

# INTERNATIONAL JOURNAL OF RESEARCH IN COMPUTER APPLICATION & MANAGEMENT

I  
J  
R  
C  
M



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

*Indexed & Listed at:*

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

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

Index Copernicus Publishers Panel, Poland with IC Value of 5.09 (2012) & number of libraries all around the world.

Circulated all over the world & Google has verified that scholars of more than 6185 Cities in 195 countries/territories are visiting our journal on regular basis.

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

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

# CONTENTS

Sr. No.	TITLE & NAME OF THE AUTHOR (S)	Page No.
1.	<b>COMMERCIALISATION OF INDIAN MUSIC INDUSTRY &amp; IT'S IMPACT ON INDIAN ECONOMY</b>  <i>Dr. NIDHI GUPTA &amp; Dr. M.K. GUPTA</i>	1
2.	<b>FACTORS AFFECTING PURCHASING BEHAVIOR OF COSMETIC PRODUCTS THROUGH DIGITAL MARKETING</b>  <i>TASHA JAVED &amp; Dr. N.K SHRIVASTAVA</i>	4
3.	<b>FINANCIAL PERFORMANCE AND DIVERSIFICATION STRATEGY OF INDIAN BUSINESS GROUPS</b>  <i>V.SUNDARA PRASAD &amp; Dr. R.KRISHNAKUMAR</i>	6
4.	<b>AN ANALYSIS OF THE SAVING MOTIVES OF THE HOUSEHOLDS IN NORTH GUJARAT</b>  <i>NC RAGHAVI CHAKRAVARTHY</i>	9
5.	<b>IMPACT OF DOMESTIC CURRENCY (INR) DEVALUATION ON EXPORTS OF INDIA (A STUDY FOR THE PERIOD OF 2000-2017)</b>  <i>ESMATULLAH MOHAMMADY</i>	15
	<b>REQUEST FOR FEEDBACK &amp; DISCLAIMER</b>	18

***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 &amp; Tourism, Government of Haryana

Former Vice-President, Dadri Education Society, Charkhi Dadri

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

***CO-ORDINATOR*****Dr. BHAVET**

Former Faculty, Shree Ram Institute of Engineering &amp; Technology, Urjani

***ADVISOR*****Prof. S. L. MAHANDRU**

Principal (Retd.), Maharaja Agrasen College, Jagadhri

***EDITOR*****Dr. PARVEEN KUMAR**

Professor, Department of Computer Science, NIMS University, Jaipur

***CO-EDITOR*****Dr. A. SASI KUMAR**

Professor, Vels Institute of Science, Technology &amp; Advanced Studies (Deemed to be University), Pallavaram

***EDITORIAL ADVISORY BOARD*****Dr. CHRISTIAN EHIOBU CHE**

Professor of Global Business/Management, Larry L Luing School of Business, Berkeley College, USA

**Dr. SIKANDER KUMAR**

Chairman, Department of Economics, Himachal Pradesh University, Shimla, Himachal Pradesh

**Dr. JOSÉ G. VARGAS-HERNÁNDEZ**

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

**Dr. RAJENDER GUPTA**

Convener, Board of Studies in Economics, University of Jammu, Jammu

**Dr. D. S. CHAUBEY**

Professor &amp; Dean (Research &amp; Studies), Uttaranchal University, Dehradun

**Dr. TEGUH WIDODO**

Dean, Faculty of Applied Science, Telkom University, Bandung Technoplex, Jl. Telekomunikasi, Indonesia

**Dr. S. P. TIWARI**

Head, Department of Economics &amp; Rural Development, Dr. Ram Manohar Lohia Avadh University, Faizabad

**Dr. BOYINA RUPINI**

Director, School of ITS, Indira Gandhi National Open University, New Delhi

**Dr. KAUP MOHAMED**

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

**SUNIL KUMAR KARWASRA**

Principal, Aakash College of Education, ChanderKalan, Tohana, Fatehabad

**Dr. MIKE AMUHAYA IRAVO**

Principal, Jomo Kenyatta University of Agriculture &amp; Tech., Westlands Campus, Nairobi-Kenya

