAGEMENT



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

The American Economic Association's electronic hibliography. Econl it 11.5 A

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 5555 Cities in 190 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

CONTENTS

Sr. No.	TITLE & NAME OF THE AUTHOR (S)	Page No.
1.	BOARD COMPOSITION AND GENDER DIVERSITY: A COMPARATIVE BETWEEN AFRICAN, ASIAN AND OCEANIAN STOCK EXCHANGE FEDERATION BOARDROOMS LEE-ANNE JOHENNESSE & TE-KUANG CHOU	1
2.	EFFECT OF MODIFIED MONTMORILLONITE ON HEAVY METAL POLLUTION IN WATER NING MAO, YOU-LI FENG, CONG WANG & MENG-TAO WANG	6
3.	IMPACT OF GDP ON FDI INFLOWS IN INDIA: AN ANALYSIS OF LONG TERM EQUILIBRIUM ASSOCIATION NEENA BRAR, DR. B. S. BHATIA & DR. RUBEENA BAJWA	10
4.	FINANCIAL INCLUSION: IT'S IMPACT ON INDIAN BANKING INDUSTRY DR. MAMTA JAIN, SYEDA SHAZIYA NAZ & DR. T.N. MATHUR	15
5.	A SOCIO-ECONOMIC ANALYSIS OF MINING Vs. NON-MINING VILLAGES WITHIN SAME TALUKAS IN GOA SHEETAL D. ARONDEKAR & DR. I BHANU MURTHY	20
6.	MARKETING OF HANDICRAFTS BY POOMPUHAR SALES SHOWROOM, THANJAVUR A. MERLIN BENANSHIYA & B. KAYATHRI BAI	26
7.	REEXAMINING THE LINK BETWEEN SATISFACTION AND LOYALTY: A STUDY IN THE DYNAMIC INSURANCE BUSINESS ENVIRONMENT IN INDIA AJAY JOSE & DR. SARASWATHIAMMA K P	29
8.	REGIONAL DIFFERENCES IN GROWTH OF ENTREPRENEURSHIP AMONG SC/STs IN MSMEs: A STUDY WITH REFERENCE TO NORTHERN AND SOUTHERN REGIONS OF KERALA SHACHEENDRAN.V & DR. TOMY MATHEW	35
9.	EVALUATION OF HRD PRACTICES OF NBA ACCREDITED COLLEGES IN HYDERABAD DISTRICT RAKHEE MAIRAL RENAPURKAR & DR. SUDHAKAR B INGLE	39
10.	ASSESSMENT OF THE IMPACT OF DEMONETIZATION ON THE INDIAN ECONOMY DR. BINDYA KOHLI & MANSHA ANAND	44
11.	CONSUMER ETHNOCENTRISM: IT'S ANTECEDENTS AND CONSEQUENCES WITH REFERENCE TO "MILLENNIALS IN INDIA" NATASHA TAGEJA	48
12.	PAYMENTS BANKS IN INDIA: A STIMULUS TO FINANCIAL INCLUSION VINEY NARANG	53
13.	A THEORETICAL FRAMEWORK ON EFFICIENT MARKET THEORY DR. NEHA BANKOTI	57
14.	A STUDY ON MANAGEMENT OF NON PERFORMING ASSETS IN CO-OPERATIVE BANKS SPECIFICALLY IN KERALA SINU.M	60
15.	COMMUNICATION IMPACT ON JOB SATISFACTION AMONG AUTOMOBILE INDUSTRY IN CHENNAI REGION R. SUBASHREE & DR. A. SENTHILRAJAN	64
16.	A STUDY ON CONSUMERS AWARENESS AND BEHAVIOUR TOWARDS DURABLE GOODS IN ERODE DISTRICT K.NACHIMUTHU & DR. G. SAKTHIVEL	69
17.	A STUDY ON CUSTOMER PREFERENCE OF HEALTH DRINKS WITH SPECIAL REFERENCE TO "BOOST" IN MANNARGUDI TOWN J.ANNAMMAL & S.KARTHIGA	74
18.	WEAK FORM EFFICIENCY OF INDIAN STOCK MARKET: AN EMPIRICAL ANALYSIS DR. BABU JOSE & SURESH T.S	80
19.	FACTORS INFLUENCING THE CAPITAL STRUCTURE DECISIONS: A STUDY OF PHARMACEUTICAL INDUSTRY, INDIA SHIVA T & GIRISH S	86
20.	CONTRIBUTION OF NATIONALISED BANK IN THE ECONOMICAL DEVELOPMENT OF FARMER SAPNA CHOUDHARY	89
	DECLIEST FOR EFFURACK & DISCLAIMED	01

CHIEF PATRON

Prof. (Dr.) 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

ADVISOR

Prof. S. L. MAHANDRU

Principal (Retd.), Maharaja Agrasen College, Jagadhri

EDITOR.

Dr. R. K. SHARMA

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

CO-EDITOR

Dr. BHAVET

Faculty, Shree Ram Institute of Engineering & Technology, Urjani

<u>EDITORIAL ADVISORY BOARD</u>

Dr. CHRISTIAN EHIOBUCHE

Professor of Global Business/Management, Larry L Luing School of Business, Berkeley College, Woodland Park NJ 07424, USA

Dr. JOSÉ G. VARGAS-HERNÁNDEZ

Research Professor, University Center for Economic & Managerial Sciences, University of Guadalajara, Guadalajara, Mexico

Dr. M. N. SHARMA

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

Dr. TEGUH WIDODO

Dean, Faculty of Applied Science, Telkom University, Bandung Technoplex, Jl. Telekomunikasi, Terusan Buah Batu, Kabupaten Bandung, Indonesia

Dr. M. S. SENAM RAJU

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

Dr. KAUP MOHAMED

Dean & Managing Director, London American City College/ICBEST, United Arab Emirates

Dr. ANIL K. SAINI

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

Dr. ARAMIDE OLUFEMI KUNLE

Dean, Department of General Studies, The Polytechnic, Ibadan, Nigeria

Dr. S. TABASSUM SULTANA

Principal, Matrusri Institute of P.G. Studies, Hyderabad

Dr. MIKE AMUHAYA IRAVO

Principal, Jomo Kenyatta University of Agriculture and Technology (JKUAT), Westlands Campus, Nairobi-Kenya

Dr. NEPOMUCENO TIU

Chief Librarian & Professor, Lyceum of the Philippines University, Laguna, Philippines

Dr. ANA ŠTAMBUK

Head of Department in Statistics, Faculty of Economics, University of Rijeka, Rijeka, Croatia

Dr. FERIT ÖLCER

Head of Division of Management & Organization, Department of Business Administration, Faculty of Economics & Business Administration Sciences, Mustafa Kemal University, Tayfur Sökmen Campus, Antakya, Turkey

Dr. SANJIV MITTAL

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

Dr. SHIB SHANKAR ROY

Professor, Department of Marketing, University of Rajshahi, Rajshahi, Bangladesh

Dr. NAWAB ALI KHAN

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

Dr. SRINIVAS MADISHETTI

Professor, School of Business, Mzumbe University, Tanzania

Dr. ABHAY BANSAL

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

Dr. KEVIN LOW LOCK TENG

Associate Professor, Deputy Dean, Universiti Tunku Abdul Rahman, Kampar, Perak, Malaysia

Dr. OKAN VELI SAFAKLI

Associate Professor, European University of Lefke, Lefke, Cyprus

Dr. V. SELVAM

Associate Professor, SSL, VIT University, Vellore

Dr. BORIS MILOVIC

Associate Professor, Faculty of Sport, Union Nikola Tesla University, Belgrade, Serbia

Dr. N. SUNDARAM

Associate Professor, VIT University, Vellore

Dr. IQBAL THONSE HAWALDAR

Associate Professor, College of Business Administration, Kingdom University, Bahrain

Dr. MOHENDER KUMAR GUPTA

Associate Professor, Government College, Hodal

Dr. ALEXANDER MOSESOV

Associate Professor, Kazakh-British Technical University (KBTU), Almaty, Kazakhstan

RODRECK CHIRAU

Associate Professor, Botho University, Francistown, Botswana

Dr. PARDEEP AHLAWAT

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

Dr. DEEPANJANA VARSHNEY

Associate Professor, Department of Business Administration, King Abdulaziz University, Ministry of Higher Education, Jeddah, Saudi Arabia

BIEMBA MALITI

Associate Professor, The Copperbelt University, Main Campus, Jambo Drive, Riverside, Kitwe, Zambia **Dr. KIARASH JAHANPOUR**

Research Adviser, Farabi Institute of Higher Education, Mehrshahr, Karaj, Alborz Province, Iran

Dr. SAMBHAVNA

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

YU-BING WANG

Faculty, department of Marketing, Feng Chia University, Taichung, Taiwan

Dr. MELAKE TEWOLDE TECLEGHIORGIS

Faculty, College of Business & Economics, Department of Economics, Asmara, Eritrea

Dr. SHIVAKUMAR DEENE

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

Dr. THAMPOE MANAGALESWARAN

Faculty, Vavuniya Campus, University of Jaffna, Sri Lanka

Dr. JASVEEN KAUR

Faculty, University Business School, Guru Nanak Dev University, Amritsar

SURAJ GAUDEL

BBA Program Coordinator, LA GRANDEE International College, Simalchaur - 8, Pokhara, Nepal

Dr. RAJESH MODI

Faculty, Yanbu Industrial College, Kingdom of Saudi Arabia

FORMER TECHNICAL ADVISOR AMITA

FINANCIAL ADVISORS

DICKIN GOYAL

Advocate & Tax Adviser, Panchkula

NEENA

Investment Consultant, Chambaghat, Solan, Himachal Pradesh

<u>LEGAL ADVISORS</u>

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

Mobile Number (s) with country ISD code

Landline Number (s) with country ISD code

E-mail Address

Nationality

Alternate E-mail Address

Is WhatsApp or Viber active on your above noted Mobile Number (Yes/No)

1

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** or online by clicking the link **online submission** as given on our website (**FOR ONLINE SUBMISSION, CLICK HERE**).

GUIDELINES FOR SUBMISSION OF MANUSCRIPT

dointimes for submiss	TON OF MANUSCRIEF
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/C	omputer/IT/ Education/Psychology/Law/Math/other, please
<mark>specify</mark>)	
DEAR SIR/MADAM	
Please find my submission of manuscript titled '	
your journals.	
I hereby affirm that the contents of this manuscript are original. Fur fully or partly, nor it is under review for publication elsewhere.	thermore, it has neither been published anywhere in any language
I affirm that all the co-authors of this manuscript have seen the su their names as co-authors.	bmitted version of the manuscript and have agreed to inclusion of
Also, if my/our manuscript is accepted, I agree to comply with the discretion to publish our contribution in any of its journals.	formalities as given on the website of the journal. The Journal has
NAME OF CORRESPONDING AUTHOR	÷
Designation/Post*	:
Institution/College/University with full address & Pin Code	:
Residential address with Pin Code	:

* 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. <u>The qualification of author is not acceptable for the purpose</u>.

NOTES:

- a) The whole manuscript has to be in **ONE MS WORD FILE** only, which will start from the covering letter, inside the manuscript. <u>pdf.</u> 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. However, mentioning of JEL Code is not mandatory.
- 8. **MANUSCRIPT**: Manuscript must be in <u>BRITISH ENGLISH</u> prepared on a standard A4 size <u>PORTRAIT SETTING PAPER</u>. 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

BOARD COMPOSITION AND GENDER DIVERSITY: A COMPARATIVE BETWEEN AFRICAN, ASIAN AND OCEANIAN STOCK EXCHANGE FEDERATION BOARDROOMS

LEE-ANNE JOHENNESSE

RESEARCH SCHOLAR (Ph. D.)

DEPARTMENT OF BUSINESS AND MANAGEMENT

SOUTHERN TAIWAN UNIVERSITY OF SCIENCE & TECHNOLOGY

TAINAN CITY, TAIWAN

TE-KUANG CHOU

PROFESSOR

DEPARTMENT OF BUSINESS AND MANAGEMENT

SOUTHERN TAIWAN UNIVERSITY OF SCIENCE & TECHNOLOGY

TAINAN CITY, TAIWAN

ABSTRACT

Board composition and gender diversity are significantly regarded areas across continents and companies. Vast research seeks to analyze the gender gaps inherent in current organizational landscapes, as well as the associated impact on firm performance. The purpose of this report, is to compare board composition, specifically relating to board size and female board representation of the African Stock Exchange Federation (ASEA) and Asian & Oceanic Stock Exchange Federation (AOSEF) member companies. The methodology is Statistical analysis of annual report data (24 ASEA companies and 16 AOSEF companies). It is found that Almost 30% of African stock exchange federation companies have no female representation on their boards, and almost 80% have less than 2 women members. 25% of Asian and Oceanic stock exchange federation companies have 1 or less females, and almost 70% have 2 or less women on their boards. Furthermore, both federations exhibit large boards of up to 15 directors. Female contribution to boards of directors continues to be a topic of high regard, however limited studies emerge from African and Asian, and this paper contributes to the literature by being the first of its kind to analyze the composition characteristics of stock exchange federation member companies. An implication of this study may exist to create awareness for these association companies to collectively bridge the high gender gaps across their boardrooms, thus positively impacting on their performance, and consequently becoming more globally competitive. These federation companies exhibit substantially lower gender diversity levels relative to other market economies, where diversity is reaching more equitable levels, as reflected by firms across the USA and Europe. Furthermore, these findings could galvanize gender diversity policies for firms seeking to list on the exchanges of the countries.

KEYWORDS

Africa, Asia, board of directors, board size, gender diversity, federation companies.

INTRODUCTION

orporate governance is fundamentally linked to judgement, responsibility and accountability. A company's Board of Directors is inherently responsible and accountable not only for the effective monitor of management, but also acting as agents to shareholders, through the development of operational and strategic imperatives. This can be achieved through critical analysis and effective problem solving (Molz, 1985). Consequently, the board of directors forms a critical element of a robust corporate governance framework (Van Den Berghe and Levrau, A. 2004). A mechanism to enhance corporate governance, is through the diversification of the board. This can be defined as the varied combination of attributes, characteristics and expertise contributed by individual board members (van der Walt and Ingley 2003).

Board of director regulation includes the role of non-directors, board independence, board skill, experience and recently board diversification. Within this definition, a primary distinction is between surface-level diversity and deep-level diversity. Surface-level diversity is defined as differences in demographic characteristics among team members such characteristics, including age, sex, and race, are often reflected in physical features. Deep-level diversity refers to differences among team members' psychological characteristics, including personalities, values, and attitudes (Harrison et al. 1998).

The goal and purpose of diversity is to incorporate and cultivate a broad spectrum of demographic traits and attributes in the boardroom, thus the realization of achieving board diversity is through improved utilization of the talent pool (Milliken and Martins 1996). This has an impact on more effective decision making, where 'groupthink' can be minimized, and consequently better management and control of risks can be implemented through multiple-perspective contributions, problem solving and information sharing.

Diversification of board members can further be reflected through intangible factors such as life experience and personal attitude. These characteristics result in varied leadership abilities such as process thinking, emotionality, behaviors and propensity to manage risk. These factors all create opportunity in varying solution development, as well as comprehensive ability to fulfill responsibilities and duties (Galbreath, 2011).

Board diversity can also be confronted by challenges. Conflict and friction may arise when new members from differing backgrounds are stereotyped by existing members as 'atypical'. Sub groups may be formed, impacting on group cohesion and potential trust agendas, resulting in non-transparency, selective communication and information (Shultz, 2001).

Tokenism is another limitation that may affect board diversity, where minority members may feel undervalued, which debases their potential impact and influence to the board. Their unique and/or required skill they may contribute may be undervalued by themselves and their peers. Tokenism also result in value creating candidates not being included, in order to comply with regulation or board requirements (Anisman-Razin and Saguy, 2016).

The diversification of boards can be achieved by quotas, 'comply or explain' approaches or voluntary processes. The latter often favored by companies on a needs or skills requirement basis, as opposed to legislative undertaking (Terjesen and Sealy, 2016).

The best boards are composed of individuals with different skills, knowledge, information, power, and time to contribute. Given the diversity of expertise, information, and availability that is needed to understand and govern today's complex businesses, it is unrealistic to expect an individual director to be knowledgeable and informed about all phases of business. It is also impractical to expect individual directors to be available at all times and to influence all decisions. Thus, in staffing most boards, it is best to think of individuals contributing different pieces to the total picture that it takes to create an effective board.' (Lawler et al., 2002)

Glass ceilings, broken windows, golden skirts and critical mass, are metaphors that have become highly popularized, researched and argued amongst, government officials, academics and industry professionals (Bendl and Schmidt, A. 2010). Corporate governance through quotas and guidelines, coupled by feminist movements have actively sought to address challenges associated with gender equality, seeking solution to ultimately address the gender disparities reflected in corporate board composition (de Jonge, 2014).

Many countries across the globe are responding to exacerbating pressure from governments, investors and corporations to achieve gender equality within the boardroom Nielsen and Huse, M., 2010). Quotas and guidelines have been established in line with the sanction, and enforcement thereof, or through the 'comply or explain' principle. Legislation has resulted in significant impact and changes to board composition. (Siri Teriesen et al., 2013)

This study seeks to compare the Boards of the African Stock Exchange Association and The Asian – Oceanic Federation of stock Exchanges. The intention is to ascertain the level of Board Composition and gender equality of these companies, who ultimately regulate the trading capabilities of listed entities.

LITERATURE REVIEW

Critical mass theory is the foundational work of Rosabeth Kanter (1977), her seminal research suggests that "as the percentage of women in a group increases, the women can, first of all, form coalitions, support one another and affect the culture of the group." and it centers on gender diversity amongst groups. Groups are categorized according to composition:

Uniform groups include identical members. Skewed groups – one dominant type exerts control. Tilted groups are characterized according to skill and abilities. Balanced groups focus on different abilities and skills of all members.

Critical mass theory proposes that until a threshold or of women in a group is reached, female skill and ability will not be the central focus. A resultant significance is that there will be decreased performance by skewed groups relative to uniform, tilted and balanced groups. Tilted group (20–40 % women) will outperform uniform and skewed groups (Kanter 1977).

Research suggests that achieving critical mass from token board members to a consistent minority (30% female representation) contribution to board strategic requirements (Torchia, M., Calabrò, A., Huse, M., & Brogi, M. (2010). Building on this theory, a "magic number" of 3 was proposed, which suggest that achieving gender equality of at least 3 female board members will result in increased performance (Joecks et al., 2012)

Kanter's critical mass theory was applied to corporate boardrooms, where Konrad et al., (2008) proposed that a "critical mass of 3 or more women can cause a fundamental change to corporate boardrooms and enhance corporate governance"

These changes are reflected by collaborative research styles, increasing listening, social support, and effective problem solving, challenging controversial issues, asking tough questions and demand detailed and direct answers. New issues and perspectives can also be brought to the boardroom discussions through higher levels of female board appointments. (Konrad et al 2008)

Research empirically testing critical mass theory proposed that having at least 3 female board members may be beneficial in the contribution to board strategic tasks (Torchia et al., (2011). Boards with two or three females have a stronger impact on firm performance than boards with two or fewer.

Female board representation affects firms' performance, and the effect is more pronounced when the number of women appointed to the board increases (Nguyen et al., 2015).

GENDER DIVERSITY AND FIRM PERFORMANCE

Debate regarding gender equality to date, is not fully resolved. Research continues to explore and contribute to the business case for equality. However, the critical mass theory has provided some impetus for further gender equality analysis and considerations.

Numerous research studies have eluded to the critical importance of corporate diversity specifically relating to boardroom gender equality. Vast research has been undertaken to ascertain the relationship between board gender diversity and firm performance (Liu et al., 2014 and Reguera-Alvarado et al., 2015).

Consequently, contradicting views reflect positive, negative to no existing links. A possible explanation for this may be attributable to multi country analysis, varying time periods and alternative use of performance measures (Joecks, et al., 2012).

An important factor to take into consideration is that company performance is influenced by high complexity environments, relating to industry economics, market competitors, bargaining power of customers and suppliers, and the threat of substitute services or products. Consequently, strategic positioning is of fundamental importance to competiveness and sustainability.

Firms operating in complexity, and that have higher performance, are more likely to have more gender balanced boards. Furthermore, there are positive correlations between gender and performance across some industries (Teriesen and Singh. 2008).

Gender diversity and company performance are further aligned in the positive reaction to the announcement of female board appointments, this intimates that investors support the value that female directors contribute to the board. (Campbell and Minguez-Vera 2010). Shareholder trust is another board imperative, where board legitimacy is augmented by females (Elise Perrault 2014). A study conducted in Asia further supports that investors positively respond to Female Board appointment (Kang, et al., 2010).

METHODOLOGY

RESEARCH GOAL AND HYPOTHESIS

The intention of this study is to compare the differences in Board gender diversity between the African Securities Exchange (ASEA), Asian and Oceanian Stock Exchange Federation Member Boards (AOSEF)

H1: ASEA and AOSEF are similar in terms of board size and board gender diversity.

SAMPLE AND DATA COLLECTION

Data was collected through the annual reports of African, Asian and Oceanian Federated Stock Exchange Member Companies. These companies represent the member stock exchanges and not the trading, companies listed on these exchanges.

African Securities Exchange Association: 26 African Countries Stock Exchanges, excluding Cameroon - Dhouala and Bourse Régionale des Valeurs Mobilières SA (BRVM) Stock Exchange Board of Directors. Therefore, final total sample size is 24.

Asian and Oceanian Stock Exchanges Federation: 18 Asian Countries Stock Exchanges, excluding Shanghai and Shenzhen Stock Exchange Board of Directors. Therefore a total sample size of 16.

TABLE 1: ASEA AND AOSEF MEMBERS

African Securities Exchange Association	Asian and Oceanian Stock Exchanges Federation
Bolsa de Valores de Cabo Verde	Australian Securities Exchange
(Excluding) Bourse Régionale des Valeurs Mobilières SA (BRVM)	Bombay Stock Exchange
Botswana Stock Exchange	GreTai Securities Market
Bourse de Tunis	Hanoi Stock Exchange
Dar es Salaam Stock Exchange	Hochiminh Stock Exchange
(Excluding) Cameroon - Douala Stock Exchange	Hong Kong Exchange and Clearing
Ghana Stock Exchange	Indonesia Stock Exchange
Johannesburg Stock Exchange	Japan Exchange Group
Khartoum Stock Exchange	Korea Exchange
Libyan Stock Market	Bursa Malaysia
Lusaka Stock Exchange	Mongolian Stock Exchange
Malawi Stock Exchange	National Stock Exchange of India
Morocco Stock Exchange	Philippine Stock Exchange
Mozambique Stock Exchange	(excluding) Shanghai Stock Exchange
Nairobi Securities Exchange	(excluding) Shenzhen Stock Exchange
Rwanda Stock Exchange	Singapore Exchange
Seychelles Securities Exchange	Taiwan Stock Exchange
Sierra Leone Stock Exchange	The Stock Exchange of Thailand
Stock Exchange of Mauritius	
Swaziland Stock Exchange	
The Egyptian Exchange	
The Namibian Stock Exchange	
Nigeria OTC Securities Exchange	
The Nigerian Stock Exchange	
Uganda Securities Exchange	
Zimbabwe Stock Exchange	

RESULTS

ASEA: BOARD CHARACTERISTICS

TABLE 2

		Females	Total Board Size
Ν	Valid	24	24
	Missing	0	0
Me	ean	1.58	9.08
Minimum		0	4
Maximum		7	15

TABLE 3

Femal	les				
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	0	7	29.2	29.2	29.2
	1	7	29.2	29.2	58.3
	2	5	20.8	20.8	79.2
	3	2	8.3	8.3	87.5
	4	2	8.3	8.3	95.8
	7	1	4.2	4.2	100.0
	Total	24	100.0	100.0	

TABLE 4

Total	Total						
		Frequency	Percent	Valid Percent	Cumulative Percent		
Valid	4	2	8.3	8.3	8.3		
	6	3	12.5	12.5	20.8		
	7	2	8.3	8.3	29.2		
	8	4	16.7	16.7	45.8		
	9	2	8.3	8.3	54.2		
	10	3	12.5	12.5	66.7		
	11	3	12.5	12.5	79.2		
	12	2	8.3	8.3	87.5		
	13	2	8.3	8.3	95.8		
	15	1	4.2	4.2	100.0		
	Total	24	100.0	100.0			

AOSEF BOARD CHARACTERISTICS

TABLE 5

		Females	Total Board Size
Ν	Valid	16	16
	Missing	0	0
Me	ean	2.06	10.19
Minimum		0	5
Maximum		4	15

TARIF 6

Femal	Females						
		Frequency	Percent	Valid Percent	Cumulative Percent		
Valid	0	2	12.5	12.5	12.5		
	1	2	12.5	12.5	25.0		
	2	7	43.8	43.8	68.8		
	3	3	18.8	18.8	87.5		
	4	2	12.5	12.5	100.0		
	Total	16	100.0	100.0			

TABLE 7

Total	Total					
		Frequency	Percent	Valid Percent	Cumulative Percent	
Valid	5	1	6.3	6.3	6.3	
	7	3	18.8	18.8	25.0	
	8	1	6.3	6.3	31.3	
	9	2	12.5	12.5	43.8	
	10	1	6.3	6.3	50.0	
	11	3	18.8	18.8	68.8	
	12	1	6.3	6.3	75.0	
	13	2	12.5	12.5	87.5	
	15	2	12.5	12.5	100.0	
	Total	16	100.0	100.0		

The descriptive results reflect that ASEA and AOSEF Stock Exchange Companies have a minimum of 4 directors on their boards, furthermore, both of these federations have large board sizes of up to 15 members (Table 2 and Table 5)

With regard to female board representation, both ASEA and AOSEF have companies where there is no female representation, both of these groups have high levels, of low female board representation. ASEA has almost 30% of its boards with no female representation and AOSEF IS AT 12.5. Moreover, ASEA includes in its federation, boards where almost 80% of their boards have 2 or less female Directors. AOSEF has almost 70% of boards with 2 or less female Directors. Female board seats of 3 and higher, include 20.8% for ASEA, and 31% for AOSEF (Table 3, Table 4 and Table 6).

The t-test between ASEA and AOSEF suggests that ASEA and AOSEF are very similar in terms of board gender diversity and Board size. (Table 8 and Table 9).

TABLE 8: T-TEST FOR GENDER DIVERSITY

Group Statistics	Federation/Association	n	Mean	Std Dev.	Mean Diff	t	Sig. (2-tailed)
	African Securities Exchange Association	24	1.58	1.692	-0.48	982	.332
Gender Diversity	Asian and Oceanian Stock Exchanges Federation	16	2.06	1.181			

TABLE 9: T-TEST FOR BOARD SIZE

Group Statistics	Federation/Association	n	Mean	Std Dev.	Mean Diff	t	Sig. (2-tailed)
	African Securities Exchange Association	24	9.08	2.873	-1.11	-1.175	.247
Board Size	Asian and Oceanian Stock Exchanges Federation	16	10.19	2.971			

CONCLUSION AND RECOMMENDATIONS

Globalization has further impacted the need for board diversity in the response to navigating dynamic, complex environments, competitors, suppliers and customers. A more balanced board creates opportunity to respond to these challenges. A heterogeneous board can be an indicator to stakeholders, reflecting the inclusion of minorities, as well as the diversity reflected in the communities and environments in which the organization operates, engendering trust and reputational value.

Female contribution to boards continues to be a topic of high regard, however limited studies emerge from African and Asian contexts. Therefore, the primary objective for this paper is to explore the main differences between ASEA and AOSEF Stock Exchange Member companies. The results obtained in this study reflect that the majority of boards across these are limited and lacking in terms of female board appointments.

Toh and Leonardelli (2013) suggest that there are cultural and / or political constraints on the emergence of women leaders, and this may be applicable to ASEA and AOSEF companies. These following are recommendations which may create opportunities for companies whom are confronted by challenges relating to board gender inequalities.

- The application of Executive Coaching, and development programs for female employees to galvanize their competencies, capabilities and 'social capital' (business networks).
- 2. Safeguard the organizational recruitment processes, such that it is not dominated by shoulder-tapping (giving preferences to friends and acquaintances), which may further deepen male board homogeneity.
- 3. Ensure that discrimination and prejudice practices are not part of board recruitment processes
- 4. The creation of Work-life balance opportunities for women, such that they too can contribute in the workplace.

Taking these notions into regard, an opportunity exists for ASEA and OASEF to further improve its current board composition, by including the critical mass theory benefit of 30% (and more) board seats being female occupied. The opportunities for enhanced performance, competitiveness and reputation can be immensely increased. Furthermore, these boards serve as a reflection, and example of the associations, and these findings could galvanize gender diversity policies for firms currently trading on, or perhaps seeking to list on these federation exchanges.

REFERENCES

- 1. Anisman-Razin, M., & Saguy, T. (2016). Reactions to tokenism: The role of individual characteristics in shaping responses to token decisions. European Journal of Social Psychology, 46(6), 716–731.
- 2. Bendl, R., & Schmidt, A. (2010). From 'Glass Ceilings' to 'Firewalls' Different Metaphors for Describing Discrimination. Gender, Work & Organization, 17(5), 612–634.
- 3. Campbell, K., & Mínguez-Vera, A. (2008). Gender diversity in the boardroom and firm financial performance. Journal of Business Ethics, 83(3), 435–451.
- 4. de Jonge, A. (2014). The glass ceiling that refuses to break: Women directors on the boards of listed firms in China and India. Women's Studies International Forum, 47, 326-338.
- 5. Galbreath, J. (2011) 'Are there gender-related influences on corporate sustainability? A study of women on boards of directors', Journal of Management & Organization, 17(1).

- 6. Harrison, D. A., Price, K. H., & Bell, M. P. (1998). Beyond relational demography: Time and effects of surface- and deep-level diversity on work group cohesion. Academy of Management Journal, 41, 96–107.
- 7. Ingley, C., & van der Walt, N. (2005). Do board processes influence director and board performance? Statutory and performance implications. Corporate Governance: An International Review, 13(5), 632–653.
- 8. Joecks, J., Pull, K., & Vetter, K. (2012). Gender Diversity in the Boardroom and Firm Performance: What Exactly Constitutes a Critical Mass? J Bus Ethics, 118(1), 61-72.
- 9. Kang, E., Ding, D. K., & Charoenwong, C. (2010). Investor reaction to women directors. Journal of Business Research, 63(8), 888–894.
- 10. Kanter, R. (1977). Men and women of the corporation. New York: Basic Books.
- 11. Kanter, R. (1987). Men and Women of the Corporation Revisited: Interview with Rosabeth Moss Kanter. Human Resource Management, 26(2), 257-263.
- 12. Kanter, R., & Stein, B. (1979). Life in organizations. New York: Basic Books.
- 13. Kanter, R., Darrow, M., & Maccoby, M. (1979). Perspectives on leadership. [Washington, DC]: American Association for Higher Education.
- 14. Konrad, A., Kramer, V., & Erkut, S. (2008). Critical Mass: Organizational Dynamics, 37(2), 145-164.
- 15. Lawler, E. E., Finegold, D. L., Benson, G. S., & Conger, J. A. (2002). Corporate Boards: Keys to Effectiveness. Organizational Dynamics, 30(4), 310–324
- 16. Liu, Y., Wei, Z., & Xie, F. (2014). Do women directors improve firm performance in China? Journal of Corporate Finance, 28, 169-184.
- 17. Milliken F, Martins L. 1996. Searching for common threads: understanding the multiple effects of diversity in organizational groups. Academy of Management Review 21: 402-433
- 18. Molz, R. (1985). Board of Directors. Journal of Business Strategy, 5(4), 86–93.
- 19. Nguyen, T., Locke, S., & Reddy, K. (2015). Does boardroom gender diversity matter? Evidence from a transitional economy. International Review of Economics & Finance, 37, 184-202.
- 20. Nielsen, S., & Huse, M. (2010). Women directors' contribution to board decision-making and strategic involvement: The role of equality perception. European Management Review, 7(1), 16-29.
- 21. Reguera-Alvarado, N., de Fuentes, P., & Laffarga, J. (2015). Does Board Gender Diversity Influence Financial Performance? Evidence from Spain. J Bus Ethics.
- 22. Şener, İ., & Karaye, A. B. (2014). Board composition and gender diversity: Comparison of Turkish and Nigerian listed companies. Procedia Social and Behavioral Sciences, 150, 1002–1011.
- 23. Shultz, S. (2001). The board book: making your corporate board a strategic force in your company's success. New York: Amacom, American Management Assoc.
- 24. Smith, N., Smith, V., & Verner, M. (2006). Do women in top management affect firm performance? A panel study of 2,500 Danish firms. Int J Productivity & Perf Mgmt, 55(7), 569-593.
- 25. Terjesen, S., & Sealy, R. (2016). Board Gender Quotas: Exploring Ethical Tensions from A Multi-Theoretical Perspective. Business Ethics Quarterly, 26(01), 23–65.
- 26. Terjesen, S., & Singh, V. (2008). Female Presence on Corporate Boards: A Multi-Country Study of Environmental Context. J Bus Ethics, 83(1), 55-63.
- 27. Toh, S., & Leonardelli, G. (2013). Cultural Constraints on the Emergence of Women Leaders. Organizational Dynamics, 42(3), 191-197.
- 28. Torchia, M., Calabrò, A., & Huse, M. (2011). Women Directors on Corporate Boards: From Tokenism to Critical Mass. Journal of Business Ethics, 102(2), 299–317
- 29. Torchia, M., Calabrò, A., Huse, M., & Brogi, M. (2010). Critical Mass Theory and Women Directors' Contribution to Board Strategic Tasks. Corporate Board: role, duties and composition, 6(3).
- 30. Van Den Berghe L.A.A, & Levrau, A. (2004). Evaluating Boards of Directors: what constitutes a good corporate board? Corporate Governance, 12(4), 461–478.
- 31. Van der Walt, N. and Ingley, C. (2003), Board Dynamics and the Influence of Professional Background, Gender and Ethnic Diversity of Directors. Corporate Governance: An International Review, 11: 218–234.

EFFECT OF MODIFIED MONTMORILLONITE ON HEAVY METAL POLLUTION IN WATER

NING MAO
STUDENT
SCHOOL OF RESOURCES AND ENVIRONMENT
HENAN POLYTECHNIC UNIVERSITY
JIAOZUO, CHINA

YOU-LI FENG
PROFESSOR
SCHOOL OF RESOURCES AND ENVIRONMENT
HENAN POLYTECHNIC UNIVERSITY
JIAOZUO, CHINA

CONG WANG
STUDENT
SCHOOL OF RESOURCES AND ENVIRONMENT
HENAN POLYTECHNIC UNIVERSITY
JIAOZUO, CHINA

MENG-TAO WANG
STUDENT
SCHOOL OF RESOURCES AND ENVIRONMENT
HENAN POLYTECHNIC UNIVERSITY
JIAOZUO, CHINA

ABSTRACT

With the rapid development of the global economy and society, the problem of heavy metal pollution in water body is increasing, which has seriously endangered the ecological environment and human health. In this paper, taking montmorillonite as one of new mineral materials as the research object, two methods of strong acid activation and organic activation were introduced. Research shows that the adsorption temperature is $30\,^{\circ}$ C, the adsorption time is 8h, and in the 1% hydrochloric acid activated montmorillonite, the adsorption capacity is the best; The molecular weight of 50000 chitosan with montmorillonite in accordance with the quality ratio of 0.25:1 mixture preparation of adsorbent effect is best, and use the adsorbent adsorption $Fe^{3\,+}$, $Cu^{2\,+}$ and $Zn^{2\,+}$ three kinds of heavy metal ions adsorption balance basically the same, finally got the best adsorbent.

KEYWORDS

 $modified\ montmorillonite,\ heavy\ metal\ pollution\ in\ water.$

1. INTRODUCTION

1.1 HEAVY METAL POLLUTION STATUS QUO

n recent years, the problem of heavy metal pollution in water is very outstanding, rivers and lakes library sediment pollution rate is as high as 80.1%^[1]. According to the best of the Yangtze river basin water quality survey, its offshore waters have been varying degrees of pollution, elements including Pb, Cd, Cu, Hg pollution is serious, and Cd, Pb, Hg, the potential activity of big, are more likely to participate in the environment of various kinds of substance reacts^[2]. Total mercury in the urban river surface water II class standard of water has more than 35.11%, total cadmium over surface water II class water standard of 18.46%, 25% of the total lead exceeded^[3]. The pollution of heavy metal ions in water environment is also very serious in foreign countries, due to the discharge and mining of smelting waste, the surface water of Poland is not up to the three grade^[4]. These pollutants has brought serious harm to aquatic animals, aquatic plants and human health, if not dealt with, the ultimate threat to human beings themselves. As all know the pollution of heavy metal ions in water environment has become a worldwide problem of environmental pollution.

1.2 THE SOURCE OF HEAVY METAL IN WATER

In general, the main sources of pollution for the mining, waste rock, concentrating mill, nonferrous metal smelting processing plants, electroplating plants, steel plants and electrolysis, pesticides, pharmaceuticals, paints and pigments and other industries. See Table 1 for details.

1.3 TREATMENT TECHNOLOGY OF HEAVY METALS IN WATER

After gradually understanding the dangers of heavy metal pollution, A lot of researches have been done on the harm of heavy metal pollution, many methods are proposed, including: chemical method, ion exchange method, sulfuration method, electrolysis method, activated carbon method and adsorption method^[5]. Adsorption method is a promising method for the treatment of heavy metal ions containing waste water, the use of adsorbent materials, such as clay minerals, activated carbon, molecular sieves, it can't only reduce the concentration of heavy metal ions in water, but also be beneficial to the recovery of precious metals, especially suitable for treating low concentration waste water. Montmorillonite has been widely used because of its good adsorption effect.

TABLE 1. THE COURCES	OF HEAVY METALS AND	LONETVOEC IN MATER

Toxic element	The main ion type in water	Source Natural mineral Anthropogenic sources			
Toxic element	The main ion type in water				
As	AsO ₂ -, Arsenite AsO ₄ ³⁻ , Arsenate	FeAsS, As ₂ S ₃ AsO ₂ , FeAs ₂ As ₄ S ₄	Removing agent Chemical fertilizer Wash the prepreg		
Cd	Cd ²⁺	CdCO₃, CdS, CdO	Electroplating, Paint, Photography		
Cr	Cr^{3+} CrO_4^{2-} , Chromate $Cr_2O_7^{2-}$, Dichromic acid	FeCr ₂ O ₄	Metal plating Industrial pigments Ink		
Pb	Pb ²⁺	PbO, PbS, PbCO ₃ , PbSO ₄	Cars, Ship sfuel, Ammunition		
Нg	Hg2 ²⁺ , Mercuric Aminochloride Hg ²⁺ , mercury	Hg ₂ Cl ₂ , HgS, HgO	Production of chlorine, Electronic industry, Pesticides, fungicides		
Se	SeO ₃ ²⁻ , Selenite SeO ₄ ²⁻ , Selenate	Trace elements in sulfide minerals	Copper smelting		
Ag	Ag ⁺	Ag ₂ O, AgCl, AgS, AgF	Electroplating, Food, Beverage processing		

2. THE SUMMARY OF MONTMORILLONITE

2.1 INTRODUCTION OF MONTMORILLONITE

Montmorillonite is a kind of clay mineral, which is composed of nanometer particles, also known as microcrystalline kaolinite. The crystal structure of montmorillonite is between two layers of silicon oxygen tetrahedron with a layer of alumina or eight aspect of -OH, between the silicon oxygen tetrahedron and alumina octahedral oxygen atoms connected by shared tetrahedral top and the eight sides relative[6]. The specific structure is shown in Figure 1. Because of this kind of clay mineral is abundant in nature and so, it has always been valued.

● O ● OH ● A1 O Si

FIGURE 1: STRUCTURE DIAGRAM OF MONTMORILLONITE

The binding force between the layers of montmorillonite is small and it is easy to break into fine particles, water molecules or polar molecules can easily enter between the two crystal layers. Therefore montmorillonite has good expansibility, dispersibility and suspension property in the solvent[7]. In addition, montmorillonite has strong commutativity, water absorption and adsorption, which is an important structural characteristics of montmorillonite.

2.2 MODIFICATION OF MONTMORILLONITE

(1) ACID ACTIVATION MODIFICATION

The purpose of acid activation is to change the physical and chemical properties of montmorillonite and improve its performance. The activity, adsorption property and specific surface area of montmorillonite modified by acid are better than that of original montmorillonite. Acid activated montmorillonite are selected strong acid, such as hydrochloric acid, sulfuric acid, phosphoric acid or mixed acid. Weak acid such as acetic acid, carbonic acid and so on, because of its weak acidity, the number of ionization is less, the effect of montmorillonite treatment is not as good as strong acid, so the general acid activation of the selection of strong acid. But the concentration of acid should be controlled in a certain range, otherwise it will affect the effect of activation. The essence of acid activated montmorillonite is that after the acid treatment, many loose pores are produced. This is due to the strong acid dissolved in the montmorillonite layer between the oxide impurities, make it into soluble metal salt. However, the smaller radius of H⁺ and the larger radius of Ca²⁺, Mg²⁺, K⁺ and other cations exchange, resulting in the filling of the pores appear^[8]. At the same time, the acid can dissolve the Al³⁺, Fe³⁺ and Mg²⁺ ions in the oxygen octahedron, and the results also make channel increases, specific surface area increased. After the activation of the acid and the permeation of the ions, the montmorillonite structure is loosened and its specific surface area increases and the number of adsorption sites increases. As a result, the adsorption capacity of montmorillonite.

(2) ORGANIC MODIFICATION

There are many inorganic cations and silicon tetrahedron and aluminum oxide octahedral also exist in some metal cations in the montmorillonite layer and the surface, so that montmorillonite has a hydrophilic oleophobic nature, so in organic matter is not easy to disperse and easy to adsorb organic material[9]. In order to make montmorillonite can be very good with organic matter and organic adsorption of organic matter, the need for organic modification of montmorillonite. The organic modification of montmorillonite is mainly through the exchange of organic cations with inorganic cations in montmorillonite to alter the cationic form of montmorillonite surface and interlayer, to make it from hydrophilic to lipophilic, and organic matter can be very good solution. At the same time, due to the exchange of the long chain organic cations between inorganic cations in montmorillonite layer, the interlayer spacing of montmorillonite increases, the larger organic molecules can be allowed to enter into the interlayer to be exchanged for adsorption, so that it can absorb the type of material greatly increased[10]. Through the organic modification, the interface polarity of the montmorillonite surface and the chemical microenvironment of the surface and the interlayer are improved, and the affinity of the montmorillonite and the organic phase is increased, it can be used to interact with larger organic molecules and polar groups, which will not cause the destruction of the main structure of montmorillonite.

(3) INORGANIC MODIFICATION

The principle of inorganic modified montmorillonite is exchanged by the addition of one or more inorganic metal hydrated cations and interchangeable cations between montmorillonite layers, balancing its own negative charge. At the same time due to the role of the inter-layer solvent can be peeled off into thinner single crystal, through the dry roasting treatment, the formation of pillared association structure, opening montmorillonite layer to form a larger space. Thereby changing the dispersion state and performance of montmorillonite in water, improving the adsorption capacity and ion exchange capacity[11].

(4) INORGANIC-ORGANIC COMPOSITE MODIFICATION

This method is the combination of two methods of inorganic modification and organic modification. This method is the first montmorillonite inorganic modification, and then inorganic modified montmorillonite for organic modification, this can reduce the amount of organic modifier, from the cost-saving point of view is a good way.

3. ADSORPTION OF HEAVY METALS BY MODIFIED MONTMORILLONITE

3.1 ACID ACTIVATION MODIFICATION

As the adsorption capacity of montmorillonite is weak, it is necessary to modify for improve its adsorption performance. A series of different acid activated montmorillonites were prepared by the addition of different concentrations of hydrochloric acid to montmorillonite as an adsorbent to adsorb Co^{2+} particles as an example. The adsorption capacity of Co^{2+} with different concentration of hydrochloric acid activated montmorillonite is shown in Figure 2.

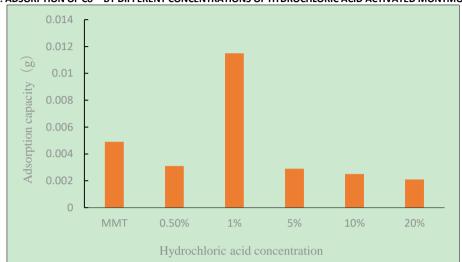


FIGURE 2: ADSORPTION OF Co²⁺ BY DIFFERENT CONCENTRATIONS OF HYDROCHLORIC ACID ACTIVATED MONTMORILLONITE

It can be seen from the figure that the adsorption capacity of 1% hydrochloric acid activated montmorillonite is better than other concentrations of hydrochloric acid activated montmorillonite and acidified montmorillonite. The reason for this is that when 1% hydrochloric acid is immersed in montmorillonite, the soluble metal oxide and other acid-soluble impurities present in the montmorillonite are first dissolved, and the oxide is converted into a soluble ion. At the same time, H+ can interact with the montmorillonite layer to exchange exchangeable cations. Al³+, Mg²+, Fe²+ ions in the aluminum oxide octahedron and silicon tetrahedron can also be replaced by smaller H+. So that the structure of montmorillonite become more lax, the channel increased, increased than the surface of trifoliate orange. At the same time, since H+ replaces the polyvalent metal ions, the montmorillonite structural units are negatively charged, and the negatively charged ions can be adsorbed negatively charged negatively charged. Therefore, 1% hydrochloric acid activated montmorillonite has a strong adsorption capacity. In addition, the adsorption temperature and adsorption time also have a certain impact on the adsorption capacity of the modified montmorillonite. The results showed that the adsorption capacity was the best when the adsorption temperature was 30 °C and the adsorption time was 8h, and the adsorption capacity of 1% hydrochloric acid was the highest. The adsorbent was used as raw material to adsorb Fe³+, Ni²+, Cu²+ and Zn²+ respectively, and the maximum adsorption capacity was Fe³+>Ni²+>Cu²+>Zn²+respectively.

3.2 ORGANIC MODIFICATION

Montmorillonite and molecular weight of 4 million, 2×10^5 , 5×10^4 and 3000 of the four chitosan as raw materials, a series of chitosan-montmorillonite composite adsorbents were prepared by using chitosan sol and montmorillonite at a mass ratio of 0.25: 1. As a raw material to the trace of the solution and the constant heavy metal particles adsorption.

(1) TRACE ADSORPTION AND CONSTANT ADSORPTION

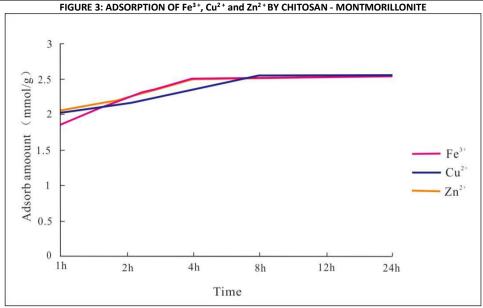
Trace adsorption refers to the initial concentration of heavy metal ions in the solution of the order of 10^{-6} (g / ml) or even lower concentration. Select heavy metal Co^{2} as the object of adsorption.

At $0.5\,h$ and $1\,h$, the initial concentration of Co^{2+} was $8.25\times10^{-6}\,g$ / ml, comparison of adsorption rates of chitosan, montmorillonite and chitosan montmorillonite composite. The adsorption capacity of four kinds of molecular weight chitosan on montmorillonite was larger than that of non loaded montmorillonite and chitosan. The maximum adsorption rates of chitosan - montmorillonite complex were 90.99% and 97.34% at $0.5\,h$ and $1\,h$. The reason is that chitosan itself can be combined with heavy metal ions by chelation to remove heavy metal ions, when chitosan is supported on montmorillonite, a functional group on the chitosan molecule replaces an adsorption site on montmorillonite, and more than one chitosan molecule has a chelating effect with heavy metal ions, and there are multiple groups exist, coupled with the adsorption capacity of montmorillonite itself, the two superimposed, so that the adsorption rate greatly improved^[13].

Constant adsorption refers to the initial concentration of heavy metal ions in the solution to a concentration of 10⁻⁴ (g / ml) or more, which is greater than the cation exchange capacity of the adsorbent

(2) ADSORPTION OF CHITOSAN - MONTMORILLONITE FOR DIFFERENT METAL PARTICLES

The composite prepared by chitosan with molecular weight of 50 thousand and montmorillonite at a mass ratio of 0.25: 1 was used as the adsorbent. Respectively, adsorption of Fe^{3+} , Cu^{2+} and Zn^{2+} three kinds of heavy metal ions, and resulting adsorption curve is shown in Figure 3.



Through the comparison of the adsorption curve, it can be seen that the adsorption curves of the three ions are almost coincident, so the equilibrium adsorption capacity is basically the same, indicating that the maximum adsorption capacity of chitosan montmorillonite composite to different heavy metal ions was the same. And the adsorption curves of Fe³⁺ and Zn²⁺ are basically coincident between 2-24h, indicating that the adsorption behavior of the two adsorbents is basically the same. Therefore, the adsorption capacity of Fe³⁺, Cu²⁺ and Zn²⁺ adsorbents adsorbed by chitosan with molecular weight of 50 thousand and montmorillonite at a mass ratio of 0.25: 1 was basically the same, and the adsorption effect was the best.

4. CONCLUSION

Montmorillonite has a layered structure, a large specific surface area, exchangeable inter-layer cation and other properties to eliminate heavy metal ions in the pollution has a significant advantage. But due to the presence of impurities such as oxides, resulting in reduced adsorption capacity. In order to improve the adsorption properties of montmorillonite, it needs to be modified. In this paper, two methods of strong acid activation and organic activation were used to modify montmorillonite, main research contents and conclusions:(1) The adsorption capacity was the best when the adsorption temperature was 30 °C and the adsorption time was 8h, and the adsorption capacity of 1% hydrochloric acid was the highest. The adsorbent was used as raw material to adsorb Fe³+, Ni²+, Cu²+ and Zn²+ respectively, and the maximum adsorption capacity was Fe³+>Ni²+>Cu²+>Zn²+. (2) The molecular weight of 50000 chitosan with montmorillonite in accordance with the quality ratio of 0.25:1 mixture preparation of adsorbent effect is best, and use the adsorbent adsorption Fe³+, Cu²+ and Zn²+ three kinds of heavy metal ions adsorption balance basically the same, finally got the best adsorbent.

REFERENCES

- 1. Huaidong Zhuo, Wengen Liao, etc. Review and Prospect of Progress in Water Environment Research[J]. Beijing: Journal of China Institute of Water Resources and Hydropower Research. Vol. 6, No.3, 2008, pp.215-223.
- 2. State Environmental Protection Administration. 2000 Report on the State of Environment in China[J]. Environmental Protection. 2001, pp.3-9.
- 3. Xiaofang Guo. The Research on Applying Modified Clay Minerals to Treat Heavy Metal Waste Water[D]. Changsha: Hunan Agriculture University. 2007.
- 4. Yixun Yang. Study on the Effect of the Cr(VI)-Containing Waste-water by Using Modified Bentonite[D]. Xi'an: Chang'an University. 2008.
- 5. Xin Li. Study on Adsorption Properties of Heavy Metal Ions in Wast-water by Bentonite[D]. University of South China. 2010.
- 6. Hongliang Sun. Study on Simultaneous Sorption of Organic Pollutants and Heavy Metals to Bentonite Modified by Surfactant and Organic Ligands from Water[D]. Zheijang University. 2010.
- 7. Gangwei Liu. Study on Preparation of Granulated Composite Materials of Montmorillonite for Heavy Metal Wast-water[D]. Wuhan University of Technology. 2009.
- 8. Lanlan Yin. Modification and Application of Montmorillonite[D]. Shandong: Qingdao University. 2005.
- 9. M.Monier, D.M. Ayad, etc. Adsorption of Cu(II), Co(II), and Ni(II) ions by modified magnetic chitosan chelating resin[J]. Journal of Hazardous Materials.Vol.177,2010,pp.926-970.
- 10. Xiang Rong, Liu Quanxiao, Zhang Yong, etc. Modifying Methods of Montmorillonites and Their Applications [J]. Beijing: Journal of Beijing Institute of Graphic Communication. Vol. 15, No. 4, 2007, pp. 30-33.
- 11. Meifang Hou, Caixia Ma, Weide Zhang, etc. Removal of rhodmine B using iron-pillared bentonite[J]. Journal Hazardous Materials. Vol. 186, 2011, pp. 1118-1123.
- 12. Haoqing Tang. Study on Adsorption of Heavy Metal Ions in Modified Montmorillonite[D]. Shanxi Normal University. 2012.
- 13. Xu Jiao, Yuvaraja Gutha, Weijiang Zhang, etc. Application of Chitosan/Poly(Vinyl Alcohol)/CuO(CS/PVA/CuO)Beads as an Adsorbent Material for the Removal of Pb(II) from Aqueous Environment[J]. Colloids and Surfaces B:Biointerfaces. Vol. 149, 2017, pp. 184-195.