**Dr. M. S. SENAM RAJU**

Professor, School of Management Studies, I.G.N.O.U., New Delhi

**Dr. NEPOMUCENO TIU**

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

**Dr. A SAJEEVAN RAO**

Professor &amp; Director, Accurate Institute of Advanced Management, Greater Noida

**Dr. H. R. SHARMA**

Director, Chhatarpati Shivaji Institute of Technology, Durg, C.G.

**Dr. CLIFFORD OBIYO OFURUM**

Professor of Accounting &amp; Finance, Faculty of Management Sciences, University of Port Harcourt, Nigeria

**Dr. SHIB SHANKAR ROY**

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

**Dr. MANOHAR LAL**

Director &amp; Chairman, School of Information &amp; Computer Sciences, I.G.N.O.U., New Delhi

**Dr. SRINIVAS MADISHETTI**

Professor, School of Business, Mzumbe University, Tanzania

**Dr. ANIL K. SAINI**

Professor, Guru Gobind Singh Indraprastha University, Delhi

**Dr. VIRENDRA KUMAR SHRIVASTAVA**

Director, Asia Pacific Institute of Information Technology, Panipat

**Dr. VIJAYPAL SINGH DHAKA**

Professor &amp; Head, Department of Computer &amp; Communication Engineering, Manipal University, Jaipur

**Dr. NAWAB ALI KHAN**

Professor &amp; Dean, Faculty of Commerce, Aligarh Muslim University, Aligarh, U.P.

**Dr. EGWAKHE A. JOHNSON**

Professor &amp; Director, Babcock Centre for Executive Development, Babcock University, Nigeria

**Dr. ASHWANI KUSH**

Head, Computer Science, University College, Kurukshetra University, Kurukshetra

**Dr. ABHAY BANSAL**

Head, Department of Information Technology, Amity School of Engg. &amp; Tech., Amity University, Noida

**Dr. BHARAT BHUSHAN**

Head, Department of Computer Science &amp; Applications, Guru Nanak Khalsa College, Yamunanagar

**MUDENDA COLLINS**

Head, Operations &amp; Supply Chain, School of Business, The Copperbelt University, Zambia

**Dr. JAYASHREE SHANTARAM PATIL (DAKE)**

Faculty in Economics, KPB Hinduja College of Commerce, Mumbai

**Dr. MURAT DARÇIN**

Associate Dean, Gendarmerie and Coast Guard Academy, Ankara, Turkey

**Dr. YOUNOS VAKIL ALROAIA**

Head of International Center, DOS in Management, Semnan Branch, Islamic Azad University, Semnan, Iran

**P. SARVAHARANA**

Asst. Registrar, Indian Institute of Technology (IIT), Madras

**SHASHI KHURANA**

Associate Professor, S. M. S. Khalsa Lubana Girls College, Barara, Ambala

**Dr. SEOW TA WEEA**

Associate Professor, Universiti Tun Hussein Onn Malaysia, Parit Raja, Malaysia

**Dr. OKAN VELI ŞAFAKLI**

Professor &amp; Dean, European University of Lefke, Lefke, Cyprus

**Dr. MOHINDER CHAND**

Associate Professor, Kurukshetra University, Kurukshetra

**Dr. BORIS MILOVIC**

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

**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

**Dr. MOHAMMAD TALHA**

Associate Professor, Department of Accounting &amp; MIS, College of Industrial Management, King Fahd University of Petroleum &amp; Minerals, Dhahran, Saudi Arabia

**Dr. ASHOK KUMAR CHAUHAN**

Reader, Department of Economics, Kurukshetra University, Kurukshetra

**Dr. RAJESH MODI**

Faculty, Yanbu Industrial College, Kingdom of Saudi Arabia

**WILLIAM NKOMO**

Asst. Head of the Department, Faculty of Computing, Botho University, Francistown, Botswana