IMPACT OF GDP ON FDI INFLOWS IN INDIA: AN ANALYSIS OF LONG TERM EQUILIBRIUM ASSOCIATION

NEENA BRAR
RESEARCH SCHOLAR
SRI GURU GRANTH SAHIB WORLD UNIVERSITY
FATEHGARH SAHIB

DR. B. S. BHATIA

DEAN (RESEARCH)

SRI GURU GRANTH SAHIB WORLD UNIVERSITY

FATEHGARH SAHIB

DR. RUBEENA BAJWA
ASST. PROFESSOR
SRI GURU GRANTH SAHIB WORLD UNIVERSITY
FATEHGARH SAHIB

ABSTRACT

Foreign Direct Investment (FDI) was considered to be the lifeblood of economic development especially for the developing and underdeveloped countries. FDI is imperative for the economy as it is a momentum of growth, strengthens domestic capital, generates employment, augments productivity, and fosters exports through up gradation of technology and many more. Thus, there are innumerable determinants which lead to increase or decrease in the flows of FDI in any economy. In the light of this background, the current study aimed to determine long term equilibrium association between GDP and FDI inflows in India for the period of 1991 to 2014. GDP was taken as an exogenous variable while FDI was considered as an endogenous variable. To examine whether long term equilibrium association between the two variables existed or not, Engel-Granger Approach (or Bi-variate Approach) of Co-Integration test was used and further, Co-Integration Vector was built. The empirical results of co-integration revealed that there existed a long-run equilibrium association between FDI Inflows and GDP followed by Error Correction Mechanism.

KEYWORDS

FDI, GDP, co integration, equilibrium, economic growth.

JEL CLASSIFICATION

C22, F43, F21.

1. INTRODUCTION

Importance to developing countries in their efforts to catch up and develop their economic integration. Foreign direct investment (FDI) was of immense importance to developing countries in their efforts to catch up and develop their economies (Hooda, 2011). Foreign direct investment (FDI) refers to the net inflows of investment to acquire a lasting management interest (10% or more) in an enterprise operating in an economy apart from that of the investors (Laura, 2014). Foreign direct investment was the sum of equity capital, reinvestment of earnings and other long or short term capital as shown within the balance of payments. It usually involved participation in management, joint venture, transfer of technology and expertise (Malankar, 2013). FDI was distinguished from portfolio investment as the former provided an opportunity to the investor to have an effective voice in management and was more stable form of investment whereas the latter was concerned with maximising short term returns and a passive investment in the securities of another country such as stocks and bonds (Thuhid. N et.al.2016).

There were two main strategies of investing in a foreign country (Lahiri, 2009):-Greenfield Investment (an investment made to set up new facilities in the host Country), Mergers and Acquisitions (a foreign investor takes over an existing Company). A foreign company could as well choose a form of International Joint Venture (Gentvilaite, 2010).

There was plethora of factors that stimulate FDI inflows in a particular country. FDI usually proved conducive to the host country. Various benefits which India could avail through FDI Inflows were use of advanced technology, expertise, better infrastructural developments, widened product basket, raising standard of living, uplifting the brand quality, fostering competitiveness, improved foreign relations, boosting exports, and providing India with a global platform (Rahul S, 2011).

2.1 REVIEW OF LITERATURE

The section briefly discusses some of the important studies of relationship of macro-economic variables with FDI inflows in India.

Kamath, G.B. (2009) showed that exchange rate and economic growth seemed to show least impact on FDI inflows in Indian economy and human capital and openness of the economy played a significant role in attracting inflows. The study made use of linear regression analysis using Ordinary Least Square equation. Gentvilaite, R. (2010) using Panel Regression discovered that among various determinants chosen for the study, significant determinants were private sector, openness (share of trade in GDP), R&D expenditures and infrastructure.

Ranjan, V. & Agrawal, G. (2011) using Random Effect Model in the study revealed that market size, trade openness, labor cost, infrastructure facilities and macroeconomic stability and growth prospects were potential determinants of FDI inflow in BRIC whereas gross capital formation and labor force were insignificant, although macroeconomic stability and growth prospects had very little impact.

Meerza, S.I.A. (2012) investigated empirically the causal relationship between trade, foreign direct investment (FDI) and economic growth of Bangladesh for the period of 1973 to 2008. To analyze the same, Johansen Co integration test and Granger causality test was used. The co-integration analysis suggested that there was a long run equilibrium relationship among the variables. The results of Granger causality test identified that there was a causal relationship among the mentioned variables. The results of the study revealed that economic growth of Bangladesh led both FDI and export growth and it was observed in the study there was a unidirectional causal relationship between FDI and export with direction from export to FDI.

Gaikwad, P.S. (2013) analyzed the effects flow of foreign direct investment (FDI) arising from the implementation of liberalization polices on the gross domestic production (GDP) growth in Indian economy using a Cobb—Douglas production function and ARDL method during the period 1990-2008. The empirical results of the study showed that in the long run there was a long-run relationship among the growth of gross domestic production and its major determinants of the labor

force, the real capital and the real foreign direct investment. The findings of the study indicated that foreign direct investment had positive effect but small significant on Gross Domestic Production, while the labor force and capital had the most effect on gross domestic production.

Nosheen, M. (2013) investigated the impact of foreign direct investment on Growth (GDP) for Pakistan. It studied a long run relationship between the foreign direct investment and gross domestic investment in Pakistan. By using co integration analysis, the study demonstrated that long run relationship was observed between the two variables. The GDP was taken as dependent variable while FDI was considered as an independent variable. The data used for the study purpose was from 1980 to 2010. The results of the study showed that there was a long term relationship between GDP and FDI.

Khan, G.S.& Mitra, P. (2014) endeavored to explore the short run and long run causal relationship between selected macroeconomic variables (GDP, Exchange Rate & Inflation Rate) and FDI inflows in Indian context by applying Co integration test followed by Vector autoregression (restricted/unrestricted) model and Granger causality test. Further, with the help of simple regression model, the exponential growth rate of FDI inflows in India was calculated. Eventually, Chow test was employed to detect the presence of significant structural break in the data series of FDI inflows. The results of the study revealed that long run equilibrium was there among the concerned variables. The Granger-causality test results concluded that exchange rate and GDP statistically significantly influenced FDI, whereas, inflation rate was insignificant variable to predict FDI inflows. Further, the growth analysis result claimed that the total FDI inflows grew exponentially at a rate of 23% per annum. However, the results of Chow test exhibited that 1991-92 was a statistically significant structural break year in the context of FDI inflows in India.

Olatunji, L. and Shahid, M.S. (2015) established an empirical relationship between foreign direct investment (FDI) and economic growth in Nigeria under the framework of co integration analysis over the period 1970-2010. The econometric evidence from the Engle Granger co integration tests suggested that there was no long-run relationship between FDI and economic growth in Nigeria. However, there was a short-run dynamic relationship between FDI and economic growth. And finally the study concluded that for the achievement of a long-run relationship between FDI and economic growth in Nigeria, there was a need to improve the business environment, with the provision of necessary infrastructure and political stability in the country.

RESEARCH GAPS: In the previous study (Gaikwad, 2013) GDP was considered as a dependent variable and FDI as an Independent variable, and study made an attempt to examine the impact of FDI on GDP in the context of an Indian Economy. However, the current study considered FDI as a dependent variable and GDP as an Independent variable in order to analyse the long run equilibrium association between them.

3. OBJECTIVE OF THE STUDY

The objective of the study was to ascertain long-term equilibrium association between GDP and FDI inflows for the period 1991-2014 in the context of Indian Economy.

4. HYPOTHESIS

To achieve the objective of the study, following hypothesis was incorporated.

Ho: There was no long-term equilibrium association between GDP and FDI Inflows during the post-liberalized period.

5. RESEARCH METHODOLOGY

In order to accomplish the objective of the study, following research methodology was incorporated.

5.1 SCOPE OF THE STUDY: The variables considered for the study were FDI Inflows and GDP for the period 1991 to 2014. FDI was taken as a dependent variable and GDP was taken as an independent variable. Relative figures of both the variables were taken in the study.

5.2 VARIABLES FOR THE PURPOSE OF THE STUDY

Macroeconomic variables of an economy were considered as the driving factors of FDI inflows to a country.

Foreign Direct Investment: FDI is considered as a long term commitment to host country and significantly contributes to gross fixed capital formation in developing countries. FDI has numerous advantages over other types of capital flows, for instance, its' greater stability and the fact that it does not create obligations for the host country. It not only provides financial resources for investment in a host country but also augments domestic saving efforts. FDI serves as an engine of economic growth, assists technological development, enhances foreign exchange reserves, and improves management and organizational competencies.

GDP: Gross domestic product is a monetary measure of the value of all final goods and services produced within a country's borders during a specific time period either quarterly or yearly. GDP includes all private and public consumption, government outlays, investments and exports minus imports that occur within a defined territory. In simple words, GDP is a broad measurement of a nation's overall economic activity.

5.2 PERIOD OF THE STUDY: The empirical analysis employed annual data on GDP and FDI for India for the period of 1991-2014. For the purposes of the study, secondary data was used. The secondary sources included World Development Indicators published by World Bank, FDI Fact Sheet published by Department of Industrial Policy & Promotion, Ministry of Finance, Handbook of Statistics on Indian Economy, Reserve Bank of India Bulletin, Economic Survey, International Financial statistics yearbook etc.

5.3 ANALYTICAL TOOLS: Before applying Co-Integration test on time series data, the properties of the time series data regarding stationarity of the data were checked using Augmented Dickey-Fuller (ADF) Unit root test and to apply Co-Integration test, it was seen whether the data was integrated at same order or not. The variables considered in the model were exhibited in natural Logarithms. Thereafter, in order to examine the impact of GDP on FDI Inflows in the context of Indian Economy, the below mentioned linear regression equation for the model was used:

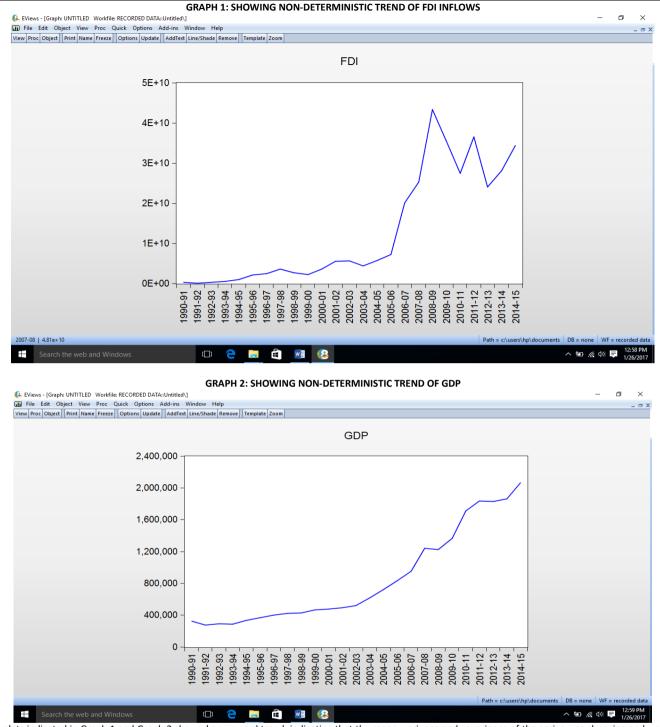
 $FDI_t = \alpha_t + \beta_t GDP_t + U_t$

Where; FDI and GDP represented Foreign Direct Investment and Gross Domestic Product at a particular time respectively while U_t represented the "noise" or error term; α_t and β_t represented the slope and coefficient of regression. The coefficient of regression, β_t indicated elasticities, i.e., how a unit change in the independent variable (GDP) affected the dependent variable (FDI). The error term was incorporated in the equation to cater for numerous other factors that may influence FDI (Egbo, 2011)

Further, to examine Co-integration between GDP and FDI inflows, Engel-Granger Approach of Co-Integration was used. If both the variables were co integrated, there existed a long-run relationship between them. On the other hand, if the variables were not co integrated, there was no long-run relationship between the selected variables. It was only after Co-Integration between the two variables that Error Correction Mechanism was built.

6. DATA ANALYSIS & INTERPRETATION

The application of Augmented Dickey Fuller Unit root test on the current data revealed that data was Stationary at order of Integration one due to the existence of Difference Stationary Process and thus, facilitated the application of Co-Integration Test. With the help of Graph, it was observed that the data had a Difference Stationary process (Phillips, et al 1988).



The plots indicated in Graph 1 and Graph 2 showed an upward trend, indicating that the mean, variance and covariance of the series was changing and was not static over a period of time. Thus, it suggested that the series had a unit-root and was non-stationary in nature. (Shumway, at el, 2011)

Ho: - There was a Unit Root in the series. (Data was Non-Stationary)

Ha:-There was no Unit Root in the series. (Data was Stationary)

Thus, for applying Co-Integration test, the basic assumption was that data ought to be stationary at same order of Integration. Thus, the first step was that through Augmented Dickey Fuller Unit Root test, the stationarity of the data was checked and both the variables came out to be stationary at order of Integration 1 with Drift model.

FDI~I (1)

GDP~I (1)

TABLE 1: RESULTS OF ADF TEST WITH INTERCEPT/DRIFT ONLY

Variables	Level	Ist Difference	Null Hypothesis	Results
FDI	-1.3471021	-6.082140	Rejected at Ist Difference	Variable is stationary at 1st difference
	(0.5905)***	(.0000)***		
GDP	951901	-5.265267	Rejected at Ist Difference	Variable is stationary at 1st difference
	(.9945)***	(.0003)***		

Source: Author's own work

Notes: denote significant at 5% using t-stat approach

Null Hypothesis (H_0): Selected variable was not stationary

Alternative Hypothesis (H1): Selected variable was stationary

The second step before testing Co-Integration between the variables was to estimate the equation using OLS Regression which displayed the following results:

TABLE 2: OLS REGRESSI	ON
-----------------------	----

Dependent Variable:						
Method: Least Squar						
Date: 02/04/17 Time	: 15:58					
Sample: 1 25						
Included observation	ıs: 25					
Variable	Coefficient	Std. Error	t-Statistic	Prob.		
С	-5.40E+09	2.25E+09	-2.397744	0.0250		
GDP	21406.94	2173.302	9.849961	0.0000		
R-squared	0.808368	Mean dep	endent var	1.29E+10		
Adjusted R-squared	0.800036	S.D. deper	ndent var	1.43E+10		
S.E. of regression	6.39E+09	Akaike inf	o criterion	48.06957		
Sum squared resid	9.38E+20	Schwarz criterion		48.16708		
Log likelihood	-598.8696	Hannan-Quinn criter.		48.09661		
F-statistic	97.02174	Durbin-Watson stat		1.108456		
Prob(F-statistic)	0.000000					

$$\begin{bmatrix} C & -5.40E + 09 \\ GDP & 21406.94 \end{bmatrix}$$

Thus, Co-Integration Vector was: -

The third step in Engle Granger procedure was to examine the stationarity of residuals at model none through ADF Unit root test. Engel-Granger Approach of Co-Integration exhibited that residuals were stationary at none model (i.e. without drift and intercept), thereby, disclosing the existence of long run equilibrium association between GDP and FDI inflows in an Indian Economy.

TABLE 3: RESULTS OF CO-INTEGRATION TESTS

Variables	Level	Results				
Resi_fdi(-1)	-2.941994 (.0051)**	Stationary at none thus, co-integration exists between the variables.				

^{**}significance at.05 level

Residuals in Matrix Form was presented as

 $I_t = FDI_t - \alpha - \beta GDP_t$

= $[1 - \dot{\alpha} - \dot{\beta}]$ FDI t 1 GDP t

Thus, Co-Integration existed between GDP and FDI inflows during the post-liberalized period. As per Engel Granger Approach (1987), if the variables were co integrated, then there must prevail vector error correction mechanism (VECM) (Egbo, 2011). Thus, Error Correction Term was calculated as:

TABLE 4

Variable	Coefficient	Std. Error	t-Statistic	Prob.
С	9.82E+08	1.54E+09	0.638525	0.5300
D(GDP)	7331.330	13525.02	0.542057	0.5935
RESI FDI(-1)	-0.483837	0.205248	-2.357327	0.0282

The above table made it clear that Growth in GDP would positively contribute growth in FDI. Furthermore, 1% increase in the growth of GDP would accelerate FDI by 7331 percent. It was an instantaneous impact. In addition to, the result further revealed that GDP was found to be complementary with FDI. As residual was negative and statistically significant (as p value was less than.05), thus the model was considered to be stable. Thus, the error correction term was -0.483837 rapid speed of convergence to equilibrium (Gaikwad, 2013).

7. CONCLUSIONS

The study used annual time series data of GDP and FDI Inflows in India from 1991 to 2014 in order to identify long run equilibrium association between them. Before applying any statistical test on the data series, it was important to find out the order of integration of the variables by applying ADF test of stationarity. However, it was found that GDP and FDI were integrated of order one [I (1)]. The stationarity of the data was checked using Augmented Dickey Fuller test. The empirical analysis suggested that the variables had a difference stationary process. The study employed Engel Granger Approach of Co-Integration to determine long run equilibrium association between the variables which proved that there existed Co-integration between the variables. Further, error correction term was built which stated that growth in GDP was found to be complementary with growth in FDI. The error correction coefficient, estimated at -0.48 was statistically significant and suggested a rapid speed of convergence to equilibrium (Gaikwad, 2013).

8. SCOPE FOR FURTHER RESEARCH

As the present study considers only two variables i.e. FDI Inflows and GDP in the context of an Indian Economy, a developing economy, however, in future, research could be done by considering the same variables of other developed or developing countries and thus, Panel Co-Integration test could be applied. Furthermore, by selecting more variables in the study of various countries for longer time period, Auto Regressive Distributed Lag Model could also be applied in order to determine Long run equilibrium between the considered variables.

REFERENCES

- 1. Amaya G, C.A. and Rowland, P. (2004), "Determinants of Investment Flows into Emerging Markets," Working Paper, Banco de la Republica, Number 131. www.banrep.gov.co/docum/ftp/borra313.pdf.
- Egbo, O.P. (2011), "Bivariate Casuality Analysis on the Impact of FDI Inflows and Economic Growth in Nigeria," Journal of Internet Banking and Commerce, ISSN: 1204-5357.
- 3. Gaikwad, P.S. (2013), "The Impact of Foreign Direct Investment (FDI) On Gross Domestic Product (GDP) in Indian Economy," Information Management and Business Review, Vol. 5, No. 8, pp. 411-416.
- 4. Gentvilaitė, R. (2010), "Determinants of FDI and its Motives in Central and Eastern European Countries," Research Paper, Lund University.
- 5. Gudaro, A.M., Chhapra, I.U. and Sheikh, S.A. (2012), "Impact of Foreign Direct Investment on Economic Growth: A Case Study of Pakistan," Journal of management and Social Sciences, Vol. 8, No.2, pp. 22-30.
- 6. Hooda, S. (2011), "A Study of Fdi and Indian Economy," Thesis, Department Of Humanities and Social Sciences, National Institute of Technology, Kurukshetra.
- 7. Hussain, F. and Kimuli, C.K. (2012), "Determinants of Foreign Direct Investment Flows to Developing Countries," SBP Research Bulletin, Volume 8, Number 1.
- 8. Kamath, G. B. (2009), "Macroeconomic Determinants of Foreign Direct Investment in India," Bauddhik, Vol. 1, No. 2.

- 9. Khan, G.S. and Mitra, P. (2014), "A Casual Linkage between FDI Inflows with select Macroeconomic Variables in India- An Econometric Analysis," IOSR Journal of Economics and Finance, Volume. 5, Issue 5, pp.124-133.
- 10. Laura A. (2014). "Foreign Direct Investment: Effects. Complementarities, and Promotion." Harvard Business School Working Paper, No. 15-006.
- 11. Malankar, S. (2013), "Indian Economy and Foreign Direct Investment," International Monthly Refereed Journal of Research in Management & Technology, Volume.2, pp.28-32.
- 12. Md. Thuhid Noor, Shahjahan Ali, Khandaker Jahangir Alam, Md. Shafiul Islam (2016), "Significance of Foreign Direct Investment on Economic Growth in Bangladesh," International Journal of Scientific & Engineering Research, Vol. 7, No. 9, pp.495-503.
- 13. Meerza, S.I.A. (2012), "Casual Links between trade, foreign direct investment and economic growth for Bangladesh," Working paper, Department of Economics, South Dakota State University.
- 14. Nayak, D. and Choudhury, R.N. (2014), "A selective review of foreign direct investment theories," ARTNeT Working Paper Series No. 143, Bangkok, ESCAP. Available at www. artnetontrade. org.
- 15. Nosheen, M. (2013), "Impact of Foreign Direct Investment on Gross Domestic Product," World Applied Sciences Journal, Vol.24, No. 10, pp. 1358-1361.
- 16. Olatunji, L. and Shahid, M.S. (2015), "FDI and Economic Growth in Nigeria: A Co-Integration Analysis," Business and Economic Research, Vol.5, No. 1.
- 17. Phillips, C.B.P. and Perron, P. (1988), "Testing for a unit root in time series regression," Biometrika, Vol.75, No.2, pp.335-346
- 18. Ranjan, V. (2011), "FDI Inflow Determinants in BRIC countries: A Panel Data Analysis," International Business Research Vol. 4, No. 4.
- 19. Sahgal R. (2011), "Foreign Direct Investment Decision-Making Processes: The Case of Swiss Companies in India", Dissertation, University of St. Gallen.
- 20. Sahni, P. (2012), "Trends and Determinants of Foreign Direct Investment in India: An Empirical Investigation," IJMT Volume 2, Issue 8.

WFRSITFS

- 21. http://Business.Mapsofindia.Com/Fdi-India/States/Haryana-Economy.Html
- 22. http://Commerce.Nic.In/Eidb/Default.Asp
- 23. http://data.worldbank.org/indicator/FI.RES.TOTL.CD?page=5
- 24. http://Fdiindia.ln/Guidelines-For-Consideration-Of-Fdi-Proposals-By-Fipb.Php
- 25. http://Finmin.Nic.In/Reports/Ind_Ext_Debt.Asp
- 26. http://Theindiaeconomyreview.org/...ticle.aspx?aid=106&mid=5
- 27. http://www.Economywatch.Com/Database/Foreigninvestment2.Html
- 28. http://www.tradingeconomics.Com/India/Industrial-Production
- 29. Press Release, Government of India Department of Industrial Policy and Promotion, Ministry Of Commerce And Industry Consolidated FDI Policy (April 5, 2013).
- 30. www.finance.duke.edu
- 31. www.indexmundi.com
- 32. www.Planningcommission.Nic.In/Aboutus/Committee/Strgrp/Stgp Fdi.Pdf
- 33. www.Rbidocs.Rbi.Org.In/Rdocs/Notification/Pdfs/15mcnfdi270613.Pdf
- 34. www.theglobaleconomy.com

BOOKS

35. Shumway, Robert H. and Stoffer, David S., (2011), "Time Series Analysis and its applications." Springer, New York.

FINANCIAL INCLUSION: IT'S IMPACT ON INDIAN BANKING INDUSTRY

DR. MAMTA JAIN
ASSOCIATE PROFESSOR
DEPARTMENT OF ECONOMIC ADMINISTRATION & FINANCIAL MANAGEMENT
UNIVERSITY OF RAJASTHAN
JAIPUR

SYEDA SHAZIYA NAZ
RESEARCH SCHOLAR
DEPARTMENT OF ECONOMIC ADMINISTRATION & FINANCIAL MANAGEMENT
UNIVERSITY OF RAJASTHAN
JAIPUR

DR. T.N. MATHUR
PROFESSOR
DEPARTMENT OF E.A.F.M.
UNIVERSITY OF RAJASTHAN
JAIPUR

ABSTRACT

Today, financial inclusion is a burning point for policy making because of its potential to encourage economic growth and development. As per the Indian economy, a huge segment of India's population exists on the margins of India's financial systems. There is growing alarm for people being 'under-banked'. The main objective of financial inclusions to provide banking and financial services to weaker section of the society in a fair, transparent and equitable manner at affordable cost. It is also an important priority of the country in terms of economic growth and development of society. It enables to reduce the gap between rich and poor. It helps to channelize money-flow to the economy; it ensures people who are unable to access financial system so far can access it with ease. For this study secondary source was used to analyze the impact of financial inclusion on Indian Banking Industry and its growth by taking five years data from 2011 to 2015. The article also tried to study the various scheme run by the Government for financial inclusion. From this study it is concluded that the provision of banking branches and strong banking network are the foremost facilitator's of developmental and expansionary activities in banking industry.

KEYWORDS

financial inclusion, economic growth, economic development, financial system.

INTRODUCTION

mong economists, the general consensus is that financial development acts as a catalyst in the overall growth and development of an economy. Moreover, empirical research demonstrates that development of a strong, sound financial system contributes to economic growth (Rajan and Zingales 2003). As a result, most developing country governments are promoting financial inclusion1 as a policy goal, especially for those who are ignored by formal sector institutions.

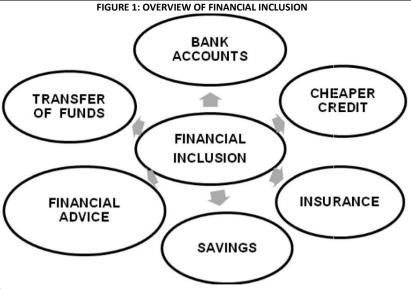
As per the Rangarajan Committee report (2008) Financial Inclusion is defined "as the process of ensuring access to financial services and timely and adequate credit where needed by vulnerable groups such as the weaker sections and low income groups at an affordable cost".

Financial inclusion complements the financial system. In the modern generation of walking for economic strength and self reliance, it is important for any country to create pleasant situations for people, households and private institutions which integrated the supply of banking offerings. The provision of banking centers and strong bank department network are the foremost facilitator's of developmental and expansionary activities. A healthy financial system is a pillar of monetary boom, development and progress of an economy. A financial system, which is inherently strong, and performs flexible, is essential to our countrywide targets of making a marketplace-driven, efficient and competitive economic system. A mature system helps higher ranges of investment and promotes growth inside the economic system with its coverage.

Banking and financial services play very crucial role in the growth and development of an economy. Research suggests that a properly-functioning and inclusive financial system is linked to a faster and equitable growth There is wide range of personal finance options for higher and upper middle income population in the form of financially engineered and innovative products whereas a significantly large section of population still lack access to the most basic banking services that is holding a bank account. This is termed as "financial exclusion". So it's very essential to provide people with easy and affordable financial products or services popularly referred to as "financial inclusion". In India, there may be a need for coordinated movement amongst the banks, government and associated groups to facilitate access to bank accounts to the financially excluded.

Financial Inclusion is very important because if customer is financially educated, he'll make better financial alternative, as an instance what type of financial product can fulfill his individual desires? It'll help in improving the overall growth of the economy. Access to financial services at a low and affordable cost price will enhance lifestyles of the poor. Financial inclusion is a long term strategy, however to achieve its goals we need to preserve in thoughts what are the important are as to focus:

- It needs to provide access of primary financial services to people like banking.
- The usage of financial services needs to deal with wishes of the poor.
- The financial product should be in low and affordable prices.
- The quality of financial product and services should be improved.



OBJECTIVES OF THE STUDY

- 1. To study the present status of financial inclusion in India.
- 2. To study need and importance of financial inclusion for economic growth of society.
- 3. To analyze the impact of financial inclusion on Indian banking industry.
- 4. To highlight the measures taken by the Government and RBI to promote financial inclusion.

RESEARCH METHODOLOGY OF THE STUDY

This study is mainly based on descriptive in nature. Research methodology explains and chooses the best way of doing. For this study secondary research was conducted to analyze the impact of financial inclusion on Indian Banking Industry and its growth by taking five years data from 2011 to 2015. The information and data for the research are collected through secondary sources i.e. published articles, journals, newspapers, reports, books and websites of the Reserve Bank of India and also taken from various committees reports submitted to the government of India on Financial Inclusion. Various tables and graphs have also been used.

WHY WE NEED FOR FINANCIAL INCLUSION

Finance has come a long way since the time when it wasn't recognized as a factor for growth and development. But now it is recognized as the brain of an economic system most of the economies strive to make their financial systems more proficient.

The earlier research focused on how finance helps an economy. Now research shows that financial inclusion is as vital. The new possibilities for research in finance are making financial inclusion workable. Patrick Honohan (of Trinity college, Dubai) in his studies developed an index to measure get right of entry to finance in 160 countries. If the index is placed on world map it can be honestly seen that the ones economies having better indices are generally the ones, which we term as evolved and advanced economies. It isn't always implied that financial inclusion by itself has led to the advancement and growth however it is a critical component. The policy makers have tried to understand how financial inclusion can be executed including superior economies like U.K. The Reserve Bank of India (RBI) has constituted a committee under the chairmanship of Mr. Deepak Mohanty, to suggest measures to increase financial inclusion

The first question that comes to my mind is why can't financial inclusion happen on its own? Why do we need to make a policy to increase the same? Like any other product or services, why can't it find a market of its own? The reasons are

- a) **Financial Exclusion**: It has been found that financial services are used most effective by means of a section of the population. There's a demand for those offerings but it has no longer been furnished. The excluded regions are rural, poor regions and additionally those dwelling in harsh climatic situations in which it's miles tough to provide those financial services. The excluded population than has to depend on informal zone like moneylenders for availing finance at a very high rates. First, high cost of finance implies that first poor person has to earn much more than someone who has access to lower cost finance. Second, the major portion of the earnings is paid to moneylenders and the person can never come out of the poverty.
- b) **High Cost**: It has also been seen that poor living in urban areas don't make use of the financial services as they find financial services are expensive. As a result, if financial services are available the excessive costs deter the poor from gaining access to them.
- c) **Non-Price Barriers**: Access to formal financial services also requires record of evidence regarding someone's identification, income and many others. The poor people do not have these documents and therefore are excluded from those services. They may also subscribe to the services initially but may not use them as actively as others a because of high distance between the bank and residence, poor infrastructure.
- d) **Behavioral Aspects**: Studies in behavioral economies has proven that many humans aren't cozy the usage of formal financial services. The reasons are problem in understanding language, various documents and situations that come with financial services.

WHO ARE THE EXCLUDED AND WHY!

Many people throughout the country are excluded from mainstream banking. The main reasons behind exclusion are:

- a) Lack of information: Lack of information about the role and function of banks, banking services and products, interest rates etc. stop people from including themselves in mainstream banking.
- b) Insufficient documentation: Many people even in urban areas not able to reveal their self-identification documents during the opening of a bank account or during taking loans.
- c) Lack of awareness: many people are unaware of the banking terms and conditions laid down from time to time.
- d) **High transaction cost**: Various commercial banks across the globe levy transaction charges on credit or debit transactions, on over utilization of banking services, on cheque books issuing etc.
- e) Lack of access: Accessibility is a problem from all those people who stay in geopolitically isolated regions. Moreover, as most of the commercial banks are located in the place of towns, people in rural regions have geographical limitations in having access to banks.
- f) Illiteracy: Because of illiteracy, a substantial number of people are not able to take recourse to banking services.

DATA COLLECTION AND ITS ANALYSIS

Financial Inclusion is an important priority of the Government. The objective of Financial Inclusion is to extend financial services to the large hitherto un-served population of the country to unlock its growth potential. In addition, it strives towards a more inclusive growth by making financing available to the poor in particular.

Financial inclusion, broadly understood as access to the formal financial sector for the mar-ginalised and formal-finance deprived sections of society, has increasingly come to the fore-front of public discourse in recent years. Policymakers all over the world are exploring ways and means to ensure greater inclusion of the financially excluded segments of society. There has been renewed global impetus to financial inclusion, particularly following the global financial crisis in 2008. It is believed that financial inclusion could be welfare-enhancing and, as a result, there is greater political support for the entire process.

In India, providing access to formal financial services and products has been a thrust of banking policy for several decades. The current thinking at the global level has also had its echo in India, with policymakers at various levels undertaking a wide range of measures to include the excluded or the under-served within the fold of formal finance. Accordingly, the Government and the Reserve Bank have undertaken a whole host of innovative and dedicated measures to drive forward the financial inclusion agenda.

The big push towards financial inclusion in India has emanated from the Pradhan Mantri Jan DhanYojana (PMJDY) in August 2014 and the Jan DhanAadhaar Mobile (JAM) trinity articulated in the Government's Economic Survey 2014-15 as well as the special thrust on financial inclusion by the Financial Stability and Development Council (FSDC) that includes a Technical Group for dedicated attention to this issue. Thus, the inclusion drive has gone beyond the confines of various financial regulators and assumed the character of a broader national development policy goal.

1. POSITIONS OF HOUSEHOLDS AVAILING BANKING SERVICES

TABLE 1

		1712				
	As per Census 2001			As per Census 2011		
Households	Total number of households	Number of house- holds availing banking services	Percent	Number of house- holds availing banking services	Number	Percent
Rural	138,271,559	41,639,949	30.1	167,826,730	91,369,805	54.4
Urban	53,692,376	28,590,693	49.5	78,865,935	53,444,983	67.8
Total	191,963,935	68,230,642	35.5	246,692,667	144,814,788	58.7

Above table shows the data has been taken from census 2001 to census 2011. It reveals that total number of households availing banking services has been increased from 35.5% to 58.7% due to increase awareness about the financial inclusion

2. BANK BRANCHES AND ATMs

At the turn of the century, the expansion of brick-and-mortar branches, despite several efforts, was limited. The low penetration of formal banking led the Reserve Bank to look at financial inclusion as a major policy drive. The slew of measures that followed were the introduction of Business Facilitators (BFs) and Business Correspondents (BCs) and deregulation of the opening of ATMs and branches, while ensuring sufficient coverage to hitherto unbanked areas. Concurrently, relaxations in the BC model were made to bridge the 'last mile' problem. This accelerated the pace of branch opening, with more branches being opened in rural and semi-urban areas. Notwithstanding this development, the number of branches per 100,000 of population in rural and semi-urban areas is still less than half of that in urban and metropolitan areas

TABLE 2

As on March	Number of Branches			Estimated population* (in million)			Branches/ 100,000 population		
	Rural + Semi- urban	Urban + Metro- politan	Total	Rural + Semi- urban	Urban + Met- ro- politan	Total	Rural + Semi- urban	Urban + Met- ro- politan	Total
2001	44,905	20,713	65,618	851	177	1,028	5.3	11.7	6.4
2006	45,673	23,904	69,577	920	195	1,115	5.0	12.3	6.2
2010	53,086	31,072	85,158	980	211	1,191	5.4	15.2	7.2
2014	76,753	40,958	1,17,711	1,044	228	1,272	7.3	17.9	9.2
2015	82,358	43,716	1,26,074	1,061	233	1,294	7.8	18.7	9.7
lune 2015	82,794	43,910	1,26,704	1,065	235	1,300	7.8	18.7	9.7

^{*}Population estimates are based on CAGR between Census 2001 and Census 2011 data

3. RBI BRANCH AUTHORIZATION POLICY

In order to extend the banking network in unbanked areas, general permission has been granted by Reserve Bank of India (RBI) to domestic Scheduled Commercial Banks (other than Regional Rural Banks) to open branches/ mobile branches/ Administrative Offices/CPCs (Service Branches), (i) in Tier 2 to Tier 6 centers (with population up to 99,999) and (ii) in rural, semi-urban and urban centers of the North-Eastern States and Sikkim subject to reporting. RBI has advised banks that while preparing their Annual Branch Expansion Plan (ABEP), the banks should allocate at least 25 percent of the total number of branches proposed to be opened during a year in unbanked rural (Tier 5 and Tier 6) centers.

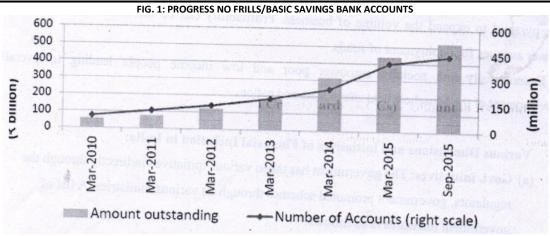
4. EXPANSION OF BCA NETWORK

Another significant regulatory change toward financial inclusion has been the relaxing of norms for business correspondents or bank mitras (i.e., agents of the bank) to complement the classical approach of physical branch-led distribution. Business correspondents provide last-mile connectivity for financial services in remote and under banked locations. While initially restrictive in the kind of players who can qualify as business correspondents, the norm has been significantly eased, as it is now open to profit-making entities. Business correspondents are microbankers who are outside of the purview of regulators. They are "protected" by the capital of a sponsor bank, but since they do not provide any capital themselves.

Banks have been advised by DFS to extend banking services to the entire geography of the country based on the concept of Sub Service Area (SSA) comprising of 1000-1500 households. In case of North-East, Hilly States and sparsely populated regions of other States banks may decide the households to be covered by each Business Correspondent Agent (BCA) appropriately. In case of larger Gram Panchayats more than one BCA could be appointed. In case of smaller Gram Panchayats more than one contiguous Gram Panchayat, taking into consideration the geographical area, could be assigned to each BCA.

5. "NO-FRILL a/c or BSBDA":

The Reserve Bank of India (RBI) has also made an effort over the last decade to create basic financial service facilities for the excluded. In April 2005, it identified that vast sections of the population did not have access to banking services due to minimum balance requirements. To gain greater access, RBI advised banks to open basic banking or "no-frills" accounts with no or very low minimum balances and no or minimal charges. Conceding the stigma associated with the nomenclature "no-frills," banks were advised to offer a "basic savings bank deposit account" (BSBDA) with simplified know-your-customer norms.



6. SWABHIMAAN SCHEME

Earlier, under the Swabhimaan campaign, the Banks were advised to provide appropriate banking facilities to habitations having a population in excess of 2000 (as per 2001 census) by March 2012. The banks identified approximately 74000 habitations across the country having a population of over 2000 for providing banking facilities. As per reports received from Banks, 74351 villages with population of above 2000 have been covered with banking facilities either by branches; Business Correspondents, mobile banking etc. by March 31, 2012.

7. DIRECT BENEFIT TRANSFER (DBT) AND DIRECT BENEFIT TRANSFER FOR LPG (DBTL)

The objective of DBT Scheme is to ensure that money under various developmental schemes reaches beneficiaries directly and without any delay. Banks play a key role in implementation of DBT/DBTL and this involves four important steps, viz.

- Opening of accounts of all beneficiaries:
- Seeding of bank accounts with Aadhaar numbers and uploading on the NPCI mapper
- Undertaking funds transfer using the National Automated Clearing House Aadhaar Payment Bridge System (NACH-APBS).
- Strengthening of banking infrastructure to enable beneficiary to withdraw money.

Ω

- (i) Direct Benefit Transfer (DBT): The scheme was launched in the country from January, 2013 and was rolled out in a phased manner, starting with 25 welfare schemes, in 43 districts and extended to additional 78 districts and additional 3 schemes from 1st July, 2013. Presently DBT in 35 schemes have been expanded across the entire country.
- (ii) Direct Benefit Transfer for LPG (DBTL): The Direct Benefit Transfer for LPG (DBTL) scheme was rolled out in 291 districts in the country from 1st June 2013 in six phases. While preliminary results indicated that the scheme met its primary objectives of curbing leakages in the distribution system, the speed at which it was rolled out and inclusion of low Aadhaar districts gave rise to consumer grievances. The Government of India took cognizance of the grievances and directed that the scheme be held in abeyance and constituted a Committee on 7th March, 2014 under the chairmanship of Dr. S.G. Dhande, Former Director, IIT, Kanpur to review the scheme and submit its report to the Government of India after consultation with the stakeholders.

The Committee examined the functioning of the DBTL scheme in depth by meeting all stakeholders and after a detailed study of the scheme design, architecture and implementation structure, audit reports, consumer feedback and interactions with the stakeholders strongly recommended that DBTL scheme should be recommenced as it is a very efficient way to disburse subsidies. The Committee recognizes that although the scheme design is indeed very robust and scalable which prevent leakages, it has suggested several systemic changes and enhancements to mitigate the hardships reported by the LPG consumers.

Union Cabinet in its meeting held on 18.10.2014 decided to re-launch of Modified Direct Benefit Transfer for LPG Consumers (DBTL) PAHAL Scheme from 15.11.2014 in 54 districts and in the entire country from 1.1.2015.

9. RuPay CARD

RuPay, a new card payment scheme has been conceived by NPCI to offer a domestic, open-loop, multilateral card payment system which will allow all Indian banks and financial Institutions in India to participate in electronic payments. The card has been dedicated to the nation by the President of India on May 08, 2014. RuPay symbolizes the capabilities of banking industry in India to build a card payment network at much lower and affordable costs to the Indian banks so that dependency on international card scheme is minimized. Government of India has directed banks to issue Debit cards to all KCC and DBT beneficiaries and that every new account holder should be issued a debit card. A low cost option such as RuPay will help in achieving this objective and consequently help in fulfilling the objective of financial inclusion. The RuPay Card works on ATM, Point of Sale terminals, & online purchases and is therefore not only at par with any other card scheme in the world but also provides the customers with the flexibility of payment options.

10. PRADHAN MANTRI JAN-DHAN YOJANA (PMJDY)

PradhanMantri Jan-DhanYojana (PMJDY) was formally launched on 28th August, 2014. The Yojana envisages universal access to banking facilities with at least one basic banking account for every household, financial literacy, access to credit, insurance and pension. The beneficiaries would get a RuPay Debit Card having inbuilt accident insurance cover of Rs.1.00 lakh. In addition there is a life insurance cover of Rs.30000/- to those people who opened their bank accounts for the first time between 15.08.2014 to 26.01.2015 and meet other eligibility conditions of the Yojana.

TABLE 3: PRADHAN MANTRI JAN - DHAN YOJANA (Accounts Opened as on 31.08.2016) (All Figures in Crores)

Bank Name	Rural	Urban	Total	No of Rupay Card	Aadhaar Seeded	Balance in a/c	% of Zero Balance a/c
PSB	10.72	8.40	19.12	15.33	10.16	33378.51	24.53
RRBs	3.55	0.58	4.13	2.88	1.72	7199.23	21.03
Private Banks	0.52	0.33	0.85	0.79	0.35	1516.50	36.54
Total	14.79	9.31	24.10	19.00	12.23	42094.24	24.35

Disclaimer: Information is based upon the data as submitted by different banks/SLBCs

PMJDY has been implemented by banks successfully. As against the estimated target of opening 10 crore accounts, as on 31.08.2016, 24.10crore accounts have been opened out of which 14.79crore accounts are in rural areas and 9.31crore in urban areas. Deposits of Rs. 42094.24crore have been mobilized. 19croreRuPay Debit cards have been issued and Aadhaar seeding has been done in 12.23crore accounts.

CONCLUSION

This paper has examined the relationship between financial stability and financial inclusion to examine whether they are mutually reinforcing, or whether there are substantial trade-offs between them. It is not possible to achieve financial inclusion only by creating investment awareness. Global and national policy makers are committing to increase financial inclusion. Financial product and services are a means to an end, and financial development has to keep in mind vulnerabilities and push back possible unintended bad effects. Investment opportunities in India have to be improved. Increase in financial inclusion would lead to diversification

of bank assets. It would lead to reduction in their riskiness; increment in stability of their deposit base, reduction in liquidity risks; and improved transmission of monetary policy. Access to financial services such as savings, insurance and remittances are extremely important for poverty alleviation and development of the country. In order to achieve the goal of total financial inclusion, policymakers and banks have to work together.

REFERENCES

- 1. Archana H.N (August 2013), "Financial Inclusion- Role of Institutions", Innovative Journal of Business and Management, ISSN 2277-4947.
- 2. C. Paramasivan and V. Ganeshkumar (March 2013), "Overview of financial inclusion in India)", VOLUME No. 2 (2013), ISSUE No. 3, ISSN (Online): 2320-0685.
- 3. Chakarbarthy, K.C (2006) "Indian Bank: A case study on financial inclusion", Readings on financial Inclusion, IIBF & Taxman, New Delhi.
- 4. D. Rama Krishna Reddy (June 2012), "Financial Inclusion: Road Ahead", The Journal of Indian Institute of Banking & Finance, Volume no.2, Issue 83.
- 5. Department of Financial Services, Ministry of Finance, Government of India
- 6. Dr. Anurag Singh and Priyanka Tondon (July, 2013), "Financial Inclusion in India- An Analysis", International Journal of Marketing, Financial Services and Management Research, Volume 1, Issue no. 6, ISSN 2277-3622.
- 7. Dr. A.TAMILARASU (February, 2014), "Role of banking sectors on financial inclusion development in India an analysis", Galaxy International Interdisciplinary Research Journal, Vol.2 (2), ISSN 2347-6915.
- 8. Joseph Massey (2010), "Role of Financial Institutions in Financial Inclusion", FICCI's Banking & Finance Journal.
- 9. Michael Chibba (2009)," Financial Inclusion, Poverty Reduction and the millennium Development Goals", European Journal of Development Research, Volume no. 21.
- 10. Pradhan Mantri Jan Dhan Yojana, Department of Financial Services, Ministry of Finance, Government of India.
- 11. Report of the committee on Financial Inclusion in India (Chairman: C. Rangarajan) (2008), Government of India.
- 12. Reserve Bank of India, "Report on financial Inclusion".
- 13. Srikanth. R (September, 2013), "A study on financial inclusion: Role of Indian banks in reaching out to the unbanked and backward areas", International Journal of Applied Research and Studies, Volume 2, Issue 9 (Sep 2013), ISSN: 2278-9480.

A SOCIO-ECONOMIC ANALYSIS OF MINING Vs. NON-MINING VILLAGES WITHIN SAME TALUKAS IN GOA

SHEETAL D. ARONDEKAR ASST. PROFESSOR IN COMMERCE & MANAGEMENT VVM'S SHREE DAMODAR COLLEGE OF COMMERCE & ECONOMICS MARGAO-GOA

DR. I BHANU MURTHY EX-PRINCIPAL VVM'S SHREE DAMODAR COLLEGE OF COMMERCE & ECONOMICS MARGAO-GOA

ABSTRACT

Mining comes with a lot of employment opportunities coupled with developmental activities in the area of operation that has an impact on the socio-economic characteristics of the inhabitants in the areas. Following the Chinese boom, during the last decade iron ore mining took place in full swing in the iron ore rich state of Goa. With this background the current study aims at comparing the socio-economic characteristics of the households in the mining areas with the non-mining areas within the same talukas. For the purpose, an interview schedule was forwarded to 256 respondents in the mining and 191 respondents in the non-mining areas within the same talukas. Descriptive statistics and t-test was used to compare the socio-economic variables of the two areas. The study revealed a significant difference in the economic variables but no difference in the educational status of the households in the two areas. The study suggests the need to promote higher education in the areas to improve people's thinking skills and to educate them about the nature of mining industry so as to enable a holistic socio-economic development in the area.

KEYWORDS

education, households, mining, socio-economic.

1. INTRODUCTION

oa is one of the most beautiful states of India ranking high in terms of socio-economic indicators especially with respect to high literacy rate of 87.50% according to Census Survey 2011 and has a high per capita income as well. Agriculture has been the dominant economic activity here followed by fishing, tourism and mining. But the state has witnessed a shift in the pattern of economy from an agrarian based to other sectors like manufacturing and tertiary. The issues linked to this as identified by TERI 2012 are loss of traditional varieties, ill-effects of the mono-culture system, rising cost of cultivation, inabilities to link to local markets, etc. while in the mining areas it is the degradation of land itself due to flow of mining silt as well as scarcity of water. The rural Goa when compared to the other rural villages of the country is better in terms of socio-economic status as reported by the Census Survey 2011. It is noted here that around 42% of the households in the rural Goa have one member working for private sector and around 13% households have a family member working with the government. Also, around 5% depend on agriculture for their incomes while 14% are manual labour.

Goa is rich in iron ore deposits. A total of 18% of the geographical area is under mining of which the forest alone accounts for 70% of the leased out area reckoning to 43% of the forest area (Forest Survey of India, 1985). The rich forests support the livelihoods of the people in the regions and also their rights to access to water and firewood. According to TERI (Tata Energy Resource Institute) 2012, 12,000 ha of land have been rendered wasteland due to the practice of mining activities. Most of the mines are located below the water table. For every one tonne of ore mined, about 10 tonnes of water needs to be pumped out. There is depletion in the groundwater in the surrounding areas. In Goa, approximately 21,000 people are employed in the mining industry, both directly and indirectly (Chhibber, Rogers, & Milkereit, 2011). Migration into Goa is a common phenomenon in search of jobs. With respect to the mining industry, the area has witnessed migrants from Jharkhand, Bihar and Karnataka in search of jobs. Availing ration card facilities is also an easy process in Goa.

The mining industry has seen an increase in the exports of iron ore as shown in the chart 1, below from 17.09 mnts (million tonnes) in the year 2001-02 to the tune of 33.38 mnts in the year 2006-07, while the highest record was in the year 2010-11 of 52.29 mnts, after which there was a decline following the mining ban ordered by the Supreme Court in September, 2012.

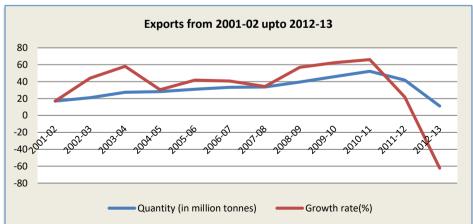
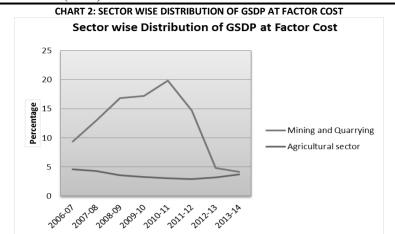


CHART 1: EXPORTS FROM 2001-02 UPTO 2012-13

Source: Directorate of Mines & Geology and Author's Compilation

This led to an increase in Gross State Domestic Product (GSDP) of Mining and Quarrying sector from 9.36% in 2006-07 to 19.87% in 2010-11 with a simultaneous decline in the GSDP of Agriculture Sector from 4.61% in 2006-07 to 3.09% in 2010-11 as depicted in Chart 2. This had an impact on the socio-economic characteristics of the households in the regions. They are the ones who bear the direct impacts of the mining activities and the most ignored in the name of development. This growth was coupled with lucrative incomes for the households in the areas.



Source: Directorate of Planning, Statistics and Evaluation, 2015

2. REVIEW OF LITERATURE

Ample of literature exists on the impacts of mining on the local communities. While some researchers are of the opinion that mining aids in improving the socioeconomic status of the locals in the areas, yet some feel it has made situations worse for them to live.

Akabzaa, Darimani (2001) observed migration of all types of people into the mining areas that led to increase in housing problems, rise in the cost of living, displacement of local communities and problems of relocation and resettlement. A significant number of the displaced people are the tribal and economically marginal rural population who depend on natural resources such as forests and rivers for their livelihoods (Singh, 2015). Remy, MacMahon (2002) however revealed the multiplier effects of the presence of migrants into the areas that led to direct and indirect employment into mines. Petkova, et.al (2009) also acknowledged the presence of migrants in the mining areas. He found that the mining boom brings high incomes for the local communities who largely depend on the non-resident by making provision for their accommodation and food. Kangwa (2008) was of the opinion that the industry uses the productive land for mining purpose instead of for traditional activities. No doubt as evident from the past studies, the mining industry provides benefits in terms of improved roads, water services, education and health services as also studied by Kitula (2006) but it also brings along conflicts over land and the unequal distribution of wealth and violation of human rights as added by Vandenbroucke (2008).

In context to Goa, a socio-economic analysis by Mendes (2001) revealed an improvement in the status of the households in the mining areas as compared to their non-mining counterparts, but the mining activities had an adverse impact on the health of the people. The Quality of Life (QOL) tool designed by Noronha, Nairy (2005) found lower QOL in the mining regions when compared to the non-mining regions, but this was only with respect to the environmental domain. The study also revealed that literacy levels and access to amenities were higher in the most active mining areas.

Though lot of literature exists on the socio-economic impacts of mining, yet recent studies on the socio-economic indicators of the households in the Goan context, i.e. education and incomes is not adequately researched.

3. NEED OF THE STUDY

Mining is a destructive activity and minerals are located in isolated and rural areas where the households rank low in terms of socio-economic indicators. Thus the presence of the industry is a ray of hope as it is presumed to come with lot of employment/ business opportunities to the people and improved benefits by way of educational, medical support and infrastructure. The study will be of importance in drawing attention of the policy holders in the current times when mining has been banned in the state and is slowly and steadily making a way for itself once again, to know whether the industry contributed in improving the socio-economic characteristics of the households in the areas of operation and to know how better they can improve if the industry resumes operations. The overall development of a whole area depends on every part of that whole area.

4. STATEMENT OF PROBLEM

The pilot study that was conducted revealed that mining was a flourishing industry for the households in the areas as they earned huge incomes at the cost of their traditional occupations for the reason mentioned above. In Goa, every taluka has government run schools, but higher education initiatives are lacking due to financial hindrances. The sad part in the mining areas was that inspite of earning lucrative incomes and owning more assets than the households in the non-mining areas, they still seemed to be at par with respect to educational status which is another important socio-economic indicator apart from income.

5. RESEARCH GAP

Though previous studies have dealt with the socio-economic issues from different perspectives, yet the impact of mining industry on some of the key socio-economic indicators like education and income still needs to be researched. Further, the mining industry though fetches lucrative incomes to its dependents, whether it has helped them improve their economic status in real terms still needs to be answered. A comparison with the non-mining areas within the same talukas will give a better understanding of the impact of mining on occupation and economic status.

6. STUDY AREA

The iron ore mining belt of Goa is located along the Western Ghats where most of the forests are confined. The four talukas rich in iron ore deposits are Bicholim and Sattari in North Goa and Sanguem and Quepem in South Goa. This covers 1/5th of the area of Goa i.e. approximately 700 km². Within the four areas, Sanguem has the maximum area under mining followed by Bicholim, Sattari and Quepem. From the point of view of mineral production Bicholim contributes almost 60% of the value of minerals followed by Sanguem. The people in these areas are to a great extent dependent on agriculture and forests for their living. But with the expansion of the mining industry there was a change in the occupational structure of the households. The non-mining areas within the same talukas also have similar characteristics as the mining areas except that there is no iron ore deposit.

7. OBJECTIVES OF THE STUDY

With the above background, the current study covers the following objectives:

- i. To give a demographic profile of the households in the mining and non-mining regions of Goa.
- ii. To compare the socio-economic characteristics of the households in the mining areas with the households in the non-mining areas within the same talukas.

8. HYPOTHESIS

Ho: There is no significant difference in the socio-economic characteristics of the households in the mining areas with the households in the non-mining areas.

9. RESEARCH METHODOLOGY

The data was collected from primary as well as the secondary sources. For collection of primary data an interview schedule was prepared comprising of the socio-demographic and economic profile to be answered by the respondents. Data was collected during the period from October 2013 up to May 2014. The schedules were administered to a random sample; of which 256 respondents of age 18 years and above from mining villages and 191 in non-mining areas within the four talukas were found to be complete in all respects. Along with descriptive statistics like frequency tables, means and standard deviations; t-test and ANOVA were used to compare the socio-economic variables using the statistical package SPSS 16. The secondary data was collected from various Government reports, newspaper articles and discussions with the Village Panchayat members, social activists, Government Officials in the Ministry and academicians.

10. RESULTS AND DISCUSSION

10.1 DEMOGRAPHIC PROFILE

In mining areas, 55% of the respondents were females while the rest were males. In the non-mining areas too, female respondents were more i.e. 52% while males were 48%. 30% of the respondents in both the areas were of the age group 41-50 years. 71% in the mining and 75% in the non-mining areas were married. 62% in the mining and 60% in the non-mining areas had family size of 4-6 members.

TABLE 1: DEMOGRAPHIC PROFILE OF THE SAMPLE (Sample Size: 447)

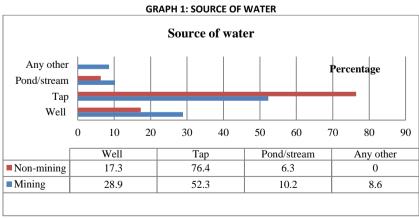
Sr. No.	Demographic Profile of the sample	Mining	3	Non-mining				
		Frequency	%	Frequency	%			
Α	Gender		•	•				
	Male	115	44.9	91	47.6			
	Female	141	55.1	100	52.4			
	Total	256	100	191	100			
В	Age		•	•				
	18- 30	36	14.1	25	13.1			
	31-40	75	29.3	46	24.1			
	41-50	76	29.7	57	29.8			
	51-60	45	17.6	42	22			
	Above 60 years	24	9.4	21	11			
	Total	256	100	191	100			
С	Marital Status							
	Married	181	70.7	144	75.4			
	Single	65	25.4	42	22			
	Divorcee/widow	10	3.9	5	2.6			
	Total	256	100	191	100			
D	Family Size							
	<3	30	11.7	30	15.7			
	4-6	158	62.1	114	59.7			
	7-9	53	20.3	26	13.6			
	>9	15	5.9	21	11			
	Total	256	100	191	100			

Source: Primary survey

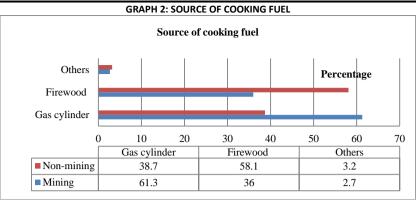
10.2 SOCIO-ECONOMIC ANALYSIS: A COMPARISON OF MINING WITH THE NON-MINING AREAS 10.2.1 ACCESS TO NATURAL RESOURCES

Graph 1 shows the source of water used in the two regions. Tap water is used by majority i.e. 76% in non-mining and 52% in the mining regions; while well water is used by 17% in non-mining and 29% in the mining regions. With respect to the other source 9% of households in the mining regions used tanker water supplied by the mining companies as there was scarcity of water in the regions while it was not so in the non-mining regions. Graph 2 shows that majority of the households in the mining areas i.e. 61% use gas cylinders while a majority in the non-mining regions i.e. 58% use firewood followed by gas cylinder.

Water scarcity problems are felt in both the regions and with piped water line connection people find it convenient to use water from tap rather than drawing waters from well and natural sources. But due to mining operations households in the mining regions faced water problem and were compelled to use the tanker water supplied to them by the mining companies. Accessibility and cost play an important role when determining fuel use (Howells, Alfstad, Cross, & Jeftha, 2002). Though firewood was the traditional source of cooking fuel, the people's entry into forests was restricted, secondly people earned high incomes thus gas cylinders seemed to be affordable; in the non-mining regions very few could afford to use gas cylinders and mainly depended on firewood and accessibility was not a problem.



Source: Primary Survey

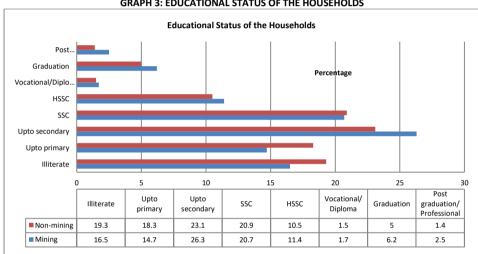


Source: Primary Survey

10.2.2 EDUCATIONAL STATUS OF THE HOUSEHOLDS

A higher percentage of illiterates i.e. 19% are seen in the non-mining areas compared to the 17% in the mining areas as shown in Graph 3 below. It is observed that the higher education level after HSSC has shown higher percentage of people in the mining areas compared to the non-mining areas. Yet, the difference does

In both the areas, primary education is not a big problem because there are government aided schools in every village, but higher education is lacking in the areas. For the people in the non-mining areas, affordability and accessibility is a hindrance in attaining higher education; while in the mining regions accessibility is the problem though, many can actually afford to pay towards higher education. The lucrative incomes gained out of mining activities did not create a desire for higher education as such incomes can be earned without any educational qualification.



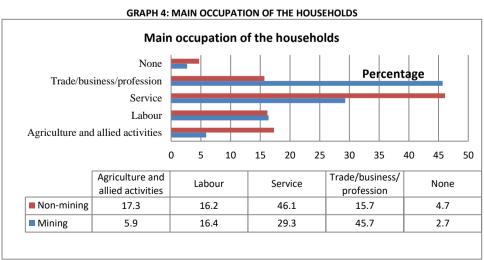
GRAPH 3: EDUCATIONAL STATUS OF THE HOUSEHOLDS

Source: Primary Survey

10.2.3 MAIN OCCUPATION

In the mining areas, 46% of the households were mainly engaged into trade/business, 6% practiced agriculture and allied activities, 16% were labourers and 29% were into salaried employment as shown in Graph 4 below. While in the non-mining regions, 46% were into salaried employment, 17% practiced agriculture and allied activities and 16% each were into labour and trade/business.

In the mining regions, lot of job/business opportunities were created by the industry by way of sale of food grains/grocery items, small hotels, garage/repair shops, letting out of trucks/mining machineries/vehicles on contract to the mining companies, etc. which fetched good incomes to the people than any other activities. In the non-mining areas, majority were into service as an occupation. Agriculture is practiced in both the regions, though more in the non-mining compared to the mining; while many cultivated mainly for self-consumption as it was becoming expensive.



Source: Primary Survey

10.2.4 INCOME FROM OCCUPATION

10.2.4.1 Income from Main Occupation

In mining areas income from trade/business was the highest contributor i.e. 68%, followed by income from service of 17%, while agriculture contributed only 7%. In the non-mining areas, income from service was the highest contributor to the total income i.e. 53% followed by income from trade/business of 24% and 9% from agriculture and allied activities. The total average income in the mining areas was three times than that of the non-mining areas. It is further noticed that the average income from agriculture and trade/business is higher in the mining regions than the non-mining regions. This was the migration impact that gave larger scope for the households to earn higher income. The average income from labour was higher in the mining regions because most of the labourers were employed by mining companies who gave them better incomes than they could derive from other activities.

TABLE 2: CONTRIBUTION OF INCOME FROM OCCUPATIONS IN MINING AND NON-MINING AREAS (Sample Size:447)

Variable	Mining		Non-mining	
Sources of income	Average Income(Rs.)	(%)	Average Income(Rs.)	(%)
Agriculture and allied activities	45756	6.9	19440	8.6
Labour	20580	3.1	12456	5.5
Service	114984	17.4	120420	53.1
Trade/business	451404	68.3	54228	23.8
Other income	28476	4.3	20340	9
Total	661200	100	226884	100

Source: Primary Data

10.2.4.2 Total incomes from all sources

In the mining areas, as shown in the table 3 below, 33% earn an income above Rs. 50000 while it was only 5% in the non-mining regions. A higher percentage of 40, earn an income of up to Rs. 10000 in the non-mining areas and 33% in between Rs. 10000-Rs. 20000.

TABLE 3: TOTAL INCOME FROM ALL SOURCES (Sample Size: 447)

Variable	Mining		Non-mining		
Income range	No. of Households	(%)	No. of Households	(%)	
Upto Rs. 10000	49	19.1	77	40.3	
Rs. 10000-Rs. 20000	49	19.1	62	32.5	
Rs. 20000-Rs. 30000	23	9.0	24	12.6	
Rs. 30000-Rs. 40000	26	10.2	16	8.4	
Rs. 40000-Rs. 50000	24	9.4	2	1.0	
More than Rs. 50000	85	33.2	10	5.2	
Total	256	100.0	191	100.0	

Source: Primary Data

10.2.5 LOAN

Loans liabilities were held more in the mining areas compared to the non-mining areas i.e. 53% in the mining and 26% in the non-mining areas. Of these, the loans were mainly taken in the mining regions for personal purposes like purchase of two wheelers and repair/renovation of houses of up to Rs. 10000 and for purchase of four wheelers of more than Rs. 10000 per month. 15% of the loans raised were for purchase of trucks/mining machinery for employing in the mining industry. The loans in the non-mining regions were mainly raised for purchase of two wheelers and repair/renovation of houses and with majority paying loan instalments of up to Rs. 10000 per month.

TABLE 4: MONTHLY LOAN INSTALMENTS AND PURPOSE OF LOAN (Sample Size: 447)

Loan instalment	alment Mining			Non-mining				
and Purpose of loan	Up to Rs. 10000/month	(%)	More than Rs. 10000/month	(%)	Up to Rs. 10000/month	(%)	More than Rs. 10000/month	(%)
Personal	44	17.2	22	8.6	27	14.1	5	2.6
Agricultural	3	1.2	2	0.8	1	0.5	0	0
Business	3	1.2	37	14.5	3	1.6	1	0.5
Others	15	5.9	13	5.1	14	7.3	0	0

Source: Primary Data

10.2.6 OTHER ECONOMIC VARIABLES

Due to high incomes earned by the households in the mining regions there was a huge difference in the monthly household expenditures, monthly savings as well as the possession of assets of the household in the mining regions with the non-mining regions as shown in table 5 below. The monthly incomes of the households in the mining regions show a wide disparity in incomes of Rs. 98960. The average monthly expenditures, savings as well as loan instalments were higher in the mining regions compared to the non-mining regions. The average loan instalment per month also shows a wide deviation. As mentioned above around 15% of the households in the mining areas have taken loans for purchase of trucks. The households had a contract with the mining companies and they received huge and direct income which encouraged them to invest into the same business as they found easy recovery of loans, thus households with more number of trucks had more loan liabilities. The results of the two independent sample t-tests show a significant difference in the asset possession of the households in the mining and non-mining regions as shown in table 6 below. This implies that the households in the mining regions held more assets than the households in the non-mining regions. The possession of trucks/mining machineries, and four wheelers by the households in the mining regions made a remarkable difference in the possession of assets. Thus the assets possessed were due to the presence of mining industry in the area.

TABLE 5: MEAN AND STANDARD DEVIATION OF ECONOMIC VARIABLES OF HOUSEHOLDS IN MINING AND NON-MINING AREAS (Sample Size: 447)

Economic variables		Mining	Non-mining	
	Mean	Standard Deviation	Mean	Standard Deviation
Monthly income	55452	98960	18907	24669
Monthly expenditure	8521	4802	6999	5108
Monthly savings	2816	4580	753	2552
Monthly loan instalment	14966	46761	1542	3323

Source: Primary Data

TABLE 6: RESULTS OF TWO INDEPENDENT SAMPLE t-TEST COMPARING SOCIO-ECONOMIC CHARACTERISTICS OF MINING AREAS WITH THE NON-MINING AREAS WITHIN THE SAME TALUKAS (Sample Size: 447)

_	••••••••••••	1201010 (01	J p. C O.L
	Variables	t-value	Sig.
	Years of education	.867	.387
	Asset ownership	2.597	.010*

Source: Primary Data

The results of the t-test show a significant difference in the asset ownership of the households in the mining and non-mining regions while no significant difference is observed in the years of education. The industry has served the households with good incomes but there has not been a simultaneous improvement in the educational attainment. This implies that education is not seen as a requirement for improvement in the financial status of the households' in the regions. With such thinking it will be a hindrance in the development of the local economy and thus needs attention.

11. CONCLUSION AND SUGGESTION

Though mining has affected people's right to access to natural resources, brought inflation within the local markets and led to decline in practice of traditional occupations, it had also brought a positive impact on the economic status of the households in the mining areas. In the non-mining areas, the salaried enjoyed higher income; while in the mining areas, income from trade/business was a significant contributor. The study revealed wide disparities in the monthly incomes and loans of the households in the mining regions compared to the non-mining regions. While huge loans raised in the mining areas were diverted mainly for purchase of trucks/vehicles for mining purpose, the small loans in the non-mining areas were taken mainly for personal purposes. Mining had created business opportunities for the households in the regions. The key finding is that the income generated from the mining industry was not diverted towards attainment of education but reinvested into the mining business by way of purchase of trucks/mining machinery which fetched them easy and direct income. Education was not a key factor for generating income within the mining regions. While mining areas have good financial support to make up for their education it was lacking in the non-mining areas. Though overall economic status compared to non-mining regions was better in the mining regions they were at par in terms of educational status. Thus the presence of the industry did not contribute wholly towards the development of the economy.

Thus, first and foremost the households in the mining areas have to be educated about the temporary nature of the mining business so that they divert their incomes into alternate sources of incomes which was done by very few in the mining areas. Secondly, households also need to be trained and motivated for taking up higher education by informing them about its future prospects. The mining companies in collaboration with the local government may take necessary steps in building up the required infrastructure thereby diverting efforts towards educational attainment of the youth in the mining regions. For a holistic development of any economy, education is a need and not a mere requirement for understanding the economy.

REFERENCES

GOVERNMENT PUBLICATION

- 1. Directorate of Planning, Statistics and Evaluation, (2006), "Agricultural Census" Panaji, Government of Goa.
- 2. Directorate of Planning, Statistics and Evaluation. (2015), "Economic Survey 2014-15" Porvorim, Goa, Government of Goa.
- 3. Forest Survey of India, (1985), "Report on Resources Survey of Goa Forests" Nagpur, Ministry of Environment and Forests.
- 4. Remy, F., & MacMahon, G. (2002), "Large Mines and Local Communities: Forging Partnerships, Building Sustainability" World Bank and International Finance Corporation, World Bank Group's Mining Department.
- 5. TERI (2012), "Directions, Innovation and Strategies for Sustainable Development in Goa-Executive Summary" New Delhi, The Energy and Resources Institute.

JOURNALS

- 6. Akabzaa, T., & Darimani, A. (2001), "Impact of Mining Sector Investment in Ghana: A Study of the Tarkwa mining region" SAPRI.
- 7. Howells, M. I., Alfstad, T., Cross, N., & Jeftha, L. C. (2002), "Rural Energy Modelling", Working Paper, Energy Research Institute, Department of Mechanical Engineering, South Africa.
- 8. Kitula, A. G. (2006), "The Environmental and Socio-economic Impacts of Mining on Local Livelihoods in Tanzania: A Case Study of Geita District", *Journal of Cleaner Production*, 14, 405-414.
- 9. Noronha, L., & Nairy, S. (2005), "Assessing Quality of Life in a Mining Region", Economic & Political Weekly, XXXX(I), pp. 72-78.
- 10. Petkova, V., Lockie, S., Rolfe, J., & Ivanova, G. (2009, October), "Mining Developments and Social Impacts on Communities: Bowen Basin Case Studies", Rural Society, 19(3), 211-228.
- 11. Singh, D. M. (2015, April-June), "Mining and its Impact on Tribals in India: Socio-economic and Environmental Risks" International Journal of Social Science and Humanities Research, 3(2), pp. 429-439.

Ph. D. THESIS/DISSERTATION

- 12. Kangwa, P. K. (2008), "An Assessment of the Economic, Social and Environmental Impacts of the Mining Industry: A Case Study of Copper Mining in Zambia" Dissertation, LUND University, Social and Economic Geography.
- 13. Mendes, G. (2001), "A Socio-Economic Analysis of Mining Industry: A Case Study of Bicholim Taluka in Goa" Ph.D Thesis, Utkal University, Dept. of Economics.
- 14. Mengwe, M. S. (2010), "Towards Social Impact Assessment of Copper-Nickel Mining in Botswana" Thesis, Nelson Mandela Metropolitan University, Faculty of Science
- 15. Vandenbroucke, E. (2008), "Environmental and Socio-Economic Impacts if Mining in Guatemala: The Role of Local Communities and The Ecological Justice Movement", Dissertation, Human Ecology and Sustainable Development.

^{*}Significant @5%(95% confidence level)

MARKETING OF HANDICRAFTS BY POOMPUHAR SALES SHOWROOM, THANJAVUR

A. MERLIN BENANSHIYA M. PHIL. RESEARCH SCHOLAR S.T.E.T. WOMEN'S COLLEGE MANNARGUDI

B. KAYATHRI BAI HEAD DEPARTMENT OF COMMERCE S.T.E.T. WOMEN'S COLLEGE MANNARGUDI

ABSTRACT

The Tamilnadu Handicrafts Development Corporation Limited, popularly known as POOMPUHAR, a Government of Tamilnadu undertaking is incharge of the handicrafts sector in the state of Tamilnadu. This Corporation was established during 1973. The main objective of the Corporation is to preserve the ancient crafts of Tamilnadu and uplifting the standard of living of the craftsmen by providing marketing assistance to the craftsmen of the state. The Corporation achieves this objective by marketing the products of the craftsmen through its large network of 14 showrooms situated all over Tamilnadu and also at New Delhi, Kolkata, and Bangalore.

KEYWORDS

corporation, handicrafts, showrooms, customer, marketing.

INTRODUCTION

arketing occupied an important place in all stages of economic life, even from barter system. But today, marketing is a complicated state. Modern marketing possesses special characteristics. Modern marketing covers all business activities in order to ascertain the demand, product planning, distribution and facilitating the entire marketing process. The modern marketing emphasizes the need for integrated and well coordinated marketing programme.

PROFILE OF POOMPUHAR SALES SHOWROOM

The Tamilnadu Handicrafts Development Corporation Limited, popularly known as POOMPUHAR, a Government of Tamilnadu undertaking is incharge of the handicrafts sector in the state of Tamilnadu. This Corporation was established during 1973. The main objective of the Corporation is to preserve the ancient crafts of Tamilnadu and uplifting the standard of living of the craftsmen by providing marketing assistance to the craftsmen of the state. The Corporation achieves this objective by marketing the products of the craftsmen through its large network of 14 showrooms situated all over Tamilnadu and also at New Delhi, Kolkatta, and Bangalore.

In this exhibition, we have specially displayed Bronze Icons, **Wood carvings**, **Brass lamps**, Thanjavur Art Plates, **Thanjavur paintings**, Clay, Terra Cotta, **Stone carvings**, Papier Mache doll, Rose wood furniture and Teak Wood Pooja Mandapam, Jute products, Leather Articles, Marble dust figures, Gem stone Jewellery, Pearls, Agarbathies and many more Handicrafts & Handcrafted Textiles collected from various states. Morethan 40 Artisans from various states are directly participating and selling their products.

A special discount of 10% is offered on all items in this exhibition. All major credit cards are accepted without any service charges.

OBJECTIVES OF THE STUDY

- 1. To study the awareness of handicraft products from Poompuhar sales showroom in Thanjavur
- 2. To analyse the customer perception and satisfaction towards the handicraft products
- 3. To analyse the factor influencing the customer preference of handicraft products.

SCOPE OF THE STUDY

This study is a micro study and the scope in limited to in analyse the satisfactory level of customer in Poompuhar sales showroom, Thanjavur. The study is useful for the company in finding whether the marketing methods of the products. It also helps to know about the consumer attributes and opinion about the handicraft products.

COLLECTION OF DATA

PRIMARY DATA

Primary data are those which are collected fresh and for the first time, and thus happen to be original in character. Questionnaire was the instrument being used for collecting the primary data.

SECONDARY DATA

The Secondary data was collected from journals, magazines and record of the company.

MARKET INTERMEDIARIES

The marketing informs diaries makeup a marketing channel. According to stern and EL. Ansary "Intermediaries smooth the flow of goods and services. This discrepancy results from the fact that the goods whereas consumers usually desire only a limited quantity of wide variety of goods.

Thus market intermediaries became an essential part in the distribution. They the manufacturer by performing variety of functions, such as,

- They distribute the products effectively, efficiently and economically from the supplier to user.
- They help the merchandising by reinforcing awareness about the product the customers.
- They also carry out the functions such as physical distribution and financing function.
- · They provide information about potential and current customers, competitors and other forces in the marketing environment.

Intermediaries act as the connecting time between the manufactures and consumers. They are very important in marketing the products. Through them products flow into the market. The gap between the producer and consumer is reduced by the intermediaries. They specialize in carrying out the transfer or title between the producers and buyers.

ROLE OF INTERMEDIARIES

Intermediaries are very important in the modern ever-widening market, by making distribution easy and smooth. They create Time, Place and Possession utility. Intermediaries concentrate their effort on marketing and distribution of goods. Here manufacture can concentrate their attention on production. The most efficient process of distribution can be performed by intermediaries. In modern marketing, the intermediaries' role is important one.

ANALYSIS

TABLE 1: CLASSIFICATION OF RESPONDENTS ON THE BASIS OF COLLECTED INFORMATION FROM MEDIA

S.No	Media	No. of Respondents	Percentage
1	Television	07	07
2	Radio	26	26
3	Newspaper	47	47
4	Magazines	20	20
	Total	100	100

Source: Primary data

Inference

The above table indicates that 47% of the respondents are collected information from newspaper, 26% of the respondents prefer Radio advertisement, 20% of the respondents prefer Magazine advertisement and only 7% of the respondents are collected from television advertisement.

CHART 1: CLASSIFICATION OF RESPONDENTS ON THE BASIS OF FORM OF ADVERTISEMENT DO YOU PREFER 47 50 40 Percentage 26 30 □ Television 20 ■ Radio 20 ■ Newspaper 10 ■ Magazines 0 Television Radio Newspaper Magazines Media

TABLE 2: SPECIALITY OF THE PRODUCT

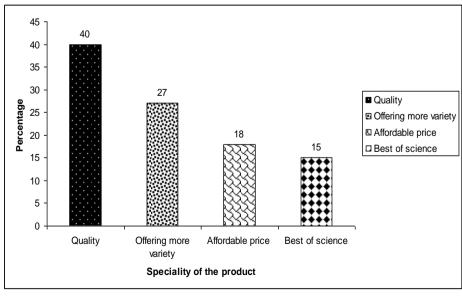
S.No	Speciality of the product	No. of Respondents	Percentage
1	Quality	40	40
2	Offering more variety	27	27
3	Affordable price	18	18
4	Best of science	15	15
	Total	100	100

Source: Primary data

Inference

The above table shows that majority 40% of the respondents like the product for quality of the product, 27% like the product for offering more varieties, 18% like for price and 15% of the respondents like for best of science.

CHART 2: SPECIALITY OF THE PRODUCT



TΔR	IF 3.	PRICE	OF BR	ΔND

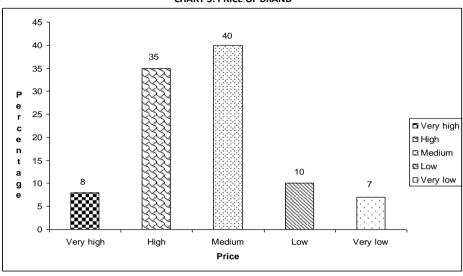
S.No	Price	No. of Respondents	Percentage
1	Very high	08	08
2	High	35	35
3	Medium	40	40
4	Low	10	10
5	Very low	07	07
	Total	100	100

Source: Primary data

Inference

The above table shows that 40% of the respondents are opinion that the price is medium, 35% of the respondents are opinion that the price is high, 10% of the respondents are opinion that the price is low, 8% of the respondents are opinion that the price is very high and 7% of the respondents are opinion that the price is very low.

CHART 3: PRICE OF BRAND



The researcher analysed from the 100 respondents and found the following:

- > 100% of the products were selling through Poompuhar sales showroom, there is a branch in Thanjavur town
- > 88% of the respondents satisfied with salesman's relationship
- ➤ 48% of the respondents are having good opinion about the quality of the product
- Majority (47%) of the respondents collected information about the brand from newspaper
- > 40% of the respondents are prefer the brand by quality, normal price and protect the health
- > 56% of the respondents were felt that the price of the product is comparable to others.
- > Majority of the respondents are selecting Television Media Advertisement.
- > 98% of the respondents are satisfied the expectation of the consumer
- > 100% of the respondents are satisfied the brand availability

SUGGESTIONS

To improve the distribution channel helps to increase the sales performance the company willing to rectify the dissatisfaction facts. To maintain the quality and low price helps to improve the sales Brand loyalty and brand image should be credited in the minds of customers so as to retain and maintain the customer. Some of the respondents dissatisfied with the salesman relationship. So the company maintain the customer. Some of the respondent's dissatisfaction relationship. So the company maintain the good salesman for their distribution. The company could give them more offers and benefits like gift, new product, etc., it will increase the sales. A maximum number of customers are purchasing the products because of the Quality and only a few customers purchase the products due to its price. The product including Thanjavur plate and coir products should be popularizing among the customer so as to increase the sales of the showroom. Customer should be induced in such a way that the amount spends towards the purchase of products be increased.

CONCLUSION

The study reveals that the Intermediaries may be able to carry out distribution activities better or cheaper than either producer or consumers. Intermediaries storage services, capability to divide large shipments into smaller once for resale and market knowledge benefits supplier and customer alike. To conclude, with vigorous and hard efforts the products can be marketed effectively and efficiently in study area.

REFERENCES

- 1. C. R. Kothari: Research Methodology, Methods and Techniques, Second Edition, Wishwa Prakashan Publishing House, New Delhi
- 2. Gundiff, Still and Gohoni: Fundamentals of modern Marketing.
- 3. Leon. G Schiffman: Consumer Behaviour.
- 4. Lesliflazar Kanuk: Pearson Education Seventh Edition.
- 5. www.tamilnadu handicraft development.com

REEXAMINING THE LINK BETWEEN SATISFACTION AND LOYALTY: A STUDY IN THE DYNAMIC INSURANCE BUSINESS ENVIRONMENT IN INDIA

AJAY JOSE

RESEARCH SCHOLAR

RESEARCH AND DEVELOPMENT CENTRE

BHARATHIAR UNIVERSITY

COIMBATORE

DR. SARASWATHIAMMA K P
RESEARCH SUPERVISOR, BHARATHIAR UNIVERSITY, COIMBATORE; &
PROFESSOR
FISAT BUSINESS SCHOOL
ANGAMALY

ABSTRACT

The research aims to reexamine the satisfaction loyalty relationship by exploring the antecedents of perceived satisfaction in the life insurance industry. A conceptual model assuming relationship between the above constructs was developed and tested on the customers of life insurance products in Kerala. Responses from 235 randomly selected life insurance customers belonging to the public sector and private life insurance companies were collected using a structured questionnaire, which captured their perceptions on certain relevant indicators capable of measuring the latent variables. A variance based Structural Equation Modelling (SEM) approach was adopted to explore the significant linkages in the proposed model. Exploring the antecedents of the satisfaction construct, and its causal effect on loyalty would provide strategic insights to practicing managers for understanding the consumer behavior, in the competitive life insurance market. The study could empirically establish the strong linkage between satisfaction and loyalty. The study gathers significance when evaluated in the light of observations by Insurance Regulatory and Development Authority (IRDA) of allowing Insurance portability

KEVWORDS

CRM, perceived service quality, perceived usefulness, trust, satisfaction, customer loyalty.

JEL CODE

M31 Marketing.

1.0 INTRODUCTION

he insurance industry in India is among the most promising emerging insurance markets in the world. The initiative for transformation of the industry was laid in 2000, when the insurance market was opened to private-sector and foreign players. Currently, India is the 4th largest in the Asia-Pacific region, being the world's 12th largest life insurance market. The insurable population in the country is anticipated to touch 750 million in 2020, with life expectancy reaching 74 years. Life insurance is projected to comprise 35 per cent of total savings by the end of this decade, as against 26 per cent in 2009-10. The insurance industry of India consists of 54 insurance companies of which 24 are in life insurance business and 29 are non-life insurers. The market size of the industry in FY-2014 stood at, Life Insurance US\$ 52463 Million and General Insurance US\$ 13535 Million (Life Insurance and Annuity Industry Outlook-Taking the longer term view, 2015). India's life insurance sector is the biggest in the world with about 360 million policies which are expected to increase at a compound annual growth rate of 12-15 per cent over the next five years. The country's insurance market is expected to quadruple in size over the next 10 years from its current size of US\$ 60 billion. During this period, the life insurance market is slated to cross US\$ 160 billion (Ibef.org, 2015).

Hence an urgent need has evolved for Insurance companies, to continually look in the way of relationship management of their customers by retaining those they are able to convince, acquire and satisfy profitably. Customer loyalty has become a top priority in service industries, since it has been proven to strongly affect profitability (Verhoef, 2003).

The demand for insurance products is likely to increase with the increase in working population leading to exponential growth of household savings and purchasing power. The proportion of working-age population in India is likely to increase from around 58 per cent in 2001 to more than 64 per cent by 2021, with a large number of young persons in the age group of 20-35. Increased incomes are expected to result in large disposable incomes, which can be tapped by the financial services sector in general and the insurance sector in particular. The Indian economy expanded 7.4% in the year ended March 2015; marginally higher than 6.9% recorded in the previous year, pointing to a soft recovery. The outlook for India is for economic strengthening through higher infrastructure spending and continued reform to financial and monetary policy. The current initiatives undertaken by the government indicate that a GDP growth rate between 7 to 8.5per cent could be attained over the next decade and the insurance industry can only benefit from this growth ("Welcome to India in Business", 2017).

India's life insurance sector is the biggest in the world with about 36 crore policies which are expected to increase at a compound annual growth rate (CAGR) of 12-15 per cent over the next five years. The insurance industry plans to hike penetration levels to five per cent by 2020, and could top the US\$ 1 trillion mark in the next seven years. The total market size of India's insurance sector is projected to touch US\$ 350-400 billion by 2020 ("Welcome to India in Business", 2017)

2.0 PROBLEM STATEMENT

There has been drastic restructuring exercise done in the insurance sector since 1999, which has made the industry dynamic, and changed the way insurance business is done in the country. Life insurance is one of the major savings cum protection tool for the common man, being the second largest contributor to household savings, amounting to almost 3.17 % of the GDP. [Report of the Working Group on Savings during the Twelfth Five-Year Plan (2012-13 to 2016-17)]. The Insurance industry is a major contributor to the Indian economy, having won customer trust and a considerable portion of his savings. However gross miss-selling, heavy loading of charges and flaws in the design led the insurance regulator (IRDA) to issue instructions to withdraw all life insurance policies on 31st Dec, 2012, and come out with new products confirming to revised regulations. The life insurance sector saw a paradigm shift after introduction of new regulations resulting in de-growth of the industry in India (IRDA Annual Report 2013). However, globally the sector has witnessed a growth in premium income, while India has seen a fall from financial year 2011(www.ibef.org). These observations have led the researcher to think of strategies for winning back customer confidence and guaranteeing growth of life insurance sector and revitalizing customer loyalty towards Insurance Companies It has been posited that, to attracting and retaining customers, is not only related to its product or services, but strongly related to the way it services its existing customers and the reputation it creates within and across the market place (Jose, Mathew, & Saraswathiamma, 2016). A strong need has arisen for life insurance companies to for effective relationship management of their customers by retaining those they are able to satisfy profitably.

3.0 LITERATURE REVIEW

Customer satisfaction has a strong linkage to loyalty (Sivadas & Baker-Prewitt, 2000), which in turn is related to profitability (Rust et al. 2004). It is essential to maintain a lasting association with the customers to provide opportunities for greater instances of cross-selling and positive recommendation intentions. The insurance provider gets to recover the selling cost of an insurance policy only when the policy is renewed for three to four years (Zeithaml et al., 1996). Higher levels of satisfaction are likely to increase the probability of, customer retaining the service provider in his consideration set and increase the customer's preference for him (Westbrook and Oliver, 1981).

3.1 PERCEIVED SERVICE QUALITY

Service quality has been conceptualized as the difference between customer expectations regarding a service to be received and perceptions of the service being received (Gronroos, 2001; Parasuraman, Zeithaml, & Berry, 1988). Service quality is found to be the critical differentiator in service-oriented business (Parasuraman, Zeithaml, & Berry, 1988). Today's competitive environment demands delivery of quality service as an essential strategy for success and survival (Dawkins and Reichheld, 1990; Reichheld and Sasser 1990). The construct of quality is conceptualized on perceived service quality (Hishamuddin et al., 2008), which is defined as, a global judgment, or attitude, relating to the superiority of service (Parasuraman et al., 1988). In most service quality models, loyalty is as an outcome variable (Cronin and Taylor, 1992; Boulding et al., 1993) of service quality. Studies have revealed that service quality is a strong antecedent and significantly related to customer satisfaction (Hossain and Leo, 2008; Sureshchandar et al, 2003; Spreng and Mackoy, 1996). Empirical evidences are available in literature to establish apparent relationship, perceived service quality shares with customer loyalty (Dabholkar, 1996). The current study the scale of perceived service quality has been presented as single-dimensional (Babakus et al., 1993; Lam, 1997).

3.2 TRUST

Trust is defined as a calculation of the likelihood of future cooperation (Williamson, 1993), where trust is the expectation that another's actions will be beneficial rather than detrimental (Creed & Miles, 1996). It is an essential ingredient for successful relationships (Berry, 1950) being a willingness to rely on an exchange partner in whom one has confidence (Moorman, Deshpande, & Zaltman, 1993). Trust can exist only when one party has confidence in an exchange partner's reliability and integrity (Morgan & Hunt,1994) To gain the loyalty of customers, it is vital to gain their trust (Reichheld & Schefter, 2000). Thus trust is considered as a critical antecedent to satisfaction for the present study.

3.3 CRM

Customer Relationship Management (CRM) is a set of business activities supported by the alignment of both technology and process directed by strategy and designed to enhance firm performance in an area of customer management (Richards and Jones, 2008). It involves a blend of methodologies, software and internet, used by a company to achieve its goal through the identification and satisfaction of customer's needs. It is the discipline of improving the way customers are managed through changes in business processes, people, organization & technology (Chen and Popovich, 2003).

The core value of customer relationship management is to understand customers' profitability and retain profitable customers (Hawkes, 2000). The purpose is of implementation of CRM in an organization is to reduce cost and increase company performance, which means profitability result through customer loyalty (Bhattacharya, 2011). Customer behaviors based on CRM have a positive effect on customer and brand loyalty (Wang and Lo, 2004).

3.4 PERCEIVED VALUE

Perceived value is the overall assessment of customer about the utility of a product or service based on this perception of the received benefits against price (Zeithamal, 1988). It is defined as customer evaluation of costs and obtained benefits from purchasing a product or service (Young et al., 2004; Zeithamal, 1988). The consumer's degree of overall loyalty is a function of the value the consumer expects in relation to the value actually received (Gounaris, Tzempelikos, and Chatzipanagiotou, 2007). Perceived value of consumer is considered as the key outcome in the consumption experience (Babin et al., 1994) and has been argued to be one of the most important predictor of repurchase intentions (Parasuraman and Grewal, 2000). Satisfaction mediates the relationship between perceived value and loyalty (Chahal & Kumari, 2011).

3.5 SATISFACTION

The concept of customer satisfaction was introduced by Cardozo (1965). Customer satisfaction conceptually has been defined as a feeling of the post utilization that the consumers experience from their purchase (Westbrook and Oliver, 1991). Satisfaction is an overall evaluation of performance based on all prior experiences with a firm (Anderson and Fornell, 1994). Customer satisfaction has significant implications on the economic performance of firms. Satisfaction is an antecedent of loyalty, with increases in satisfaction leading to increases in loyalty (Bennett et al, 2005). It has been revealed that customer satisfaction helps in generating continuous profitability by inducing loyalty (Homburg et al., 2008).

3.6 LOYALTY

Loyalty is a commitment of current customer in respect to a service provider, when there are other alternatives that the current customer can choose for (Shankar et al., 2003). It forms positive attitudes by producing repetitive purchasing behavior from time to time. customer loyalty is the mindset of the customers who hold favorable attitudes toward a company, commit to repurchase the company's product/service, and recommend the product/service to others(Pearson,2016). The feeling of loyalty resists attractive short term alternatives in favour of the expected long time benefits of staying with the existing partner. The level of customer loyalty is measured by how willing a respondent is to recommend their insurer to their friends and the extent to which a respondent will buy more services from their insurer (Nguyen & Leblanc, 2001).

4.0 THEORETICAL FRAMEWORK

Based on literature review and consultation with experts the current study considers Perceived service quality, Trust, CRM and Perceived Usefulness as the critical antecedents of Satisfaction. The impact of the construct of Satisfaction on Loyalty is also proposed to be studied through empirical investigation in the life insurance setting. Accordingly following hypotheses were proposed

- H1- Perceived Service Quality significantly develops Satisfaction to the life insurance service provider
- H2- Trust significantly develops Satisfaction to the life insurance service provider
- H3- CRM initiatives significantly develops Satisfaction to the life insurance service provider
- H4- Perceived value significantly develops Satisfaction to the life insurance service provider
- H5- Satisfaction significantly develops Loyalty to the life insurance service provider

The following model as illustrated in Exhibit -1 was conceptualized as capable of testing the theory proposed in this study. The paths between each latent constructs are assumed as hypotheses to be tested in this study.

EXHIBIT 1: THEORETICAL MODEL

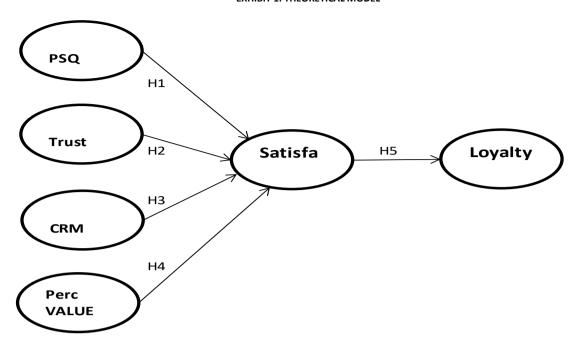


EXHIBIT 2: DEFINITION OF CONSTRUCTS WITH INDICATOR SUMMARY

	1				
Construct	No: of indicators	NATURE	DEFINITION WITH INDICATORS SUMMARY		
Perceived Ser-	4	Reflective	The quality of service as perceived by insurance customers		
vice Quality			in Kerala, from their service provider in terms of products & services; quality of advice on offer; quality		
			of customer support & brand image		
Trust		Reflective	The trust of insurance customers, in the company; in the intermediary; in the insurance providers		
	4		ability in fulfilling expectations & confidence in solving financial problems		
CRM	4	Reflective	The belief of the customer in the ability of the insurance service providers to customize services; in		
			being proactive to their needs; reward loyalty; ability to listen & value suggestions		
Perceived Value		Reflective	The value feel perceived by the insurance customers in Kerala with respect to reasonable pricing; feel		
	4		good feel; wanting to buy & feeling of security		
Perceived Satis-	5	Formative	The satisfaction as perceived by Insurance customers in Kerala towards product; intermediary; firm;		
faction			their needs & overall satisfaction		
Loyalty	4	Reflective	The loyalty intentions of the customers of Insurance in Kerala towards their service providers of main-		
			taining continued relation; positive word of mouth; first choice & repurchase		

5.0 RESEARCH METHODOLOGY

A preliminary study was conducted by way of interviews with focus groups, to identify specifically the relevant indicators to be considered for measuring the variables in the study. Based on the insights of the focus group and literature review, a structured questionnaire was developed. Data from 235 respondents were collected using the questionnaire from policy holders of life insurance companies in the state of Kerala. A simple random sampling strategy was adopted to select the sample. A total of 250 persons were met in person and 235 usable responses were obtained. The questions were designed as closed ended questions, where the respondents were expected to make their response on a 5 point Likert scales ranging from strongly disagree to strongly agree.

6.0 DATA ANALYSIS

The data collected was screened for missing values and normality. To analyse causal relationship s between the constructs, the structural equation modelling approach was adopted.

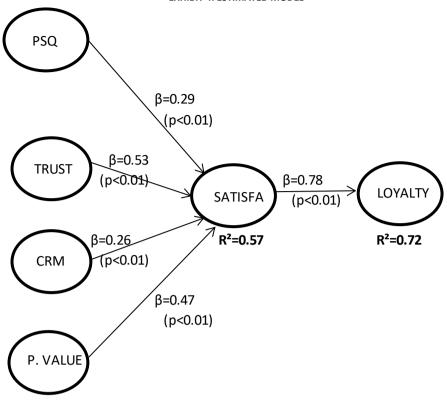
A reliability analysis was done, the high values of reliability coefficient emphasized on the appropriateness of the reflective indicators.

EXHIBIT 3: RELIABILITY STATISTICS OF SCALE

Sl. No	Dimension	No: of Items	Cornbach's alpha
1	PSQ	4	0.821
2	Trust	4	0.876
3	CRM	4	0.853
4	Perceived Value	4	0.798
5	Satisfaction	5	0.841
5	Lovaltv	4	0.813

The model was analysed using Partial Least Square (PLS) based software, Warp PLS 5.0, since PLS accommodates both reflective and formative scales easily. The preprocessing of the data includes in Warp PLS 5.0 confirmed the quality of data for further analysis with regard to missing values, zero variance and so on. The validity of the model was evaluated with the various fit indices. As recommended that the 'p' values for both the average path coefficient (APC) and the average R-squared (ARS) was lower as 0.05 and also the average variance factor (AVIF) was lower than 5. Since these 3 criteria were met the model had an acceptable predictive and explanatory quality as the data was well represented by the model.

EXHIBIT 4: ESTIMATED MODEL



Model fit & quality indices

Average path coefficient (APC)=0.286, P<0.001

Average R-squared (ARS)=0.398, P<0.001

Average adjusted R-squared (AARS)=0.397, P<0.001

Average block VIF (AVIF)=1.431, acceptable if <= 5, ideally <= 3.3

Tenenhaus GoF (GoF)=0.681, small >= 0.1, medium >= 0.25, large >= 0.36

Sympson's paradox ratio (SPR)=1.000, acceptable if >= 0.7, ideally = 1

R-squared contribution ratio (RSCR)=1.000, acceptable if >= 0.9, ideally = 1

Statistical suppression ratio (SSR)=1.000, acceptable if >= 0.7

Nonlinear bivariate causality direction ratio (NLBCDR)=1.000, acceptable if >= 0.7

EXHIBIT 5: RESULTS OF HYPOTHESIS TESTING

Sl.No	Hypothesis	'β' Value	<i>ʻp'</i> Value	Result
1	Perceived Service Quality significantly develops Satisfaction to the life insurance service provider	0.29	<0.01	Accepted
2	Trust significantly develops Satisfaction to the life insurance service provider	0.53	<0.01	Accepted
3	CRM initiatives significantly develops Satisfaction to the life insurance service provider	0.26	<0.01	Accepted
4	Perceived value significantly develops Satisfaction to the life insurance service provider	0.47	<0.01	Accepted
5	Satisfaction significantly develops Loyalty to the life insurance service provider	0.78	<0.01	Accepted

7.0 DISCUSSION AND CONCLUSIONS

The study could empirically conclude about the critical antecedents to satisfaction in insurance context and reaffirm the satisfaction loyalty linkage. All the hypotheses tested were found significant and the causality assumptions were found statistically valid.

The results of the model estimates revealed the relative importance of each of the antecedents that contribute to satisfaction in the insurance context. The study indicated that among the various satisfactions dimensions, trust (β value=0.53) as the best predictor, followed by perceived value (β value=0.47), perceived service quality (β value=0.29) and CRM (β value=0.29). The indicator which imparts the greatest trust feel was identified as the trust reposed in the intermediary (β =0. 859). The insurance intermediary being the focal point of contact with the customers should constantly ensure that he lives up to the trust expectations of the customer.

The perceived value was measured using indicators such as reasonable pricing; feel good feel; wanting to buy & feeling of security. The best sought indicator of perceived value was the feeling of security on the thought of being insured (β =0.816)

The best sought indicator for service quality perceptions was advice quality (β = 0.834) and for CRM it is the ability of the insurance service provider in being proactive to customer needs (β =0.921).

The path coefficient of the satisfaction to loyalty had a β value of 0.78 which reinforces the strong linkage of satisfaction in inducing loyalty.

8.0 MANAGERIAL IMPLICATIONS

The study statistically that trust is critical construct in developing satisfaction. Managers have to ensure their intermediaries are trustworthy and also train them on the vital aspects in developing trust. Trust assuring behavior of service personnel is a primary requisite. Trust assuring communications have to be constantly given out to customers to pamper this all-important ant need. The customers should be given a constant value feel which can be intermitantly reinforced through proper service by the intermediary.

The study could establish that CRM forms the most important factor in enhancing satisfaction, and that being proactive to customer needs should be given prime importance. Organisations should ramp up their CRM departments; and all employees should be trained to be to fulfil customer needs. The perceived quality feel of the customers should also be enhanced by delivering high quality service on all fronts. The researchers posit that insurance companies need to be proactive and enhance customer satisfaction experience, so as to have long term profitable relationship with their customers

9.0 LIMITATIONS AND FUTURE DIRECTION

This study and their results have several limitations and also indicate directions for further research. The sample size itself is relatively small. The study can be strengthened by increasing the sample size and including participants in other geographical areas. With an increased sample size, a more detailed empirical analysis among the independent variables and the variables that have multiple categories can be performed. The study did not take into account length of association of the customer with the insurance service provider, which would have been a good measure of loyalty. Future studies could incorporate these and also check on the moderating effects of choice overload and switching barriers on the satisfaction-loyalty relationship. Also, the present study did not examine personal factors, brand involvement, brand associations and brand personality. The researchers did not examine such personal factors as product involvement, variety seeking, impulsiveness, and so forth.