**YU-BING WANG**

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

**Dr. SHIVAKUMAR DEENE**

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

**Dr. MELAKE TEWOLDE TECLEGHIORGIS**

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

**Dr. BHAVET**

Faculty, Shree Ram Institute of Engineering &amp; Technology, Urjani

**Dr. THAMPOE MANAGALESWARAN**

Faculty, Vavuniya Campus, University of Jaffna, Sri Lanka

**Dr. ASHISH CHOPRA**

Faculty, Department of Computer Applications, National Institute of Technology, Kurukshetra

**SURAJ GAUDEL**

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

**Dr. SAMBHAVNA**

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

**Dr. LALIT KUMAR**

Faculty, Haryana Institute of Public Administration, Gurugram

**FORMER TECHNICAL ADVISOR****AMITA****FINANCIAL ADVISORS****DICKEN GOYAL**

Advocate &amp; Tax Adviser, Panchkula

**NEENA**

Investment Consultant, Chambaghat, Solan, Himachal Pradesh

**LEGAL ADVISORS****JITENDER S. CHAHAL**

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

**CHANDER BHUSHAN SHARMA**

Advocate &amp; Consultant, District Courts, Yamunanagar at Jagadhri

**SUPERINTENDENT****SURENDER KUMAR POONIA**

## **CALL FOR MANUSCRIPTS**

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

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

## **GUIDELINES FOR SUBMISSION OF MANUSCRIPT**

1. **COVERING LETTER FOR SUBMISSION:**

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

**THE EDITOR**

IJRCM

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

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

**DEAR SIR/MADAM**

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

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

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

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

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

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

**NOTES:**

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

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

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

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

**BOOKS**

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

**CONTRIBUTIONS TO BOOKS**

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

**JOURNAL AND OTHER ARTICLES**

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

**CONFERENCE PAPERS**

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

**UNPUBLISHED DISSERTATIONS**

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

**ONLINE RESOURCES**

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

**WEBSITES**

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



**COMMERCIALISATION OF INDIAN MUSIC INDUSTRY & IT'S IMPACT ON INDIAN ECONOMY****Dr. NIDHI GUPTA****FACULTY****DEPARTMENT OF COMMERCE & MANAGEMENT****PT. J.L.N GOVERNMENT P.G. COLLEGE****FARIDABAD****Dr. M.K. GUPTA****HEAD****DEPARTMENT OF COMMERCE & MANAGEMENT****PT. J.L.N GOVERNMENT P.G. COLLEGE****FARIDABAD****ABSTRACT**

*Music is a primary form of artistic expression; since the dawn of civilization, music has been one of the most significant means by which cultures have defined themselves. On the other hand, in the contemporary world, music is a relentlessly commercial industry generating billions of dollars in revenues for composers, performers, publishers, record companies, and many other players. This paradox is sometimes represented as a contradiction – creativity versus commercialism, the muse versus the market, culture versus economics – whereby the two forces must inevitably pull in opposite directions. The Indian entertainment industry is known and incomplete without music. Other segments such as remix, Indi-pop, mobile music have also gained popularity. The popularity of music in Indian films is such that almost every filmmaker incorporates at least four to five songs in the movies which is enjoyed by one and all.*

**KEYWORDS**

commercial, entertainment, industry, market, economics.

**JEL CODES**

M31, L82.