REFERENCES

- 1. Anderson, E. W., & Fornell, C. (1994). A customer satisfaction research prospectus. Service quality: New directions in theory and practice, 14(1), 239-266.
- 2. Babakus, E., Pedrick, D. L., & Inhofe, M. (1993). Empirical examination of a direct measure of perceived service quality using SERVQUAL items. In *American Marketing Association* (pp. 8-9).
- 3. Babin, B. J., Darden, W. R., & Griffin, M. (1994). Work and/or fun: measuring hedonic and utilitarian shopping value. *Journal of consumer research*, 20(4), 644-656.
- 4. Bennett, R., Härtel, C. E., & McColl-Kennedy, J. R. (2005). Experience as a moderator of involvement and satisfaction on brand loyalty in a business-to-business setting 02-314R. *Industrial marketing management*, 34(1), 97-107.
- 5. Bhattacharya, A. (2011). Preeminent Analysis of Customer Relationship Management (CRM). *International Journal of Research in Management & Technology*, *1*(1), 45-51.
- 6. Boulding, W., Kalra, A., Staelin, R., & Zeithaml, V. A. (1993). A dynamic process model of service quality: from expectations to behavioral intentions. *Journal of marketing research*, 30(1), 7.
- 7. Cardozo, R. N. (1965). An experimental study of customer effort, expectation, and satisfaction. Journal of marketing research, 244-249.
- 8. Chahal, H., & Kumari, N. (2011). Consumer perceived value and consumer loyalty in the healthcare sector. Journal of Relationship Marketing, 10(2), 88-112.
- Chen, I. J., & Popovich, K. (2003). Understanding customer relationship management (CRM) People, process and technology. Business process management journal. 9(5), 672-688.
- 10. Creed, W. D., Miles, R. E., Kramer, R., & Tyler, T. (1996). Trust in organizations. Trust in organizations: Frontiers of theory and research, 16-38.
- 11. Cronin Jr, J. J., & Taylor, S. A. (1992). Measuring service quality: a reexamination and extension. The journal of marketing, 55-68.
- 12. Dabholkar, P. A. (1996). Consumer evaluations of new technology-based self-service options: an investigation of alternative models of service quality. *International Journal of research in Marketing*, 13(1), 29-51.
- 13. Dawkins, P., & Reichheld, F. (1990). Customer retention as a competitive weapon. Directors and Boards, 14(4), 42-47.
- 14. Ecowrap, State Bank of India, Issue no: 33, FY15, March, 2015
- 15. Ernst & Young, Voice of the customer Time for insurers to rethink their relationships. (2015). Retrieved 16 December 2015, from http://Ernst & Young, Voice of the customer Time for insurers to rethink their relationships. p.15 2012
- 16. Gounaris, S. P., Tzempelikos, N. A., & Chatzipanagiotou, K. (2007). The relationships of customer-perceived value, satisfaction, loyalty and behavioral intentions. *Journal of Relationship Marketina*, 6(1), 63-87.
- 17. Hawkes, V. A. (2000, January). The heart of the matter: The challenge of customer lifetime value. In CRM Forum Resources (Vol. 13, No. 1, pp. 2-10).
- 18. Homburg, C., Droll, M., & Totzek, D. (2008). Customer prioritization: does it pay off, and how should it be implemented? *Journal of Marketing*, 72(5), 110-130
- 19. Hossain, M., & Leo, S. (2009). Customer perception on service quality in retail banking in Middle East: the case of Qatar. *International Journal of Islamic and Middle Eastern Finance and Management*, 2(4), 338-350.
- 20. India, & India, I. (2017). Insurance Sector in India, Indian Insurance Industry, LIC, IRDA. Ibef.org. Retrieved 3 March 2017, from http://www.ibef.org/industry/insurance-sector-india.aspx
- 21. IRDA Annual reports
- 22. Jose, A., Mathew, S., & Saraswathiamma, K. P. (2016). Initial Negativity-A Moderator in Customer Satisfaction during the Service Recovery Process in the Life Insurance Context. *Rajagiri Management Journal*, 10(1), 15-36.
- 23. King, E. C. (1950). Future interests in Colorado. WC Brown.
- 24. Lam, S. S. (1997). SERVQUAL: A tool for measuring patients' opinions of hospital service quality in Hong Kong. Total Quality Management, 8(4), 145-152.
- 25. Life Insurance and Annuity Industry Outlook Taking the longer-term view, (2015). 2015 Life Insurance and Annuity Industry Outlook Taking the longer-term view. Deloitte Center for Financial Services.
- 26. Moorman, C., Deshpande, R., & Zaltman, G. (1993). Factors affecting trust in market research relationships. the Journal of Marketing, 81-101.
- 27. Morgan, R. M., & Hunt, S. D. (1994). The commitment-trust theory of relationship marketing. The journal of marketing, 20-38.
- 28. Nguyen, N., & Leblanc, G. (2001). Corporate image and corporate reputation in customers' retention decisions in services. *Journal of retailing and Consumer Services*, 8(4), 227-236.
- 29. Parasuraman, A., & Grewal, D. (2000). The impact of technology on the quality-value-loyalty chain: a research agenda. *Journal of the academy of marketing science*, 28(1), 168-174.
- 30. Parasuraman, A., Zeithaml, V. A., & Berry, L. L. (1988). Servqual: A multiple-item scale for measuring consumer perc. Journal of retailing, 64(1), 12.
- 31. Pearson, S. (2016). Building brands directly: creating business value from customer relationships. Springer.
- 32. Reichheld, F. F., & Sasser, W. E. (1990). Zero Defeofions: Quoliiy Comes to Services.
- 33. Reichheld, F. F., & Schefter, P. (2000). E-loyalty: your secret weapon on the web. Harvard business review, 78(4), 105-113.
- 34. Richards, K. A., & Jones, E. (2008). Customer relationship management: Finding value drivers. Industrial marketing management, 37(2), 120-130.
- 35. Rust, R. T., Zahorik, A. J., & Keiningham, T. L. (1995). Return on quality (ROQ): Making service quality financially accountable. *The Journal of Marketing*, 58-70.
- 36. Shankar, V., Smith, A. K., & Rangaswamy, A. (2003). Customer satisfaction and loyalty in online and offline environments. *International journal of research in marketing*, 20(2), 153-175.
- 37. Sivadas, E., & Baker-Prewitt, J. L. (2000). An examination of the relationship between service quality, customer satisfaction, and store loyalty. *International Journal of Retail & Distribution Management*, 28(2), 73-82.
- 38. Spreng, R. A., & Mackoy, R. D. (1996). An empirical examination of a model of perceived service quality and satisfaction. Journal of retailing, 72(2), 201-214.
- 39. Sureshchandar, G. S., Rajendran, C., & Anantharaman, R. N. (2003). Customer perceptions of service quality in the banking sector of a developing economy: a critical analysis. *International journal of bank marketing*, 21(5), 233-242.
- 40. Syed, Z. Hishamuddin and Nilufar (2008)'Young consumers online shopping: an empirical study'. Journal of Internet Business, (5), 81-98.
- 41. Verhoef, P. C. (2003). Understanding the effect of customer relationship management efforts on customer retention and customer share development. *Journal of marketing*, 67(4), 30-45.
- 42. Wang, Y., Lo, H. P., & Yang, Y. (2004). An integrated framework for service quality, customer value, satisfaction: Evidence from China's telecommunication industry. *Information systems frontiers*, *6*(4), 325-340.

- 43. Welcome to India in Business. (2017). Indiainbusiness.nic.in. Retrieved 3 March 2017, from http://indiainbusiness.nic.in/newdesign/index.php?param=in-dustryservices_landing/379/3
- 44. Westbrook, R. A., & Oliver, R. L. (1981). Developing better measures of consumer satisfaction: some preliminary results. NA-Advances in Consumer Research Volume 08.
- 45. Westbrook, R. A., & Oliver, R. L. (1991). The dimensionality of consumption emotion patterns and consumer satisfaction. *Journal of consumer research*, 18(1), 84-91.
- 46. Williamson, O. E. (1993). Calculativeness, trust, and economic organization. The Journal of Law and Economics, 36(1, Part 2), 453-486.
- 47. Zeithaml, V. A. (1988). Consumer perceptions of price, quality, and value: a means-end model and synthesis of evidence. The Journal of marketing, 2-22.
- 48. Zeithaml, V. A., Berry, L. L., & Parasuraman, A. (1996). The behavioral consequences of service quality. the Journal of Marketing, 31-46.

REGIONAL DIFFERENCES IN GROWTH OF ENTREPRENEURSHIP AMONG SC/STs IN MSMEs: A STUDY WITH REFERENCE TO NORTHERN AND SOUTHERN REGIONS OF KERALA

SHACHEENDRAN.V
HEAD
PG DEPARTMENT OF COMMERCE
GPM GOVERNMENT COLLEGE
MANJESWAR

DR. TOMY MATHEW
HEAD
DEPARTMENT OF COMMERCE
CMS COLLEGE
KOTTAYAM

ABSTRACT

Entrepreneurship enables to create employment opportunities, delivers goods and services to people, thereby promote economic development and growth. Along with various broad socio-economic advantages, entrepreneurship also provides source of livelihood for the individuals. As part of their empowerment, it is essential to ensure that SC/STs are also participating in entrepreneurial activities. Micro Small and Medium enterprises serve as seed beds of entrepreneurship. Hence in a State, entrepreneurship in MSMEs should be promoted among SC/STs also. In a State governed by same set of rules and regulations is supposed to have uniform development of entrepreneurship throughout. However, the research paper proves that in Kerala State there is regional difference in the status of entrepreneurship among SC/STs in MSMEs.

KEYWORDS

MSMEs, entrepreneurship, regional difference, northern region, southern regions.

1. INTRODUCTION

conomic growth and development requires vibrant and visionary participation of entrepreneurial community. As an iterative, business churning process, entrepreneurship stimulates economic development and generates social wealth through opportunity discovery and exploitation (Venkataraman 1997). Entrepreneurship is generally perceived as an engine of social and economic growth (Acs and Audretsch 2005). They act as nursery of entrepreneurial and managerial skills. MSMEs form the fulcrum of job creation and income generation in many developing economies. As per the 4th Census of MSME sector (2011), in India, MSME sector employs 59.7 million persons spread over 26.1 million enterprises and in terms of value, the sector accounts for about 45 per cent of the manufacturing output and around 40 per cent of the total exports. MSMEs contribute about eight per cent of the GDP of the country.

The status and growth of MSME form of entrepreneurship can be measured by the variables such as the number of MSME units set up. The available data show that these measures are lower in the northern region as compared to that of the southern region. The table 1shows the number of MSME units registered by SC/ST entrepreneurs in the northern and southern regions of Kerala upto 31. 03. 2014.

TABLE 1: MSME UNITS REGISTERED IN THE NORTHERN AND SOUTHERN REGIONS OF KERALA UPTO 31. 03. 2014

District / Region	Number of Units Promoted By SC/STs
Thiruvananthapuram	1400
Kollam	1185
Pathanamthitta	747
Alappuzha	614
Kottayam	649
Idukki	567
Ernakulam	725
Thrissur	1415
Southern Region Total	7302
As % of Total of Kerala	69.88
Per Capita	0.0004
Palakkad	1468
Malappuram	560
Kozhikode	660
Wayanad	241
Kannur	267
Kasaragod	260
Northern Region Total	3456
As % of Total of Kerala	30.12
Per Capita	0.0002
Kerala Total	10758

Source: Economic Review 2014

The table shows that, the entrepreneurship in the form of MSMEs are very lower in the northern region as compared to that in southern region. The 69.88 per cent of the MSMEs promoted by SC / STs in the state are in the southern region as against only 30.12 per cent in the northern region. The per capita MSMEs promoted by SC / ST entrepreneurs in the southern region were 0.0004 as against only 0.0002 in the northern region. Thus it indicates that as on 2014, the status of entrepreneurship in MSMEs is lower / backward in the northern region as compared to that in the southern region.

2. METHODOLOGY

The study has been conducted in Kerala State. Kerala State, covering a geographical area of 38863 Square Kilometer (Sq. Km) which is only 1.18 percent of the Indian Union but accounts for 2.76 per cent of the total population. Prior to the formation of Kerala state in 1956, there were two distinct regions (princely states) viz., Travancore-Cochin and Malabar. Hence the present study has classified the State into the northern (Malabar) and southern (Travancore-Cochin) regions. The southern Region (erstwhile Travancore-Cochin Region) consisting of Thiruvananthapuram, Kollam, Pathanamthitta, Alappuzha, Idukki, Kottayam, Ernakulam and Thrissur, and The Northern Region (erstwhile Malabar Region) consisting of Palakkad, Wayanad, Kozhikode, Malappuram, Kannur and Kasaragod.

3. OBJECTIVE OF THE STUDY

To examine whether there is any regional difference in respect of status and growth of entrepreneurship among SC/STs in MSMEs in Northern and Southern Regions of Kerala.

4. HYPOTHESES OF THE STUDY

H₀: There is no significant difference in the status and growth of entrepreneurship among SC/STs in MSMEs between the northern and southern regions of Kerala. H₁: There is significant difference in the status and growth of entrepreneurship among SC/STs in MSMEs between the northern and southern regions of Kerala.

5. DATA USED AND METHOD OF ANALYSIS

The study is analytical in nature. It is based on secondary data. In order to examine the regional difference in the status and growth of entrepreneurship among SC/STs in MSMEs, a comparison using the data relating to a decade period 2014 and 2004 on per capita and per square Kilometre basis is done. The comparison using per capita and per Sq. Km. measures assumes significance because number-wise, the southern region of Kerala consists eight districts as against only six districts in the Northern Region. Since the reliable population data of the regions are available only in respect of census years, for computing per capita figures of 2014, population data of Census 2011 and for computing per capita figures of 2004, population data of Census 2001 are used uniformly throughout the study. Quantitative data relating to selected variables are analysed using average, standard deviation and Compounded Annual Growth Rate (CAGR). The CAGR is computed with the formula- CAGR= $[(t_n/t_1)^n(1/n)]$ -1. The significance of difference in the absolute status of MSME entrepreneurship has been analysed using 't' test. For this purpose, secondary data for a period of 23 years from 1991 to 2013 has been used.

6. ANALYSIS AND FINDINGS

For achieving an inclusive economic growth, participation in entrepreneurial activities by persons belonging to all communities, particularly SC/STs is needed. The table 1 shows decadal comparison of number of units of SC/ST entrepreneurs in MSME sector in the northern and southern regions of Kerala.

TABLE 1: DECADAL COMPARISON OF NUMBER OF UNITS OF SC/ST ENTREPRENEURS IN MSME SECTOR IN THE NORTHERN AND SOUTHERN REGIONS OF KERALA IN 2004 AND 2014

Particulars	2004		20	14	Gap Between Regions	
Particulars	North	South	North	South	2004	2014
No of Units	2856	7842	3456	7302	4986	3846
Per Capita #	0.0021	0.0037	0.0002	0.0004	0.0016	0.0002
Per Sq.Km.	0.1635	0.3664	0.1979	0.3412	0.2029	0.1433

Source: Economic Review 2004 and 2014.

#SC / ST Population figures of 2004 are based on Census 2001 and that of 2014 are based on Census 2011

The table shows that in 2004 in the southern region the per capita number of MSME units of SC / ST entrepreneurs is 0.0037, while the northern region it is only 0.0021. By 2014, in the southern region per capita number of units of SC / ST entrepreneurs has decreased to 0.0004 and that in the northern region, it has decreased to 0.0002. Thus it shows that, though the gap between the two regions was reduced, over the decade period, MSME entrepreneurship by SC / STs is lower in the northern region as compared to that in the southern region on per capita basis. In 2004, in the southern region per Sq. Km. number of MSME units set up by SC / ST entrepreneurs is 0.3665, while the northern region it was only 0.1630. By 2014 per Sq. Km., number of units of SC / ST entrepreneurs in the southern region has decreased to 0.3412 as against an increase to 0.1979 in the northern region. Thus it shows that, though the gap between the two regions was reduced, over the decade period MSME entrepreneurship by SC / STs is lower in the northern region as compared to that in the southern region on per capita and per Sq. Km., basis.

The table 2 shows the number of MSME units promoted by SC / ST entrepreneurs in the northern and southern regions of Kerala from the year 1991 to 2013, along with their annual growth rate and Compounded Annual Growth Rate (CAGR).

TABLE 2: GROWTH OF UNITS PROMOTED BY SC / ST ENTREPRENEURS OF MSMEs IN THE NORTHERN AND SOUTHERN REGIONS OF KERALA FROM 1991 TO 2013

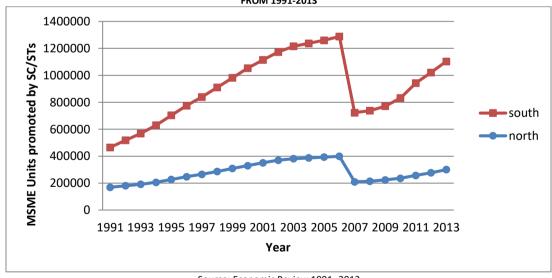
Year	Nor	thern Region	Southern Region		
rear	Number	Growth Rate (%)	Number	Growth Rate (%)	
1991	999		1559		
1992	1104	10.51	1793	15.01	
1993	1376	24. 64	2880	60. 62	
1994	1663	20. 86	3823	32. 74	
1995	1843	10. 82	4696	22. 84	
1996	1976	7. 22	5289	12. 63	
1997	2190	10. 83	5773	9. 15	
1998	2404	9. 77	6442	11. 59	
1999	2578	7.24	6833	6.07	
2000	2682	4.03	7262	6.28	
2001	2737	2.05	7458	2.70	
2002	2812	2.74	7679	2.96	
2003	2847	1.24	7796	1.52	
2004	2856	0.32	7842	0.59	
2005	2866	0.35	7904	0.79	
2006	2869	0.10	7949	0.57	
2007	2739	-4.53	5509	-30.70	
2008	2797	2.12	5625	2.11	
2009	2767	-1.07	5734	1.94	
2010	2839	2.60	5944	3.66	
2011	2972	4.68	6184	4.04	
2012	3094	4.10	6487	4.90	
2013	3134	1.29	6826	5.23	
CAGR	5.097		6.631		

Source: Economic Review 1991- 2013.

The table shows that in the northern region, out of the 23 years analysed, the highest annual growth recorded in SC / ST entrepreneurship in MSMEs is only to the extent of 24.64 per cent as against the growth of 60.62 per cent in the southern region. Though in both the regions, annual growth rate of the SC / ST entrepreneurship in MSMEs was declining from 1993 level, SC/ST entrepreneurship in the southern region was growing at a much higher rate than that inthe northern region. During the end years of analysis, SC/ST entrepreneurship is showing a rising trend in the southern region, as against a falling trend in the northern region, in terms of annual growth rate.

The CAGR shows that, the SC / ST entrepreneurship in MSMEs in the southern region has grown at faster rate (6.631 per cent) as against that in the northern region (5.097 per cent). Thus to conclude, the table shows that the northern region has lower status and growth of SC / ST entrepreneurship in MSMEs than that in the southern region. The figure 1 shows the trend line of growth of MSME units promoted by SC / ST entrepreneurs in the northern and southern regions of Kerala.

FIGURE 1: TREND LINES OF GROWTH OF MSME UNITS PROMOTED BY SC / ST ENTREPRENEURS IN THE NORTHERN AND SOUTHERN REGIONS OF KERALA FROM 1991-2013



Source: Economic Review 1991-2013

The chart shows that the SC / ST entrepreneurship in the form of MSMEs is at a very lower level in the northern region than that in the southern region. The trend lines show that though, there was a sharp decline in SC / ST entrepreneurship in the southern region in 2007, the region is well ahead of the northern region in respect of promoting SC / ST entrepreneurship in MSMEs.

The table 3 shows the mean, standard deviation and results of t test in respect of SC / ST entrepreneurship in MSMEs in the northern and southern regions of Kerala.

TABLE 3: ANALYSIS OF NUMBER OF MSME UNITS PROMOTED BY SC / ST ENTREPRENEURS IN THE NORTHERN AND SOUTHERN REGIONS OF KERALA FROM 1991-2013

1331 2013							
Region	N	Average	Standard Deviation	t	*р		
South	23	5882	1867	0.266	0.0001		
North	23	2441	637	8.366	0.0001		
H₀: Rejec	ted						

Source: Economic Review 1991- 2013.

The table shows that the average number of units set up by SC / STs during 1991-2013 is 5882 in the southern region as against only 2441 units in the northern region. Thus the table shows that the average number of units set up by SC / STs in the northern region is lower than that in the southern region. The t test results show that, since p=0.000<0.05, there is significant difference between the regions in respect of participation of SC / STs in entrepreneurship in the form of MSMEs and the northern region promotes SC / ST entrepreneurship lesser than that in the southern region.

7. CONCLUSION

The study has found that in the northern region, the status of entrepreneurship in MSMEs, as measured by number of units promoted by SC / STs is lower as compared to that in the southern region. Decadal analysis using per capita and per Sq. Km., has also proved this. The analysis of Compounded Annual Growth Rates (CAGR) has shown that entrepreneurship in MSMEs in the northern region has lower growth than that in the southern region. Testing of hypotheses has proved that status of entrepreneurship is lower in the northern region as compared to that in the southern region and there is significant difference between the regions in this regard.

In order to promote entrepreneurship among SC / STs, the promotional agencies should develop innovative business models. Among SC / STs, lack of awareness or personal skill/ knowledge related problems are found to be common. Hence intensive and rigorous training on entrepreneurship at the initial and at regular intervals are needed. Specific business idea based orientation may give a better result to promote entrepreneurship among them. In order to meet initial shortages, business incubation or similar other business models can be adopted. At all point of entrepreneurship, they should be adequately guided, morally encouraged and professionally supported so that more number of females may turn into entrepreneurship in the male dominated profession.

REFERENCES

- 1. Acs, Z. J., and Audretson. 2005. Introduction to the Handbook of Entrepreneurship Research. Springer Science. New York.
- 2. Aravinda and Renuka. 2001. Women Entrepreneurs. International Journal of Ideas. Third Concept. Vol. 20. P. 22. March.
- 3. Cherian, 1994. Impact of Entrepreneurship Development Programme on the Performance of SSI Units in Kollam District. Cochin University of Science and Technology. Cochin P. 14.
- 4. Gadar, Kamisan and Nek Kamal Yeop Yunus. 2009. The Influence of Personality and Socio-Economic Factors on Female Entrepreneurship Motivations in Malaysia. *International Review of Business Research Papers*. Vol. 5 No. 1 January. 149-162.
- 5. Khanka S. S. 2009. Entrepreneurial Development. S. Chand and Company Ltd. Edn pp. 33-39.
- 6. Rahman, S A and Das D K (2005) The Development of Small and Medium Enterprises in Bangladesh. Stanford Journal of Business Studies. Vol. 01pp. 108-124.
- 7. Rao, Harinarayan C. 1991. Promotion of Women Entrepreneurship: A Brief Comment. SEDME. Vol. 18 (2), pp. 90-99.
- 8. Report of the Committee on Development of Small and Medium Entrepreneurs (1973) Ministry of Industrial Department. Govt. of India. New Delhi. Oct.
- 9. Report of the Internal Group to Review Guidelines on Credit Flow to SME Sector (2005) Headed by Murthy. C. S Reserve Bank of India. Rural Planning and Credit Department. Mumbai
- 10. Venkataraman S. 1997. The District domain of Entrepreneurship Research. in Advances in Entrepreneurship, Firm Emergence, and Growth. Eds J. Katz and R. Brockhaus. pp. 119-138.

^{*}Significant at 0.05 level

EVALUATION OF HRD PRACTICES OF NBA ACCREDITED COLLEGES IN HYDERABAD DISTRICT

RAKHEE MAIRAL RENAPURKAR SR. ASST. PROFESSOR DEPARTMENT OF MANAGEMENT BADRUKA COLLEGE PG CENTRE KACHIGUDA

DR. SUDHAKAR B INGLE ASSOCIATE PROFESSOR R. S. MUNDLE, DHARAMPEETH ARTS & COMMERCE COLLEGE NAGPUR

ABSTRACT

The present study is taken up to analyze and understand the Human Resource development (HRD) practices of accredited colleges in Hyderabad. The study purely focuses on HRD practices, rather than focusing on the accreditation criteria (where weight age is assigned to each of the criteria for the sake of evaluating and awarding the grade to the institution). The study focuses on HRD practices in accredited colleges, considering them to be better than non-accredited colleges. For simplification of the study the HRD practices are been framed under the subheadings of accreditation Criteria which are framed by NBA governing bodies. Each criterion is further divided into sub headings for the purpose of evaluation. To study these dimensions a well-structured questionnaire is administered on the respondents. The questionnaire contains demographic information of the faculty along with these dimensions segregated under their respective heads. Both dichotomous and Likert scale are used for the collection of data. Simple and stratified random sampling techniques are used. A sample of size 169 is been taken for the study. The study indicates that gender wise there is difference in the satisfaction levels of faculty members. Few among the variables are salary, infrastructure, research and consultancy, Teaching and innovation. Especially in case of engineering college's faculty need labs and leisure time to work in their relevant specialized fields. Such motivation, if provided by colleges may motivate faculty to showcase their talents and get accolades for both themselves and institutions too.

KEYWORDS

employee satisfaction, human resource development (HRD), motivation, national board of accreditation (NBA).

INTRODUCTION

uman Resource Development (HRD) a concept in HRM is the framework for helping employees to develop their personal and organizational skills, knowledge, and abilities. Human Resource Development includes such opportunities as employee training, employee career development, performance management and development, coaching, mentoring, succession planning, key employee identification, tuition assistance, and organization development. The focus of all aspects of Human Resource Development is on developing the most superior workforce so that the organization and individual employees can accomplish their work goals in service to customers. Organizations have many opportunities for human resources or employee development, both within and outside of the workplace. Human Resource Development can be formal such as in classroom training, a college course, or an organizational planned change effort. Or, Human Resource Development can be informal as in employee coaching by a manager. Healthy organizations believe in Human Resource Development and cover all of these bases.

According to **M.M.** Khan, "Human resource development is the across of increasing knowledge, capabilities and positive work attitudes of all people working at all levels in a business undertaking." According to **South Pacific Commission** 'human resource development is equipping people with relevant skills to have a healthy and satisfying life'. According to **Watkins**, 'human resource development is fostering long-term work related learning capacity at individual, group and organizational level'.

ACCREDITATION

Education plays a vital role in the development of any nation. Therefore, there is a premium on both quantity and quality of higher education. Accreditation is a mode to facilitate the volunteering institutions to assess their performance viz-a-viz set parameters through introspection and a process that provides space for participation of the institution.

Assessment and Accreditation is broadly used for understanding the "Quality Status" of an institution. In the context of Higher Education, the accreditation status indicates that the particular Higher Educational Institutions (HEI) – a College, a University, or any other recognized Unit there in, meets the standards of quality as set by the Accreditation Agency, in terms of its performance, related to the educational processes and outcomes, covering the curriculum, teaching-learning, evaluation, faculty, research, infrastructure, learning resources, organization, governance, financial well being and student services.

The **National Board of Accreditation** (NBA), India was initially established by AICTE, under section 10(u) of AICTE act, in the year 1987, for periodic evaluations of technical institutions & programs basis according to specified norms and standards as recommended by AICTE council. NBA in its present form came into existence as an autonomous body with effect from 7th January 2010, with the objective of Assurance of Quality and Relevance of Education, especially of the programs in professional and technical disciplines like Engineering and Technology, Management, Architecture, Pharmacy and Hospitality through the mechanism of accreditation of programs offered by technical institutions. NBA has introduced a new process, parameters and criteria for accreditation. Following are the main objectives of assessment and accreditation are to: a) Assess and grade colleges and/or institutions of technical and professional education, the courses and programs offered by them, their various units, faculty, department etc. b) Stimulate the academic environment and quality of teaching and research in these institutions. c) Contribution to the sphere of knowledge in its discipline. d) Motivate colleges and/or institutions of technical and professional education for research, and adopt teaching practices that groom their students for the innovation and development of leadership qualities. e) Encourage innovations, self evaluation and accountability in higher education. f) Promote necessary changes, innovations and reforms in all aspects of the working of the colleges/ institutions of technical and professional education for the above purpose and g) Help institutions realize their academic objectives.

REVIEW OF LITERATURE

Qaiser Abbas, Shakeel Ahmad and Yesha Nisar (Master's Scholar) APCOMS Rawalpindi Campus, Pakistan in their paper on "Impact of HR practices on performance of Teachers serving in colleges of Rawalpindi, Pakistan", aimed to determine the impact of Human Resource practices on the performance of college teachers in two areas of Rawalpindi District. Four practices namely recruitment & selection, performance appraisal, compensation and training were taken as independent variables while teacher's performance was taken as dependent variable. Results of this study showed that there is significant impact of HR practices on Teacher's performance. They concluded that HR practices affect the performance of teachers. They have suggested that college administration needs to offer training courses for improving the skills, in order to get better performance from their teachers. College administration is also suggested to take step for redefining their HR policies.

Harold Andrew Patrick and Shiju Sebastian, Christ University, Bangalore in their paper on "Human resources management practices influence on faculty commitment in higher educational institutions" discussed that Human Resources Management is a set of practices that businesses incorporate to ensure that they have an effective workforce in place to meet operational needs. They found that Organizational commitment of teachers is an issue that has attracted the interest of researchers and educationists. The study found that there was a significant relationship between human resources practices and commitment of college teachers. This study confirms that both human resources management practices and organizational commitment congruence create organizational success and develop competitive advantage for educational institutions.

Hrushikesh Kulkarni, G. Tejasvi and Rakhee from Hyderabad in their paper on "A study on Job Satisfaction and Motivation of Faculty of selected colleges in Hyderabad" discussed that, every individual in this world wants to satisfy themselves. The satisfaction among faculty is related to the motivation practices practiced by their Institution. These practices motivate employees to learn and exhibit their inherit talent and gives them autonomy to innovate, experiment with new ideas. The major satisfaction is experienced when organization motivates them to take up research work, enroll in Ph.D or give them time off to attend programs through which they can enhance their teaching methodology. These sources of motivation mould employees positively and give them job satisfaction. When there is a gap between the ideal pay structure and fee structure, competent and qualified faculty are not opting for teaching as a profession. Hence, it may be concluded that a good pay structure and fee structure have a direct bearing in establishing an ideal working environment to attract qualified and competent faculty members. A satisfied faculty member certainly will give best output in teaching and research and ultimately students will get benefitted in learning, practicing, applying and retaining the knowledge.

RESEARCH METHODOLOGY

Primary Data - For the purpose of study, structured Questionnaire from employees point of view was prepared to study HRD practices of educational institutions with respect to the laid accreditation criteria. Data was also collected through personal discussion. Secondary data - Secondary source is that information that is obtained from those sources other than direct sources and the information is collected through Website, Magazines and Journals, Text books, published on Human Resource Management, Websites and Search engines. Sampling Technique - Respondent were chosen using random sampling technique to conduct the study. Simple Random Sampling and Stratified Random Sampling Technique are used. Sample size - A Total sample 167 respondents from NBA accredited colleges were taken. Analytical Tool- Chi-Square Test and Correlation Analysis are used to analyze the data.

REASON FOR SELECTION OF PROBLEM

The Topic is been taken up to study how educational institutions are implementing HRD practices to positively reinforce their employees to perform well by utilizing the resources and facilities available. The current study can help the organization to understand the Changes in job requirements, Need for multi-skilled Human Resources, Technological advances, complexity in the organization and in Human relations with the help of which an organization can plan their strategies to match with their future objectives. This study also helps an organization to modify their practices based on need and expectations of employees in their organization, as it ultimately affects employee performance.

NEED OF THE STUDY

The purpose of the study is to understand the impact of HRD practices of educational institutes on the teaching fraternity. How the practices framed under NBA are positively implemented in the institutes, which can affect an individual's personality, natural capabilities, developed skills, experience and learning to improve their Teaching methodology thereof.

OBJECTIVES OF THE STUDY

- 1. To understand various efforts taken by the Institutions towards HRD practices and its various dimensions.
- 2. To study effect of HRD practices on Employee Satisfaction and Motivation
- 3. To study level of satisfaction of employees (Gender wise) from different dimensions of HRD in terms of their ratings (with respect to laid criteria of accreditation)

SCOPE OF THE STUDY

To study effect of HRD practices on employee contributions / Performance, Career development character and value. The study is taken up with special reference to colleges in Hyderabad district only.

HYPOTHESIS

Hypothesis that have been formulated and will be tested to describe the relationship between the variables are:

H1: To test if there is relation or association between HRD practices and Employee satisfaction in terms of ratings.

H2: To Test if there is impact of HRD Practices and Policies of organization on employee ratings (towards each of the factor).

H3: To test if the ratings differ gender wise.

For the purpose of analysis, the hypothesis are further divided into sub hypothesis and analysis is done based on sub hypothesis and conclusions were drawn.

TEST FOR RELIABILITY OF THE DATA

To test the reliability of the data the Cronbach's Alpha test in SPSS was used independently for NBA data. The results of which are shown below in the table:

TABLE 1: CRONBACH'S ALPHA TABLE FOR RELIABILITY FOR NBA

Reliability Statistics					
Cronbach's Alpha No. of items					
.775 77					

Inference: From the above table we understand that the Cronbach's alpha value for NBA is 0.775; since the value is > 0.6 or 60% the data is reliable.

ANALYSIS

1) H0: There is no significant difference in salary paid and total experience of the faculty H1: There is significant difference in salary paid and total experience of the faculty

TABLE 2: CHI-SQUARE VALUE FOR RELATION BETWEEN SALARIES PAID AND TOTAL EXPERIENCE OF THE FACULTY

	Value	df	Asymp. Sig. (2 Sided)
Pearson Chi-Square	74.702a	12	.000
Likelihood Ratio	71.185	12	.000
Linear-by-Linear Association	39.813	1	.000
N of Valid Cases	167		

Inference: The Chi-Square value is 74.702 and the corresponding significant value is 0.000. As the calculated significant value is less than 0.05, we accept the alternative hypothesis.

2) H0: There is no relation between designation and salary paid to the faculty

H1: There is relation between designation and salary paid to the faculty

TABLE 3: CHI-SQUARE RESULTS FOR RELATION BETWEEN DESIGNATION AND SALARY PAID TO THE FACULTY

	Value	df	Asymp. Sig. (2 Sided)
Pearson Chi-Square	58.250a	21	.000
Likelihood Ratio	56.879	21	.000
Linear-by-Linear Association	13.930	1	.000
N of Valid Cases	167	,	

Inference: The Chi-Square value is 58.250 and the corresponding significant value is 0.000. As the calculated significant value is less than 0.05, we accept the alternative hypothesis.

3) HO: There is no relation between gender and self evaluation and accountability in college

H1: There is relation between gender and self evaluation and accountability in college

TABLE 4: CHI-SQUARE TEST RESULTS FOR RELATION BETWEEN GENDER AND SELF EVALUATION AND ACCOUNTABILITY IN COLLEGE

	Value	df	Asymp. Sig. (2 Sided)
Pearson Chi-Square	1.640a	4	.802
Likelihood Ratio	1.777	4	.777
Linear-by-Linear Association	0.217	1	.642
N of Valid Cases	167		

Inference: The Chi-Square value is 1.640 and the corresponding significant value is 0.802. As the calculated significant value is greater than 0.05, we accept the null hypothesis.

4) HO: There is no relation between gender and student support and progression in college

H1: There is relation between gender and student support and progression in college

TABLE 5: CHI-SQUARE TEST RESULTS FOR RELATION BETWEEN GENDER AND STUDENT SUPPORT AND PROGRESSION IN COLLEGE

	Value	df	Asymp. Sig. (2 Sided)
Pearson Chi-Square	2.041 ^a	4	.728
Likelihood Ratio	2.016	4	.733
Linear-by-Linear Association	0.000	1	.996
N of Valid Cases	167		

Inference: The Chi-Square value is 2.041 and the corresponding significant value is 0.728. As the calculated significant value is greater than 0.05, we accept the null hypothesis.

5) HO: There is no impact of experience on using best method of teaching

H1: There is impact of experience on using best method of teaching

TABLE 6: CHI-SQUARE TEST RESULTS FOR IMPACT OF EXPERIENCE ON USING BEST METHOD OF TEACHING

	Value	df	Asymp. Sig. (2 Sided)
Pearson Chi-Square	14.843a	16	.536
Likelihood Ratio	16.685	16	.406
Linear-by-Linear Association	9.007	1	.003
N of Valid Cases	167		

Inference: The Chi-Square value is 14.843 and the corresponding significant value is 0.536. As the calculated significant value is greater than 0.05, we accept the null hypothesis.

6) HO: There is no impact of motivation to work on new ideas and experiments on innovation and development

H1: There is impact of motivation to work on new ideas and experiments on innovation and development

TABLE 7: CHI-SQUARE TEST RESULTS FOR IMPACT OF MOTIVATION TO WORK ON NEW IDEAS AND EXPERIMENTS ON INNOVATION AND DEVELOPMENT

	Value	df	Asymp. Sig. (2 Sided)
Pearson Chi-Square	62.150 ^a	12	.000
Likelihood Ratio	63.512	12	.000
Linear-by-Linear Association	43.920	1	.000
N of Valid Cases	167		

Inference: The Chi-Square value is 62.150 and the corresponding significant value is 0.000. As the calculated significant value is less than 0.05, we accept the alternative hypothesis.

7) H0: There is no impact of motivation to work on new ideas and experiments on teaching and learning environment

H1: There is impact of motivation to work on new ideas and experiments on teaching and learning environment

TABLE 8: CHI-SQUARE TEST RESULTS FOR IMPACT OF MOTIVATION TO WORK ON NEW IDEAS AND EXPERIMENTS ON TEACHING AND LEARNING ENVIRONMENT

	Value	df	Asymp. Sig. (2 Sided)
Pearson Chi-Square	20.236a	9	.017
Likelihood Ratio	21.957	9	.009
Linear-by-Linear Association	16.429	1	.000
N of Valid Cases	167		

Inference: The Chi-Square value is 20.236 and the corresponding significant value is 0.017. As the calculated significant value is less than 0.05, we accept the alternative hypothesis.

8) HO: There is no impact of Industrial visit for students for practical experience on student working on new ideas and their experimentation

H1: There is impact of Industrial visit for students for practical experience on student working on new ideas and their experimentation

TABLE 9: CHI-SQUARE TEST RESULTS FOR IMPACT OF INDUSTRIAL VISIT FOR STUDENTS FOR PRACTICAL EXPERIENCE ON STUDENT WORKING ON NEW IDEAS AND THEIR EXPERIMENTATION

7.1.2					
	Value	df	Asymp. Sig. (2 Sided)		
Pearson Chi-Square	70.183ª	16	.000		
Likelihood Ratio	66.468	16	.000		
Linear-by-Linear Association	33.827	1	.000		
N of Valid Cases	167				

Inference: The Chi-Square value is 70.183 and the corresponding significant value is 0.000. As the calculated significant value is less than 0.05, we accept the alternative hypothesis.

9) H0: There is no impact of teaching resources on making the teaching methodology more flexible and comfortable

H1: There is impact of teaching resources on making the teaching methodology more flexible and comfortable

TABLE 10: CHI-SQUARE TEST RESULTS FOR IMPACT OF TEACHING RESOURCES ON MAKING THE TEACHING METHODOLOGY MORE FLEXIBLE AND

	Value	df	Asymp. Sig. (2 Sided)		
Pearson Chi-Square	53.461 ^a	6	.000		
Likelihood Ratio	53.850	6	.000		
Linear-by-Linear Association	33.008	1	.000		
No. of Valid Cases	167				

Inference: The Chi-Square value is 53.461 and the corresponding significant value is 0.000. As the calculated significant value is less than 0.05, we accept the alternative hypothesis.

10) HO: There is no relation between experience and research and consultancy in college

H1: There is relation between experience and research and consultancy in college

TABLE 11: CHI-SQUARE TEST RESULTS FOR RELATION BETWEEN EXPERIENCE AND RESEARCH AND CONSULTANCY IN COLLEGE

	Value	df	Asymp. Sig. (2 Sided)
Pearson Chi-Square	16.334ª	16	.430
Likelihood Ratio	18.386	16	.302
Linear-by-Linear Association	7.664	1	.006
N of Valid Cases	167		

Inference: The Chi-Square value is 16.334 and the corresponding significant value is 0.430. As the calculated significant value is greater than 0.05, we accept the null hypothesis.

11) HO: There is no relation between experience and innovation and development in college

H1: There is relation between experience and innovation and development in college

TABLE 12: CHI-SQUARE TEST RESULTS FOR RELATION BETWEEN EXPERIENCE AND INNOVATION AND DEVELOPMENT IN COLLEGE

	Value	df	Asymp. Sig. (2 Sided)
Pearson Chi-Square	31.428a	16	.012
Likelihood Ratio	31.317	16	.012
Linear-by-Linear Association	14.488	1	.000
N of Valid Cases	167		

Inference: The Chi-Square value is 31.428 and the corresponding significant value is 0.012. As the calculated significant value is less than 0.05, we accept the alternative hypothesis.

12) H0: There is no relation between experience and student support and progression in college

H1: There is relation between experience and student support and progression in college

TABLE 13: CHI-SQUARE TEST RESULTS FOR RELATION BETWEEN EXPERIENCE AND STUDENT SUPPORT AND PROGRESSION IN COLLEGE

	Value	df	Asymp. Sig. (2 Sided)
Pearson Chi-Square	34.523a	16	.005
Likelihood Ratio	35.076	16	.004
Linear-by-Linear Association	11.441	1	.001
N of Valid Cases	167		

Inference: The Chi-Square value is 34.523 and the corresponding significant value is 0.005. As the calculated significant value is less than 0.05, we accept the alternative hypothesis.

CONCLUSION

Educational institutions are taking efforts to build their HR practices in such a way that, both the Management and faculty members can be satisfied simultaneously. The level of satisfaction in the accredited colleges differs based on Salary, Motivation for presenting papers, financial benefits for research related contributions, Performance, Student's self-support and their progression, Learning and evaluation techniques, Infrastructure, Governance leadership and management.

Through personal discussion it is known that, in spite of having sufficient facilities and infrastructure, many restrictions are in place for using these infrastructural facilities (in few colleges), due to which faculty members are de-motivated as they cannot make use of these facilities to experiment. Faculty feels that they should be allowed for some leisure time to think about new ideas and for taking research projects especially in case of engineering colleges.

Teaching profession has not been a whole-hearted choice of the faculty due to huge gaps between ideal pay and fee structure. Thus many qualified faculties are not selecting teaching as their primary source of income/profession. This reflected on working environment of the colleges, whereby it is observed to be one of the factors for either dissatisfaction or moderate satisfaction. Male faculty members in accredited colleges are unhappy; however female faculty members are either satisfied or happy with the working environment or pay in proportion to the service they render for the organization. Very few colleges are offering incentives to encourage their teaching staffs, who engage themselves in publishing research articles apart from their regular teaching routines. Through survey it is observed that employees are paid as per their experience; that not always there is match between designation and salary paid to the employee. Gender wise, employees do not differ in their opinion towards learning Environment, Research and consultancy and Innovation, development and Infrastructure.

Experienced faculty can teach best methods to make classroom interaction more effective. Employees are motivated to experiment on ideas and implement successful ones in their environment. Students are encouraged for industrial visit for practical experience in their respective fields and then work on new ideas for experimentation. Employees are provided with the relevant teaching resources to make their teaching methodology more flexible and comfortable. Experienced faculties are recruited for relevant courses and programs and different departments which are incorporated in the institution. There is positive correlation between Experience and variables of accreditation criteria. The more the experience of the faculty the better are their contributions in different fields.

REFERENCES

BOOKS REFERRED

- 1. Chawla Deepak, Sondhi Neena (2011), "Research Methodology Concepts and Cases", First Edition, Vikas Publishing House Pvt Ltd.
- 2. DeCenzo & Robbin (2004), "Personnel and Human Resource management, Third Edition, Prentice Hall, India
- 3. Deepakshi Gupta (2010), "Human Resource Development practices in Information Technology Industry in India", Research Work, Guru Nanak Dev University,
- 4. Desimore. L. Randy, Werner. M. Jon, Harris. M. David (2003), "Human resource management", Third Edition, Thomson Publication
- 5. Kothari, C.R (2008), "Research Methodology methods and techniques", Second revised edition, New Age International Publishers.
- 6. Pareek Udai (2003), "Training Instrument in HRD and OD", Second Edition, Tata McGraw Hill
- 7. Prasad, L.M. (2007), "Human resource management", Sultan Chand & Sons
- 8. Rao.T.V, Verma.K.K, Khandelwal.Anil.K, S.J. Abraham.E (1997), "Alternative Approaches and Strategies of HRD", Rawat Publication Jaipur and New Delhi
- 9. Singh.I.S (1996), "HRD for Workers", Oxford & IBH Publication
- 10. Werner, DeSimore (2007), "Human Resource Development", Fourth Edition, Thomson Publication

WEBSITES

- 11. http://ijrcm.org.in/
- 12. http://ijrcm.org.in/download.php?name=ijrcm-1-ijrcm-1_vol-5_2014_issue-07-art-13.pdf&path=uploaddata/ijrcm-1-ijrcm-1_vol-5_2014_issue-07-art-13.pdf
- 13. http://ijrcm.org.in/download.php?name=ijrcm-2-ijrcm-2_vol-4_2014_issue-05-art-01.pdf&path=uploaddata/ijrcm-2-ijrcm-2_vol-4_2014_issue-05-art-01.pdf
- 14. http://onlinelibrary.wiley.com/journal/10.1111/(ISSN)1748-8583
- 15. http://papers.ssrn.com/sol3/papers.cfm?abstract_id=1636372
- 16. http://papers.ssrn.com/sol3/papers.cfm?abstract_id=1888125
- 17. http://ssrn.com/abstract=2138950
- 18. http://ssrn.com/abstract=2138950
- 19. http://www.academia.edu/8741370/impact of hr practices on performance of teachers serving in colleges of rawalpindi pakistan
- 20. http://www.businessdictionary.com/definition/human-resource-development-hrd.html#ixzz36wh2w4se
- 21. http://www.ddegjust.ac.in/studymaterial/mba/obh-414.pdf
- 22. http://www.iiste.org
- 23. http://www.iiste.org/journals/index.php/iel/article/viewfile/1069/989
- 24. http://www.ipublishing.co.in/ajmr.html
- 25. http://www.irdindia.in/journal_ijrdmr/about.html
- 26. http://www.naac.gov.in/
- 27. http://www.naac.gov.in/assesment accreditation.asp
- 28. http://www.naac.gov.in/assessment outcome.asp
- 29. http://www.naac.gov.in/eligibility_hei.asp
- 30. http://www.nbaind.org/en/1049-what-is-accreditation.aspx
- 31. http://www.nbaind.org/en/1051-nbas-accreditation-parameters-criteria-and-processes.aspx
- 32. http://www.nbaind.org/views/home.aspx
- 33. http://www.sajhrm.co.za/index.php/sajhrm/article/view/225/231
- 34. http://www.slideshare.net/alexanderdecker/11predicting-job-satisfaction-among-the-academicians-of-universities-in-kpk-pakistan
- 35. http://www.whatishumanresource.com/human-resource-development
- 36. http://www.yourarticlelibrary.com/human-resource-development/human-resource-development-features-scope-and-objectives/32371/
- 37. http://www.yourarticlelibrary.com/human-resource-development/human-resource-development-features-scope-and-objectives/32371/
- 38. http://www.ssrn.com

ASSESSMENT OF THE IMPACT OF DEMONETIZATION ON THE INDIAN ECONOMY

DR. BINDYA KOHLI
ASSOCIATE PROFESSOR
SYMBIOSIS SCHOOL OF BANKING & FINANCE
SYMBIOSIS INTERNATIONAL UNIVERSITY
PUNE

MANSHA ANAND
STUDENT
SYMBIOSIS SCHOOL OF BANKING & FINANCE
SYMBIOSIS INTERNATIONAL UNIVERSITY
PUNF

ABSTRACT

In one of the boldest decisions taken by the government in the history of Independent India, it had stripped INR 500 and INR 1000 notes' status as legal tender, with a short four-hour notice on 8th November, 2016. The research paper aims to analyze both the short and long term implications of the decision on macro-economic variables like Gross Domestic Product (GDP), interest rates, foreign exchange, Foreign Direct Investment (FDI) and Foreign Institutional Investors (FII). The study will also focus on the impact of the decision on various sectors, such as FMCG, Manufacturing, Oil and Gas and its implications for the Government, RBI and the banking industry. The researchers would attempt to build a model through which the implementation process can be refined based on the current problems being faced by the citizens at large, thereby focusing on the tools for rolling out the scheme. Based on the assessment, conclusions would be drawn that would throw light on the fact whether such a move would prove to be a success or a failure for the Indian economy. Secondary sources of data (magazines, newspapers, Bloomberg Terminal) will be used to analyse the information available.

KEYWORDS

RBI, de-monetization, economy, impact, macro variables.

INTRODUCTION

emonetization is the process of stripping a currency of its status as a legal tender. It involves declaring a currency invalid as a medium of exchange. India witnessed its third demonetization initiative through an announcement by the Prime minister, Mr. Narendra Modi on 8th November 2016. It involved the discontinuance of the old Rs 500 and Rs 1000 currency notes and replacing them with new Rs 500 and Rs 2000 currency denominations. The three fold objective of this initiative was to:

- Curb the menace of corruption. By encouraging the citizens to go cashless, illegal usage of cash can be contained. The cash less transactions provide a big
 facility to the investigating agencies, that they can check and recheck the transactions and find the wrong/ illegal financial deals. This will bring about an
 element of transparency in the system and reduce corruption in the economy.
- 2. Manage black money in the economy and- By putting restrictions on the deposit of the demonetized currency, the government tried to ensure that around one lakh thirty-eight thousand and six hundred crores worth of currency goes out of circulation. Similar initiatives would also be taken to identify non cash assets like gold, silver and real estate.
- 3. Eliminate the usage of counterfeit currency used to fund terror based activities. A major objective of the demonetization was to stop the usage of counterfeit and fake currency to fund terrorist activities in India. With the old Rs 500 and Rs 1000 denominated currencies going out of the system, it would act as a crackdown on these activities.

Various experts have expressed their views on the prime minister's masterstroke. Mr. Narayan Murthy, founder Infosys stated that, "The dishonest will have to suffer, absolutely that is the right thing." Chanda Kochhar, MD and CEO of ICICI Bank," this move will definitely bring about a whole amount of transition to no cash or low cash kind of transactions (Kumar, 2016)

WORLD EXPERIENCE

Demonetisation is not a new phenomenon. It has been tried and tested world over, witnessing some successes and some failures. The European Union is a classic example of the successful implementation of demonetisation.

EURO

Twelve EU countries introduced their single currency, the euro, on January 1, 2002. The European Central Bank prepared for almost three years with everyone fully knowing about the changeover on a particular day. Printing new notes and minting of new coins had already started in mid-1998. Frontloading banks with new notes and coins started almost three months in advance. By December 31, 2001, banks were already frontloaded with almost two-thirds of the cash needed in the next few weeks. About 96% of coins in value terms were also already in banks. All ATMs were preloaded with new cassettes and were activated at midnight. Most ATMs were designed to provide maximum 10 and 20 euro notes, as it was thought that large denominations would create a change shortage during the changeover. Despite all these preparations, many countries still permitted their legacy currency to remain in circulation for almost two months. The European example shows that how much advance preparation is required if we were looking for the successful and convenient changeover to new currency notes (Sachdeva, 2016)

In 2015, the **Zimbabwean** government demonetized the **Zimbabwean** dollar in order to fight the country's hyperinflation that was recorded at 231,000,000%. In 1996, **Australia** replaced its paper-based notes with polymer bank notes. The first plastic currency in the country was introduced in 1992 and by 1996 all the banknotes were polymer-based. Since the purpose was to replace paper with plastic and only the material changed, it did not have any side-effects on the economy (December, 2016)

The other countries which have successfully been able to demonetize their currency include Pakistan (2015, 2016), United Kingdom (1971) and Philippines (2015). **FAILURES**

While demonetization was successful in some countries, for other economies it was not able to achieve the objectives for which it was initiated. Examples include Ghana (1982), Myanmar (1987), Soviet Union (1991), Zaire (1993) and North Korea (2010) to name a few.

Majority of these countries expected demonetization to curb the menace of black money but instead the governments were faced with stiff opposition from the masses, political turmoil and people lost faith in their respective governments. Hence, the move came to an end (BS Web Team, 2016)

HISTORY OF DEMONETIZATION IN INDIA

India is not unfamiliar with the mechanism of demonetization. In 946, the Government of India phased out the Rs 10,000 notes. These were again brought into circulation in 1954 but demonetized in 1978. The other denominations which met with the same fate in 1978 were Rs 1000 and 5000. The Rs 1,000 note made a comeback in November 2000. Rs 500 note came into circulation in October 1987. The move was then justified as attempt to contain the volume of banknotes in circulation due to inflation [5].

OBJECTIVES OF THE STUDY

- 1. To study the impact of demonetization on the various macroeconomic variables
- 2. To study the impact of demonetization on various sectors of the economy.
- 3. To suggest measures for effective implementation of the demonetization initiative.

ANALYSIS

OBJECTIVE-1 IMPACT OF DEMONETIZATION ON MACROECONOMIC VARIABLES

1. GDP

On 6h January, 2017, the Indian Central Statistics Office released the numbers of the advance estimates of GDP growth rate for the ongoing fiscal year. The estimates stood lower by 0.5% at 7.1% as compared the earlier estimates of 7.6%.

Although, the estimates have reduced by only half a percentage, the effects of demonetization might dent the GDP growth by over 1.5%. This argument originates from the fact that the numbers released are based on the data captured till October 2016, which is prior to the demonetization policy being announced.

The advance estimates however, can be used as a benchmark against the actuals to be published during the budget session. Upon comparison, the quantitative impact of the policy on the overall economic growth can be inferred.

Even though it is necessary to assess the possible effects of the proposed policy on the GDP estimates, it might be a challenging task to accomplish. Although, it is quiet premature to estimate the quantum of effects that the demonetization policy has caused, however, accompanied with global slow-down and subdued demand it has further impacted the demand trend negatively which might take the GDP growth southwards for the year.

There are a multitude of things that would get affected in the entire shift. There is an evident continuous flow of money into bank accounts which has ultimately led banks to lower the interest rates. With the existing deposit rates and the lending rates slashed, banks might face immense pressure to generate appropriate Net Interest Income which might lead to a subdued profit and growth figure. Although, the lower interest rates on borrowings might push the credit growth, the likely impact on the overall profit and loss account seems to remain under pressure. On the other hand, the budget deficit is expected to go down as the government will acquire tax revenues which will ultimately reduce inflation (Inflation reduction also have to be supported by an accommodative monetary policy stance). The GDP is also largely affected by the money supply in the economy. The effects of all these factors shall also be taken into consideration but it seems like a challenging task for the economy to pick up in a period of 2-3 quarters.

2. MONEY SUPPLY

There are 4 measures of money supply in India denoted by M1, M2, M3 and M4. Comparing the two extreme connotations, i.e., M1, which is known as the narrow money and M4, which is known as the broad money, narrow money comprises of cash and demand deposits, while M4 is M1 multiplied by the velocity of money and the actions of the banking system.

The velocity of money existing in the formal economy can be gauged with certainty, but the velocity of money existing in the informal sector is difficult to predict. It can be both more or less than that existing in the formal economy. If we work on the assumption that black money hoarders churn it as quickly as possible to make maximum possible gains, then the velocity would be high. While on the other hand, if we assume that people hoard money and keep hold of it for longer periods of time, then the velocity would be less.

Accordingly, the money supply can increase as well as decrease. If the velocity of money in the informal sector is lower, it would lead to a flow of money into the formal banking channels thus, having a stimulatory effect and increasing the money supply. While on the other hand, if it is higher, the demonetization policy will significantly reduce the monetary base having a contractionary effect. Thus, it is difficult to predict the overall direction with certainty.

3. INTEREST RATES

According to estimates released on 5th January, 2017, approximately INR 15 lakh crore has already been injected into the banking system since 8th November, 2016, when the demonetization scheme was announced. Taking a short term standpoint, the banks are experiencing additional deposits of a tremendous quantum. In order to reduce the pressure on the net interest income generation, the banks cannot simply sit on the mounds of cash being deposited. Therefore, in order to facilitate credit creation, the lending rates have been reduced. While on the other hand, to support the profitability and growth motive of the banks, the deposit rates have too moved southwards.

In the long term, the banks might not have these additional funds. The demonetization policy has forced the citizens of the country to deposit their savings into bank accounts. A majority of such deposits are involuntary savings which have been made simply for the sake of exchanging the old notes and not with the intention of earing an interest income. It will be converted into liquidity by the depositors when the full-fledged new currency supply takes place. It means that the savings with the banks are transitory in nature. Therefore, banks can reduce their rates in the short or medium term. But they cannot afford to maintain such a stance in the longer term.

4. REPO RATE

On 4th October, 2016, the newly formed Monetary Policy Committee sliced down the country's reporate by 25 basis points aggregating to a 50 basis points cut for the entire year. A change in this rate affects the rates of commercial banks, other rates such as the reverse reporate and marginal standing facility along with a significant impact on the movement of rupee.

As a result of the recent demonetization policy announcement, there has been a significant fall in the number of cash transactions which is an indicator of decreased consumption due to which the inflation is likely to go down. Therefore, in order to boost economic activity and consumption and to bring back the temporarily derailed economy back on track, the RBI will likely undertake more rate cuts in the upcoming monetary policy reviews.

5. INFLATION

The proposed policy has till now negatively affected the inflation numbers and has kept them moving south. Consumer spending has reduced drastically as consumers are refraining from making any purchases except for essentials like consumer staples and health care. The real estate sector seems to be the worst hit as it remained a hot spot for cash and undocumented transactions.

A shortfall is expected in the money supply in the short term due to inadequate infrastructure for the printing and circulation of new notes. This will have a deflationary impact on the economy. Nonetheless, whether the impact of the decreased money supply will lead to deflation or contraction in demand or a mix of both will differ from sector to sector contingent to the nature of goods & services.

6. FOREIGN TRADE

The growth rate of any economy can be accelerated or decelerated based upon the health of its foreign trade, i.e., imports and exports. Post demonetization, the exports have backed off because of cash crunch. Instability in the exports of a country might lead to inflation and hence, erodes the internal purchasing power leading to an unstable economy. However, on the other hand a decline in the consumption expenditure highlights a downward trend in the imports. A stable exchange rate could be an idle situation for the economy as volatility vitiates the trade for India.

OBJECTIVE-2: IMPACT OF DEMONETIZATION ON VARIOUS SECTORS

1. FMCG

Consumers have drastically cut down on discretionary spending. Majority of the households have restricted their spending to essentials only. The wholesale businesses along with the traditional *kirana* stores have been hit hard where majority of the transactions are in cash. According to estimates, this segment has experienced a 20-25% fall in the sales on a year-on-year basis. Sales in the rural areas have been affected more.

Although, on the other hand, sales via organized retail stores have picked up due to their ability of accepting non cash payments. A change in the nature of purchases has been witnessed. Consumers are willing to buy essentials such as sugar, flour, etc. from such outlets.

2. MANUFACTURING

The PMI in November 2016 fell to 52.3 from October 2016's 22-months high of 54.4. Cash shortage has hampered the growth of new work flows, buying activity and production, while passive inflationary pressure may prompt the RBI to cut down key policy rates. A growth in demand from both domestic as well as external entities has been witnessed, though it has been hampered by the prevailing cash crunch.

Although, a disruption has been caused by the policy implementation, it is expected to ignite a growth pattern in the long run as unregulated entities may be forced to exit the market space.

OIL AND GAS

This sector will not be adversely impacted by the withdrawal of high denomination notes. Various components such as refining margins, production of petro products, gas transmission, etc., will not be affected. This sector will largely remain unaffected due to the fact that factors such as capacity utilization, capacity expansion, marketing margins and tariffs for gas utilities are independent of demand.

However, demand for petro products at retail outlets did pick up post the announcement of the policy as old currency notes were being accepted at petrol pumps. As a result of reduction in wealth and liquid cash, the retail demand for petro products may take a hit.

TOURISM

The most challenging phase of dealing with the post traumatic effects of the demonetization policy has perfectly coincided with the busiest season for the tourism industry. A sharp decline has been experienced in hotel bookings and other associated services sales. The premium hotels segment although remains largely unaffected as majority of their bookings are in advance and are done online. The unorganized sector has been the worst hit. Offshore travel has gone southwards as majority of the foreign exchange usage abroad is via cash.

5. AVIATION

Inbound travel has been majorly hit post the implementation of this policy. Airlines have experienced as large as a 16% fall in their bookings in the week following the introduction of this policy as compared to the week prior to it. Discretionary travel has taken the worst hit. Chartered flights have also experienced cancellations as majority of the payments are made via cash.

In order to cope up with the slump in sales, airlines have been forced to pre pone their airfare sales. Combined with the low oil prices, airlines have been able to offer cheaper deals in order to attract customers.

6. REAL ESTATE

Real estate deals have backed off altogether as the consumers are not willing to invest in property in light of the recent demonetization policy introduced by the Government of India. Land developers have delayed the launch of premium site projects as the prices of land and property are expected to decline further in the upcoming months. The resale property market has also witnessed a significant decline in the number of deals going through.

It is an undeniable fact that the real estate segment has been the hot spot for money hoarders leading to the maximum number of cash transactions. Post the introduction of the demonetization policy, the purchaser has to furnish a reasonable statement supporting the source of funds being utilized for the purchase of the property, which in majority of the cases is almost an impossible task.

Although, in the light of expected rate cuts by the RBI, this sector is expected to get back on track in the coming months.

7. BANKS

Banks have been experiencing a huge quantum of low cost deposits being made in the short term. They have reduced their deposit rate which means lower cost of funds and thus, better margins. As credit growth picks up, the increasing balance sheet size would also prove to be beneficial for them. Due to excess liquidity in the market, the yields are likely to fall down which will accrue treasury gains for the banks.

But on the other hand, even though banks are making significant efforts to facilitate the credit generation process, they have not experienced sufficient demand. With real estate deals on the slump and production estimates going south, the demand for credit has not been incremental. The asset quality of the banks could also worsen due to an expected slowdown in the economy.

8. AUTOMOBILES

The demand for two wheelers may take a hit as majority of the payments are rendered in cash. But the sales for passenger vehicles will largely remain unaffected as 70-80% of the sales are via external financing or cheque payments. Sales of commercial vehicles will be negatively impacted.

OBJECTIVE-3: IMPLEMENTATION STRATEGY

Developing a larger supply of new notes ahead of time would surely have maintained a strategic distance from a portion of the burden and the related cash shortage. The late arrangements made for weddings and agriculturists, could have also been foreseen. The ministry of agriculture's demand with respect to exclusion for farmers procuring seeds and different contributions amid the sowing season, so as to avoid disruption in sowing, should have been tended to expeditiously, as opposed to after numerous days.

The adaptability provides after issues surfaced is to be invited yet it could be expanded considerably further. For instance, old notes are permitted to be utilized in public-sector hospitals yet not private healing facilities, and farmers are permitted to utilize them for buying of seeds from public sector organizations but not private agencies. There is a decent case for permitting adaptability for buys from the private part too. The due date that has been taken into consideration for this adaptability could have been protracted.

Although the most imperative adaptability is to permit cooperative banks to accept old notes. Their nearness in rural regions is much bigger than that of commercial banks, and they are all governed by certain laws. On the off chance that enough currency does not exist at present to supply cooperative banks, they ought to be permitted to accept the old notes and supply new ones later.

The government should have given more time to its citizens to adjust to the change thereby reducing the agony of being without cash or standing in long queues. The ATMs should have been recalibrated in advance to meet the requirements of cash. The post office network should have been more optimally used due to its greater penetration in the Indian economy. The new currency introduced in denomination of Rs. 2,000 has been rendered useless because the government has failed to maintain a sufficient supply of smaller currency notes due to which people could not make change of the new currency.

CONCLUSION AND RECOMMENDATIONS

Taxation transparency, benami transactions, cash transaction dominant economy, unorganized sector etc. are some of the key challenges that the acting government has been facing. With demonization, majority of the key issues are expected to be addressed. There have been declarations that more strides will be taken, however these cover the ambit of benami properties and the undeclared foreign holdings. What are required are steps that will demoralize further creation of unaccounted income.

The accompanying is a rundown of steps that can be taken, which will have a critical effect after some time.

- 1. Reducing circumspection in both the Central and State governments by enabling transparency and accountability particularly in higher amount transactions. The greatest range of prudence identifies with land, land utilization, real estate regulations & digitization of the transactions.
- 2. Reforming the system of tax administration, including revamping, reinforcing and modernizing the Central Board of Excise and Customs/Central Board of Direct Taxes.

- 3. Lowering tax rates and rearranging the assessment framework to enhance consistency. The goods and services tax (GST) to be presented shortly was a perfect open door, yet the proposition at last endorsed by the GST committee has far too many rates and exemptions. Regardless of the possibility that this can't be changed at this stage, the committee could announce a review of the multiplicity of rates with a view to converging on two rates plus a transgression charge. It could likewise declare an expectation to incorporate liquor—a noteworthy wellspring of avoidance and black money—furthermore real estate in the GST by 2020.
- 4. The government should also focus on enforcing the Real Estate Regulatory Bill in order to avoid embezzlement of funds & introduce transparency of transactions in order to ensure that the real estate markets remains a buyer biased market in terms of the rules and regulations. The bill has been passed in Lok Sabha and is waiting for the Rajya Sabha passing for it to transform into one of the most herculean laws governing the way real estate functions.
- 5. Lowering the corporate tax rate to 25% in equal tranches with exemptions eradicated in the following budget. The tranches can be of 1% each year. This would definitely impact the fiscal deficit but if performed in tranches with the support of various other reforms in tax rates, export policies, import burdens etc., the deficit should be in control.
- 6. Persuading states to radically bring down the stamp duty for land deals as high rates of stamp duty are a noteworthy motivating force to sustain land exchanges in black money.
- 7. Pursuing some prominent debasement cases to an effective decision to make an impression on both business and the administration that corruption won't go on without serious consequences. A specific approach in view of logical probabilistic analysis is more appropriate than broad-based action which only creates fear in the business community.
- 8. Finally, it is significant to begin endeavouring at transforming the arrangement of electoral funding, incorporating transparency in gathering accounts which has already been kick started with the current year's budget. Business people routinely say that they are compelled to create black money to meet the requests of the political framework furthermore, the demands of the bureaucracy which has self-assertive forces which can convey business to a stop.
- 9. The government must critically focus on delivering reforms by increasing the expenditure of income generating areas and reduce the extent of subsidies by empowering increase in the income of the various low income groups. However, the task of reducing such subsidies can be challenging as the expenditure route requires strong fiscal revenue for support.
- 10. The government must start imposing charges on the cash withdrawal/transactions and complement the same by reducing the charges on digital transactions in the interim. This would help in discouraging the cash transactions.

Demonetization can only be a part of an extensive technique to handle corruption and generation of black income, and it is probably going to force considerable agony due to the antagonistic impact on GDP and low-end employment. The government will hopefully implement the next set of reforms better than the demonetization implementation which caused extreme liquidity issues across the economy. The more essential part of the battle against corruption includes the other arrangement of measures recorded previously. Advancement on these would make a genuine commitment to decreasing the long term advantage of lessening the generation of black income over time.

REFERENCES

- 1. BS Web Team, (November 18, 2016): Demonetisation: 5 countries that tried currency reforms and failed http://www.business-standard.com/article/economy-policy/demonetisation-5-times-countries-tried-currency-reforms-and-failed-116111800271 1.html
- 2. (December 19, 2016): Demonetization Can Be Successful & Here Are 6 Countries Which Proved It. http://www.spellerstep.com/information/demonetization-can-successful-6-countries-proved/
- 3. Know all about history of Indian currency demonetization. https://www.ncaacademy.com/know-all-about-history-of-indian-currency-demonetisation/
- 4. Kumar, Ravi Prakash (Nov 09, 2016): What is demonetisation and why was it done, economictimes.com.http://economictimes.indiatimes.com/articleshow/55326862.cms?utm_source=contentofinterest&utm_medium=text&utm_campaign=cppst
- 5. Sachdeva, Gulshan (Nov 21, 2016): Europe's Successful Currency Changeover Highlights Everything India Did Wrong. https://thewire.in/81396/europe-currency-changeover-demonetisation/

CONSUMER ETHNOCENTRISM: IT'S ANTECEDENTS AND CONSEQUENCES WITH REFERENCE TO "MILLENNIALS IN INDIA"

NATASHA TAGEJA
ASST. PROFESSOR
DEPARTMENT OF COMMERCE
COLLEGE OF VOCATIONAL STUDIES
DELHI UNIVERSITY
DELHI

ABSTRACT

With the removal of trade barriers in India, it has become easy for the foreign firms from all over the country to enter the Indian markets and tap its consumers. But what has been a challenge for the firms is gaining the consumer acceptance of the foreign products. Therefore, the marketing literature poses Consumer Ethnocentrism a major hindrance in consumer evaluation and acceptance to the foreign products. "Ethnocentrism" refers to the evaluation of other's culture according to pre-conceived notions originating in the standards and customs of one's own culture. Consumer ethnocentrism specifically refers to ethnocentric views that are held by consumers in one country, the in-group, towards products from another country, the out-group (Shimp & Sharma, 1987). Consumer ethnocentric tendencies as seen through various researches play a significant role in determining the purchase behaviour of consumers towards domestically produced goods and foreign products. This paper aims to study the factors triggering ethnocentric tendencies amongst the consumers and discussing the millennial segment of the consumer population in India in depth in the present context as this is still an unexplored dimension of Consumer Ethnocentrism. The millennial population is chosen as the focal point of the study because this segment forms 65% of the total population and thus, their purchase behaviour poses economic implications for marketers. The attempt is to fill the gap in the current consumer marketing literature relating to "Consumer ethnocentrism" in India as this concept is still in its infantry stage due to lack of awareness in the country. The paper also attempts to trace the history of such a concept in our country and how such a concept revived itself in the wake of current developments in the country. Based on findings from the study, the paper spells out various strategic implications for both domestic and international marketers in gaining acceptance of their products among different markets, consumer segments, niches and p

KEYWORDS

consumer ethnocentrism, CET scale, millennials, antecedents.

I. INTRODUCTION

1. CONCEPT OF CONSUMER ETHNOCENTRISM

he term Consumer ethnocentrism is a modified version of the original concept of "Ethnocentrism" given by Sumner in 1906. Going by what ethnocentrism means, Consumer ethnocentrism is defined as an evaluation of beliefs held by the Indian consumers about their own products in relation to the foreign products. Ethnocentrism is a human universal phenomenon and almost a universal syndrome of bigoted attitudes and behaviours of people (LeVine & Campbell, 1972). LeVine and Campbell believe that this feeling among humans compels them to view their own symbols, values and objects that signify their nations pride and attachment whereas that of the other becomes a matter of contempt. It typically points towards the attitudes of a consumer due to which he/she is likely to weigh his own products and services favorably as compared to ones imported from outside the country. This attitude jumps on to become a stereotype that it is unethical, immoral, unpatriotic and harmful to buy or consume the products that come from the out group (Shimp & Sharma, 1987). The psychology behind such an attitude is understood well by some and explained as- consumers have a sense of proclivity to those symbols, objects and values to which they can identify rather than those which are unknown to them (Sumner, 1906).

It can even be defined as a sensation that one's own group has regarding a mode of living, values and prototype of adaptation that are superior to other groups (Haviland, 1993). These ethnocentric beliefs or sensations of the person tend to divide the society across different races, religion, cultures, etc.

Consumers who are indifferent between buying foreign or Indian are believed to violate the cultural norms of the domestic country. But an ethnocentric buyer on the other hand believes that alien offerings alter the consumption patterns and also lead to economic losses for the country by way of causing loss of jobs.

Consumers who are thought to be ethnocentric tend to be skeptical about foreign product both morally and economically as they think that it will lead to loss of jobs for their own country and morally it is incorrect to buy foreign goods as it impairs their economy. They are more inclined towards their local products thinking that their country makes the best products, boasts itself superior and that foreign goods are lower in terms of quality as compared to their domestic goods. For example, consumers in India find pride in using products made from khadi maybe because they feel khadi reflects their own culture and therefore the feeling of patriotism emerges while making its purchases.

Until mid-eighties, no definite scale existed for the purpose of measuring ethnocentric sentiments as relevant to the domain of consumer behaviour and marketing phenomena (e.g., Sharma and Shimp, 1987, Luque-Martinez, Ibanez-Zipata, & Barrio-Gracia, 2000). A few instruments that existed at that time were too generic that could be useful for the measurement of ethnocentric tendency prevailing among consumers. Shimp and Sharma in 1987 made the pioneering attempt by constructing a multi-item scale for measuring consumer ethnocentric tendency also known as the CET SCALE. The CET SCALE is a 17-item scale used for the purpose of identifying the ethnocentric attitude of a consumer, which has been popularly used in several studies across countries.

Several studies have summarized the outcomes of product country of origin studies and suggest that a product's origin is a vital factor in determining how it will be received by buyers and what kind of purchase behaviour it would derive (Bilkey & Nes, 1982).

However, recent studies have revealed that consumers in the less developed economies prefer to buy products which come from outside. So, ethnocentrism does not find much ground in these countries. Consumers of these countries have shown preference for imported goods (Agbonifoh & Elimimian, 1999).

Moreover, evidence in developed countries suggests that CET that is consumer ethnocentric tendency is particularly strong among them as they are in a way more "alert economies" and know how to protect themselves from other nations. These economies feel that they are threatened by foreign competitors taking away their employment and destroying their culture (Vida & Reardon, 2008).

2. ANTECEDENTS OF CONSUMER ETHNOCENTRISM

By antecedents we mean the factors such as feelings of patriotism, low degree of openness towards various cultures, conservatism, animosity towards other country, collectivism/individualism, income and education level of consumers and age which directly influence the purchase behavior of customers. These factors can be easily divided into demographic factors, product related factors and socio-psychological factors, and might be positively or negatively correlated to ethnocentric feelings among buyers.

2.1 SOCIO-PSYCHOLOGICAL FACTORS

2.1.1 Patriotism and Conservatism

Patriotism can be defined as "strong feelings of attachment and loyalty to one's own country, but without any corresponding hostility towards other nations" (Balabanis & Diamantopoulos, 2004). It seems that consumers in India find a certain kind of ethnic pride in using products made from khadi maybe because they feel khadi is related to their own culture and therefore the feeling of patriotism emerges while making its purchases. It is thus evident that brands like Fabindia and Patanjali have flourished in the Indian markets and their success may be rightly attributed to a great extent to ethnocentric attitudes of consumers towards

these domestic brands which may be symbolic of our Indian culture. In other words, patriotism may be seen as positive indicator of consumer ethnocentrism (Shimp & Sharma, 1987). Also, that a conserve person would always like to cherish the traditions and those bigoted social and cultural institutions that have survived the test of time and are less welcoming to changes.

2.1.2 Cultural Openness

Cultural openness is defined as willingness of people belonging to a particular culture to interact with people from other culture and experience their customs and values (Shankarmahesh, 2006). With increased exposure, consumers are getting influenced by real time information available on different media like TV, internet, smartphones, etc. Because of the changing dynamics of the environment, the erstwhile stable indicators of consumer behaviour i.e. beliefs, values and customs (constituents of culture) are also undergoing change. Culture is becoming increasingly de-territorialized and penetrated by elements from other cultures, resulting in cultural contamination, cultural pluralism and hybridization (Criag & Douglas, 2006). Various studies have found a negative relationship persists between cultural openness and CET (Shimp and Sharma, 1987 & Howard, 1989). These studies have quoted that "travel opportunities can broaden one's mind" (Berkowitz, 1962).

2.1.3 Collectivism

Collectivistic persons are likely to show ethnocentric tendencies since their actions carry a relative dimension. They consider what effect they will have on a particular social group. Hofstede (1976, 1980) divided cultures in terms of collectivism and individualism. He has defined a "Country Individualism Index" (IDV) and calculated the index scores for forty countries. The people in a country with high IDV score tend to be more individualistic and the people in a country with low IDV score tend to be more collectivistic.

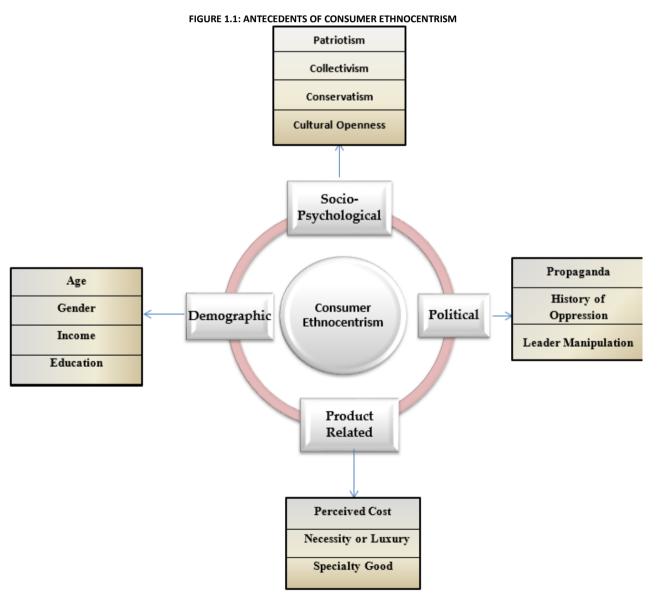
Nicholson, Lee, Hemmasi, and Widdison (1993) have found in their research that people from collectivistic cultures tend to be more ethnocentric than people from individualistic cultures. Thus, the people in collectivist cultures are likely to be strongly ethnocentric as they tend to obey the norms of the in-group or the society. They think about the effect of their behaviour on society and feel responsible for their actions or behaviour. Whereas self-absorbed, self-centered or self-indulgent are the words used to describe an individualistic person as he/she acts for his own benefit and thus will show lesser degrees of ethnocentrism.

If we consider developed economies like USA, Japan and Canada, products from more developed countries are generally perceived to be more positively by consumers as values of collectivism, cooperation and collaboration are prominently visible in their population as compare to less developed countries like India.

2.1.4 Animosity towards other Countries

Talking about animosity towards other countries, animosity or feeling of hatred or tensions among nations may hinder the sale of foreign products in the country. Thus, animosity tends to decrease consumer's extent of inclination towards foreign products of nations for which animosity is directed giving rise to ethnocentric tendencies. As mentioned above, the case of India proves to be a good example. During the colonial rule, the nationalist leaders provoked people to abandon foreign clothing imported from Britain as a sign of their hatred towards them and promoted the use of Khadi.

The following figure enumerates the factors triggering ethnocentric tendencies in Consumers:



2.2 DEMOGRAPHIC FACTORS

2.2.1 Education

Education exposes people to various aspects of living and changes the way one views the world, they become more open and acceptable to other cultures, religions, races, various kinds of attitudes and perspectives, thus paving way to positive outlook for foreign commodities. A recurring theme of findings of past studies concluded that educated people are less conservative and less ethnic in their prejudice against artefacts and thus education makes them less averse to imports due increased visibility of the outer world (Klein, Ettenson, & Krishnan, 1999).

2.2.2 Gender

As far as gender is concerned, an overwhelming body of evidence supports the axiom that women score higher on CET scale than men (Bruning, 1997 & Sharma et al., 1995). The logic underlying this assumption is that women are more considerate, conservative, and conformist and play a collectivist role in life as compared to the opposite sex (Eagly, 1978 & Han, 1988).

2 2 3 Income

It is evident that buyers with higher income are open to imported luxuries, frequent foreign travel, more social interaction; thus making them prone to other cultures as provided by Sharma *et al*. In other words, higher education and income levels lead to decreased ethnocentric tendencies. Though studies conducted by Han (1988) reveal no significant relationship between income and CET among consumers.

2.2.4 Age

Lastly, age as a factor is a positive indicator of ethnocentric tendency as suggested by various studies. The elderly tend to be more conservative and patriotic as compared to the young who are more open to experimenting with new things and are associated with low feelings of national pride. The younger generations are easily influenced by their environment which makes them an easy target for global marketers to sell their products in the country.

Education, age, gender and income levels among the natives of a country have direct implications on their purchase drives.

2.3 PRODUCT RELATED ATTRIBUTES

2.3.1 Perceived Cost of the Product

The perceived cost of the product is another factor that affects ethnocentric attitudes of the consumer during the purchase process. If he feels very strongly for the country and wants to buy domestic but if he perceives the cost to be high, then he/ she may suffer a drastic drop down in his CET score towards the product and may end up not buying it.

2.3.2 Necessity or Luxury Good

When we talk about attributes that are product related- the product may be a necessity or a normal good. These attributes will influence the ethnocentric tendencies operating in a purchase situation (Sharma, Shimp, & Shin, 1995). Thus, Sharma says that if a product is found to be a necessity product such as salt or milk, the less inclined ethnocentric tendencies the consumer will have towards the product.

2.3.3 Specialty Product

The product may be a specialty of one country or region that derives the consumer off ethnocentrism. For example, while buying shawls or stoles one may prefer to buy Pashmina which is a specialty in that category and therefore one may not think of going for domestic.

2.4 POLITICAL FACTORS

2.4.1 History of Oppression

Political histories of different countries determine the level of CET in a society. Huddleston, Good, & Stoel in their study explained higher CET scores in Poland compared to Russia by arguing that consumers who are native to countries that have a long history of oppression (such as Poland) tend to be more ethnocentric than those belonging to countries that were conquerors (such as Russia). The same is true in the case of India as first instance of "Ethnocentrism" was experienced when the nation was under the colonial rule of the British and went onto abandoning their goods and buying "Indian". However, it can be argued that consumers of conquering nations will tend to view their own country products as more superior and preferable compared to those of conquered nations which is the "outgroup".

2.4.2 Propaganda

Rosenblatt, 1964 suggested political propaganda as one of the important antecedents of ethnocentrism. He argued that leaders can trigger or influence group ethnocentrism by raising the bogey of threat by out-groups. To estimate the extent of such a propaganda on CET in a society is an empirical question. It might be of much interest to look at the role of "political freedom" or "democracy" as a complementing force in the relationship between political propaganda and CET. In other words, the key issue is whether consumers belonging to democratic countries are less likely to be driven by political propaganda than those living in authoritarian environments.

In summary, the extent and direction of influence of both political propaganda and political history are both empirical questions that require further investigation.

2.4.3 Leader Manipulation

It has been seen that a particular behaviour of a leader may mainly instigate a group towards another group. Thus, a person may act as a leader in a purchase decision affecting the ethnocentric attitude of another one making the actual purchase and this act may be against his natural instinct.

II. RELEVANCE

India being a large transnational economy since 1991 has revolutionized itself in terms of literacy levels, purchase behaviour, income levels, industrial growth, keeping in view the vicious competition the domestic marketers are exposed to foreign products. With population of approximately 1.2 billion, annual growth rate of GDP averaging to 6.08% and literacy rates souring to 74.04% (Census Of India, 2011), the country presents a lucrative market and growth opportunity for multinational organizations. These multinationals have shot hard to tap the hidden potential in the new markets thinking that their offerings will easily be welcomed. According to a study by Mckinsey Global Institute (MGI), a country like India is likely to emerge as the fifth largest consumer market in the world by 2025 and the second largest "emerging consumer hub" (Pal, 2000). There has been a gradual surge in the average spending of a consumer and its economic reforms have led to this increase in consumption expenditures (Paswan & Sharma, 2004).

After the operation of the economic policy of 1991, the Indian markets have gone a 360 degree transformation where it has seen evident entries of both big and small foreign brands and at the same time a boom in the number of domestic brands on the retail shelves. Factors such as increased exposure to media, rising levels of consumer awareness and consequent rise in the quality of products offered by domestic firms and leadership campaigns run by leaders like Narendra Modi and others to buy Indian have paved way for ethnocentric beliefs in buyers yet again posing threat to the multinationals and alien firms entering the country. But the fact remains that consumers in the country are free to choose the products or service they like or any brand they prefer. Keeping in view the dynamic consumption pattern followed by the youth of the country it is worth researching the belief and attitude of the population, particularly the millennial population in depth towards globalization vs localization quandary considering that such a category of our population constitutes almost 65% of the total as quoted by an Economic Survey. This segment has a bawling for foreign brands, Batra *et al*, 's (2000) paper provides an account of literature that furnishes possible reasons for the average Indian youth's fondness towards foreign products and why it ultimately calls for an empirical research altogether. The reason for the same could be escalated to the following factors: search for status symbols in the hierarchy-conscious Indian society, changing expectations, low self-esteem vis-a-vis the (erst-while) foreign rulers, rising income, increasing opportunities of contact with the West, privatization and deregulation of the emerging markets and cultural receptiveness to symbolism of brands (Townsend, Cavusgil, S, & Yeniyurt, 2004).

Therefore, for a developing country like India where market provides enormous potential to domestic as well as foreign brands for growth, it becomes important to study the attitudes and beliefs of consumers (the millennials) towards Indian as well as alien products and services and this paper enumerates enough reasons to study their perspective on ethnocentrism.

III. HISTORY OF CONSUMER ETHNOCENTRISM IN INDIA

Prior to Indian independence in 1947, the British era is classified as one with modern governing practices in the name of "Enlightenment Rationalism" which led people to battle with their ethnic conflicts (Chakrabarty, 1995). Indians were forced to buy foreign as against their own country originating products. At that point of time, a gradual wave of realization hit the countrymen that the imports are actually harming their moral and economic well-being. This wave though was termed as "nationalism" and not "ethnocentrism" all over the country. The key difference between the two is that "ethnocentrism" is a by-product of "nationalism" (Heath & Sen, 2007) and that ethnocentrism does not require an external or internal stimuli, it is a voluntarily generated feeling. It is important to mention that Mahatma Gandhi was the source for promoting such ideas among the natives. That was the first time that feelings of ethnicity emerged among them and compelled them to boycott these imports and adopt khadi and cotton made clothes specifically made in India. People found a certain kind of pride in buying their own "desi" goods. Post-independence during the period of 1950's-80's, the country barred imports of various foreign products into the boundaries to protect the interest of its own industries and small producers. Only Indian products prevailed in the markets for a long time and a large part of it was financed out of government subsidies in order to promote them and therefore, people could no longer realize the value of their own goods, and thus the feeling of ethnocentrism gradually died. It was only in 1991 that when the new economic reforms were passed that allowed liberal rules for imports and greater role of foreign brands in the Indian markets, people were subsequently exposed to the foreign lifestyle by way of their products. Where the choice of every Indian was pretty much Indian Airlines if one had to fly within India. In 1991 East West Airlines was launched with nicely dressed hostesses. Then in 1992, there was let airlines. Same ways if one had to bank he/she needed to wait to get any transaction done that day meaning that he would be at the mercy of Sarkar. Then in 1994 came ICICI, HDFC, UTI (Axis). We had more choice and were rather showered by the power of choice. A year later India became a member of the World Trade Organization (WTO) and consequently the Indian government was committed to systematically reduce barriers to trade. By this time nobody could imagine these would ultimately dig big holes and pits in the economy and somewhere the economy would suffer both economically and morally.

People started looking for better substitutes ignoring the country of origin dimension for the satisfaction of their needs. But it must not be denied that by opening up Indian markets to global companies through the reform programme, made the need to be competitive – to defend one's own market position- a compulsion and offer a price which appeals to the Indian audience. "Ethnocentrism" was still far from the line of thought and realization in this period among Indians in spite of various scholars working on concepts of Consumer ethnocentrism and trying to popularize it outside the country. Over time as consumers became rational and educated enough to understand and comprehend the effects of various policies in the country subsumed with the advent of Indian entrepreneurs, the value of "Indian" was starting to be realized. Later on leaders like Atal Bihari Vajpayee, Dr. Manmohan Singh and the present PM Mr. Narendra Modi etc. slowly worked upon the image of Indian goods in the minds of Indians by focusing on improving the native handicrafts industry, setting up SEZs and attempting to lurk manufacturers to set up factories there, carrying on focused growth reforms for IT and Telecom sector of the country, etc. Mr. Narendra Modi's "Make in India" campaign is an initiative launched with the goal of making India a global manufacturing hub, by encouraging both multinationals and domestic companies to manufacture their products in India. This initiative can encourage entrepreneurs to start up their own business or shake hands with foreign firms to produce jointly for the country and be a part of the global skill pool as India lags behind in "Home-grown brands" like German cars, French wines or Swiss chocolates.

These steps have proved to be a milestone to set up a benchmark for India both in the minds of Indians and Foreign nationals and this way they have been successful in reviving the roots of ethnocentrism again. Though many may not be aware of this term yet practice it in their daily lives today.

IV. MILLENNIALS IN THE COUNTRY

Millennials as defined in the above section are "the people who are born between 1980-2000". In Indian context their numbers range between 700 million and 701 million of the 1.2 billion population estimated during the Census of 2011 and currently they form almost 65% of the total population of the country. This number is more than 503 million residents of the European Union. Contrary to the US economy, the millennials there form only a quarter of their populations i.e. 25%. But when compared, the two stand on the same stature in terms of attitudes, zeal to work, adaptable and to changes, both are more upbeat than their elders about their futures and more rational than before when asked to make choices for themselves or the society in general. The per capita income in U.S dollars of the Indian millennial (a person reaching young adulthood around the year 2000), was \$ 2,400 while those above 45 years earned about \$ 2,150 in 2015 as reported by the Economic Times 2016.

Many believe that millennials will lead the changes in an economy and lead it to prosperity. This fact is well reflected by the "Millennial Survey" carried out by Deloitte in 2015 where in eighty per cent of the millennial aspire to reach a higher managerial position within their place of work. Thus, certainly it is not there size that captivates the marketers. The truth is that millennials are classified with special attributes and dynamic attitudes which are non-static just like the ever changing marketing environment. They are seen embracing multiple modes of self-expression. Three-quarters of these millennials have created a profile on a social networking site. One-in-four have posted a video of themselves online. Most millennials have placed privacy restrictions on their social media profiles. They are less skeptical than their elders; they believe government should put more sincere efforts to solve people's problems. And lastly, they aren't influenced at all by advertising. Only 1% of millennials on an average believe that their purchases are driven by advertisements. Millennials believe that advertising is all spin and not authentic. Thus, it is therefore well comprehended fact as to why they are the focal point of various marketing firms to be dealt as a separate niche altogether. All these characteristics act as ceiling on the marketing strategies of the firms barring them from easily reaching out to them.

These attributes do not point out that they are less ethnocentric or patriotic towards their country but it's just that the form that ethnocentrism takes among these millennials looks a bit different from one that persisted in previous generations. They may look less patriotic than the rest of the generations at first glance, but coming of age in the era of globalization and being a more racially diverse generation may simply mean that traditional symbols of democracy hold less meaning for this cohort, they may only be driven by the ideals of the country and not by symbols.

The recent report released by the Goldman Sachs of 87 pages based on the Indian consumers in detail, points that there are eight clusters in the population which actually drive 75% of the total consumption in the economy. But it is the urban educated mass, including the graduate students who hold basic corporate, SME and government jobs, in general the blue collar job holders who will push and derive the consumption in the next 5-10 years in the country (Sachs, 2017).

It is therefore hard for both domestic and foreign firms to ignore these trends and draft out strategies to target this section of the population. Firms need to understand the attitudes and beliefs that the so called "Gen Y" carries towards products made in their own country (the country of origin products) and those that are imported from abroad. And with the available literature this area has gone unsearched when it comes to researching and identifying their ethnocentric tendencies, areas that have been studied relate to segregating population variables on the basis of age group and then sampling from groups of 18-25, college students ranging from 19-22, 25-35, etc. yet millennial as an independent variable has gone unexplored in the country till now even though we know that it forms the most important part of the potential consumer groups from the point of view of global producers and domestic producers. Empirical researches conducted in this field by: Singh and Kewlani on young management graduates in 2013 revealed that such class of consumers are moderately ethnocentric (Singh & Kewlani, 2013); Sanjay and Ritika from the University of Delhi have dealt with the same research area and found that for all the respondents (majority of whom fell in the age group of 25-44 years), age is the only demographic variable which is significantly and positively correlating with consumer ethnocentrism. Thus, older people are sought to be more ethnocentric in making their purchases as compared to the younger ones. This is in line with previous researches which too reveal relatively a higher level of consumer ethnocentrism present among older people (Schooler, 1971 and Klein, Ettenson, & Krishnan, 1999).

But the objective of all of these researches has been either to validate age as a factor influencing or driving consumer ethnocentric feelings among people and not considering the millennials as a unique set from the rest of the population and then carrying out a comprehensive research specifically designed for addressing and exploring the "millennial dimension" of the country with regard to their ethnocentric behaviour in the market place towards varying products and brands. Thus, this paper has furnished enough data about millennials to carry out further research in this area, and calls for an empirical research in this area to validate the above points.

V. CONCLUSION

In this paper, we have sought to define the concept of consumer ethnocentrism and tried to study its relevance in Indian context. This concept in its pristine form has not been explored in dearth with regard to Indian consumers. Therefore, a thorough review of the related literature, antecedents and consequences of CET was provided along with an integrative framework along with tracing its roots in Indian history. It has been realised that such tendencies were strongly present earlier during the British raj in the country however it lost its momentum in the late 50s to 80s as the country became a closed economy for the purpose of protecting and promoting its domestic industries. It again appeared as a strong force in the 1990s when India opened its trade doors to other countries and in 2000s when political leaders started promoting Indian industries when they realized that they lagged behind in the race when it came to taking pride in own country products.

During the discussion of the antecedents, the study recorded all the factors that trigger the phenomena of consumer ethnocentrism and we have segregated the factors into socio-economic, demographic, product related and political but it is only further research that can validate which all factors are applicable to the consumers of a developing nation like India. Shimp and Sharma (1987) and Olsen *et al* (1993) point out that domestic marketing teams have an edge over others because of the prevalent ethnocentric tendencies in consumers and therefore can tap them by promoting the "native" image so that international competitors can be held at bay.

In contrast, it will be prudent for the international marketers and retail stores who intend to sell foreign products in India to initially focus upon those set of consumers who are less ethnocentric.

Moreover, the important aspect of the paper highlights the role of millennials in driving the consumption of an economy like India, especially when they constitute almost two-third of the total population. Thus, it is interesting to study the nature of their purchase behaviour towards own country products and towards the imports and what implications it will carry for domestic and foreign firms with respect to their selling strategies and gimmick. It henceforth calls for further research into this area.

REFERENCES

- 1. Agbonifoh, A. B., & Elimimian, J. U. (1999). Attitudes of Developing Countries Towards 'Country of Origin' Products in an Era of Multiple Brands. *Journal of International Consumer Marketing*, 11, (4), 91-116.
- 2. Balabanis, J., & Diamantopoulos, A. (2004). Domestic Country Bias, Country-of-origin Effects, and Consumer Ethnocentrism: A Multidimensional Unfolding Approach.". *Journal of the Academy of Marketing Science, 32*(1), 80-95.
- 3. Batra, R., Ramaswamy, V., Alden, D. L., Steenkamp, E. J., & Ramachander, S. (2000). Effects of Brand Local and Non local Origin on Consumer Attitudes in Developing Countries. *Journal of Consumer psychology*, 83-95.
- 4. Berkowitz, L. (1962). Aggression: A Social Psychological Analysis. In McGraw-Hil. New York.
- 5. Bilkey, W. J., & Nes, E. (1982). Country of origin effects on consumer evaluation. Journal of International Business Studies, 8(1), 89-99.
- 6. Bruning, E. R. (1997). Country of origin, national loyalty and product choice: the case of international air travel. International Marketing Review, 14(1), p. 59.
- 7. (2011). Census of India. Ministry of Home Affairs.
- 8. Chakrabarty, D. (1995, December 30). Modernity and Ethnicity in India: A history for the Present. Economic and Political weekly, 30(52), pp. 3373-3380.
- 9. Criag, C. S., & Douglas, S. P. (2006). Beyond national culture: implications of cultural dynamics for consumer research. *International Marketing Review*, 322-343.
- 10. Eagly, A. (1978). Sex differences in influenceability. *Psychological Bulletin*, 85(1), 86-116.
- 11. Han, C. (1988, June/July). The role of consumer patriotism in the choice of domestic versus foreign products. Journal of Advertising Research, 25-32.
- 12. Haviland, J. B. (1993). Anchoring, iconicity, and orientation in Guugu Yimidhirr pointing gestures 3(10). Journal of Linguistic Anthropology, 3-45.
- 13. Heath, D., & Sen, A. (2007). India, Identity and Globalization. In *The Augmentative Indian*. London.
- 14. Howard, D. G. (1989). Understanding how consumers can formulate their attitudes towards foreign products. *Journal of International Consumer Marketing*, 2(2), 7-24.
- 15. Huddleston, P., Good, L. K., & Stoel, L. (2001). Consumer ethnocentrism, product necessity and Polish consumers' perceptions of quality. *International Journal of Retail & Distribution Management, 29*(5), 236-46.
- 16. Klein, J. G., Ettenson, R., & Krishnan, B. C. (1999). Consumer Animosity and Consumer Ethnocentrism: An Analysis of Unique Antecedents. *Journal of International Consumer*, 5-24.
- 17. LeVine, R. A., & Campbell, D. T. (1972). Etnocentrism.
- 18. Luque-Martinez, T., Ibanez-Zipata, J., & Barrio-Gracia, S. (2000). Consumer ethnocentrism measurement An assessment of the reliability and validity of the CETSCALE in Spain. *European Journal of Marketing*, 34(11/12).
- 19. Olsen, E. J., Granzin, K. L., & Biswas, A. (1993). Journal of the Academy of Marketing Science. *Influencing Consumers' Selection of Domestic versus Imported Products: Implications for Marketing based on a Model of Helping Behaviour, 21*(4), 307-321.
- 20. Pal, C. Y. (2000). India's Big Emerging Market opportunity. Franchising World Volume 32, May/June, 63.
- 21. Paswan, A. K., & Sharma, D. (2004). Brand-country of origin (COO) knowledge and COO image: Journal of Product and Brand Management, 13(3), 144-155.
- 22. Ramanthan, A. (2017). The rise of the millennials. Livemint.
- 23. Rosenblatt, P. C. (1964). Origins and effects of group ethnocentrism and nationalism. Journal of Conflict Resolution, 8(2), 131-146.
- 24. Sachs, G. (2017, January). India's Millennials to be catalyst for consumption.
- 25. Schooler, R. D. (1971). Bias Phenomena Attendant to the Marketing of Foreign Goods in the US. Journal of International Business Studies, 71-80.
- 26. Shankarmahesh, M. N. (2006). Consumer Ethnocentrism: An Integrated Review of Its Antecedents and Consequences.". *International Marketing Review,* 23(2), 146-172.
- 27. Sharma, S., Shimp, T. A., & Shin, J. (1995). Consumer ethnocentrism: a test of antecedents and moderators. *Journal of the Academy of Marketing Science*, 23(1), 26-37.
- 28. Shimp, T. A., & Sharma, S. (1987). Consumer Ethnocentrism: Construction and Validation of CETSCALE. Journal of Marketing Research.
- 29. Singh, S., & Kewlani, S. (2013). Ethnocentrism & "Made in Tags" go Hand in Hand for Indian Youths "Cetscale Validation and Dimensionality Assessment".
- 30. Sumner, W. G. (1906). New York: Ginn Custom Publishing.
- 31. Townsend, J., Cavusgil, Z. a., S, D., & Yeniyurt. (2004). Exploring the Marketing Programme Antecedents of Performance in a Global Company. *Journal of International Marketing 12(4)*, 1-24.
- 32. Vida, I., & Reardon, J. (2008). Domestic consumption: rational, affective or normative choice? Journal of consumer marketing, 34-44.

PAYMENTS BANKS IN INDIA: A STIMULUS TO FINANCIAL INCLUSION

VINEY NARANG ASST. PROFESSOR SHAHEED BHAGAT SINGH (EVENING) COLLEGE UNIVERSITY OF DELHI NEW DELHI

ARSTRACT

The Government of India have been making rigorous efforts to promote financial inclusion. Continuous need has been felt to review & revolutionize the present banking set up. Payment Banks are a step in this direction. Dr. Nachiket Mor Committee (September 2013) proposed to set up Payments Banks. RBI gave approval to 11 applicants out of 41 applicants, based on criteria like infrastructure, banking penetration, popularity, technology and past experience in their respective domain like postal offices, telecom service provider (TSPs), mobile wallet, banking services, consumer goods, business correspondence. Payment banks are aimed at providing small savings accounts, meet payments and remittance needs of small businesses, unorganized sector, low income households, farmers and migrant work force. These new kind of banks are designated to reach people outside the ambit of formal banking services. This paper attempts to review business model of payment banks.

KEYWORDS

payments bank, financial inclusion, rural banking, small savings accounts.

1. INTRODUCTION

raditionally, India has been cash dominated economy. There has been limited penetration of formal banking and financial services. Access to formal financial services such as remittance, micro credit has been extremely limited especially for the low income groups in India, because banking sector considers high cost of acquisition associated with small amounts transactions. Thus these low income segments of population are either deprived of access to such services or approach unorganized service providers and avail these services at steep rates.

The Government of India and Reserve Bank of India have been making rigorous efforts to promote financial inclusion and financial access in India.

To study 'Comprehensive financial services for small businesses and low income households' RBI constituted a committee headed by Dr. Nachiket Mor in September 2013. The purpose was to suggest solutions to address the needs of financial inclusion in unbanked and under-banked segments of the society in sustainable way. The committee submitted its report in January 2014. One of the prime recommendations of the committee was to introduce Payments Bank. These will be specialized banks catering to financial services needs of niche area. The report also suggested criteria to assess 'Fit and Proper' status of the Payments bank license aspirants.

2. OBJECTIVES OF THE STUDY

- 1. To scrutinize the need of Payments Bank in India.
- 2. To examine the strengths, weaknesses, opportunities & challenges of Payments Bank in India.
- 3. To analyse how will 'payments banks' change the Economic landscape in India.
- 4. To study Business model of Payments Banks.

3. METHODOLOGY OF THE STUDY

The kind of research conducted here is exploratory research. Information has been collected from various secondary sources to study the potentiality of payments banks and its effect on changing the payment landscape of India and justify the above mentioned objectives.

4. APPROVED COMPANIES FOR PAYMENT BANKS

On 19 August 2015, the Reserve Bank of India gave "in-principle" licences to eleven entities to launch payments banks:

1. ADITYA BIRLA NUVO LIMITED

Payment bank is joint venture between ABNL and Idea Cellular (51:49).

2. AIRTEL M COMMERCE SERVICES LIMITED

Bharti Airtel owns 80% of Payments Bank unit and Kotak Mahindra Bank holds the rest. It is the first of its block to launch payment bank on 12th January 2017, aiming at taking banking services to those who are outside the ambit of payments bank.

3. CHOLAMANDALAM DISTRIBUTION SERVICES LIMITED

It has abandoned its plan to set up a Payments Bank considering Competition and long gestation period to become profitable.

4. DEPARTMENT OF POSTS (INDIA POST PAYMENTS BANK)

It is Incorporated as a Public Sector Bank under the Department of Posts with 100% GOI equity, IPPB has launched on January 30th, 2017.

5. FINO PAY TECH LIMITED

ICICI bank has partnered with FINO to venture into Payments bank. ICICI Group owns a 20 per cent stake in the bank.

6. NATIONAL SECURITIES DEPOSITORY LIMITED

NSDL, the biggest security depository, has plans for launching up Payments bank within 2017 under managing director and chief executive GV Nageswara Rao.

7. RELIANCE INDUSTRIES LIMITED (JIO PAYMENTS BANK)

Reliance Industries Limited (RIL) has entered into partnership with State bank of India (SBI) for Payments Bank. SBI will be the joint venture partner with equity investment of 30% and RIL is the promoter having 70% stake in venture.

8. SHRI DILIP SHANTILAL SHANGHVI, FOUNDER OF SUN PHARMACEUTICALS

Payment bank was a planned partnership between Shri Dilip Shantilal Shanghvi, founder of Sun Pharmaceuticals (41%), IDFC bank (20%) and Telenor (39%). But now they have opted out their plans.

9. SHRI VIJAY SHEKHAR SHARMA, CEO OF PAYTM

Paytm Payments Bank started its operations on 23rd May 2017. Renu Satti is the CEO OF Payments bank. Bank will partner with insurance companies and various lenders and make them available to customers and small businesses.

10. TECH MAHINDRA LIMITED

The bank was planned to be an independent unit under Mahindra Group led by Mahindra Finance and Tech Mahindra. But now it has opted out.

11. VODAFONE M-PESA LIMITED

Vodafone had issued open mandate to bankers to find best partner. But because of planned merger of idea cellular and Vodafone, Vodafone would surrender its in principle license as it cannot compete with Aditya Birla Nuvo, which owns idea cellular, which also has a banking licence. The major reason for Vodafone to

surrender would be its foreign ownership. Vodafone India is wholly owned subsidiary of its UK parent and it needs to reduce it to less than 50%, to be able to set up a payments bank

The "in-principle" licence was valid for 18 months within which the entities had to fullfill the requirements. They were not allowed to engage in banking activities within the period. The RBI after being satisfied that the required conditions have been fulfilled will grant full licences under Section 22 of the Banking Regulation Act, 1949.

5. OBJECTIVE OF SETTING UP OF PAYMENTS BANKS

Financial inclusion is the primary objective of setting up of payment banks. They should help the financial inclusion by

- Opening of small savings account and enabling high volume-low value transactions in deposits.
- b. Smooth and easy payment/remittance services to migrant labourers, small business people, low income households and other unorganized entities etc.
- c. Secured Technology driven environment

6. BUSINESS MODEL OF PAYMENTS BANKS

- Financial inclusion is the key objective of these banks and unbanked & under-banked segments of Indian population are the priority target market.
- RBI does not visualize a Payments Bank to become virtual or branchless bank, however internet banking services has been encouraged.
- Cost to serve unbanked & underbanked population is lower due to technology adoption right from the very beginning.
- Fee earned from various transactions (like deposit, remittances etc.) is primary product for revenue generation. It is doubtful that payments bank will be able to feed on transaction revenues alone. Without diversified revenues, the road to profitability will be difficult.

7. MAJOR REGULATIONS FOR PAYMENTS BANKS

- 1. The banks should have fully networked and technology driven systems from the inception. They have to conform to generally accepted standards and norms relating to data storage, security and real time data update. Detailed technology plan should be furnished to the RBI. Technology is the backbone and plays a central role across all functions and processes.
- 2. For the first five years, the promoter's share should be at least 40%.
- 3. FDI is allowed in Payments banks subject to FDI rules for banking institutes.
- 4. Minimum capital required for payments bank is ₹ 100 crores.
- 5. They cannot engage in lending activities. Credit Cards cannot be issued.
- . These banks are not allowed to have subsidiaries for undertaking non-banking activities.
- 7. The deposits are restricted to ₹ 1,00,000 per customer, but it may be raised by the RBI later on based on the performance of the bank.
- 8. Appointment of directors will be as per Reserve Bank of India guidelines. Independent directors should have the majority.
- 9. Voting rights of shareholder have been restricted at 10% which can be raised to 26% by Reserve Bank of India.
- 10. At least 25% of bank branches must be set up in rural areas.
- 11. The payments banks will be licensed under Section 22 of the Banking Regulation Act 1949 and will be registered as public limited company under the Companies Act 2013.
- 12. The bank must use the phrase "payments bank" in its name.
- 13. The Payments Banks must maintain a leverage ratio of not less than 3% i.e. it's external liabilities should not exceed 33.33% of it's net worth (capital and reserves).
- 14. Deployment of funds: They can hold upto 25% of demand deposit balances in current & fixed deposits with other scheduled commercial banks for operational purposes & liquidity management. Further they have to invest at least 75% of Demand deposit balances in statutory liquidity ratio (SLR) eligible government securities\treasury bills with maturity upto one year.
- 15. Minimum capital adequacy ratio to be maintained by the payment banks: Payment banks are required to maintain a minimum capital adequacy ratio of 15% of its risk weighed assets (RWA) on a continuous basis, subject to RBI guidelines. Tier1 capital should be at least 7.5% of RWAs. Tier2 capital should be limited to a maximum of 100% of total tier1 capital.

8. SCOPE OF OPERATIONS OF PAYMENTS BANK

Payment banks are allowed only certain restricted activities under the banking regulation act, 1949

- a. Payment banks can accept current and savings deposits from the individuals, small business and other entities. Non Resident Indian (NRI) deposits will not be accepted. The customers can deposit and withdraw money, use cheque books, transfer funds, buy mutual funds and insurance from payments banks. There will be deposit insurance and credit Guarantee Corporation of India (DICGCI) cover for the deposits. Payment banks can issue Debit card but not credit card.
- b. They can issue pre-paid payment instruments (PPIs).
- c. Payment banks can offer internet banking and thus leverage technology.
- d. Payments bank can act as a business correspondent (BC) of another bank, following RBI guidelines.
- e. Payments banks can send or receive remittances (RTGS/NEFT/IMPS) under a payment mechanism approved by RBI.
- f. Payment bank can engage in only non-risk sharing simple financial service activities not requiring any commitment of their own funds such as distribution of mutual fund, insurance products, pension product etc. with prior approval of RBI.
- g. The payment bank can undertake utility bill payments on behalf of its customers and general public.
- h. Subject to RBI approval, Payment banks will be permitted to handle international fund payments or remittances.

9. SWOT ANALYSIS OF PAYMENTS BANK

STRENGTHS OF PAYMENTS BANK

- The business model is very innovative.
- It is spread nationwide and able to cover last mile.
- Banking can be done anywhere and anytime.
- Servicing cost will be lower.
- The customer base will be very large.
- It will work towards furthering the objective of Financial Inclusion.
- It will be highly uneconomical for traditional banks to open bank branches in every rural area but the mobile phones coverage is an economical platform for quickly taking basic banking services to every village. This is the Unique selling proposition of payment banks.
- Payment banks can be very crucial in implementing the direct benefit transfer (DBT) scheme of government, where subsidies on healthcare, education and gas are paid directly to beneficiaries accounts.

WEAKNESSES OF PAYMENTS BANK

- Due to poor networking and internet facility there will be loss of business.
- There is lack of awareness among people on latest technology and products

- It is quite a low margin business.
- Only limited products are being offered. No lending activities will be undertaken. No credit cards will be issued.
- There are issues related to security because of use of internet and technology.
- The payments banks face high costs of compliance associated with the banking regulatory framework
- The banks will need significant capital infusion to meet high ongoing capital requirements.
- They will face high overheads (e.g., technology and personnel) and direct costs (e.g., free ATM withdrawals).

OPPORTUNITIES OF PAYMENTS BANK

- There is immense potential for extensive reach in rural areas.
- Innovative business model will help to offer unique products and services
- Offering right product to right customer at right time.
- New offerings in the form of unique products will help Enhance customer relationship beyond core business.

CHALLENGES OF PAYMENTS BANK

- There is intense competition in banking sector with so many already established banks.
- Payments bank will have a narrower product portfolio.
- India is more of a cash dominated economy.
- Business viability would be a challenge. It is difficult to ensure sustained profitability as cost of acquisition is high. It is likely to be a low profit margin business.
- Technology inexperience amongst general public specifically rural areas will lead to lower acceptance.
- There is lack of awareness amongst unbanked segments for this new model
- Customers may easily switch over between banks, so there will be low customer loyalty.
- Regulatory restrictions exist in form of stringent guidelines issued by RBI.
- Three of the 11 in-principle payments bank licensees have withdrawn their applications, highlighting the investment and commercial challenges of the business model. These are as per following:
 - o Cholamandalam Distribution Services Limited
 - o Shri Dilip Shantilal Shanghvi, founder of Sun Pharmaceutical
 - o Tech Mahindra Limited

10. IMPLICATIONS ON FINANCIAL LANDSCAPE

The major financial implications of Payments Banks in different areas:

- 1) FINANCIAL INCLUSION OF REMOTE RURAL AREAS: Every rural area citizen with a mobile data connection will be able to avail banking services using the online electronic medium. Thus, digitisation will be the vehicle for banking.
- 2) ELIMINATION OF BLACK MONEY: By reducing cash transactions Payments bank will help in reduction of black money from the financial Landscape of India.
- 3) SECURE MEDIUM MINIMIZING THE NEED FOR ATMS: Payment Banks will help in creating cashless economy. Thus gradually the need for Debit / Credit Cards and ATM units will reduce. Thus they will help in saving space which is a scarce resource in cities.
- **4) EFFICIENT IMPLEMENTATION OF SUBSIDY SCHEMES:** Payment banks can be very crucial in implementing the direct benefit transfer (DBT) scheme of government, where subsidies on healthcare, education and gas are paid directly to beneficiaries accounts.
- 5) BENEFIT TO GOVERNMENT: These banks will benefit the government in acquiring loans at low cost loans because Payments bank can only lend to Government.
 6) DIGITAL INDIA CAMPAIGN: They will provide an impetus for creation of Digital India because of the propagation of payments banks will stimulate the need for a digital infrastructure.
- 7) IMPACT ON TRADITIONAL BANKS: Increasing competition between traditional banks and payments banks will help in reducing the banking costs.

11. FEASIBILITY ANALYSIS OF PAYMENT BANKS

To evaluate the feasibility of Payment Banks, the following factors have to be considered:

1) COSTS INCURRED FOR THE PAYMENT BANKS

Rural areas might have limited number of smartphones and mobile data connectivity as well. Thus, the success of these Banks will depend largely on their ability to go beyond the digital medium and reach out to these areas via physical medium i.e. by opening branches. Thus, there will be heavy costs involved for building the Physical infrastructure.

'India Post Payments Bank' will be relatively well off in this area because of their massive presence already in rural areas. However, for other players it might be difficult.

2) NOT ALLOWED TO ENGAGE IN LENDING ACTIVITIES

A major drawback for these entities is that they are unable to lend money to account holders. This affects the revenue stream of Payment Banks to a large extent. Traditional Banks generate revenue from difference in lending interest rate and deposit rates. Thus they are enabled banks to make profits.

However, in case of payments banks, the only borrower is government and 75% of their deposits have to be compulsorily invested in government bonds whose yield is quite very low approximately 7.45-8%.

Payments banks will further need to have aggressive deposit rates to lure customers if they want to be successful. This will further shrink the profitability of the

Moreover, deposit amount is capped at INR 1 Lakh, thus these banks will have to deal in low value & high volume markets.

3) LIMITED DIGITAL INFRASTRUCTURE OF INDIA

The digital infrastructure of India is still in the growing phase. Digital India is yet to be fully materialized.

Vodafone, Idea and Airtel might be able to handle digital transactions in a better manner since they are already in the mobile connection service providers category.

4) 3 PLAYERS ALREADY OPTED OUT

Within 9 months of the selection, out of 11 applicants, 3 have already pulled out citing profitability issues and long gestation period.

12. CONCLUSION

As the ecosystem around Payments Banks develops, it is critical for the regulatory and operational environment around them to evolve as well. Payments Banks are expected to be catalysts for broadening access to the banking system by offering innovative products and solutions with efficient customer service. Payments Banks have the benefit of being legacy-free and unlike established banks, they are under no pressure to grow credit volumes or meet priority-sector lending requirements. Therefore, they can focus on managing basic accounts and should have the freedom to do so in innovative ways.

In addition to the regulator providing an encouraging environment, the Government could also play a significant role in furthering the cause of Payments Banks through country-wide initiatives involving communication and consumer-education programs. Measures such as these could provide significant stimulus to broadening the customer base of Payments Banks and consequently furthering the cause of financial inclusion in the country, while enabling these banks to build sustainable businesses. Indeed, there is a question about who will take care of the credit needs of the unbanked. RBI evoke that Payment Banks will serve as a channel to allow people to eventually migrate to full-service banks, which is quite likely. Certainly payment banks will be a game changer.

Payments banks will face competition from the existing lenders. Besides, profitability will also remain a challenge as they will be working on narrow margins. To this end, due to ever-growing customers' expectations for faster-easier-simpler banking facilities what will drive the bankers is to work with creativity and passion, which contributes to growth of cross sections of our society, and so the challenges.

Banking costs will come down due to intense competition driven by the expected proliferation of payment banks. Currently, the customers are required to pay heavily for services like ATM transactions beyond a prescribed limit, additional cheque-books, non-maintenance of minimum balances etc. These costs will come down as payment banks start offering zero-balance, barefoot accounts with low-cost services and potentially higher rate of interest on deposits. The customer is finally going to be the king in the banking sector.

Thus payments banks and traditional bank will complement each other on the changing financial landscape of India.

REFERENCES

- 1. Deloitte, "RBI Guidelines for Licensing of Payments Bank Opportunities and Challenges," Dec. 2014.
- 2. Dr. Nachiket Mor, "Committee on Comprehensive Financial Servicesfor Small Businesses and Low Income Households," Reserve Bank of India, Govt Report, 2013
- 3. http://www.businessinsider.in Article- "Payments Banks A game changing idea for financial Inclusion", Date of access- 18 March 2017
- 4. Reserve bank of India- www.rbi.org.in Date of access- 15 March 2017
- 5. Sonu garg and Dr. Parul Agarwal, Financial inclusion in India A review of initiatives and achievements, IOSR journal of business management, Volume 16, issue 6, version I, June 2014, pp 52-61.

NEWSPAPERS

- 6. Business Standard: www.business-standard.com/ Date of access- 15 March 2017
- 7. Mint: http://www.livemint.com/
- 8. BusinessToday: http://www.businesstoday.in/
- 9. FirstPost: http://www.firstpost.com/ Date of access- 16 April 2017
- 10. The Hindu Date of access- 12 January 2017
- 11. The Economic Times Date of access- 23 May 2017

A THEORETICAL FRAMEWORK ON EFFICIENT MARKET THEORY

DR. NEHA BANKOTI ASST. PROFESSOR DEPARTMENT OF MANAGEMENT STUDIES IEC COLLEGE OF ENGINEERING GREATER NOIDA

ABSTRACT

The Efficient Market theory has always been a popular topic for discussion among Stock Market Researchers. It suggests that nobody can predict market, return is fully depending on information which are uncertain, it deals with one of the most fundamental and exiting issues in finance, financial market always behave randomly that is why it is also called random walk theory. The present paper discusses on the theoretical background of efficient market theory or efficient market Hypothesis.

KEYWORDS

efficiency, random walk, unpredictable, anomaly.

1. MARKET EFFICIENCY

nvestors and academicians has always been attracted from capital market specially stock. Everybody who invest in market want to outperform in the market. Academicians want to predict it in order to test the effectiveness of their predictive models. In fact, financial markets put a great challenge before the researchers interested in the development of predictive models. Not only financial economists, but researchers from other streams including statistics, mathematics, physics, psychology and social sciences, leveraged with the expertise of their respective domains, have attempted to build predictive models for stock prices. But all of these efforts seem to yield little success. Why are the prices of financial assets unpredictable? The efficient market hypothesis provides the answer to this question.

The financial market has influence by money along with information there in. The prices of financial assets at a point of time reflect the expectations of investors which are shaped mainly by the available information. Accuracy and the quickness in which market translated the expectation into prices are termed as market efficiency. Fama (1970) stated, 'A market in which prices always fully reflect available information is called efficient.' In an efficient market price rapidly translate in to the available information.

Here the term market efficiency is used in context to the 'informational efficiency' rather than the 'operational efficiency' and the 'allocative efficiency'. The concept of operational efficiency is basically related to the efficiency of the market microstructure and is influenced by the factors as time taken to execute the order and the number of bad deliveries. The operationally efficient market keeps the transaction costs at minimum. On the other hand, the concept of 'allocative efficiency' refers to the application of basic concept of 'Pareto-efficiency' of economics in the field of financial markets. Financial markets are efficient in Pareto sense if they allocate the capital to different products in an efficient way and any further reallocation of capital cannot increase the national output.

2. EFFICIENT MARKET THEORY

The efficient market theory or efficient market hypothesis (EMH) says that the stock market prices or returns are unpredictable and do not follows any regular pattern so it is impossible to "beat the market" or outperform in market. According to the EMH theory security prices immediately and fully reflect all available relevant information.

The EMH theory suggests that the asset prices are determined by the demand and supply in the competitive market with rational investors. Rational investors gather information very rapidly and immediately incorporate this information into stock prices. Only new information, i.e. news, cause change in prices but the news, by definition, is unpredictable; therefore, stock market which is immediately influenced by the news is also unpredictable.

According to EMH theory neither technical (study of past stock prices in an attempt to predict future prices) nor fundamental analysis (financial analysis such as industry analysis, company analysis, asset valuation etc.) can help the investor to select "under-valued stock". Past price contain no useful information and cannot predict the

future change, today's price is totally independent from past price so it is waste of time to analyze past return and on the basis of result attempt or expect to make profit from market.

If we discuss about historical background of EMH theory, efficient market is as old as stock market itself but the hypothesis was first expressed by Louis Bachelier, a French mathematician in 1900. In his dissertation, "The Theory of speculation" has suggested that price fluctuation is random and do not follow any regular pattern. In 1933 Cowles, an American Economists and businessman attempted to investigate the predictability of stock price, he analyzed the performance of market professionals and suggested that stock market is unforecastable even professional investors are unable to outperform in the market. Further in 1934, Holbrook Working supported the EMH theory by showing his empirical result that in ideal market, prices follow random differences and it is impossible to predict price changes successfully.

In 1933 Cowles, an American Economists and businessman attempted to investigate the predictability of stock price, he analyzed the performance of market professionals and suggested that stock market is unforecastable even professional investors are unable to outperform in the market. Further in 1934, Holbrook Working supported the EMH theory by showing his empirical result that in ideal market, prices follow random differences and it is impossible to predict price changes successfully.

In 1956, Bachelier's name reappeared in finance, Paul Samuelsson took interest in Bachelier's work and he circulated this among economists. Samulson was the first who provided the formal economic argument for efficient market; his contribution was summarized by the title of his article "Proof that Properly Anticipated Prices Fluctuate Randomly". Prior to Samuelsson's work it was believed that random fluctuation of asset prices is a reflection of market inefficiency. Economists used to look at such observations at great disbelieve (See Kendall 1953). According to them, if prices are determined by the "forces of supply and demand", then price changes should move in particular direction towards market clearing and not randomly. Samuelsson argued that the random nature of changes in asset prices is not a reflection of inefficient functioning of financial markets rather it is a reflection of their efficiency. In an efficient market, prices reflect all the available information at a particular point of time; prices change only when new information (news) arrives in the market. Since, news by definition is unpredictable and random in nature; hence, it causes random changes in price. Mandelbrot (1966) also supported this view. He argued that if markets are working properly, then all public (and, in some versions, private) information regarding an asset will be channeled immediately into its price. If price changes seem random and thus unforecastable it is because investors are doing their jobs: all arbitrage opportunities have already been exploited to the extent to which they can be.

In 1965, the term "Efficient Markey" was defined by Fama at first time, Fama explained how the theory of EMH challenges to both technical and financial analysts. Some important definitions related to efficient market hypothesis are as follow:

Fama (1965) defines EMH theory "...an "efficient" market for securities, that is, a market where, given the available information, actual prices at every point in time represent very good estimates of intrinsic values."

Jensen (1978) defines "A market is efficient with respect to information set θ if it is impossible to make economic profits by trading on the basis of information set θ ".

Malkiel (1992) provides a closely related definition of efficient market hypothesis as "A capital market is said to be efficient if it fully and correctly reflects all relevant information in determining security prices. Formally, the market is said to be efficient with respect to some information set, φ , if security prices would be unaffected by revealing that information to all participants. Moreover, efficiency with respect to information set, φ , implies that it is impossible to make economic profits by trading on the basis of φ ".

Fama (1998): "...market efficiency (the hypothesis that prices fully reflect available information)..." ... the simple market efficiency story; that is, the expected value of abnormal returns is zero, but chance generates deviations from zero (anomalies) in both directions."

Timmermann and Granger (2004): "A market is efficient with respect to the information set, Ω t, search technologies, St, and forecasting models, Mt, if it is impossible to make economic profits by trading on the basis of signals produced from a forecasting model in Mt defined over predictor variables in the information set Ω t and selected using a search technology in St."

Implications of EMH theory may be pointed out as follows:

- In efficient market stock price is always at the "fair" level, a stock price change only when its fair value changes.
- The market is efficient if the reaction of market prices to new information is immediate and unbiased.
- Stock prices immediately react on the news.
- Stock price changes are unpredictable because no one knows tomorrow's news.
- Stock prices follow random walk, if price of today goes up nobody can tell what would be the price of tomorrow.
- It is impossible for investors to consistently outperform in the market.

2.1 FORMS OF EFFICIENT MARKET THEORY

In 1970, Fama classified efficient market hypothesis in three categories according to the level of information reflected in market prices – weak form, semi-strong form and strong form; a summarized description of these different forms of market efficiency is presented below:

2.1.1 WEAK FORM

The weak form efficiency is also popularly known as 'random-walk'. In weak form of market efficiency stock prices reflect by all available trading information which can be derived from the market data such as past price, trading volume etc, so nobody can use information related to past price to identify the undervalued security and make a big profit by them, It implies that no one should be able to outperform the market using something that "everybody else knows". If the markets are efficient in weak from, technical trading rules cannot be used to make profit on a consistent basis. This form of market efficiency is called weak-efficiency because the security prices are the most publicly and easily accessible pieces of information. Although number of empirical studies support weak form of efficient market but there are still numbers of financial researchers are studying the past stock price series and trading volume data in attempt to generate profit. In short weak form of efficient market implies that:

- Stock prices quickly incorporate all past price information which can be derived by trading data (i.e. past prices, volume, short interest).
- Everyone knows the past price movement of market; therefore, nobody can outperform the market on a consistent basis using some trading strategy based on past price trends (as done by technical analysts).
- Prices follow a "random walk" or more precisely an 'exponential random walk'.

2.1.2 SEMI-STRONG FORM

In semi-strong form all publicly available information is incorporated into current stock prices. Publicly available information includes past price information plus company's annual reports (such as financial reports, balance sheet and profit and loss account), company's annual reports (such as financial reports, balance sheet and profit and loss account), company's annual reports, macro-economic factors such as (inflation, unemployment etc) and others. Some information (to the extent anticipated in advance) is discounted even before the event is annuanced and some before the event took place. Such matters like earnings reports, bonus, and rights affect the market even in anticipation before the formal annuancements. Semi-strong form implied that share prices adjust to publicly available new information very rapidly and in an unbiased fashion, such that no one should be able to outperform the market using something that "everybody else knows". This indicates that a company's financial statements are of no help in forecasting future price movements and securing high investment returns. Evidences of empirical studies (most of them are based on event-study methodology) broadly support this form of efficiency.

Implications of Semi-Strong form are as follow:

- Market prices incorporate all publicly available information.
- Publicly available information is easily reachable for everybody so no investor can use it to device the strategy which could outperform the market on a
 consistent basis.
- Share prices adjust to publicly available new information very rapidly and in an unbiased fashion, such that no excess returns can be earned by trading on that information.
- Neither technical analyst nor fundamental analyst will be able to help the investors to outperform in the market.

However, the following factors can impede the market-efficiency in its strong form:

- Information may be relatively difficult and costly to obtain.
- Information may be asymmetrically distributed; some investors may have access to information but others may not have.
- It may be difficult to segregate the information from noise.
- It may be difficult to interpret and to understand the exact implication of information.

2.1.3 STRONG FORM

In strong form of efficiency stock prices quickly reflect all types of information which include public information plus companies inside or private information. Thus, it is the combination of public and private information that is incorporated into current prices. This form implies that even companies management can not make profit from inside information; they cannot take advantage of inside affairs or important decision or strategies to beat the market. According to strong-form market efficiency, inside information is also already incorporated into stock prices, the common rational behind this is unbiased market anticipation that already react in to market before companies strategic decision. Strong form of efficiency is hard to believe in practice except where rules and regulations of law are fully ignored. Studies (Reilly & Brown, 2008) that examined the result of the corporate insiders and stock exchange specialists do not support the strong form of efficient market hypothesis. Empirical evidence has been mixed, but has generally not supported strong forms of the efficient-market hypothesis Implications of strong form of efficiency is-

- Market prices incorporate all public and private information.
- Nobody can gain abnormal return even those who have inside information.
- This type of market is very hard to believe.

3. EVIDENCE IN FAVOR OF EMH

From past studies by researchers following evidences come out in favor of EMH:

- In general, prices appear to react quickly to new information.
- Fama (1965) found no serial correlation in stock returns (price changes are random).
- Most money managers do not outperform in the market, and those that do outperform in one period do not appear consistently to do so in the next period.
- Most of anomalies disappear quickly.

Even the strongest anomalies do not produce dependable returns over all time periods.

EMH remained a prominent theory until 90's. By the start of the twenty first century, the monopoly of EMH among other market theories had become far less universal, a number of empirical argument started to attack EMH theory. EMH has been a hot topic for argument among financial researchers. Empirical analysts have consistently found problem with the efficient market hypothesis. Many financial economists and statistician began to believe that stock prices are at least partially predictable because many researchers found in their studies that psychological and behavioral (sentiments and expectations) elements play an important role in determining price of stock in market rather than fundamental factors.

Some empirical evidences which are against the EMH are as follows:

- If the markets are efficient and prices reflect the fundamental value of assets, the prices should not follow the volatile moves as they generally follow. Assets bubbles are crises are difficult to explain in an efficient market. Sudden market crashes as happened on 1992, Black Monday in 1987 are unsolved for the supporters of EMH.
- Researchers have observed statistically significant (although economically quite low) autocorrelations in stock returns. These correlations are mostly positive
 in short run and negative in long run.
- There are certain systematic patterns (called anomalies) observed by the researchers; which are inconsistent to the EMH.

Grossman and Stiglitz (1971, 1980) suggested that Information are costly, prices cannot perfectly translate into available information so it is very hard for a market to be perfectly efficient, if so investors who have spent resources on obtaining and analyzing they would receive no compensation. LeRoy and Porter in 1981 found that stock markets exhibit 'excess volatility' and they rejected market efficiency. However, there are a number of empirical evidences by researchers that show market inefficiency and reject random walk of security prices *i.e.* (Laffont and Maskin 1990, Lehmann 1990, Jegadeesh 1990), Shiller 2000 etc.).

4. CONCLUSION

However, number of studies have been made outperform in market. Number of anomalies have been find out by researchers to beat the idea of efficient market hypothesis. which indicate market inefficiency (profit opportunities) or in another words inadequacies in the underlying asset-pricing model. But After its documentation and analysis in the academic literature, anomalies often seem to disappear, reverse, or soothe. It raises a question, whether profit opportunities existed in the past, but have since been arbitraged away, or whether the anomalies were simply statistical peculiarity that engrossed the attention of academics and practitioners.

REFERENCES

- 1. Fama, E. (1965) "The Behavior of Stock Market Prices", Journal of Business, 38, 34-104
- 2. J.E. Stiglitz, (1971) "Perfect ad Imperfect Capital Markets", paper presented to the Econometric Society, New Orleans
- 3. Kendall, M. (1953) "The Analysis of Economic Time Series", Journal of the Royal Statistical Society, 96 11-25.
- 4. Le Roy, Stephen F., and Porter, Richard D. (1981)" The Pre4sent –Value Relation: Tests based on Implied variance Bond" Econometrica Vol 49, 555-74
- 5. Malkiel, B. (1992), "Efficient market Hypothesis", New Palgrave Dictionary of Money and Finance, Macmillan, London
- 6. Michael, C.J. (1978), "Some Anomalous Evidence Regarding Market Efficiency", Journal of Financial Economics, Vol. 6, 95-101
- 7. Sanford J. G. and Joseph E. S. (1980) "On the Impossibility of Informationally Efficient Market", The American Economic Review, Vol. 70. 393-408

A STUDY ON MANAGEMENT OF NON PERFORMING ASSETS IN CO-OPERATIVE BANKS SPECIFICALLY IN KERALA

SINU.M ASST. PROFESSOR IN COMMERCE SCHOOL OF DISTANCE EDUCATION UNIVERSITY OF CALICUT MALAPPURAM

ABSTRACT

Co-operative banks play very important role in providing banking services to common man in their area of operation. If co-operative banks go in liquidation due to abnormal increase of Non-Performing Assets not only customers and staff members of that particular co-operative bank will suffer but all other co-operative banks will also get a major setback. Leading to severe damage to the reputation of entire co-operative sector, which is very important for the balance of economic development of our country. This study is aim to evaluate the present level of nonperforming assets in co-operative banks and also the recovery prospects of Non-Performing Assets in general, and also various methods adopted by the bank in the recovery process.

KEYWORDS

NPA, co-operative banks, management of NPA.

INTRODUCTION

anking is the life blood of Indian economy. Without a sound and effective banking system in India it cannot have a healthy economy. The banking system of India should not only be hassle free but it should be able to meet new challenges posed by the technology.

Banking has three types of sectors, which provide finance to different sectors i.e. private sector, public sector and cooperative sector. The co-operative banking structure has developed very fast in India. Through cooperative societies it is possible to reach last man in village. They provide finance to agrarians at low rates of interest, and thereby relieve them from the clutches of the money lender. But the pin problem is recovery management. The unrecovered loan which is termed as NPA is a great headache for the banks especially in rural areas. The NPA impact on the performance of the bank in which it reduces its interest income, the net worth of the bank, demoralized the staff, hardens Capital Risk Adequacy Ratio which also restricts recycling of fund and hinders the desirable yield.

NON-PERFORMING ASSETS

An asset which ceases to generate income for the bank is called as Non-performing asset. Non-performing assets are those when loan given by a bank or financial institution and the borrower delays in payment of interest or principle amount with in stipulated period. According to the guidelines, 'any loan repayment, which is delayed beyond 90 days, has to be identified as Non-performing assets. Banks are not allowed to book any income from Non-performing assets. They have to make provision for the Non-performing assets or keep money aside'.

MEASURES ADOPTED BY BANKS TO REDUCE NPA LEVEL

Looking to the situation of banks it is desirable to take effective measures to reduce the NPAs as low as possible. Managing these Non-performing assets is required in order to protect the interest of shareholders, depositors as well as increase the credit worthiness of bank. It is also advisable to increase the profitability by making the provision as well as expansion plan.

SECURITIZATION ACT

- Now this act is also applicable to all Urban Co-Operative Banks.
- > According to this act Bank can take direct possession of the movable and immovable property mortgages against loans and sell out the same for such recovery, without depending on legal process in the court.

ONETIME SETTLEMENT

This scheme covers all sectors sub – standard assets, doubtful or loss assets as on 31st March 2000. All cases on which the banks have initiated action under the SRFAESI Act and also cases pending before Courts/DRTs/BIFR, subject to consent decree being obtained from the Courts/DRTs/BIFR are covered. However, cases of willful default, fraud and malfeasance are not covered. As per the OTS scheme, for NPAs up to Rs.10crores, the minimum amount that should be recovered should be 100% of the outstanding balance in the account.

SAHAKARANA ADALAT

It is a one-day settlement scheme, all the cooperative banks, higher officials, and defaulters are attended the programme. Here the officials conduct a discussion with the clients, and try to find out the reason for default and also in certain cases days of grace is allowed to the defaulters. Through this scheme by reducing the interest rate bank should be able to collect half of the amount.

DEBT RECOVERY TRIBUNAL

The Debt Recovery Tribunals have been established by the Government of India under an Act of Parliament (Act 51 of 1993) for expeditious adjudication and recovery of debts due to banks and financial institutions. The Debt Recovery Tribunal is also the appellate authority for appeals filed against the proceedings initiated by secured creditors under the Securitization and Reconstruction of Financial Assets and Enforcement of Security Interest Act.

RESCHEDULING OF LOAN REPAYMENT

Repayment schedule may be fixed taking into account gestation or moratorium period, harvesting season, income generation, surplus available etc. If the repayment schedule is defective both with reference to quantum of installment and period of recovery, assets have a tendency to become NPA.

MONTHLY CONFERENCE

It is arranged by the bank with a view to reduce the overall NPA. Here the managers of all the branches file a report about the NPA level and also the areas of default. The higher official suggests remedial measures and helps them to reduce the NPA level. From 1-4-2012 the NPA of the bank does not exceed 10% of the advance.

NPA RECOVERY SECTION

In order to reduce the level of NPA, the bank has also developed a department that is NPA recovery section or department. This department continuously informs the borrower about the due date of repayment and other details regarding the repayment of loan. Registered demand notice and registered notices are issued by this department and also personal visit is conducted in order to recover the NPA.

LITERATURE REVIEW

S. N. Bidani (2002) feels that Non-Performing Assets are the smoking gun threatening the very stability of Indian banks. NPAs wreck a bank's profitability both through the loss of interest, income and write-off of the principal loan amount itself. In a bid to stem the lurking rot, RBI issued in 1993 guidelines based on recommendations of the Narasimham Committee that mandated identification and reduction of NPAs and reducing NPAs was treated as a 'national priority'.

Prof. S. K. Kulkarni (2005) found that the co-operative bank was miserably failed to keep pace with the banking sector reforms. The other banking groups have significantly surpassed the co-operative banking sector, not only in the performance but also in the market share in the core area so far dominated by the cooperative banks. If things do not improve, the co-operative banking sector may cease to exist by 2020. The high amount of NPA's is one major aspect for this failure.

Dr. James Mathew (2006) observed that rising over dues and high level of NPAs among the co-operatives in the country is a matter of serious concern. The politicization of the recovery management has further vitiated the recovery climate. The growth in over dues has been much higher than the growth in loans outstanding. For example, in Kerala, while the loans outstanding with the PACS in the state increased by 55% between 1999 and 2003, the loans over dues increased by 113% (The Hindu, 2004). This alarming situation in over dues has to be seriously addressed.

NEED AND SIGNIFICANCE OF THE STUDY

The accumulation of huge non-performing assets in banks has assumed great importance. The depth of the problem of bad debts was first realized only in early 1990s. The magnitude of NPAs in banks and financial institutions is over Rs.1,50,000 crores. While gross NPA reflects the quality of the loans made by banks, net NPA shows the actual burden of banks. The banks and financial institutions have to take the initiative to reduce NPAs in a time bound strategic approach.

STATEMENT OF THE PROBLEM

Non-performing assets are those which are not been yielding revenue for a long period of time. The bank will always face the problem of NPA because of poor recovery of advances granted by the bank and several other reasons like adopting some poor recovery strategies so when the loan is not recovered from the bank effectively and efficiently that balance amount will become the NPA to the bank it may create some huge problem to the bank's financial status.

OBJECTIVES

- 1. To evaluate the level of NPA in the bank and the credit worthiness.
- 2. To study the recovery prospects of NPA in general, and also various methods adopted by the banks in the recovery process.

RESEARCH METHODOLOGY

The research project is descriptive and analytical in nature. The main source of primary data is collected through discussions with managerial personnel, executives and staffs. The secondary data were collected from annual reports (Balance Sheets, Profit & Loss Accounts) of the bank, internal circulated matter from RBI, RBI guidelines, Trend & Progress reports of RBI, Co-operative journals and from the web sites available on net. The collected data were classified, analyzed and tabulated in a systematic manner and presented here.

RESULTS AND DISCUSSION

The analysis and interpretation was carried through various tables and charts. The analysis was mainly done to know the management of the non-performing assets of the co-operative bank and its performance over the years.

TABLE 1: TOTAL LOAN PROVIDED BY COOPERATIVE URBAN BANK FROM 31-3-2011 TO 31-3-2015 (In lakh)

Term loan	Short term loan	Medium term loan	Long term loan
2011	14278.44	2051.84	72.30
2012	14945.19	2658.62	136.46
2013	11253.46	5518.83	433.55
2014	12680.03	6172.39	474.62
2015	7479.56	7424.36	589.66

Source: annual report

By analyzing the data, total short term loan issued by the bank in the year 2011 was 14,278.44 lakh and this was decreased to 7479.56 lakh in the year 2015. But medium term and long term loan shows an increasing trend from year to year.

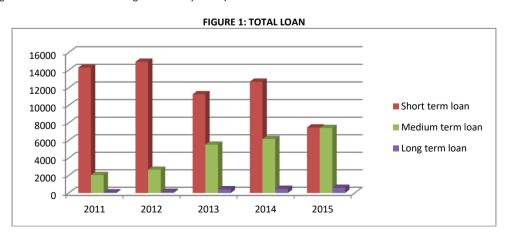


TABLE 2: DETAILS OF NPA (in lakh)						
YEAR	2011	2012	2013	2014	2015	
SUB-STANDARD ASSETS	182.90	201.52	725.33	498.41	327.11	
DOUBTFUL ASSETS	155.87	200.08	140.03	107.79	148.91	
LOSS ASSETS	.05	1.30	1.00	.49	.99	
TOTAL NPA	338.82	402.9	866.36	606.79	477.01	

Source: annual report

The data given shows that there is an increase in Nonperforming assets of the banks in the previous years and after that there is a decrease. The NPAs would destroy the current profit, interest income due to large provisions of the NPAs, and would affect the smooth functioning of the recycling of the funds. So the bank should take measures to reduce the rate of nonperforming assets.

FIGURE 2: TOTAL NPA 900 800 700 600 500 ■ TOTAL NPA 400 300 200 100 0 2011 2012 2013 2014 2015

TABLE 3: CLASSIFICATION OF TOTAL ADVANCES

YEAR	2011	2012	2013	2014	2015
Total npa	338.82	402.9	866.36	606.79	477.01
Standard assets	2849.54	3718.54	4212.41	5087.08	6427.72
Total advances	3188.36	4121.44	5078.77	5693.87	6904.73

Source: annual report

The total advances provided by the bank is increasing year to year and also the rate of nonperforming assets are also shows the same in first three years. And it is peak in 2013, which is a bad signal for the bank. After that bank take serious steps to mitigate the rate. In 2105 it is reduced to 477. 01.

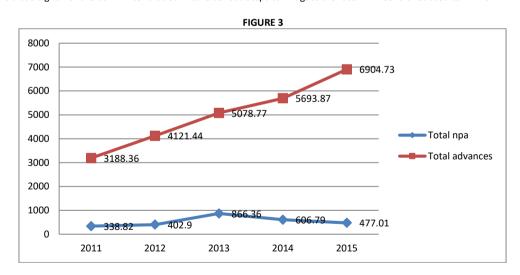


TABLE 4: TREND ANALYSIS (Amount in lakh)

YEAR	NET NPA
2011-12	127.84
2012-13	153.41
2013-14	409.56
2014-15	358.95
2015-16	223.94
2016-17	374.062
2017-18	413.836

The figure mentioned above shows a mounting tendency in non-performing assets of Cooperative Bank from 2011 to 2018. The NPA line begins from 127.84, and it is increased to 409.56 in 2013-14. In 2015-16 NPA rate is reduced to 223.94. But in 2017-18 it is again in peak (414.836).

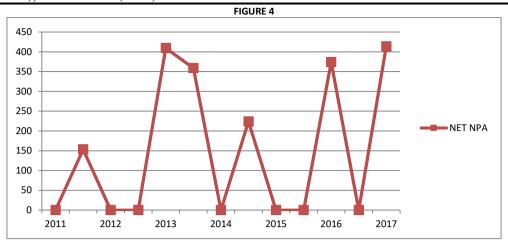


TABLE 5: IMPACT OF NPA ON BANK'S PROFITABILITY (amount in lakh)

CORRELATION BETWEEN NPA AND NET PROFIT							
YEAR	NET PROFIT (X)	NET NPA (Y)	dx	dy	dxdy	dx ²	dy ²
2011	219.59	679.72	22.822	65.838	1502.55	520.8437	4334.642
2012	150.19	696.40	-46.578	82.518	-3843.52	2169.51	6809.22
2013	172.21	582.80	-24.558	-31.082	763.311	603.0954	966.0907
2014	218.26	550.88	21.492	-63.002	-1354.04	461.9061	3969.252
2015	223.59	559.61	26.822	-54.272	-1455.68	719.4197	2945.45
TOTAL	983.84	3069.41	0	0.00	-4387.38	4474.775	19024.66
	MEAN	MEAN	n∑dxdy- (∑dx∑dy)				
	196.76	613.88	r =				
CORREL =4805			$\sqrt{[n\sum dx^2 - (\sum dx)^2]}$ $\sqrt{[n\sum dy^2 - (\sum dy)^2]}$				

The correlation analysis shows a negative correlation between NPA and profitability of the bank. That is when NPA reduces, profitability of the bank increases and vice versa.

FINDINGS

Banking sector is one of the largest revenue generated sector in India. The non-performing assets mean those assets which are classified as bad assets which are not possibly be returned back to the banks by the borrowers. If the proper management of the NPAs is not undertaken it would hamper the business of the banks. The NPAs would destroy the current profit, interest income due to large provisions of the NPAs, and would affect the smooth functioning of the recycling of the funds.

SUGGESTIONS

- 1. Each bank must develop its own independent credit rating agency which should evaluate the financial capacity of the borrower before granting credit.
- 2. Based on the study it is suggested that the bank should keep Non-Performing Assets under the track.
- 3. The Co-operative Bank should follow even more stringent measure to tackle problem of non-performing assets.
- 4. As concern to future feasibility of the banks provision is necessary. It is advisable for the bank to classify the assets according to the prudential norms of Reserve bank of India and keep aside prescribed amount of provision as a reserve to future likelihood of bank concern.

CONCLUSION

Nowadays Non Performing Assets is one of the biggest problems have been facing by the cooperative societies. There is a direct link in between nonperforming assets and profitability of the bank. The bank can able to reduce the nonperforming assets; ultimately the bank can able to improve the profitability.

REFERENCES

- 1. Banking Theory and Practice by K.C. Shekhar and Lekshmy Shekhar Co-operative Banks in India Functioning and Reforms by Amit Bhasak
- $2. \hspace{0.2in} \hbox{Co-operative Banking WEBSITES en. wikipedia.org/wiki/Cooperative_banking.www.banknetindia.com/banking/cintro.htm.}\\$
- 3. Dr. Krishnamurthy D., Dr. Sivasankar P.R. and Ekambaram K., Prudential Norms and Growth of NPA in Indian Banking Sector, Edited by B. Ramchandra Reddy, Management of Non-Performing Assets in Banks and Financial Institutions, Serials Publications, New Delhi. P, 19, 2004.
- 4. Dr. Sharma T.V., Economic Analysis of NPA in Public Sector Banks, Edited by Dr. V.S. Patil and Dr. J.F.Patil, Non-Preforming Assets Causes, Extent and Remedies Published by Shivaji University, Kolhapur, P.61. 2003.
- 5. en.wikipedia.org/wiki/Cooperative banking
- 6. Prashanth K Reddy (2002), A Comparative Study of Non-Performing Assets in India in the Global Context-Similarities and dissimilarities, remedial measures, The Indian Institute of Management, Ahmedabad, India
- 7. Rajaraman, I & Vashistha, G. (2002), 'Non-Performing Loans of Indian Public Sector Banks Some Panel Results', Economic & Political Weekly.
- 8. RBI/2013-14/62 DBOD.No.BP.BC.1/21.04.048/2013-14
- 9. Research Methodology Methods & Techniques 2 ed, Kothari C. R. Vishwa Prakashan New Delhi 1990.
- 10. Reserve Bank of India Annual Report, RBI/2012-13/39 DBOD.No.BP.BC.9/21.04.048/2012-13
- 11. www.banknetindia.com/banking/cintro.htm.

COMMUNICATION IMPACT ON JOB SATISFACTION AMONG AUTOMOBILE INDUSTRY IN CHENNAI REGION

R. SUBASHREE RESEARCH SCHOLAR DRAVIDIAN UNIVERSITY KUPPAM

DR. A. SENTHILRAJAN

ASST. PROFESSOR

DEPARTMENT OF BUSINESS ADMINISTRATION

S.S GOVERNMENT ARTS COLLEGE

TIRUTANNI

ABSTRACT

Communications are considered as the lifeblood of any enterprise in this information-based driven scenario. In the present context, communication acts as an essential ingredient in employer-employee relations having a direct correlation between employee communication and profitable operations of organization. In order to develop mutual understanding of organizational goals, to gain information about employees and other such activities in the workplace needs effective communication. So this stimulates every business management to concentrate on human skills which involves effective interaction with others and the quality of this interaction determines the team spirit and dedication within the organization leading to job satisfaction. This research paper focuses on the effectiveness of communication among employees in Chennai region. A descriptive research design comprising of disproportionate stratified sampling of the data collection was adopted using a well-structured questionnaire distributed to 110 respondents. This research dealt with pattern of communication, timing of communication, various important information on organizational activities, sources of communication, manager's communication skill, opportunities to express ideas and suggestions for improvement of communication to attain job satisfaction among employees in Chennai region, Tamilnadu. The collected data were analyzed using statistical tools such as Frequency and Percentage Analysis, Chi-Square Test, Charles Spearman's Coefficient of Correlation (or) Rank Correlation. The research concludes highlighting the satisfaction level of employees in communication, mutual understanding of the organizational information, and improvement in mode of communication, which leads to fulfillment of organizations future personnel needs.

KEYWORDS

communication, employer-employee relation, team spirit, employee dedication, job satisfaction.

INTRODUCTION

ommunication is the heart of modern business. It is the most important of all entrepreneurial skills in today's environment. In the corporate scenario, the destiny of any business depends on the quality of relationships and their ability to transmit information helps both management and employees feel they can communicate with each other and ultimately believe in each other, to create a trustworthy business environment.

A good communication process is the lubricant that keeps the organization running smoothly. With active and assessable communication, employees are better able to understand their job and are more connected to it. This leads to better performance and higher job satisfaction. Therefore, communication is an essential factor relating to job satisfaction since effective communication can lead to any of four end results: Productivity, satisfaction, relationship with management and profit. This study, therefore, goes on to explore the perceived communication practices and its impact on job satisfaction.

AUTOMOBILE INDUSTRY

The Indian auto industry is one of the largest in the world. The industry accounts for 7.1 percent of the country's Gross Domestic Product (GDP). The Two Wheelers segment with 81 percent market share is the leader of the Indian Automobile market owing to a growing middle class and a young population. The overall Passenger Vehicle (PV) segment has 13 percent market share. India is also a prominent auto exporter and has strong export growth expectations for the near future. Several initiatives by the Government of India and the major automobile players in the Indian market are expected to make India a leader in the Two Wheeler (2W) and Four Wheeler (4W) market in the world by 2020.

Automobile Mission Plan (AMP) 2006-16 focused broadly on five aspects: Economic growth, passenger comfort, sustainability, quality and cost competitiveness. According to the Society of Indian Automobile Manufacturers (SIAM) – Apex Industry Body, Indian automotive sector today is a \$74 billion industry and by 2026, the industry is expected to achieve a turnover of \$300 billion. During 2006-2016, the industry created 19 million additional jobs and saved 8.6 billion liters of fuel. 'Make in India' or 'Made in India'? Vision AMP 2016-2026 has been aligned with Make in India campaign which is essentially a Made in India initiative. Made in India initiative has brand perception challenges and could be overcome only by providing value added products and services such as improved safety features, technological enhancements and quality management.

AUTOMOTIVE BUSINESS THRIVES IN SOUTH INDIA: 2016

Tamil Nadu, Andhra Pradesh, Karnataka, Telangana, Kerala

Tamil Nadu is the largest contributor to the automobile sector in the country in terms of industrial output. Several major car companies like TVS Motor, Hyundai, Renault-Nissan, Ford India, Mitsubishi, BMW India, India Yamaha, among operate out of Tamil Nadu alone. The Chennai-Bangalore industrial corridor is a major region for automotive players in the country. There are several factors that work together towards making South India an attractive destination for automobile players. Some of them are 1. Industry-friendly government policies, 2. Proximity to ports, 3. Availability of land, 4. Strong auto component base and 5. Excellent pool of skilled talent and productive labour, "said a spokesperson of Daimler India Commercial Vehicle.

The Chennai hub is one of the largest auto hubs of the country. Component majors in the State include Lucas-TVS, Delphi, Brakes India, Bosch, Rane, Valeo, Visteon, Amalgamation Group, Samvardhana Motherson Group, etc. The distinct clusters of automobile industry in Tamil Nadu are identifiable in and around Chennai at Sriperumbudur, Oragadam Industrial Corridor and Maraimalai Nagar. Moreover, the state also has the Global Automotive Research Centre in Chennai.

REVIEW OF LITERATURE

Communication is a process of sharing ideas, information, and messages with others in a particular time and place. Communication includes writing and talking, as well as nonverbal communication (such as facial expressions, body language, or gestures), visual communication (the use of images or pictures, such as painting, photography, video or film) and electronic communication (telephone calls, electronic mail, cable television, or satellite broadcasts). Communication is a vital part of personal life and is also important in business, education, and any other situations where people encounter each other.

The business strategies such as employee autonomy, customer orientation, communication, job satisfaction, training and development, motivational factors, corporate social responsibility have major role to play in organizational performance, (Adegbuyi, Adunola, Worlu, Rowland & Ajagbe, 2015).

The human relations approach carries greater importance as it is the foremost time that two-way (between worker and manager) communication which is similar to a conversation was encouraged instead of unidirectional (from manager to worker) communication. Thus the human relations approach view communication as an instrument to obtain cooperation from employees, (Wrench et al, 2015).

Effective communication is a process by which sender of message, received feedback from receiver in intended, (Peter, 2015).

Education Portal (2003-2015) defined internal communication as the process of transmitting information among members of an organization within the different parts of the organization.

Extensively the present modern management methods motive is to increase employees performance by applying the power of effective communication, (Erogluer, 2011 in Asamu, 2014).

Job satisfaction is a psychological factor which is described as a type of emotional adjustment to the job requirements. This states that the employee is satisfied when the work gives ideal conditions otherwise employee begins to blame the job and quit it, (Asamu, 2014).

The change management in the business organization becomes successful only when the communication is functioned properly. Through which the key resources that is employees executive such changes in the firms. Parallely, management should address the apprehensions and issues related with them so as to get the expected change from their employees, (Husain, 2013).

Communication occurs in the form of exchange of information, needs, relationship and feedback is a valued behavior (Bolman & Deal, 2013).

Smart business persons understand that happy employees are productive employees who benefit their organizations (Waggoner, 2013).

When the information exchanged is not clear, concise, complete and accurate then breakdowns occurs in communication which results in dropping of communication satisfaction. Effective communication involves interpersonal and professional relationships developed in the workplace by being keen, courteous, attentive, active and appropriate use of gestures (Ramirez, 2012).

Among the scales used to measure communication satisfaction, Communication Satisfaction Questionnaire (CSQ) developed by Downs and Hazen (1977) having eight dimensions such as communication climate, relationship with superiors, organizational integration, media quality, horizontal and informal communication, organizational perspective, relationship with subordinates and personal feedback are the most widely used scale in various types of firms (Alsayed, Motaghi & Osman. 2012).

Neves & Eisenberger (2012) research work supports Anchor's findings specifying most of the companies apply open communication which is considered as an imperative human resource policy. In addition to the human resource practices such as pay, promotion, job security, autonomy and training (Shore & Shore, 1995), the open communication while recognizing the employees performance also leads to happiness and job satisfaction which further results in positive outcome benefiting the firm. Thus it was suggested that managers should be trained to effectively use open communication among employees and management which is the key element of organization's strategic planning. Communication in the workplace is also called as organizational communication which prevails from ancient period to modern period have undergone various modification due to technology. A lengthy path from industrialization, assembly lines, long-term employment, cross functional work teams, early years of internet and electronic mail to the present period influenced by globalization, terrorism, climate change and changing demographics (Miller, 2015).

Society of Human Resource Management (SHRM) Report 2012, found the top seven factors influencing the level of job satisfaction among employees are opportunities to use skills and abilities, job security, compensation or pay, communication between employees and senior management, relationship with immediate supervisor, benefits, organization's financial stability, and the work itself.

Previous researches states open two-way communication makes employees to be happy who are highly successful in every parts of life (Eisenberger & Stinglhamber, 2011).

Effective communication supports organization in attaining higher success (Steingrimsdottir, 2011). Effective internal communication builds a healthy environment having motivation, trust, and engagement and sharing of thoughts with ideas freely (Moyer, 2011).

Effective communication has little to do with getting the message across, but more with its acceptance from the intended receivers (Office politics, HRM Review, October 2004)

Bi-directional communication promotes feelings of being valued and increases job satisfaction. Various studies have resulted in the supposition that employees develop beliefs concerning their value to the organization in order to satisfy socio-emotional needs and to determine the organization's readiness to recognize and reward increased work effort and performance (Eisenberger & Stinglhamber, 2011; Rhoades & Eisenberger, 2002; Shore & Shore, 1995).

We live in a world filled with other people. We live together, work together, and play together. In our personal lives, we need each other for security, comfort, friendship, and love. In our working environment, we need each other in order to achieve our goals and objectives. None of these goals can be achieved without communication. Communication is the basic thread that ties us together. Through communication we make known our needs, our wants, our ideas, and our feelings. The better we are at communication, the more effective we are at achieving our hopes and dreams (Alessandra, Hunsaker, 1993).

Chester I. Barnard, viewed communication as the means by which people are linked together in an organization to achieve a common purpose. This is still the fundamental function of communication (Harold Koontz / Heinz Weihrich, Essentials of Management).

R.N. Gupta, Principles of Management states, Communication as a process, by which human behavior is modified and shaped for organizational purposes and good results are expected of the members of the organization.

OBJECTIVES OF THE STUDY

- 1. To identify the employees level of understanding with regard to the organizational information.
- 2. To determine the job satisfaction level of employees regarding accessible and active communication in the work environment.
- 3. To identify the efforts taken by the organization in maintaining quality relationship in fulfilling its future personnel needs.
- 4. To suggest suitable measures based on the results of the study.

RESEARCH METHODOLOGY

The locale selected for the study was Chennai region, Tamilnadu. Descriptive research was applied for the study as it attempts to obtain a complete and accurate description of situation, and with some definite purpose with help of questionnaire to gather primary information. For the research purpose, 110 employees were taken as the sample size. The method adopted for the survey was probability sampling, disproportionate stratified sampling method has been chosen from the access. A well-structured questionnaire consists of both open-ended, in which rating scales comprising category scale, likert scale and also ranking scale comprising forced choice as well as close-ended questions were used in the organizational research. Finally, the information gathered is analyzed by using the following tools such as:

- 1. Frequency and Percentage Analysis
- 2. Chi-Square Test
- 3. Charles Spearman's Coefficient or Correlation (or) Rank Correlation

LIMITATIONS OF THE STUDY

- 1. The study was restricted to only male employees.
- 2. There was a general apprehensions and reluctance on the part of the respondents initially while responding to the questionnaire.

RESULTS AND DISCUSSION

TABLE I: GENERAL PROFILE OF THE RESPONDENTS

Aspects	Percentage of respondents (N: 110)
Age (in yrs)	
21-25	0
26-35	41
36-45	19
Above 45	50
Educational Qualification	
10 th	30
12 th	10
Graduate	40
Post Graduate	13
Professional Course	07
Experience (in yrs)	
1-5	07
6-10	36
11-20	20
Above 20	47

Source: Primary data

The above table depicts that 46 percent of the respondents were in the age group of above 45 years. It shows that the workplace receives the expertise of employees under above 45 years age category in line with the remaining age group of employees in the company. It was found that 36 percent of the respondents were graduates and 27 percent of the respondents were 10th qualified. The data also reveals that young blood graduates were given an opportunity to serve and employees with lesser educational qualification were also entertained based on their skill sets as required by the company. This implies states that higher educational qualification does not act as a constraint for potential and skilled persons. As far as the work experience is concerned, 43 percent of the respondents had above 20 years of experience, which shows that the organization has a right mixture of employees with adequate experience who have a good long time serving record in the company and fresher's with dynamic energy.

TABLE II: MANAGERS COMMUNICATION SKILL BASED ON THEIR EXPERIENCE

Communication Skill / Experience	1 – 5 yrs	6 – 10 yrs	11 – 20 yrs	Above 20 yrs	Total
Excellent	07	13	07	24	51
Very Good	0	13	10	20	43
Good	0	10	03	03	16
Poor	0	0	0	0	0
Total	07	36	20	47	110

Step 1: Setting up of Null Hypothesis.

H₀: There is no significant association between employees experience and managers communication skill.

Step 2: Setting up of Alternate Hypothesis.

H₁: There is a significant association between employees experience and managers communication skill.

Step 3 : Level of significance is 5%

Step 4: $\chi^2 = \sum (O_i - E_i)^2 / E_i$

Step 5: Degrees of freedom

= (r-1) (c-1)

=(4-1)(4-1)

= 3 × 3

= 9

Step 6: The calculated value is 17.301.

Step 7: The table value with 12 degrees of freedom is 16.919.

Result: Here the calculated value is 17.301 and the table value is 16.919. This shows that the calculated value is greater than the table value. Hence the null hypothesis is rejected.

Inference: There is a significant association between employees experience and managers communication skill.

TABLE III: RANK CORRELATION ON IMPORTANT INFORMATIONS FOR INTERNAL COMMUNICATION

Information	Staffs	Workers
Company strategies for the future	1	1
Products and services	2	4
Human resource process	3	2
Key customer business issues	4	6
Technology development	5	3
Competitive activities	6	5
Issues and trends affecting business	7	7

r ₁	r ₂	$d = r_1 - r_2$	d ²
1	1	0	0
2	4	-2	4
3	2	1	1
4	6	-2	4
5	3	2	4
6	5	1	1
7	7	0	1
			$\Sigma d^2 = 15$

Result: The calculated value shows that the rank correlation r = 0.732. Thus the two variables are positively correlated. **Inference:** Both staffs and workers opinion on prioritizing and receiving the important information's are similar.

TABLE IV: RANK CORRELATION ON PRESENT MODE OF ORGANIZATIONAL COMMUNICATION

Present Mode	Staffs	Workers
Company e-mail	1	5
Bulletin board	2	1
Meetings	3	3
Immediate supervisor	4	2
Local company publications	5	4

r ₁	r ₂	$d = r_1 - r_2$	d²
1	5	-4	16
2	1	1	1
3	3	0	0
4	2	2	4
5	4	1	1
			$\Sigma d^2 = 22$

Result: The calculated value shows that the rank correlation r = -0.1. Thus the two variables are negatively correlated. **Inference:** The staffs reveal that the present modes of organizational communication are quite different from that of workers.

TABLE V: RANK CORRELATION ON PREFERENCE IN MODE OF ORGANIZATIONAL COMMUNICATION

Present Mode	Staffs	Workers
Company e-mail	1	5
Immediate supervisor	2	2
Middle management	3	3
Bulletin board	4	1
Senior Management	5	4
•		

r ₁	r ₂	$d = r_1 - r_2$	d²
1	5	-4	16
2	2	0	0
3	3	0	0
4	1	3	9
5	4	1	1
			$\Sigma d^2 = 26$

$$\begin{array}{ccc}
& & \underline{6(\sum d)^2} \\
r & = & \underline{1} \\
\text{where,} & d=r_1-r_2 \text{ and } n=5
\end{array}$$

r =
$$\frac{6(26)}{5(24)}$$

$$\frac{1.56}{120}$$
r = 1-

 $\textbf{Result:} \ \ \text{The calculated value shows that the rank correlation } \ \ r = -0.3. \ \ \text{Thus the two variables are negatively correlated}.$

Inference: The preference in mode of organizational communication for staffs and workers varies.

FINDINGS OF THE STUDY

-0.3

- 1. Majority of respondents (64%) are fully satisfied with the pattern of communication existing in the company.
- 2. Maximum numbers of employees are satisfied with their job.
- 3. It is clearly stated that (55%) employees receive adequate information. Thus employees have only moderate knowledge about the ongoing process of the company.
- 4. The study shows that majority of respondents (61%) agree that they receive information at appropriate timings.
- 5. Employees (100%) are satisfied with their manager's communication skill.
- 6. It is concluded that majority of the employees (85%) always believe the information they receive.
- 7. The study authenticates that both staffs and workers rank the company strategies as important.
- 8. Majority of the staffs state that they receive information by means of company e-mails and bulletin board.
- 9. Majority of the workers state that they receive information by means of bulletin board and through supervisor.
- 10. The study indicates that (58%) employees have more opportunities to express their ideas to senior management.

SUGGESTIONS

The majority of the findings have proved that the communication is effective, however few suggestions are provided for consideration.

- 1. It is suggested that the management can provide the employees with adequate information about the ongoing process and keep them informed about the changes of tomorrow and to make them prepare for it. Thus strive them for accomplishment of organizational goals.
- 2. It's further suggested that periodical meetings are to be conducted at regular intervals to invite constructive ideas from the employees for improving the effectiveness of communication which will pave way in building a good employee employer relationship.
- 3. In the era of information technology employees should be encouraged to use and have the accessibility to modern modes of communication to have a better understanding of their organization and its setup.
- 4. Self-Development Programmes should be initiated by the management from time to time which in turn satisfies organization's communication needs in the long run.

SCOPE FOR FURTHER RESEARCH

The study is restricted to only male employees and moreover at present, an employee working is subject to variation over a period of time. So, the results of this study though relevant now may not be applicable after a period of time. Therefore, there is a scope for further research.

CONCLUSION

Communication is central to the success of all organizations. And when change is occurring in an organization, communication is even more essential to implement that change effectively. However, one problem for many modern organizations is that change is not always communicated effectively. Ineffective communication during organizational change is reported to negatively impact the way an organization functions. Ineffective change communication can lead to resistance to the change, rumors, and promote exaggeration of the negative aspects associated with the change as well as to act as an overall negative influence on corporate culture. The purpose of this study is to investigate effective communication in the workplace. The attempt to measure the effectiveness of communication reveals that the organization is committed. For an esteemed and well established organization, it is not an upheavan task to challenge this widely forced obstacles with commitment and determination of the organization can successfully overpower this obstruct and surpass the other existing competitions to reach the aim of success.

REFERENCES

- 1. Aczel Amir.D & Sounderpandian Jayavel Business Statistics Tata Mc Graw Hill publishing company limited 2003
- 2. Chandan. Jit.S Organizational Behaviour Vikas Publishing House Pvt Ltd 2003
- 3. Koontz Harold & Weihrich Heinz Essential of Management Tata Mc Graw Hill publishing company limited 2003
- 4. Sekaran Uma Research Methods of Business John Wiley & Sons, Inc 2003

A STUDY ON CONSUMERS AWARENESS AND BEHAVIOUR TOWARDS DURABLE GOODS IN ERODE DISTRICT

K.NACHIMUTHU
Ph. D. RESEARCH SCHOLAR
DEPARTMENT OF COMMERCE
CHIKKAIAH NAICKER COLLEGE
ERODE

DR. G. SAKTHIVEL ASST. PROFESSOR DEPARTMENT OF COMMERCE CHIKKAIAH NAICKER COLLEGE ERODE

ABSTRACT

Consumer durables involve any type of product purchased by consumers that is manufactured for long-term use. As opposed to many goods that are intended for consumption in short term, consumer durables are intended to endure regular usage for several years or longer before their replacement is required. Just about every household contains at least a few items that may be considered to be of consumer durable nature. With India being the second fastest growing economy having a huge consumer class, consumer durables have emerged as one of the fastest growing industries in India. With the increase in income levels, easy availability of finance, increase in consumer awareness and introduction of new models, the demand for consumer durables has increased significantly. This paper makes an attempt to study the consumer behaviour of 150 consumers towards durable goods and their awareness while making such purchase.

KEYWORDS

consumers, consumption, consumer awareness, consumer durables.

INTRODUCTION

he Indian consumer durables industry has witnessed a considerable change over the last few years. Changing lifestyle and higher disposable income coupled with boom in the real estate and housing industry and a surge in advertising have been instrumental in bringing about a sea change in the consumer behaviour pattern. Consumer durables involve any type of product purchased by consumers that is manufactured for long-term use. As opposed to many goods that are intended for consumption in short term, consumer durables are intended to endure regular usage for several years or longer before their replacement is required. Just about every household contains at least a few items that may be considered to be of consumer durable nature. With India being the second fastest growing economy having a huge consumer class, consumer durables have emerged as one of the fastest growing industries in India.

CONSUMER BEHAVIOUR

The term consumer behaviour can be defined as the behaviour that consumers display in searching for purchasing, using, evaluating and disposing of products and services that they expect will satisfy their needs. To succeed in this dynamic and rapidly evolving industry as in all others, marketers need to know everything they can about consumers – what they want, what they think, what they buy, how, when and why. They need to understand the personal and group influences, which affect consumer decisions and how these decisions are made. Consumer behaviour is perceived as the cornerstone of a successful marketing strategy. Consumer behaviour is 'the mental and emotional process and the observable behaviour of consumers during searching, purchasing and post consumption of a product and service.

DURABLE GOODS

Durable goods differ from non-durable goods in their characteristic lumpiness and in their durability. These characteristics have important implications; the latter means that durable goods do not quickly wear out and that they yield services and utility over time rather than being completely used up once they are consumed. Therefore, in contrast to non-durables, consumption and purchase are not the same for durable goods; purchases are considered as adding or acquiring stocks, whereas consumption is regarded as the depletion or physical deterioration of these stocks. Additionally, the reason for purchasing a durable good could either be the new demand of a consumer who wants to acquire ownership for the first time or, on the other hand, it could be the replacement demand of an actual owner who wants to maintain a certain utility flow from a durable stock which has decreased because of depreciation. The second important characteristic, the lumpy nature of durables, implies that the choice whether or not to buy a durable is largely a choice between two discrete alternatives. It differs, therefore, from the purchase of non-durables which can be made over a more continuous, quantitative range. This, in consequence, implies that price decision is discontinuous too for durables; they have higher unit cost.

CONSUMER DURABLE PRODUCTS - A BRIEF OVERVIEW

A product is a bundle of satisfactions that a consumer buys. It represents solution to consumer problems. It is a combination of tangible and intangible benefits. For example, a refrigerator is not just merely steel, plastics, frozen gas, brand name, number of doors, etc., but also involves factors like installation, delivery, dealer network, after sales service, etc. It also connotes status in developing countries like India. Similar is the case with other products like television, music system, washing machine, personal computer, etc. Thus, want satisfying products are broadly classified under consumer durables and non- durables. Both the categories differ in respect of various parameters like unit price, usage pattern and durability of the product, concerns of the consumers and the complexity in the purchase decision process. As such, consumer durables differ from non-durables essentially in that the former normally are not consumed while using them, whereas the latter are consumed in the process of usage. Consumer durables are mainly characterized by high unit cost, long life, and consequently low frequency of purchase. Hence, high level of involvement, mental homework proceeds in a systematic way in the search, analysis and interpretation of information. An intensive preparation both psychologically and emotionally is found in the decision-making process as compared to the purchase of many non-durables where the behavior is more impulsive in nature.

For the purpose of this study - three major sets of durable products, which are classified under entertainment, general maintenance and kitchen appliances, are chosen. Products included under each category are given below:

Entertainment appliances - television, audio system, video system and personal computer / multimedia;

General maintenance appliances - refrigerator, washing machine, air conditioner, vacuum cleaner, water heater and power control equipment; and **Kitchen aided appliances** - mixer-cum-grinder, wet grinder, food processor, microwave oven and gas stove.

CHARACTERISTICS OF BUYER BEHAVIOUR

- Buyer behaviour comprises of mental and physical activities of a buyer when he wants to buy goods and service to satisfy his needs.
- It includes both visible and invisible activities of buyer. The visible activities refer to physical activity like actually going to the market place, buying the product and consuming them. The invisible activities on the other hand, refer to mental activates like thinking about the product, deciding to buy or not to buy that product, to buy one brand instead of another etc.
- Buyer behaviour is very complex and dynamic also. It is constantly changing requiring certain adjustment. The marketing management which fails to make such adjustments, would certainly lose its market.
- An individual buying behaviour is also influenced by internal factors such as needs, habits, instincts, motives, attitudes etc and also by outside or environmental factors such as family, social, groups, culture, status, positions, economic and business conditions. In narrow sense, consumer behaviour is the act of a consumer when he is engaged in buying and consuming a good or a service.

CONSUMER BEHAVIOUR AND AWARENESS

It is a fact that Marketing firms use their knowledge of consumer behaviour to segment Markets, to design Marketing strategies and to Measure Marketing performance. The development of consumer behaviour studies is an outgrowth of the evaluation of Marketing philosophy from production and production orientation to a selling orientation to a Marketing orientation. Other factors that have contributed to the development of consumer behaviour studies include the fast pace of new product introduction, shorter ' product life cycles, the high rate of new product life cycles, the high rate of new product failures, increased interest in consumer protection by private group and public policy decision — Makers and the adoption of Marketing practices by service and non-profit organisations. Of these factors, the consumers protection and awareness has been main frontline task of the government and its agencies and voluntary organisations to protect the present day consumers from all malpractices of the traders. Because of the Government's Acts and the initiatives taken by the voluntary organisations from time-to-time, it can be hypothesized that the present day consumers are better educated, informed with a greater sense of awareness and right consumer behaviour. Hence, consumer protection and promotion of awareness among them is the need of the hour and important facet of the consumer behaviour.

REVIEW OF LITERATURE

Nikita Bhatbhai Patel (2014) conducted a study of Consumer Awareness Behaviour among Consumers of North Gujarat. The study focuses mainly on the rural consumer behaviour towards selected Market products with the prevailing trend, it is necessary to focus on the essence and emergence of vibrant rural marketing efforts from the Market products companies. Thus with more number of companies entering into the rural market, with a variety of products, it is a must for the companies to study the rural consumer behaviour, on Market products. This study will highlight the rural consumer behaviour before purchase, at the time of purchase

Dr. R. Prakash Babu & R. Buvaneswari (2014) A study on Users Behaviour towards Durable Goods in Srirangam. As far as the durable products are concerned, the users' are indifferent when compared to purchasing of durables. Previously users' stuck to one particular shop and one particular brand. However, there is a remarkable change in the buying behaviour of the users' towards durable products. This is because of the different shopping outlets, various sources of information, multifarious aspects of article evaluation process and consistent promotional offers made by the marketers. Further, it is concluded that the changing concept of retail business into retail in detail, establishment of giant sized retail shops in the name of malls and the influx of foreign direct investment in retail business also influence the buying habits of the users'.

S. Aruna & A. John William (2015), conducted a study on Consumer behaviour towards online shopping in Coimbatore District. Thus in the midst of technological advancements people mostly prefer online shopping to traditional shopping. It has become popular and is extremely convenient. Though it is convenient there are various factors such as price, quality of the product and delivery time which customers look before online shopping. So the online websites must aware of these factors to be successful and retain the customers. The final result from the study is that online shopping is growing rapidly in positive manner. By removing little flaws, it can be much profitable.

Dr.K.M.Chinnadorai & R. Anusuya (2015) conducted a study on consumer awareness and satisfaction towards handloom products with special reference to Coimbatore district. The study reveals that consumers are very much aware of the handloom products but that makes no profit to the handloom seller.Customers find comparing to the mill made and power loom cloth handloom products are the best and well known for durability. It concluded Private and government organization should take steps for increasing the quality and availability of products.

Dr.C.Subramanian & Ms.C.Eswari (2016) A Study on Women Consumer Behavior Towards Durable Goods with Special Reference to Pudukkottai Town. This present study concluded that, the women consumer behaviour and preference have a great impact on the home appliance products. The women consumers' behaviour owns a good degree of consciousness of the change taking place in their situation. Women grow in their educational level and the growth in the media has contributed to their development. Women are not only cost conscious but also a quality conscious customers. The sales promotional activities sometimes may help women consumers to purchase more but it cannot remain same.

SCOPE OF THE STUDY

The study aims at assessing the consumers behavior towards durable goods. It consists of consumer behaviour and their level of awareness regarding the usage of durable goods. The study also focuses the problems of the consumers while using durable goods. It covers the consumers of durable goods in Erode District only.

STATEMENT OF THE PROBLEM

The Indian consumer durable industry is facing a tough competition with the entry of many companies. All the companies are constantly engaged in gaining the attention of consumers by introducing a novelty in the existing goods, changing the design and model. In view of the above, the researcher has made an attempt to study the consumer awareness and behaviour towards durable goods.

OBJECTIVES OF THE STUDY

- 1. To identify the demographic profile of the respondents
- 2. To study the factors influencing the consumers to purchase durable goods.
- 3. To study the consumers awareness and buying behavior towards durable goods
- 4. To summarize the key findings and offer suggestions for the study.

HYPOTHESIS

- 1. There is no significant difference between the age and the level of consumer awareness while purchasing consumer durable goods.
- 2. There is no significant difference between the gender and the level of consumer awareness while purchasing consumer durable goods.
- 3. There is no significant difference between the educational qualification and the level of consumer awareness while purchasing consumer durable goods.
- 4. There is no significant difference between the occupation and the level of consumer awareness while purchasing consumer durable goods.
- 5. There is no significant difference between the income and the level of consumer awareness while purchasing consumer durable goods.
- 6. There is no significant difference between the marital status and the level of consumer awareness while purchasing consumer durable goods.

RESEARCH METHODOLOGY

SAMPLING DESIGN

Convenience sampling (sometimes known as grab or opportunity sampling) is a type of non-probability sampling which involves the sample being drawn from that part of the population which is close to hand. That is, a population is selected because it is readily available and convenient.

DATA COLLECTION METHODS

Both primary and secondary data were used by the researcher for this research study.

PRIMARY DATA

Primary data are data, which are collected afresh and for the first time, and thus happen to be original in character. The primary data were collected from various customers with the help of a well structured questionnaire.

SECONDARY DATA

Secondary data consist of information that already exists somewhere, Secondary data are collected from company websites, magazines and using some library books.

AREA OF THE STUDY

The study was undertaken in Erode District.

SAMPLE SIZE

A total of 150 respondents residing in the Erode District form the sample.

STATISTICAL TOOLS

1. SIMPLE PERCENTAGE ANALYSIS

Percentage refers to a special kind of ratio; percentages are used in making comparison between two or more series of data. Percentages are used to describe relationships. Percentages are also used to compare the relative terms, the distribution of two or more series of data.

Percentage of consumer = No. of respondents * 100

Total consumer

2. CHI-SQUARE ANALYSIS

For the purpose of the analysis chi-square test was used to find out whether there is any significant relationship between dependent variables viz., level of consumer awareness and independent variables like age, gender, educational qualification, occupation, monthly income and marital status of the respondents. The following formula was applied for calculating the chi-square test.

$$X^2 = (O - E)^2$$

Where, O = observed frequency, E = expected frequency

$E = Row total \times Column total$

Grand total

If the calculated value is greater than the table value at 5 percent level of significance, it is concluded that there is a significant relationship between the level of consumer awareness of the respondents and that of independent variables. If calculated value is less than the table value, it is concluded that independent variable has no significant relationship in the level of consumer awareness of the respondents.

ANALYSIS AND INTERPRETATION

The analysis of data collected from primary source is presented in the form of tables and interpretation is given in description as required. Analysis refers to the course of finding out answers to the question that had arisen to the study. Interpretation finds out the relationship among the available data and the variables.

TABLE 1: PROFILE OF THE RESPONDENTS

Sl.No.	Particulars	Classification	Numbers	Percentage
1	Age	Below 30	15	10
		31-40	63	42
		41-50	55	36.67
		Above 50	17	11.00
		Total	150	100
2	Gender	Male	90	60
		Female	60	40
		Total	150	100
3	Educational qualifications	Upto SSLC	20	13.33
		HSC	40	26.67
		Degree/Diploma	48	32
		Professional	30	20
		Others	12	8
		Total	150	100
4	Occupation	Agriculture	37	24.66
		Employed	55	36.67
		Businessmen	40	26.67
		Others	18	12
		Total	150	100
5	Monthly Income	Below 15000	40	26.67
		15001-25000	50	33.33
		25001-35000	25	16.67
		35001-45000	20	13-33
		Above 45000	15	10
		Total	150	100
6	Marital status	Married	95	63.33
		Unmarried	55	36.67
		Total	150	100

Table-1 shows that out of 150 consumers taken for the study, 42 belong to the age group up to 31-40 years, 60% of the consumers are male. As regards to educational qualification 32% are degree/diploma level and 36.67% are employed, 33.33% of the consumer recorded monthly income of Rs. 15001 to Rs. 25000 and 63.33% of the consumers are married.

TABLE 2: FACTORS INFLUENCING CONSUMER BUYING BEHAVIOUR

Factors	Number of respondents	Percentage
Price	30	20.00
Brand image	24	16.00
Durability	25	16.67
After sale service	17	11.33
Warranty and guarantee	20	13.33
Easy availability	21	14.00
Advertisement network	13	08.67
Total	150	100.00

Table 2 shows that 30(20%) consumer are influenced by price; 25(16.67%) consumers are influenced by durability; 24(16%) consumers are influenced by brand image; 21(14%) consumers are influenced by easy availability; 20(13.33%)consumers are influenced by Warrantee and Guarantee; 17(11.33%) consumers are influenced by after sale service and only 13(8.67%) are influenced by advertisement network.

CHI-SQUARE TEST

TABLE 3: AGE OF THE RESPONDENTS AND LEVEL OF CONSUMER AWARENESS

Level	High	Medium	Low	Total	Chi square value	Table Value	Sig
Age							
Below 30	10	2	3	15			
31-40	20	13	30	63			
41-50	25	20	10	55	17.72	12.5916	**
Above 50	5	7	5	17			
Total	60	42	48	150			

At 5% level of significance, for 6 degree of freedom the table value is 12.5916. Since the calculated value (17.72) is more than the table value, the null hypothesis is rejected. Hence there is a significant difference between the age and the level of consumer awareness while purchasing consumer durables.

TABLE 4: GENDER OF THE RESPONDENTS AND LEVEL OF CONSUMER AWARENESS

Gend	Level	High	Medium	Low	Total	Chi square value	Table Value	Sig
Male		42	20	28	90			
Fema	le	18	22	20	60	5.09	5.9915	NS
Total		60	42	48	150			

As 5% level of significance, for 2 degree of freedom the table value is 5.9915. Since the calculated value (5.09) is less than the table value, the null hypothesis is accepted. Hence there is no significant difference between the gender of the respondents and the level of consumer awareness while purchasing durables.

TABLE 5: EDUCATIONAL QUALIFICATIONS OF THE RESPONDENTS AND LEVEL OF CONSUMER AWARENESS

.,							
Level	High	Medium	Low	Total	Chi square value	Table Value	Sig
Educational Qualifications							
•	_		_				
Upto SSLC	2	10	8	20			
HSC	20	8	12	40			
Degree/Diploma	22	18	8	48	22.7709	15.5073	**
Professional	12	3	15	30			
Others	4	3	5	12			
Total	60	42	448	150			

At 5% level of significance, for 8 degree of freedom the table value is 15.5073. Since the calculated value (22.7709) is more than the table value, the null hypothesis is rejected. Hence there is significant difference between the educational qualification and the level of consumer awareness while purchasing consumer durable goods.

TABLE 6: OCCUPATION OF THE RESPONDENTS AND LEVEL OF CONSUMER AWARENESS

IADLE 0. OC	TABLE 0: OCCOT ATION OF THE RESPONDENTS AND LEVEL OF CONSONIER AWARENESS							
	Level	High	Medium	Low	Total	Chi square value	Table Value	Sig
Occupation								
Agriculture		17	9	11	37			
Employee		23	22	10	55			
Businessmen		15	6	19	40	13.6808	12.5916	**
Others		5	5	8	18			
Total		60	42	48	150			

At 5% level of significance, for 6 degree of freedom the table value is 12.5916. Since the calculated value (13.6808) is more than the table value, the null hypothesis is rejected. Hence there is significant difference between the occupation and the level of consumer awareness while purchasing durable goods.

TABLE 7: MONTHLY INCOME OF THE RESPONDENTS AND LEVEL OF CONSUMER AWARENESS

Level	High	Medium	Low	Total	Chi square value	Table Value	Sig
Mandhli							
Monthly Income							
Below 15000	15	6	19	40			
15001-25000	19	19	12	50			
25001-35000	13	9	3	25	14.550	15.5073	NS
35001-45000	8	5	7	20			
Above 45000	5	3	7	15			
Total	60	42	48	150			

At 5% level of significance, for 8 degree of freedom the table value is 15.5073. Since the calculated value (14.550) is less than the table value, the null hypothesis is accepted. Hence there is no significant difference between the income group and their level of consumer awareness while purchasing durable goods.

TABLE 8: MARTIAL STATUS OF THE RESPONDENTS AND LEVEL OF CONSUMER AWARENESS

	Level	High	Medium	Low	Total	Chi square value	Table Value	Sig
Martial	_							
Status								
Married		32	27	36	95			
Unmarrie	d	28	15	12	55	5.411	5.9915	NS
Total		60	42	48	150			

As 5% level of significance, for 2 degree of freedom the table value is 5.9915. Since the calculated value (5.411) is less than the table value, the null hypothesis is accepted. Hence there is no significant difference between the marital status and the level of consumer awareness while purchasing consumer durable goods.

FINDINGS OF THE STUDY

From the analysis carried out with the above objectives and hypotheses, the following are the major findings:

- 42% belong to the age group of 31-40 years,
- 60% of the consumers are male.
- Majority 32% of consumers educational qualification are degree/diploma level.
- 36.67% consumers are employed
- 33.33% of the consumer have a monthly income from Rs.15001 to Rs.30000.
- Majority 30(20%) consumer is influenced by price
- 25(16.67%) consumers are influenced by durability;
- 24(16%) consumers are influenced by brand image
- 21(14%) consumers are influenced by easy availability
- 20(13.33%)consumers are influenced by Warrantee and Guarantee
- 17(11.33%) consumers are influenced by after sale service
- Only 13(8.67%) are influenced by advertisement netwoerk.
- There is no significant relationship with demographic profile such as gender, marital status and income and factors influencing level of satisfaction of consumer buying behavior.

SUGGESTIONS

- 1. The purchase decisions of the respondents are influenced considerably by the price-factor. Concessions in the price, price reductions, discounts sale, gifts and offers have become common practices. The buyers of consumer durables should try to avail of these benefits, whenever they are available. However, the buyers of such goods should not take without considering the quality and performance aspects of these higher value products.
- 2. The buyers of consumer durables have largely shown their preference to make extensive enquiry from the dealers of different brands of the products. This trait should be emulated by all the buyers in order to avoid post purchase dissatisfaction about the quality and performance of the products
- 3. The buyers of the consumer durables should insist for all the technical information on the use of durable products without any technical fault leading to frequent repairs, free servicing of the durables by dealers during the guarantee period insisted upon the buyers.
- 4. The buyers of consumer durables prefer well known Indian brands to imported ones since the imported products have been found to be inconvenient in view of the problems of post purchase servicing faced by them
- 5. Marketers of consumer durables must identify who makes and influences the buying decisions. This will enable the marketers in understanding how consumers influence, different marketing campaigns that might be targeted to each type of persons. Marketers also examine buyer's level of involvement and numbers of brands available to determine whether consumers are engaging in complex buying behavior, dissonance reducing buying behavior, habitual buying behavior

CONCLUSION

The market for consumer durables is becoming more competitive now a days. Therefore, the producer of durable products should understand consumer interest much to find higher sale of their products. Marketers communicate with consumers and try to convince through every possible media. Highly inevitable to produce goods as preferred by the customer, as he is the kingpin around whom the entire marketing activity revolves. Thus, a marketer who understands the behaviour of the consumers and plan his marketing strategies to suit the needs and aspirations of the target market will definitely have an advantage over his competitors

LIMITATIONS OF THE STUDY

- 1. The study confined to Erode District only.
- 2. The researcher has studied only durable goods.
- 3. Only 150 respondents are taken to this study.

REFERENCES

BOOKS

- 1. Deaton, A. and Muellbauer, J. (1980). Economics and Consumer Behaviour. Cambridge University Press, Cambridge.
- 2. Senguptha, J.S (2011), Consumer Behaviour on Durables: Analyses, Southern economist, March 2011.

JOURNALS AND ARTICLES

- 3. **Aruna,S & John William,A (2015),** 'A Study on Consumer behaviour towards online shopping in Coimbatore District, *Impact: International Journal of Research in Business Management,* ISSN(E): 2321-886X; ISSN(P): 2347-4572 Vol. 3, Issue 7, Jul 2015, pp.51
- 4. **Chinnadorai, K.M & Anusuya, R (2015),** 'A study on consumer awareness and satisfaction towards handloom products with special reference to Coimbatore district', *International Journal in Management and Social Science*, Vol.03 Issue-09 (September, 2015) ISSN: 2321-1784 pp.296-300
- 5. **Nikita Bharatbhai Patel (2014),** 'A Study of Consumer Awareness Behaviour among Consumers of North Gujarat', *International Journal of Research in Humanities and Social Sciences*. ISSN:(P) 2347-5404 ISSN:(O)2320 771X, Vol. 2, Issue: 5, June: 2014 pp.17-22
- 6. **Prakash Babu,R & Buvaneswari,R (2014)**, 'A study on Users Behaviour towards Durable Goods in Srirangam', *International Journal of Advanced Research in Management and Social Sciences*, ISSN: 2278-6236, Vol. 3 | No. 11 | November 2014: pp 133 -141
- 7. **Subramanian, C & Eswari, C (2016),**'A Study on Women Consumer Behavior Towards Durable Goods with Special Reference to Pudukkottai Town', *International Journal of Scientific Research*, ISSN No 2277 8179, Volume: 5 | Issue: 3 | March 2016, pp.434-436

WEBSITES

- 8. www/http/durables in Indian context
- 9. www.Tata durables.com

A STUDY ON CUSTOMER PREFERENCE OF HEALTH DRINKS WITH SPECIAL REFERENCE TO "BOOST" IN MANNARGUDI TOWN

J.ANNAMMAL
ASST. PROFESSOR IN COMMERCE
S.T.E.T. WOMEN'S COLLEGE
MANNARGUDI

S.KARTHIGA M. Phil. RESEARCH SCHOLAR S.T.E.T. WOMEN'S COLLEGE MANNARGUDI

ABSTRACT

Boost is the first Malt Based Drink in India to use celebrity endorsement to convey its energy proposition and has successfully differentiated from other brands. The brand has been popular among kids in its core markets for its delicious chocolaty taste. Not only Boost has strong taste equity amongst the consumers but also has got relevant science credentials as well to drive conviction on health benefits of the drink. In 2009, Boost launched its strongest ever, scientifically proven claim, of increasing stamina by 3 times driving up the nutritional credentials of the brand. All people, whether young or old, like health drinks. Thus health drinks have become a part of their lives. As regards manufactures they should realise that the consumers are the focal point of any business enterprises. They should be conscious of the fact that the consumer is a prime determining factor or decisive force in the market. So the producer should understand what exactly is expected of him by the consumers who are highly sensitive and reactive.

KEYWORDS

health drinks, energy, nutrition, consumer, marketing.

INTRODUCTION

n all walks of life man is said to be a working animal. Most of people's wants are satisfied through outside sources namely different goods and services. Some sort of exchange process and relationship must take place among various people to make use to each other's products and services.

In the modern and competitive world people must do heavy work both mentally and physically. So that they require more energy and stamina for the maintenance of good health.

Health is man's most precious possession. It influences all his activities and shapes his destiny. Health is wealth. This indicates the importance of health. Health infect is a key to education, success, good citizenship and happy life. Without good health an individual can't perform efficiently. One individual health is like a pillar of a society. The health of an individual and society are interlinked. An individual health keeps free from disease, stops the spread of disease in one's community and neighbourhood or society.

COMPANY PROFILE

Boost is India's leading malt-based food drink in chocolate flavour. It was developed by company's R&D team in 1974 and launched in 1975-76. Currently it's the third biggest health food drink in India and enjoys a market share of 11.5.

Boost is the first Malt Based Drink in India to use celebrity endorsement to convey its energy proposition and has successfully differentiated from other brands. It had been endorsed by India's most famous cricket stars, particularly those which have a huge following among children like Kapil Dev, Sachin Tendulkar, Virendar Sehwag and now M S Dhoni and Virat Kohli.

The brand has been popular among kids in its core markets for its delicious chocolaty taste. Not only Boost has strong taste equity amongst the consumers but also has got relevant science credentials as well to drive conviction on health benefits of the drink. Boost has been differentiated of its energy proposition since its early years. In 2009, Boost launched its strongest ever, scientifically proven claim, of increasing stamina by 3 times driving up the nutritional credentials of the brand. The brand further strengthened its strong science credentials through the claim of delivering 3 times more stamina+ in a span of just 120 days.

DETERMINANTS OF HEALTH

The important determinants are heredity, environment, life style, socio-economic condition, health and family welfare services and other factors. Health is a multidimensional. The three specific dimensions are physical, mental and social.

a. Mental dimension

Mental health is not more absence of mental illness. A person is said to be healthy if

- a. One is free from internal conflicts
- b. One neither under estimate nor over estimates his own abilities
- c. One known himself, his needs, problems and goals and
- d. One has good self control.

b. Physical dimension

Physical dimension implies the notions of perfect functioning of the body. The sign of physical health in an individual are a good complexion, a clear skin, bright eyes, lustrous hair, a body with firm flesh, a good appetite, sound sleep, regular activity of bowels and bladder and smooth, easy co-ordinate bodily movements.

C. Social dimension

The third one is social dimension it means the quantity and quality of an individual inter personalities and the extent of involvement with the community.

FOOD AND NUTRITION

Food is the chief of essential materials which the body needs for its well being. These essential materials are called 'nutrients'. Good food is indispensable for health at all stages of life and from satisfactory growth during infancy, childhood, adolescence and adulthood.

Food provides energy to the body it also supplies the essential nutrients for its growth and enables, it to replace the tissue. Food are needed for three main purposes.

- a) Muscular works and vitality
- b) Body construction and
- c) Repair process

NUTRIENTS

Nutrients are defined "as the sum total of the process involved in the intake and utilization of food substances by living organisms including digestion, absorption and metabolism of food".

Food contains five sorts of nutrients

- a. Carbohydrates
- b. Fat
- c. Protein
- d. Mineral and
- e. Vitamins

CONSUMERS

A consumer is the central point and all the marketing activities revolved around him. The firm should understand the consumers and the marketing system should be designed to suit consumers need. "Consumers are people in families and other kinds of households who buy and use products and service in order to satisfy the personal needs and wants".

"Consumer is one, who purchases goods and services for his / her own personal use or for house hold use. End use consumption is perhaps the most pervasive of all types of consumer behaviour, since it involves every individual, of every age and background, in the role of buyer or user or both".

Producers, sellers and providers of service give importance to the consumer. In the sense, "Every one of us is a consumer".

"A customer is the most important visitor in our premises. He is not dependent on us. We are dependent on him. He is not an interruption on our work. He is the purpose of it. He is not an outsider on our business. He is part of it. We are not doing him favour by serving him. He is doing us a favour by giving us an opportunity to do so". – Mahatma Gandhi.

A customer as one who purchases a commodity or service usually, systematically or frequently or one who patronizes or uses services. – Webster Dictionary. To satisfy the customers is the mission and purpose of every business. – Peter F. Drucker.

Who is customer?

- ❖ A customer is the most important person ever in this office in person or by mail.
- A customer is not dependent on us ... we are dependent on him.
- A customer is not an interruption of our work... he is the purpose of it. We are not doing a favour by serving him... he is doing us a favour by giving us the opportunity to do so.
- A customer is not someone to argue or match with. Nobody ever won an argument with the customer.
- A customer is a person who brings us his wants. It is our job to handle them profitably to him and to ourselves.

SIZE ON FAMILY INCOME

The size of family and the size of family income affect the spending and saving patterns. Generally large families spend more and small families spend less in comparison.

INCOME EXPECTATION

The expected income to receive in future has direct relation with the buying behaviour. The expectation of higher or lower income has a direct effect on spending plans.

SPEND DISPOSABLE INCOME

This goes to the habit of spending or saving with the disposable income of buyers. If the buyers give importance to present needs, then they dispose of their income and buyers spend less if they give importance to the future needs.

LIQUIDITY OF FUND

The present buying plans are influenced greatly by liquidity of assets i.e. cash and assets readily convertible into cash, example, readily marketable shares and bonds, bank balances etc. However, these convertible assets influence and offer freedom to the buyer, who actually buys with current income.

CONSUMER CREDIT

Facility of consumer credits system, hire purchases, instalment purchases etc., play on important role in purchasing decision. A buyer can command more purchasing power. "Buy now and pay later play its role effectively in the rapid growth of markets for car, scooter, radio, fridge, furniture, television and the like.

ECONOMIC MODEL SUGGESTS BEHAVIOUR HYPOTHESIS

- 1. Lower the price of the product, higher the sales.
- 2. Lower the price of substitute products; lower the sales of this product.
- 3. Higher the real income, higher the sales of this product.
- 4. Higher the promotional expenses, higher the sales.

However, "Lower the price of a product, higher the sales" may not hold good. As buyers may feel that the product is a sub-standard one. Economic factors alone cannot explain all the variations in sales. The model ignores the fundamental question of how product and brand preference are formed.

OBJECTIVES OF THE STUDY

- 1. To study the socio-demographic characteristics of the respondents.
- 2. To analyze the factors influencing the brand preference of Health Drinks.
- 3. To find out the reason for preferring a particular brand especially for Boost.
- 4. To measure the impact of media influencing consumer in their selection process

SCOPE OF THE STUDY

The study has been undertaken among the all consumers and retailers to know and analyze the factors, different opinion on the selection of health drinks. This research helps the retailers to the customer's preference in the brand. It helps know about the satisfaction of the customers regarding the health drinks.

METHODOLOGY

This study is an analytical one and based on both primary data and secondary data. Primary data were collected through a structural questionnaire after conducting pilot study with 100 respondents. The secondary data are collected from various books and journals and websites.

COLLECTION OF DATA

PRIMARY DATA

Primary data are those which are collected fresh and for the first time, and thus happen to be original in character. Questionnaire was the instrument being used for collecting the primary data. The data was collected from various customers of private and public banks in Mannargudi town.

SECONDARY DATA

The data are those which have already been collected by some one else and which have already been passed through the statistical process. Secondary data was collected from journals, magazines and record of the company.

SAMPLING DESIGN

In this study the researcher has selected simple random sampling method which is known as probability sampling. Under this sampling design every item of the universe has an equal chance of inclusion in the sample. This method is free from bias.

SAMPLE SIZE

The sample size of 100 respondents was selected in Mannargudi town for this study.

STATEMENT OF THE PROBLEM

The problem undertaken for this study purpose is to find out the consumer and retailer opinion about the health drinks especially in brand of Boost for this purpose, preferential status of consumers are analysed on what basis the consumer prefers his brand and what problem faced by the retailer, what are the activities of retailer in sales of the product and which influence him to buy such as brand and how his buying motives is created.

AREA OF THE STUDY

Mannargudi town is selected as the area of this study. Mannargudi is a town in the Tiruvarur district of Tamil Nadu, India, situated at a distance of 20 kilometers from the district capital Tiruvarur and 310 kilometers from the city of Chennai. Mannargudi is the largest town in the district. Apart from being a rice-production centre, Mannargudi is known for the Rajagopalaswamy Temple, which is an important Hindu pilgrimage site.

Agriculture is the principal occupation of the people of Mannargudi. Mannargudi is also known its cloth weaving and metal industries.

PERIOD OF THE STUDY

The data was collected in the month of November 2016 to February 2017.

LIMITATIONS

- 1. The study restricted to Mannargudi town only.
- 2. Due to time and cost constraint, the study is confined only to the 80 respondents.
- 3. Lack of time has reverted on deep and thorough study.
- 4. Some of the consumers had been reluctant to give complete information about their product.
- 5. The findings are drawn only on the basis of information supplied by the respondents and they can't be relied upon wholly.

DATA ANALYSIS AND INTERPRETATION

After analyzing the trends of health care production in India and discussing about consumer behaviour with respect of Health drinks especially boost, the current chapter reports the results of the survey conducted by the candidate on consumers. The survey was intended to collect primary data on consumer behaviour with respect to Boost. Those who use Boost constitute the population frame.

As almost all the persons are using Boost no specific frame was prepared for the survey. A questionnaire schedule with 20 main questions was prepared for the purpose of the survey. A sample of 100 consumers was chosen at random. Enough care was taken to include all types of consumers in the sample.

The result of the survey is presented in this chapter. An analysis of the data collected reveals many relevant facts about consumer behaviour with regard to health drinks.

TABLE 1: AGE WISE CLASSIFICATION

S. No	Age Group	No. of Respondents	Percentage
1	Below 25 Yrs	10	10
2	26Yrs-30Yrs	50	50
3	31Yrs-40Yrs	25	25
4	Above 40 Yrs	15	15
	Total	100	100

Source: primary Data

Inference

The above table shows that majority 50% of the respondents are in the age group of 26-30 years, 25% of the respondents are in age group of 31-40 years, 15% of respondents in the age group of above 40 years and above and remaining 10% of the respondents in the age group of below 25 years.

TABLE 2: GENDER WISE CLASSIFICATIONS

S. No	Gender	No. of Respondents	Percentage
1	Male	30	30
2	Female	70	70
	Total	100	100

Source: Primary Data

Inference

The above table shows that gender wise classification of the respondents in terms of percentage, 70% of respondents are females and the rest 30% of the respondents are males.

TABLE 3: CLASSIFICATIONS OF RESPONDENTS ON THE BASIS OF MARITAL STATUS

S.No	Marital status	No. of Respondents	Percentage
1	Married	75	75
2	Unmarried	25	25
	TOTAL	100	100

Source: Primary data

Inference

The table 3 reveals that marital status of the respondents terms of 75% of respondents are married and 25% of the respondents are unmarried.

TABLE 4: CLASSIFICATIONS OF RESPONDENTS ON THE BASIS OF EDUCATIONAL QUALIFICATION OF RESPONDENTS

S.No	Educational Qualification	No. of Respondents	Percentage
1	S.S.L.C	15	15
2	H.Sc	30	30
3	UG	36	36
4	PG	19	19
	Total	100	100

Source: primary Data

Inference

The above table indicates that 36% of the respondents have qualified for UG degree, 30% of the respondents have studied Higher secondary, 19% of the respondents are qualified PG Degree and only 15% of the respondents are studied on S.S.L.C.

TABLE 5: CLASSIFICATIONS OF RESPONDENTS ON THE BASIS OF EXPERIENCE OF THE RESPONDENTS

S.No	Experience	No. of Respondents	Percentage
1	0-5 Yrs	33	33
2	6-10 Yrs	30	30
3	11-15 Yrs	20	20
4	Above 15 Yrs	17	17
	Total	100	100

Source: primary Data

Inference

The above table indicates that 33% of the respondents are experienced for 6-10 years, 30% of the respondents experienced for 6-10 years, 20% of the respondents are 11-15 years and 17% of the respondents are above 15 years.

TABLE 6: CLASSIFICATIONS OF RESPONDENTS ON THE BASIS OF FAMILY INCOME

S.No	Family income (Rs).	No. of Respondents	Percentage
1	Rs.5000 to Rs.10000	25	25
2	Rs.10000 to Rs.15000	25	25
3	Rs.15000 to Rs.20000	50	50
	Total	100	100

Source: Primary data

Inference

The above table shows that the family income of the respondent's surveyed 50% of the respondents are in the income range of Rs.15000 to Rs.20000, 25% of the respondents are in the income range of Rs.15000 to Rs.20000 and remaining 25% of the respondents are in the income range of Rs.5000 to Rs.10000.

TABLE 7: CLASSIFICATIONS OF RESPONDENTS ON THE BASIS OF TYPES OF FAMILY

S.No	Type of family	No. of Respondents	Percentage
1	Nuclear family	80	80
2	Joint family	20	20
	Total	100	100

Source: Primary data

Inference

The above table 7 shows that the majority 80% of the respondents is in the category of Nuclear family and 20% of the respondents are joint family. The study cover the surrounding of Mannargudi town, so most of the people living in nuclear family.

TABLE 8: CLASSIFICATIONS OF RESPONDENTS ON THE BASIS OF AREA OF RESIDENCY

S.No	Area	No. of Respondents	Percentage
1	Rural	20	20
2	Urban	70	70
3	Semi-Urban	10	10
	Total	100	100

Source: Primary data

Inference

The above table shows that majority 70% of the respondents is located at urban areas, 20% of the respondents are rural areas and only 10% of the respondents are semi-urban areas.

TABLE 9: OCCUPATIONS OF THE RESPONDENTS

S.No	Occupation	No. of Respondents	Percentage						
1	Government Employees	25	25						
2	Private Employees	40	40						
3	House wife	20	20						
4	Others	15	15						
	Total	100	100						

Source: primary Data

Inference

The above table shows occupation wise, among 100 of respondents 40% of the respondents are working in private employees, 25% of the respondents are government employees, 20% of the respondents are housewife and 15% of the respondents are other categories.

TABLE 10: CLASSIFICATIONS OF RESPONDENTS ON THE BASIS OF AWARE OF THE BRAND

S. No	Opinion	No. of Respondents	Percentage
1	Yes	77	77
2	No	23	23
	Total	100	100

Source: Primary data

Inference

The above table shows that the aware of the product, majority 77% of the respondents are aware the Boost brand and 23% of the respondents are not aware of the product.

TABLE 11: CLASSIFICATIONS OF RESPONDENTS ON THE BASIS OF THEIR THINKING ABOUT THE PRODUCT

S. No	Opinion	No. of Respondents	Percentage		
1	Excellent	38	38		
2	Good	31	31 17		
3	Poor	17			
4	None	14	14		
	Total	100	100		

Source: Primary data

Inference

The above table indicates that 38% of the respondent's opinion that the products are excellent, 31% is opinion that good, 17% are opinion that poor and 14% of the respondents are none of them.

TABLE 12: CLASSIFICATION OF RESPONDENTS ON THE BASIS OF SATISFACTION ABOUT COMPANY'S AFTER SALES AND SERVICES

S.No	Opinion	No. of Respondents	Percentage
1	Extremely satisfied	25	25
2	Satisfied	21	21
3	Dissatisfied	54	54
	Total	100	100

Source: Primary data

Inference

The above table shows that majority 54% of the respondents are dissatisfied about the company sales and services, 25% are extremely satisfied about the company sales and services and only 21% are satisfied.

TABLE 13: REASONS FOR USING THE BRAND

S.No	Reason	No. of Respondents	Percentage	
1	Brand image	14	14	
2	Quality	13	13	
3	Price 57		57	
4	Services	16	16	
	Total	100	100	

Source: Primary data

Inference

The above table 13 shows that majority 57% of the respondents using the brand for affordable price, 16% of the respondents are using the brand for better services for the product, 14% of the respondents are using the Boost for Drand image, 13% of the respondents are using the Boost for Quality.

TABLE 14: SATISFACTION LEVELS OF THE RESPONDENTS

S.No	Level of satisfaction	No. of Respondents	Percentage
1	Fully satisfied	40	
2	Satisfied	30	30
3	Dissatisfied	10	10
4	Neutral	20	20
	Total	100	100

Source: Primary data

Inference

The above table shows that 40% of the respondents are fully satisfied from the product, 30% of the respondents are satisfied, 20% of the respondents are neutral and only 10% of the respondents are dissatisfied.

TABLE 15: TYPES OF FLAVOUR

S.No	Types	No. of Respondents	Percentage	
1	Kesar Badam	29	29	
2	Elaichi	23	23	
3	Original 35		35	
4	Chocolate	13	13	
	Total	100	100	

Source: primary Data

Inference

The above table shows that majority 35% of the respondents are like Boost Original, 29% are like Kesar Badam, 23% are like Elaichi and only 13% of the respondents are like Chocolate.

TABLE 16: REASON FOR CHANGE THE BRAND IN FUTURE

S.No	Opinion	No. of Respondents	Percentage
1	Non Availability	10	10
2	Price	36	36
3	Dissatisfaction	30	30
4	Unlimited colours and models	24	24
	Total	100	100

Source: Primary data

Inference

The above table 16 reveals that 36% of the respondents are opinion that change the brand in future due to high price of the product compare to other health drinks, 30% are opinion that change the brand in future for dissatisfaction of the product 24% are unlimited colours and models and another 10% of the respondents are opinion that non availability of the product for the reason to change the brand in future.

TABLE 17: FACTORS INFLUENCE PURCHASE DECISIONS

S.No	Reason	No. of Respondents	Percentage		
1	Quality 35		35		
2	Price	25	25		
3	Advertisement 20		20		
4	Availability 06		06		
5	Other factors	04	04		
	Total	100	100		

Source: Primary data

Inference

The above table 17 reveals that 35% of the respondents are opinion that quality is the main factors for influence the purchase decisions, 25% of the respondents are say price is the main factors for influence the purchase decision, 20% are say advertisement, 6% of the respondents are availability and remaining 4% of the respondents are say the other factors such as habit, convenience is the main factors for decide the purchase of the product.

FINDINGS

- Majority of the health drink users belong to the age group of 26-30(50%).
- Majority of the respondents are female (70%).
- ❖ 75% of the respondents are married
- Most of the respondents have studied UG degree (36%).
- ❖ 33% of the respondents are using the brand for 5 years
- Majority 50% of the respondents are the income range of Rs. 15000 to Rs. 20000
- Majority 80% of the respondents are nuclear family
- 70% of the respondents are urban family
- 77% of the respondents are aware the brand of Boost
- ❖ Majority 38% of the respondents are opinion that the brand is excellent
- Majority 54% of the respondent are dissatisfied the company after sales and services provided to the consumers
- ❖ Majority 57% of the respondents are using the Boost for low price compare to other brands
- 40% of the respondents are fully satisfied the overall of the product
- Majority 50% of the respondent are purchase the brand of Boost regularly
- 35% of the respondents are prefer the regular Boost
- Majority 36% of the respondents are change the brand in future due to high price of the product
- ❖ 35% of the respondents are influenced by quality of the product

SUGGESTIONS

- Customers buy the brands depend upon the price of the product. If the price is reduced considerably all the consumers will prefer that brand.
- Improvement of quality should be considered but at the same time price equilibrium should be maintained.
- **Setter and improved flavour and taste may increase the sales.**
- Steps should be taken to make the products available in different quantities.
- Sensible advertisement should be made for better impression in the customer mind.
- Samples could be provided to rural areas to create awareness about the product.
- Unhealthy competition among the manufacturers to the effect of lowering the quality on standard of the product (while showing price off or gift offer should be avoided).
- The manufacturer must take Market survey, once in six months, to know the consumer attitude and preference.
- There should be regular supply of all brands of health drinks.

CONCLUSION

All people, whether young or old, like health drinks. They take health drinks for relaxation, refreshment and to get energy. Thus health drinks have become a part of their lives. As regards manufactures they should realise that the consumers are the focal point of any business enterprises. They should be conscious of the fact that the consumer is a prime determining factor or decisive force in the market. So the producer should understand what exactly is expected of him by the consumers who are highly sensitive and reactive.

The above preposition implies that there is an imperative necessity on the part of the manufacturers to supply tastier drinks at the competitive price but at the same time should see that the quality or standard is not deteriorated. Thus, the consumer is the most important aspect in his business, he should deliver quality product at an acceptable price.

REFERENCES

- 1. Anil Metre Advertisement and Marketing International Edition, 15, Feb, 1986, 2015 Pg.10.
- 2. Bender E. Arnold, Bench mark publication- 1983, The value of Food.
- 3. Beri G.C., TaTaMcGrew Hill Publishing Co., Ltd., New Delhi, 1981, Marketing.
- 4. Brain A Fox, Allan C. Cameron, Hodder and Stoughton educational, 1985, Food science a chemical approach.
- 5. Douglas W. Mellott. Macmillan Publishing Co. New York, Consumer Behaviour.
- MC. Carthy, Essential of Marketing, The United States of America, 1979, Essential of Marketing.
- 7. Monorama year book 2014 38th year of publication p. 209.
- 8. Pillai R.S.N. and Bagavathi, S. Chand & Co Ltd. 1998, Principles and practices of modern marketing.

WEAK FORM EFFICIENCY OF INDIAN STOCK MARKET: AN EMPIRICAL ANALYSIS

DR. BABU JOSE
ASST. PROFESSOR
DEPARTMENT OF COMMERCE
ST. THOMAS COLLEGE
PALA

SURESH T.S M. Phil. SCHOLAR DEPARTMENT OF COMMERCE S.H. COLLEGE THEVARA

ABSTRACT

Market efficiency of Indian stock market based on the daily return of NSE Nifty and BSE Sensex form 1 January 1994 to 31 December 2015 is tested by applying Unit root, Autocorrelation, Run test and Variance ratio methodologies based on the trends and patterns in the movements of Indian market. The unit root tests like ADF and PP proved that the Indian stock market is non-stationary and contains a unit root. The auto correlation results are also revealed high degree of dependence on previous prices, which means that previous prices are related with current prices. The strong autocorrelation behaviour of the variable leads to non stationarity situation in data series. The run test results also proved that there is no randomness in Indian stock market. From the results, it is clear that the Indian stock market does not follow random walk and it is in inefficient in its weak form.

KEYWORDS

NSE, BSE, market efficiency, weak form, dependency behaviour of market, independent movements, random movements.

INTRODUCTION

apital market is an institutional arrangement which facilitates long term borrowing and lending of funds where the investors are always interested for capital appreciation and dividend returns. An efficient capital market is one where the security prices reflect all the relevant information. Information of capital market efficiency is very important for the investors. In financial literature the term 'Stock Market Efficiency' is used to explain the relationship between information and share prices movement in the capital market of any economy. Fama (1970) provided the formal definition of 'Market Efficiency' into three categories. Market efficiency has an influence on the investment strategy of an investor because since in an efficient market, the prices of securities will reflect the markets best estimate of their expected return and risk, taking into account all that is known about them. Therefore, there will not be any undervalued securities. If, however markets are not efficient and excess returns can be made by correctly picking winners, then it will pay investors to spend time finding these undervalued securities.

The weak form efficiency of the market is to be analysed to give clarification on the real behaviour of stock market and help the investors to take appropriate decision on their investment strategies. Studies by Gagan Deep Sharma et al (2007), Sharma (2011) and Alan (2012) revealed the inefficiency of Indian market and it emphasises the importance of one study which should test the weak form efficiency of Indian stock market.

NEED OF THE STUDY

India is one of the fastest growing economies of the world. It has a vibrant stock market that has attracted a lot of foreign institutional investments. The institutional changes such as online trading, availability of real time data and instant execution of transactions have led to increase volume of trading in Indian stock markets. Still the level of sophistication in terms of market participation and techniques is nowhere near to the developed markets (Sapate, 2013). A study to measure the market efficiency will be very relevant, if a market is efficient, stock price movements should follow a random walk and the price movements in the past should be not related to future price movements. But if the market is not efficient and price movements are not random, some investors can exploit the inefficiency by gaining abnormal returns (Alan 2012). They may be able to correctly predict the future price movements by examining the historical price movements. Especially the speculators will take such advantages.

Since there are three forms of market efficiency, but working on all the three forms is not possible in this study because of unavailability of the data and usefulness of the results for attaining the objectives of the study. Testing the strong form of market efficiency is not possible on account of data unavailability because it considers private or insider information which is not easily accessible, and the results of testing semi-strong form does not measure the randomness in the market returns, which is only possible through testing the weak form of market efficiency (Sharma 2011). There are many studies testing the market efficiency of Indian stock market. Majority of the study are either based on and single index, i.e Nifty or Sensex and one or two basic tools. This study is a comprehensive study of market efficiency of Indian stock market based on NSE Nifty and BSE Sensex using various tools applied in literature.

REVIEW OF LITERATURE

Eugene F. Fama (1969) developed the theory of random walk and efficient market is defined as a market where there are large numbers of rational profit-maximizers actively competing, and as a market where successive price changes in individual securities are independent. R Vaidyanathan & Kanti Kumar Gali (1994) has conducted a research to test the weak form of efficiency of the Indian Capital Market. The randomness is tested using run test, serial correlation and filters rule and the results provided supportive evidence for the weak form of efficiency of the Bombay Stock Exchange. This result was supported by Sunil Poshakwale in 1996. Eugene F Fama (1997) made another theoretical analysis which gave explanations to the challenges of the literature on long-term return anomalies. Elory Dimson and Massoud Mussavian (2000) made a descriptive research on the concept of market, Asma Mobarek & Professor Keavin Keasey (2000) studied on weak form efficiency of an emerging market like the Dhaka stock exchange of Bangladesh. The results of both non-parametric test and parametric test provide evidence that the share return series do not follow random walk model. The efficient market hypothesis was analysed by Gagan Deep Sharma & Mandeep Mahendru in 2007, Samuel Dupernex (2007) defined a random walk and discussed how the random walk model is associated with the idea of market efficiency. Rakesh Gupta & Parikshit K Basu (2007), P K Mishra (2009), P Srinivasan (2010), A Q Khan & Sana Ikram (2010), Victor K Gimba (2010) made studies on the week form efficiency of Indian stock market by using different methodology. Ambuj Gupta (2011) conducted a critical analysis of weak form efficiency in Indian stock market based on the four Indian indexes. The empirical results of A.Q. Khan, Sana Ikram & Mariyam Mehtab (2011), Anil K Sharma & Neha Seath (2011), Rakesh Guptha & Junhao yang (2011), M Bharath & H Shankar (2012) and Zabiulla (2012) revealed that the market does not follow random walk and as such are not efficient in weak form. Di

inefficient form of Indian capital market by using econometrics model like GARCH and other parametric tests. The volatility behaviour of Indian market was analysed by Ravi Kumar Gupta (2014) and the results did not show the evidence of random walk. But Ghada (2014) found that the daily returns do not confirm to a random walk during the period under examination in Damascus Securities Exchange. Achal Aswathi (2015) conducted a study to test the efficiency and random walk nature of Indian Stock Market. The auto-correlation results significantly differ which shows that the stock indices are biased random lime series and stock market is not weakly efficient in pricing securities.

STATEMENT OF THE PROBLEM

The evidence from past research shows that the efficiency in stock market explains the extent to which the stock prices reflects all available information in the market and therefore by relaying upon this information one can take decisions about buying or selling stock. In an efficient market, the share price over a long period of time do not show any types of patterns and there is no systematic correlation between one movement and subsequent ones. They all follows random walk and nobody knows exactly what will happen tomorrow. Financial economists often classify efficiency into three categories based on the level of information efficiency. Weak form suggests that one cannot beat the market by knowing past prices. Semi strong form efficiency suggests that one cannot consistently beat the market using publically available information, that is, cannot win knowing what everyone else knows- annual report. Strong form efficiency states that no information of any kind can be used to beat the market. But working on all the three forms is not possible because of unavailability of data.

Many research studies have been done on weak form market efficiency. From reviewing the past studies, it is identified that unit root, Serial correlation, Run test, Variance test ratio are the various tools used to test weak form efficiency. The studies conducted by the researchers are also contradicting to one another. Some studies prove that Indian stock market is weak form efficient where some other studies claim that Indian market is not weak form efficient. From the reviews, According to Fama (1997), Elory(2000), Mishra(2009), Gupta(2011), Rakesh Gupta(2011), Bharath(2012), Divyangi(2012), Kapil(2013), Mohad(2013), Sachin(2014) are in support of weak form efficiency in Indian market. But According to Srinivasan (2010), Khan (2011), Sharma(2011), Zabiulla(2012), Haritika(2013), Ravi Gupta(2014), Ghada(2014), Indian market is not weak form efficient. Studies provide different results because of the peculiarities of data and peculiarities of tool used. These variations and differences in results provide researchers opportunity to test the weak form efficiency of Indian Market for a long period and get the consistency of the result by dividing the study period in different sub- periods by applying the same statistical tools. This study makes an attempt to test the week form efficiency of Indian market by considering the data for a long period.

OBJECTIVES OF THE STUDY

The objectives of the study are listed below;

- 1. To understand the various forms of stock market efficiency.
- 2. To test whether the Indian Stock Market is weak form efficient or not

HYPOTHESIS

In order to determine whether the Indian stock market is weak form efficient or not, it can be verified by checking some characteristics of stock market. The stock market data falls in the category of time series. Time Series data generally follows some characteristics such as, stationarity, Independency and random movement of Prices, and specifically the stock prices follow a random walk movement. The characteristics of the Indian Stock market are verified by testing the following hypothesis.

- H01: The Indian Stock market is not in Stationary form.
- H02: Daily returns of Indian stock market do not exhibit significant serial correlation.
- HO3: The Indian stock market follows a random sequence

DATA AND PERIOD OF THE STUDY

Indian capital market is always represented by the major two indices viz, NSE Nifty and BSE Sensex (BSE). The data for the study has been collected from the web sites of NSE and BSE. The data includes the daily closing vale of the stock indices from 1 January 1994 to 31 December 2015. Prices series are converted in return series to test the serial correlation of the Indian market returns.

TOOLS FOR THE ANALYSIS

This study is using parametric tests namely autocorrelation and variance test ratio, and one non parametric test called run test. This study is applying the unit root test to analyse the week form efficiency of Indian Capital Market.

VARIABLES OF THE STUDY

The two variables used in the study to test the efficiency of Indian stock market, are the daily closing value of major two indices in India such as NSE Nifty and BSE Sensex

ANALYSIS & INTERPRETATION

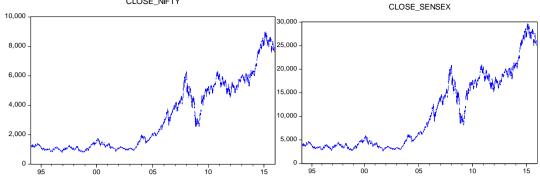
This session deals with the analysis and interpretation of data. The collected data are analyzed to have a deep understanding of the subject matter of the study. In order to analyze the data both statistical and mathematical tools are used. The behaviour of stock returns has been extensively debated over the years. Researchers have examined the efficient market hypothesis (EMH) and random walk characterization of returns. In an informationally efficient market, current prices quickly absorb information and hence such a mechanism does not provide scope for an investor to make abnormal returns (Fama 1970). In respect of empirical evidence, earlier studies have found evidence in favour and against of random walk hypothesis. In this context, an attempt is made to empirically check whether the Indian stock market follows random walk or not.

THE BASIC TRENDS AND PATTERNS OF STOCK MARKET MOVEMENTS

Line graphs are extensively used for the analysis of time series data (Robert, 1999). The basic trends and patterns of stock market movements can be explained in detail with the help of line graph. The trends of variables of the study can be identified from their below figure 1

The data for the study consist of BSE Sensex and NSE Nifty from 1 January 1994 to 31 December 2015. Before the establishment of NSE Nifty in 1994, BSE Sensex was the single stock index to represent the Indian market. After the implementation, Nifty has gained as an important stock market index. Now a day both the NSE Nifty and BSE Sensex are considered as appropriate indicators of Indian stock market.

FIGURE 1: LINE GRAPH OF NSE NIFTY AND BSE SENSEX FOR THE PERIOD OF STUDY CLOSE NIFTY



The Figure 1 shows the line graph of NSE Nifty and BSE Sensex for the whole period of study. The line graph of NSE Nifty and BSE Sensex almost moves in a similar pattern except certain trends and variations. The graph helps us to know the market reaction, the various crisis faced by the market and the level of ups and downs. From the line graph it can also identify shapes and patterns such as V shape, W shape, Double top, Cup and holder.

RANDOMNESS OF INDIAN STOCK MARKET

The random walk hypothesis is a financial theory stating that stock market prices evolve according to a random walk and thus cannot be predicted. It is consistent with the efficient-market hypothesis. In short, this is the idea that stocks take a random and unpredictable path (Rawal, 2014). The random walk can be measured with the help of various tests such as unit root, Run test, Autocorrelation and Variance test ratio.

DESCRIPTIVE STATISTICS

In order to get more clarification about the basic characteristics of variables, descriptive statistics can be used. Mean, Median, Standard Deviation, Skewness, Kurtosis and Jarque- Bera are measured and presented for the study period.

TABLE 1: DESCRIPTIVE STATICS FOR THE STUDY PERIOD

Statistic	NSE Nifty	BSE Sensex
Mean	3157.93	10532.59
Median	1977.73	6384.940
SD	2318.27	7743.552
Skewness	0.725	0.7007
Kurtosis	2.261	2.2001
JB	601.203	588.6917
Probability	0.000	0.0000
No of Obs.	5452	5426

The basic characteristics of a normal distribution are symmetric around their mean, median and mode of a distribution and it requires that skewness and kurtosis should be almost near to the standard values of 0 and 3 respectively. The Jarque Bera test also measures the normality of the data series.

Table No 1 contains the descriptive statistics of daily closing index value of NSE Nifty and BSE Sensex for the study period. It is clear from the figures listed in the table that the series is not normal for both the series. To apply various statistical models and tools, it requires normally distributed data series, for that the series is to be smoothened by converting them in to log form. The further tools are applied on the log data except the run test as it is a non-parametric test to be applied on the raw data.

DEPENDENCY BEHAVIOUR OF INDIAN STOCK MARKET

STATIONARITY OF DATA

A stationary time series is one whose statistical properties such as mean, variance and auto correlation are all constant over time (Babu, 2015). In other words, it is a quality in which the statistical parameters of the process do not change with time. In a stationarized series is relatively very easy to predict that is its statistical properties will be the same in the future as they have been in the past. Stationary is the important properties of time series data which shows the ability of the data series to explain the long and short term information. In time series econometrics, a time series that has a unit root is known as a random walk. A random walk is an example of a non-stationary time series (Shuba, 2010). As a preliminary test, it is necessary to test the stationarity of the variable by applying Augmented Dickey Fuller (ADF) and Philip Perron (PP) unit Root test. The below table 2 shows the stationarity test results of NSE Nifty for the periods of study

TABLE 2

	PP Test results of NSE Nifty									
Period	Test statistic	Critical Values		Probability	Test statistic	Critical Values			Probability	
		1%	5%	10%			1%	5%	10%	
Whole Period	-2.765	-3.959	-3.410	-3.127	0.2105	-2.527	-3.959	-3.410	-3.127	0.3147

From the results, there is no possibility to reject the null hypothesis as the probability value is more than 0.05 and the test static values are less than the critical values, i.e. the daily closing values of NSE Nifty contains a unit root. The below tables 3 shows the stationarity test results of BSE Sensex for the study periods.

TABLE 3

	Augmei	nted Dicke	Ph	ilip Perron (PP) re	sult of BSE Sensex				
Test statistic	Critical Values			Probability	Test statistic	Critical Values			Probability
	1%	5%	10%			1%	5%	10%	
-2.483	-3.965	-3.410	-3.127	0.3363	-2.314	-3.959	-3.410	-3.127	0.4254

The results state that BSE Sensex for the study period is non-stationary. The Indian stock market is non-stationary and contains a unit root. It's a general thing that the data which is nonstationary in level form will be stationary in first difference in this case it is essential to check the stationarity of data series in first difference and proved that the data is stationary in first difference.

TABLE 4

	Unit roo	t test in firs	Unit root test in first difference of NSE				
ADF		PP		ADF		PP	
T Static	P value	T static	P value	T Static	P value	T static	P value
-16.753	.0000	-68.187	.0000	-16.949	.0000	-67.667	.0000

From the above results it is clear that NSE Nifty and BSE Sensex for the sub periods are non-stationary in level form and stationary in first difference, which implies that the series contains a unit root. Therefore, the market is inefficient at its weak form. The results are supported by the empirical evidence of Sharma (2011), Gupta (2013), Sachin (2014).

INDEPENDENCE OF INDIAN STOCK MARKET

Auto correlation test is the most commonly used tool to test weak form efficiency. The autocorrelation function (ACF) test is examined to identify the degree of autocorrelation in a time series data. It measures the relationship between the stock return at current period and its value in the previous period. Auto correlation techniques are used if price change in one-time period is not correlated with the price change in some other time period, then the price changes are considered to be serially independent. It means that the market is efficient.

One way to determine if there is autocorrelation in the time series is to plot the ACF with different number of lags and check if the correlation coefficient for each lag is significantly

different from 0. If time series has unit root, then the autocorrelation function slowly decrease starting from the value of one and the partial correlation function has only first value which differs from zero.

TABLE 5: AUTOCORRELATION RESULTS FOR THE STUDY PERIOD OF NSE NIFTY AND BSE SENSEX

DCE

Logo NCE

Lags	NSE	BSE		
1	0.999	0.999		
2	0.999	0.999		
3	0.998	0.998		
4	0.998	0.998		
5	0.997	0.997		
6	0.997	0.997		
7	0.996	0.996		
8	0.996	0.996		
9	0.995	0.995		
10	0.995	0.995		
11	0.994	0.994		
12	0.994	0.994		
13	0.993	0.993		
14	0.993	0.993		
15	0.992	0.992		
16	0.992	0.992		
17	0.991	0.991		
18	0.991	0.991		
19	0.990	0.990		
20	0.990	0.989		
21	0.989	0.989		
22	0.988	0.988		
23	0.988	0.988		
24	0.987	0.987		
25	0.987	0.987		
26	0.986	0.986		
27	0.986	0.986		
28	0.985	0.985		
29	0.985	0.985		
30	0.984	0.984		
31	0.984	0.984		
32	0.983	0.983		
33	0.983	0.983		
34	0.982	0.982		
35	0.982	0.982		
36	0.981	0.981		
RSE Sansay for the whole				

The table no. 5 shows the auto correlation results of NSE Nifty and BSE Sensex for the whole study period. The test of autocorrelation is done using up to 36 lags depending upon akaike criterion. It's very interesting to note that the auto correlation results are same for both NSE and BSE. In the initial analysis it is found that both the NSE and BSE moves with similar trends and patterns, this finding is again supported by the auto correlation results. The results indicate a high degree of dependence on previous prices when the lag is low. For NSE Nifty and BSE Sensex the ACF value is ranging between 0.999 and 0.981. However, the market to be efficient in its weak form, the values of auto correlation should be around zero (Sachin,2014). That means the share prices do not follow the weak form efficiency or the market is inefficient in its weak form for the study period. The market conditions, related factors will affect the level of dependency. The test results are significant and it is supported by empirical evidences of sharma (2011), Jain (2013), Sachin(2014), Mohad(2013), Ghada(2014), Sunil(1996). The empirical results clearly explain that Indian share market movements may not follow a random walk and the market is inefficient at weak form.

THE RANDOMNESS OF PRICE CHANGES IN INDIAN STOCK MARKET

Run test is a nonparametric test for serial dependence in the stock Returns, which designed to examine whether or not an observed sequence is random. A run is the frequent occurrence of the same value of a variable. The run test converts the total number of runs into a Z statistic. For large samples the Z statistics gives the probability of difference between the actual and expected number of runs. The Z value is greater than or equal to +/- 1.96, reject the null hypothesis at 5% level of significance (Sharma and Kennedy, 1977). As can be seen from the above tables, the Z statistics of daily market return is greater than +/- 1.96 then it means that the observed number of runs is fewer than the expected number of runs with observed significance level.

The null hypothesis for the run test is the Indian stock market follows a random sequence.

The hypothesis is based on the belief that since the market is not normal we are expecting that the series may follow a random pattern. The below table 6 shows the result of run tests of NSE Nifty and BSE Sensex.

TABLE 6: RUN TEST RESULT OF NSE NIFTY AND BSE SENSEX FOR THE STUDY PERIOD

	NSE Nifty	BSE Sensex
Test Value ^a	1977.73	6384.94
Cases < Test Value	2726	2713
Cases >= Test Value	2726	2713
Total Cases	5452	5426
Number of Runs	10	12
Z	-73.601	-73.369
Asymp. Sig. (2-tailed)	.000	.000

Median

The above table shows the result of run test for the whole period of study of both NSE Nifty and BSE Sensex. For NSE Nifty, it is found that the Z value are more than +/- 1.96, therefore, null hypothesis for the run test is rejected at 5 percent level of significance for the period of NSE Nifty. When we take into consider the p value also it is 0.000 which is clearly too small than the alpha (.05) hence the null hypothesis is rejected. In case of BSE Sensex also the same results is revealed. Hence it can be concluded that both the series do not follow random walk over the time period of study and for this reason both the NSE and BSE are considered to be weak form inefficient. Sharma (2011), Mohad (2013), Sachin (2014), Kapil (2013) supported the results in their empirical conclusion. Therefore, in all the cases of both the NSE and BSE, the results states that the series of return is not following the assumption independent relationship of random walk model. Therefore, the study rejects the null hypothesis that the return series on the NSE Nifty and BSE Sensex follows random walk and by this evidence it is confirmed that Indian equity market is inefficient in its week form Market. The result is consistent with the literature of Sharma (2011), Mohad(2013), Sachin(2014), Kapil(2013).

TEST OF VARIANCE OF INDIAN STOCK MARKET RETURNS

The hypothesis of random walk can be tested under the asymptotic distribution of both homoscedasticity. Variance ratio estimators developed by Lo and MacKinlay (1988) can be applied to test the variance of Indian Stock market with the null hypothesis of VR (q) = 1, which means that the returns follow a random-walk process. If the value does not equal to one, then it means that the series is auto correlated.

TABLE 7: VARIANCE RATIO TEST RESULTS OF NSE NIFTY AND BSE SENSEX

		NSE	BSE
	Var ratio	1.076	1.08
	Z	3.405	3.837
	P	0.0026	0.0005
	Df	5451	5425

The variance ratio is more than one for both the NSE Nifty and BSE Sensex for the entire sub periods of study. Variance ratio is larger than unity, which indicates that the variances grow more than proportionally with time existing thus there is a positive autocorrelation of the daily closing prices. The Z statistic is also significant at 5% level of significance so the assumption of Indian stock markets follows random walk is not acceptable there is not random walk movement in the Indian stock market and the same situation is already revealed by Gupta (2014), Victor (2010), Ghada (2014), Daniel (2014).

CONCLUSION

This study discusses the empirical testing of market efficiency of Indian stock market based on the daily return of NSE Nifty and BSE Sensex form 1 January 1994 to 31 December 2015. To empirically test the weak form efficiency of Indian stock market four basic tools such as Unit root, Autocorrelation, Run test and Variance ratio have been applied in the study. From the descriptive statistics, it is clear that the Indian stock market daily closing price series does not follow a normal distribution. The log value of the variable is used for further analysis except for run tests. The unit root tests like ADF and PP tests are proved that the Indian stock market is non-stationary and contains a unit root. The auto correlation results are also revealed high degree of dependence on previous prices, which means that previous prices are related with current prices. The strong autocorrelation behaviour of the variable leads to non stationarity situation in data series, which means that the stock market movements are not in predictable manner. The run test results also proved that there is no randomness in Indian stock market. The actual runs are less than the expected runs. The variance ratio test results are also consistent with other results. It also shows that the Indian stock market does not follow a random walk model and contains a positive correlation. From the results, it is clear that the Indian stock market does not follow random walk and it is in inefficient in its weak form.

The efficiency of stock market explains the extent to which the stock prices reflects all available information in the market, and therefore by relying upon the information one can take decisions about buying and selling the stocks. Relevant investment strategies can also be adopted after deciding whether the market is efficient or not. On the basis of this empirical results proved by various tests, it can be concluded that the Indian stock market does not show efficiency in its weak form. The practical implication of inefficiency in stock markets is that, it may lead to the variation in the expected returns of the securities in the market. This is because the changes in the price of securities would be more than the expectation on arrival of some new information in the market. In other words, there is possibility of earning extra income in the Indian market because abnormal returns are possible only when the market is inefficient as the future prices can be predicted using the past information. Thus, observation and the use of the past behaviour of stock price movement may help investors in generating excess profits.

REFERENCES

- 1. Arora, H. (2013) "Testing weak form market efficiency of Indian Stock Market". Pacefic Business Review, Vol.5, No.12, pp.16-23.
- 2. Aswathi, S., & Malafeyev. O. (2015). "Is the indain Stock market is efficient- A comprehensive study of BSE indices", RFF, pp.1-8.
- 3. Bharath, M., & Shankar. (2012), "Market efficiency of Indian stock market a study of bonus announcement in Bombay Stock Exchange", Indian Journal of Applied Science, Vol.2, No. (1), pp 45-50.
- 4. Dimson, E., & Mussavian, M. (1998), "A brief history of market efficiency", European Financial Management", 4(1), pp. 91-93.
- 5. Dimson, E., & Mussavin, M. (2000), "Market efficiency", The current states of business disciplines, 3, pp. 957-970.
- 6. Dupernex.S.(2007). "Why might share prices follow a random walk?" Student Economic Review, Vol.21, pp.167-179.
- 7. Fama, E. (1969), "Efficient capital markets: A review of theory and empirical work", New York: BlackWell Publishing House, pp. 383-417.
- 8. Fama, E. F. (1965), "Random Walks in Stock Market Prices. Chicago", Graduate school of business.
- 9. Fama, E. F. (1965), "The Behaviour of Stock Market Prices", Journal of Business (28), pp. 34-105.
- 10. Fama, E. F. (1970), "Efficient capital markets: Review of theory and empirical work", Journal of Finance (25), pp.383-417.
- 11. Fama. E. F. (1998), "Market efficiency, long-term returns, and behavioural finance", Journal of Financial Economics, 49, pp 283-306.
- 12. Ghada (2014), "Testing random walk behaviour in the Damascus securities exchange", International Journal of academic research in accounting, finance and management, 4, pp 317-325.
- 13. Gimba. V. K. (2010), "Testing the weak form efficiency market hypothesis: Evidence from Nigerian stock market", CBN Journal of Applied Statistics, Vol.3, No.1, pp 117-136.
- 14. Gupara. R & Basu. P. K. (2007), "Weak form efficiency in Indian stock market", International Business and Economics Research Journal, 6(3), pp 57-64.
- 15. Gupta. A. (2010), "A Critical analysis of weak form market efficiency in Indian stock market', Asian Journal of Management Research, pp 657-665.
- 16. Gupta. R & Yang. J. (2011), "Testing Weak Form Efficiency in the Indian Capital Market", International Journal of Finance and Economics (75), pp 108-119.

- 17. Gupta. R. K. (2014), "An empirical analysis of weak efficiency of Indian stock market", International Journal of Advance Research in Management studies, 2(8), pp 214-220.
- 18. Harper. A. (2012), "Examining market efficiency in India: An empirical analysis of the random walk hypothesis", Journal of Finance and Accountancy, pp 1-5.
- 19. Harris. R. L. (1999), "Information Graphics: A Comprehensive Illustrated Reference", Oxford University Press.
- 20. Hassan. M. M. & Sangmi. M. D. (2013), "Testing of Efficient market hypothesis in the emerging capital markets: Evidence from India", IOSR Journal of Business and Management, 14(3), pp 49-62.
- 21. Jain. K. & Jain P. (2013), "Empirical study if the weak form of EMH on Indian stock market", International Journal of Management and Social Sciences Research, 2(11), pp 52-59.
- 22. Joshi. D. J. (2012), "Testing Market Efficiency of Indian Stock Market", International Journal of Scientific and Research Publications, 2(6), pp1-6.
- 23. K.S. & Sanningammanavara. K. (2014). "The efficiency testing of weak form of the Indian stock market", International Journal of Engineering and Management research, 4(4), pp 44-53.
- 24. Khan. A. Q, Ikram.S.& Mehtab. M. (2011), "Testing weak form market efficiency of Indian capital market: A case of NSE and BSE", African Journal of Marketing Management, 3(6), pp 115-127.
- 25. Khan. A. Q. & Ikram. S. (2010), "Testing Semi-Strong form of efficient market hypothesis in relation to the impact of FII's investment on Indian capital market", International Journal of Trade, Economics and Finance, 1(4), pp 373-380.
- 26. Misra. P. K. (2010), "Indian capital market on Revisiting market efficiency", SSRN.
- 27. Mobarek. A & Keasey. K. (2000), "Weak form market efficiency of an emerging market: Evidence from Dhaka stock market Bangladesh", ENBS Conference.
- 28. Poshakwale. S. (1996), "Evidence on weak form efficiency and day of the week effect in the Indian stock market", Vol. 3, Finance India.
- 29. Rawal. D. P. (2014), "Indian Stock Market and Investors Strategy".
- 30. Sharam. A. K. & Seth. N. (2011), "Recent Financial crisis and market efficiency: An empirical analysis of Indain stock market", IMJ, 2(4), pp 27-40.
- 31. Sharma. G. D. & Mahendru. M. (2007), "Efficiency Hypothesis of the stock markets: A case of Indian Securities", SSRN.
- 32. Srinivasan. P. (2010), "Testing weak form efficiency of Indian stock markets", APJRBM, 1(2).
- 33. Stefan. D. & Iulian. S. (2014), "Testing the efficient market hypothesis on Romanian capital market", Management challenges for sustainable development Bucharest: Bucharest University, pp. 252-260.
- 34. Vaidyanatahn. R. & Gali. K. K. (1994), "Efficiency of the Indian capital market", Indian Journal of Finance and Research, 2, pp 35-40.
- 35. Verheyden.T, Moor.L.D. & Bossche. F. V. (2013), "A Tale of Market Efficiency", HUB Research, pp1-30.
- 36. Zabiulla (2015), "Capital market efficiency: A study of weak form efficiency of Bombay Stock Exchange", IEFJ, Vol.7, No.1, pp 155-162.

FACTORS INFLUENCING THE CAPITAL STRUCTURE DECISIONS: A STUDY OF PHARMACEUTICAL INDUSTRY, INDIA

SHIVA T
STUDENT
DEPARTMENT OF COMMERCE
CHRIST UNIVERSITY
BANGALORE

GIRISH S
ASST. PROFESSOR
DEPARTMENT OF COMMERCE
CHRIST UNIVERSITY
BANGALORE

ABSTRACT

Capital structure is one of the major determinants of the performance of the companies as it states about the usage of leveraging of different sources of funds by the company. There have been many theories based upon the capital structure like, Miller and Modigliani, Pecking order theory, Agency cost theory and Trade off theory. In this study, we have taken the data of five companies from the pharmaceutical sector of NSE, India based upon the highest market cap. The data is collected from various secondary resources and is for the period ranging from 2012 to 2016. The variables used herein are the firm specific characters like the profitability, growth, liquidity, size and tax shield. We have used the regression analysis and the results we have found, liquidity has no influence on the capital structure as the company with the liquid funds can invest by itself in the projects it owns and therefore it does not affect its capital structure decisions. And in the profitability, the company with more profits will employ them for its further operations and so it also exhibits negative relationship with the capital structure. The study also further found that the growth of the company, its size and tax shield also has negative relation with the capital structure. The study considers only a few factors which are firm specific and the number of firms as well the time frame of the data collected can also prove to be the limitations of this research.

KEYWORDS

determinants, capital structure, pharmaceutical industry.

INTRODUCTION

apital structure is one of the major determinants of the performance of the companies as it states about the usage of leveraging of different sources of funds by the company. There have been many theories based upon the capital structure like, Miller and Modigliani, Pecking order theory, Agency cost theory and Trade off theory. These theories mention about the optimal combination of various sources of funds that a company employs as because the capital structure not only speaks about the financial stability but also looks into the enhancement of the firm's wealth. These theories majorly focus upon the industry specific characters but does not take any account of the firm specific characters.

Now we know about why the capital structure is important and also the above mentioned theories too make it clear regarding the calculation of the optimal combination of various sources of funds in formulating the capital structure. In knowing the factors that determine the capital structure decisions, in this paper we are analyzing the internal and firm specific characters like profitability, liquidity, growth, size and tax shield. Along with the external factors like country specific factors and industry specific factors, it is known that even the firm specific factors make an influence on the determination of optimal capital structure (Masnoon & Anwar, 2012).

LITERATURE REVIEW

The focus of this paper is in the changed scenario of the pharmaceutical industry with advent of the biotechnology in Italy. Firm's size, its diversification in business, propensity in collaboration lowers the leverage and also the profitability implies lower leverage ratio on the sustainable debt. (Zambuto, Billitteri, & Nigro, 2011). (Hossain & Ali, 2012) This paper reveals that a few of the firm specific characters have a negative impact on the leverage and also dividend and volatility does not impact the capital structure decisions. Also reveals that the DTA ratios differ from one industry to other industry. The data was collected from Dhaka Stock Exchange over 39 nonfinancial firms. Yet in another research done on the pharmaceutical industry alone taking into account 17 firms, this paper (Lima) says that the capital structure is best described by using agency cost theory and trade-off model.

(Mohammadzadeh, Rahimi, & Rahimi, 2013) This paper mainly focuses on the effect of capital structure on profitability and is conducted on the top 30 companies of the Iranian pharmaceutical industry, Tehran Stock Exchange (TSE). The findings are, companies with long term debt financing and short term debt financing does not help in the profitability of the company. It concludes that, the firms follow pecking order theory. And also the capital structure is negatively related to profitability.

The companies prefer for equity in order to do business at the time of economic crisis as well as where there is unstable institutional environment. It is also saying that, the firm-specific characteristics are negatively related to the debt-total assets ratio. (ShEluntcova, 2014)

(Saeed, Munir, Lodhi, Riyaz, & Iqbal, 2014) The following paper deals with the capital structure determinants of the pharmaceutical companies listed in Karachi Stock Exchange (KSE), Pakistan. The paper is unique in its own nature as it also involves corporate governance along with the internal firm specific characteristics. The findings of the study are, all the firm specific characteristics like profitability, growth, tax shields, liquidity and earning volatility does influence the capital structure decisions along with a few factors of corporate governance has influence on debt ratio, which is considered as a proxy for the capital structure.

(Yuxuan & Wenlin, 2014) This paper is about the optimization of the capital structure. It takes into consideration the data from 119 companies. The researcher uses the regression model, Hausman test and F test. The result of the study is, a few factors like size and capital guarantee are positively correlated whereas the profitability and ownership concentration has a negative correlation with the capital structure. This paper suggests promotion of distribution of equity among the shareholders as the individual big shareholder has negative correlation with the capital structure, it also states that the company should also improve the bond financing as it helps in optimizing the capital structure.

OBJECTIVES

- 1. To analyze the influence of profitability and liquidity in determining the capital structure of a firm.
- 2. To examine the impact of growth and size on capital structure of a firm.
- 3. To determine the effect of tax shield on capital structure of a firm.

RESEARCH METHODOLOGY

- Hypothesis
 - The profitability of the firm is not related to the capital structure. 0
 - Liquidity of the firm is not positively related to the capital structure.
 - Growth of the firm has no impact on the capital structure of the firm. 0
 - The size of the firm does not influence the capital structure of the firm.
 - There is no relation between the tax shield and the capital structure of the firm.
- Selection of sample: The top five companies listed in NSE are considered as sample. The selection criteria is the market capitalization of the firms. The companies selected are Sun Pharma, Lupin, Dr. Reddys Labs, Aurobindo Pharm and Cipla.
- Data collection: This study is based on the information obtained through secondary sources. They are, the financial statements of the firms. The data is collected for over a period of 2012-16.
- Data analysis: Linear regression is used to find out the influence of significant factors in determining the capital structure of the selected firms.

DATA ANALYSIS AND FINDINGS

Debt equity ratio is used as the proxy variable for the capital structure and is the dependent variables and the rest of them are used as the independent variables. This method was adopted with the help of the review of literature. In this study we have used the regression analysis in the E-Views 8. The significance value used to test the hypothesis is 5% or 0.05. It is assumed that the amounts represented by the annual reports of the companies reveal true information.

Coefficient Std. Error Variable t-Statistic Prob. 0.001529 GROWTH 0.001426 0.932256 0.3623 LIQUIDITY -0.141372 0.080560 -1.754861 0.0946 PROFITABILITY -2.108075 1.309829 -1.609428 0.1232 SIZE 0.041987 0.031152 1.347795 0.1928 TAXSHIELD 12.53682 8.054608 1.556478 0.1353 0.426642 0.262400 R-squared Mean dependent var Adjusted R-squared 0.311971 S.D. dependent var 0.272829 0.042990 S.E. of regression 0.226305 Akaike info criterion Sum squared resid 1.024278 Schwarz criterion 0.286765 0.110602 Log likelihood 4.462630 Hannan-Quinn criter. Durbin-Watson stat 0.850913

TABLE 1

ANALYSIS

- Various proxy variables have been used to arrive at the independent variables like natural log of sales for the size, current ratio used for the purpose of liquidity, the ratio of net income before extraordinary items to the total assets is used for the profitability, depreciation to total assets used for the tax shield and the growth percentage in the total assets used as the proxy for the growth.
- As per the regression analysis used at 5% as the significance value, all independent variables do not influence nor they have any positive relationship with the decisions made in setting the capital structure of a company. And it must be kept in mind that these are firm specific characters.
- If a firm is in a very good position, in the sense of good position what we mean is, where it has abundant funds available for itself through the internal sources, and thus does not influence the capital structure decisions.
- If a firm, has greater sales, then we can imply that there is a greater profitability of the firm and henceforth there will be a greater percentage of increase in its revenue and henceforth need not worry on getting the funds from outside and as proved in this case, profitability and size of the firm does not influence its capital structure decisions.
- A total increase in the growth of the assets of the firm, at the same time its liquidity ensures the easy availability of the funds for the firm and further growth of the firm's projects also does not influence its capital structure decisions as the firm can have more of the assets and its projects at a very liquefiable rate and henceforth it proves the null hypotheses. Moreover, in the case of tax shield, if there is a greater availability of the internal funds for the firm in its further expansion and its operations and henceforth the tax shield also does not affect the firm's capital structure decisions.
- The results are in line with our review of literature.

RESEARCH LIMITATIONS

- The research is done only on the companies listed in NSE, it can further be done in the BSE also.
- This paper has taken only 5 companies based upon the market capitalization and therefore further companies can be added based upon the other criteria.
- Further research can be done considering a wider time frame.

CONCLUSIONS

Thus, in this paper we have taken 5 companies based upon their market capitalization and we can make out that these are the top 5 companies in this industry. We have also taken only 5 firm specific characters for analyzing their effect on deciding the capital structure. One of the major drawback what we can find from this paper is, these are the top 5 companies and they perform well in the market and henceforth these factors have either no impact or no relationship with the capital structure (DE ratio) of the firm. The profitability and liquidity are not related to the firm's capital structure. There is no impact of the growth and the size on the firm's capital structure decisions. And finally there is no effect of the tax shield on the capital structure of the firm.

Further research can be carried out including the various other factors and also for a larger time frame and using a larger sample size with more criteria on the selection of the companies. Another drawback is, the data is solely based upon the secondary resources and any errors in the secondary sources may lead to the error in the analyses.

REFERENCES

- Hossain, M. F., & Ali, P. A. (2012). Impact of Firm Specific Factors on Capital Structure Decision: An Empirical Study of Bangladeshi Companies. International Journal of Business Research and Management, 163-182.
- Lima, M. (n.d.). An Insight into the Capital Structure Determinants of the Pharmaceutical Companies in Bangladesh. 1-17.
- Mohammadzadeh, M., Rahimi, F., & Rahimi, F. (2013). The Effect of Capital Structure on the Profitability of Pharmaceutical Companies The Case of Iran. 3. Iranian Journal of Pharmaceutical Research, 573-577.
- Saeed, D., Munir, H. M., Lodhi, R. N., Riyaz, A., & Iqbal, A. (2014). Capital Structure and Its Determinants: Empirical Evidence from Pakistan's Pharmaceutical Firms. Journal of Basic and Applied Scientific Research, 115-125.

- 5. ShEluntcova, M. (2014). Capital Structure of Private Pharmaceutical Companies in Russia. International Journal of Economics and Management, 315-325.
- 6. Yuxuan, Y., & Wenlin, G. (2014). An empirical study on factors influencing capital structure of pharmaceutical listed corporations. *Journal of Chemical and Pharmaceutical Research*, 1042-1046.
- 7. Zambuto, F., Billitteri, C., & Nigro, G. L. (2011). Capital Structure Decisions in the Biopharmaceutical Industry. *International Conference on Industrial Engineering and Operations Management*, (pp. 170-175). Kuala Lumpur.

CONTRIBUTION OF NATIONALISED BANK IN THE ECONOMICAL DEVELOPMENT OF FARMER

SAPNA CHOUDHARY RESEARCH SCHOLAR VIKRAM UNIVERSITY UJJAIN

ABSTRACT

India is basically an agriculture based country and the people of India still depend on agriculture productivity for their livelihood. Finance facility is the base to play main role for the development of the farmer for this various banking sector help for the development of the former and run various schemes like KCC, KVC, Agriculture loan, Fasal Bima Yojana and various Credit schemes. The main purpose of this research paper was to bring into light the contribution of nationalised bank in the economic development of farmer which play an important role in providing agriculture credit and to remove them from the clutches of local moneylenders.

KEYWORDS

kisan credit card, banking, government schemes lending, banking sector reforms.

INTRODUCTION

India is an agriculture-dominated country Agriculture is the backbone of Indian economy and Banks play an important role in the development of agriculture system. Before the development of modern banking facilities, the condition of Indian agriculture was very Poor because farmer was severely exploited by sahukar and money-leaders. But with the improvement of banking facility condition of the farmer will also improve bank provide various facility to the farmer. Various Screams like Agricultural Gold Loans., Kisan Credit Card., Kisan Gold Card Scheme., Dairy Plus Scheme., Scheme for financing seed processors. run by the various banks for the development of the farmer and economical groth. Our aim for this study is to focus the contribution of nationalized for the development of farmer with special reference to DAMOH district.

VARIOUS TYPE OF SCHEMES OF NATIONALISED BANKS

Agricultural loans are available for a multitude of farming purposes. Farmers may apply for loans to buy inputs for the cultivation of food grain crops as well as for horticulture, aquaculture, animal husbandry, floriculture and sericulture businesses. There are also special loans to finance the purchase of agricultural machinery such as tractors, harvesters and trucks. Construction of biogas plants and irrigation systems as well as the purchase of agricultural land may also be financed through special types of agricultural finance. Here is some information about the kind of agricultural credit and loans provided by public sector banks in India.

- 1. State Bank of India- State Bank of India presents a wide range of financial schemes for agriculturalists. These schemes include crop loans, Produce Marketing Loan Scheme, Loan Against Warehouse Receipts, Kisan Credit Card Scheme, agricultural term loans, Land Development Scheme, Minor Irrigation Scheme, Farm Mechanisation Scheme, Financing of Combine Harvesters, Kisan Gold Card Scheme, Land Purchase Scheme, Krishi Plus Scheme, Arthias Plus Scheme, Dairy Plus Scheme, Broiler Plus Scheme, Finance to Horticulture, Lead Bank Scheme and Agri Business Heads Scheme. The Bank also provides Micro Finance through Self Help Groups and loans through 30 regional rural banks.
- 2. Allahabad Bank -Offers the Kisan Credit Card and Kisan Shakti Yojana Scheme. The Kisan Credit Card(External website that opens in a new window) offers the Kisan Credit Card and Kisan Shakti Yojana Scheme. The Kisan Credit Card is a unique scheme for farmers through which they can draw a cash loan for crop production as well as domestic needs from the card-issuing branch within the sanctioned limit. The Kisan Shakti Yojana provides farm investment credit, as well as personal/domestic loans including repayment of debt to moneylenders. The permissible loan limit will be 50 per cent of the value of land or 5 times the net farm income, whichever is lower, less the outstanding amount, if any, in Agril.
- 3. Andhra Bank Provides facilities to farmers like AB Kisan Vikas Card, AB Pattabhi Agricard, AB Kisan Chakra, rural godowns, agri clinics, agri service centres, self help groups and solar cookers. They also provide other schemes such as Kisan Sampathi, tractor financing, Kisan Green Card, Surya Sakhti and loans to dairy agents
- 4. **Bank of Baroda** Offers farmers the Baroda Kisan Credit Card. It also has schemes for the purchase of agricultural implements, heavy agricultural machinery like tractors, irrigation and other infrastructure. Bank of Baroda also finances the development of agri industries like horticulture, sericulture, fisheries, dairy and poultry.
- 5. **Bank of India** Has a Kisan Credit Card Scheme that helps farmers raise short-term funds for agriculture and other farm-based activities, on an on-going basis, with very flexible and friendly repayment terms. It also offers an agricultural loan for development of agriculture related industries, purchase of machinery and other agricultural purposes.
- 6. **Bank of Maharashtra** Offers agriculturists a Mahabank Kisan Credit Card and financial schemes for digging new wells, purchasing harvesters, livestock, vehicles and land. Repayment terms for different agricultural loans range from three to fifteen years.
- 7. **Canara Bank** Provides Kisan Credit Cards. Limits up to 50,000 have no margin while those above 50,000 have a margin of 15 to 20 percent. Other than this, Canara Bank provides a wide array of financial schemes for different agricultural purposes.
- 8. **Central Bank of India** The Central Kisan Credit Card is a credit service provided to farmers on the basis of their holdings for purchasing agricultural inputs. Only those farmers having a good track record for the past 2 years with the bank as a borrower or depositor and who are not defaulters to any credit institution would be considered for loans.
- 9. **Corporation Bank** Offers a range of loan schemes to farmers. They are the Corp Gram Mitra Yojana, Corp Arthias Loan Yojana, Corp Kisan Tie-Up Loan Scheme. Corp Kisan Farm Mechanisation Scheme and Corp Kisan Vehicle Loan Yojna.
- 10. **Dena Bank** Dena Bank has sponsored 2 Regional Rural Banks namely Dena Gujarat Gramin Bank in Gujarat and Durg Rajnandgaon Gramin Bank (DRGB) in Chhattisgarh. The bank has set up a Rural Development Foundation for training unemployed youth in rural areas. Other financial schemes of the bank are the Dena Swacch Gram Yojana, Dena Kisan Gold Credit Card Scheme and the Dena Bhumiheen Kisan Credit Card Scheme.
- 11. Indian Bank Has a wide range of schemes for agriculturalists such as Swarojgar Credit Card, Gramin Mahila Sowbhagya Scheme, Kisan Bike Loan Scheme, Yuva Kisan Vidya Nidhi Yojana and Indian Bank Kisan Card Scheme.
- 12. **Indian Overseas Bank** Offers agri business consultancy services that include conducting feasibility and market studies, preparation of detailed project reports and formulation of rehabilitation packages for sick agro units.
- 13. Oriental Bank of Commerce It has two agricultural projects the Grameen Project and the Comprehensive Village Development Programme. The Grameen Project involves disbursing small loans ranging from Rs.75 onwards to mostly women. Training is also provided in villages in using locally available raw material to produce pickles and jams. The Comprehensive Village Development Programme focuses on providing an integrated package of rural finance to villagers to build up their village.
- 14. **Punjab and Sind Bank** Offers a range of financial schemes for farmers like the Zimidara Credit Card, tractor finance scheme, drip irrigation scheme, Kheti Udyog Khazana Yojana, vermi composting scheme, horticulture clinic and private veterinary clinic with dairy unit scheme.

- 15. **Punjab National Bank** -This bank has a special website called PNB Krishi for agriculturalists. It gives details on crop practices, plant protection, farm machinery, market prices and other farming news and activities. The website also provides a list of financial schemes offered by Punjab National Bank on production credit, investment credit, composite loans, animal husbandry and farm mechanization.
- 16. **Syndicate Bank** Offers a wide range of agricultural loan products such as the Synd Jai Kisan Loan Scheme, Jewel Loan Scheme for Agriculture, Syndicate Farm House Scheme, Finance for Hi-tech Agriculture, Development of Irrigation Infrastructure scheme, Syndicate 2/3/4 Wheelers Scheme and the Syndicate Kisan Credit Card (S.K.C.C).
- 17. **UCO Bank** This Bank provides the UCO Hirak Jayanti Krishi Yojana to meet the long-term credit needs of the farming community in rural areas for agriculture, allied activities as well as for personal purposes. Only farmers below 60 years are eligible to apply. Minimum quantum of the loan is **Rs.** 25,000/- and the maximum is **Rs.** 5 lakhs.
- 18. **Union Bank of India** Facilities provided to farmers include Kisan ATM Cards and special Kisan ATM Machines. These ATM's are easy to operate and do not require farmers to have a high level of literacy. They are voice enabled in the local language, have a touch screen monitor and work on a bio-metric authentication system like finger print verification.
- 19. United Bank of India The range of financial schemes offered to agriculturalists include the United Krishi Laghu Paribahan Yojana, United Krishi Sahayak Yojana, United Gramyashree Yojana, Gramin Bhandaran Yojana and the United Bhumiheen Kisan Credit Card.
- 20. Vijaya Bank This bank offers one comprehensive financial scheme known as the Vijaya Krishi Vikas (VKV) Scheme. This scheme provides a simple package to farmers to meet entire agricultural credit requirements such as crop production, investment credit and consumption credit. All farmers including owners, tenant cultivators, leased land farmers and sharecroppers are eligible for this scheme.

CONCLUSION

With the above study there is a slight improvement in the condition of farmers but the overall position is that the financial institutions do not serve the purpose of agriculture. All the schemas that run by the banks not completely fulfil the farmer needs. Therefore, the agriculture sector is going behind and due to which the economic growth of the country is also goes behind since Indian economy is an agriculture economy and if the condition of agriculture economy will not improve it will definitely affect the Indian Economy and its growth.

REFERENCES

- 1. Biswa Swarup Misra (2006), "The performance of Regional Rural Bank (RRBs) in India",
- 2. Dyavappa Habalappa, Prakash M Badiger, laxyapati ET. Facilities to the farmers at nationalised banks from Golden Research Thoughts. 2015, 4(7). ISSN 2231-5063.
- 3. Rath Jayadev: Regional Rural Banks and development of agriculture in India, 1996
- 4. RBI Occasional papers (2006) Vol.27, No.1 and 2, Summer and Monsoon.
- 5. Suresh C. Sinha and Anil K. Dhiman: Research Methodology

WEBSITES

- 6. https://www.nabard.org
- 7. https://www.rbi.org.in

REQUEST FOR FEEDBACK

Dear Readers

At the very outset, International Journal of Research in Commerce & 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 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.

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, 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 cooperation of like-minded scholars, we shall be able to serve the society with our humble efforts.