**INTRODUCTION**

The Indian Music Industry (IMI) is a trust that represents the recording industry distributors in India. It was founded on February 28, 1936 as Indian Phonographic Industry (IPI). It is the 2nd oldest music industry organization in the world that was involved in protecting copyrights of music producers and supporting growth of music entertainment industry. In 1994, it was renamed as Indian Music Industry (IMI) and represented India at the International Federation of the Phonographic Industry (IFPI). It is also registered with the West Bengal Societies Registration Act. All major music labels in India are part of this association. Record companies like Saregama India Ltd. (HMV), Universal Music (India), Tips Industries Limited, Venus, Sony Music Entertainment (India), Crescendo, Virgin Records, Magnasound, Milestone, Times Music and several other prominent national and regional labels are part of the IMI. The IMI represents over 75% of all legal music sales in India. IMI has its registered office in Kolkata and Administrative office in Mumbai. It also has offices in New Delhi, Chennai, Bangalore and other major Indian cities working on the protection of rights of music producers and preventing music piracy. It has also been instrumental in launching the IMMIES music awards in collaboration with MTV.

**BACKGROUND HISTORY OF MUSIC INDUSTRY**

The history of Indian Music is from the ancient day of 3rd and 2nd millennia BC, during the Indus valley civilizations. Indian music is based on rhythms and melodies but more importantly it is more concerned with vibrant colors of the rich musical heritage and a wide range of vivid emotions and expressions. Many Archaeological studies are the evidences and give validated presence of several musical instruments like harps and drums during the era. According to the Indian mythology, the laws of music was revealed known to Narada, the first sage. It is being believed that Tumburu was the first singer and Goddess of music and learning is Saraswati.

**TABLE 1**

Dates	Periods in music history
(before writing)	Prehistoric music
(before 350)	Ancient music
About 350–1400	Medieval music
1400–1600	Renaissance music
1600–1750	Baroque music
1740–1820	Classical music period
1820–1900	Romantic music
1900–today	Modern period

**TOP LEADING MUSIC COMPANIES**

The major players in the Indian Music Industry in the film and non-film music categories are:

1. T-series
2. Times Music
3. BMG Crescendo
4. Polygram
5. HMV
6. Tips.
7. Magnasound
8. Sony Music
9. Universal
10. Virgin

**OBJECTIVES**

1. To study the Recent Growth Trends of Indian Music Industry.
2. To analyse the impact of music industry on Indian Economy.
3. To find out the obstacles ahead Music Industry in India.

**RESEARCH METHODOLOGY**

This paper is based on secondary data collected from various sources like journals, magazines, websites and newspapers and economic survey etc.

**DATA ANALYSIS**

**1. RECENT TRENDS IN INDIAN MUSIC INDUSTRY**

The country's recorded music industry revenues grew by as much 26 per cent in 2016, helping it grab the 19th rank worldwide in sales. It outgrew the global recorded music industry, which saw a modest growth of 5.9 per cent in 2016.

The Indian music industry's revenues growth was propelled by streaming revenues that contributed about 47.5 per cent to the total revenues. Physical sales dropped to just 11.4 per cent and synchronization grew over five times to 14.7 per cent.

India's mobile phone market grew hugely in 2006 and has since gained more than half a billion subscribers, taking the total today to 900 million. Music plays a key role in mobile operators' customer acquisition, branding and engagement strategies, as smartphone adoption rises. Leading operators such as Airtel, Vodafone, Idea and Tata Docomo offer a range of music services including ringtones, ring back tones, downloads and mobile radio streaming services - which are usually bundled into subscription packages. Mobile radio services are evolving to offer multi-language stations and intelligent playlists. Streaming services such as Gaana, Dzingana and Saavn and download stores are beginning to emerge.

Telco operators such as Airtel, Vodafone and Idea have launched services to leverage their existing data bundling and billing capabilities. Bharti Airtel, India's largest telecom operator, launched music app Wynk, which has now crossed more than 5 million downloads, played 100 million songs and been featured in Google Play Store's 'Favourite Apps'.

Vodafone has also launched its own music streaming service – Vodafone Music, in association with Hungama Digital Media Entertainment. While audio and video streaming are not charged for, the user has to pay nominal fee for downloading content. And Idea launched the Idea Music HUB, an application that allows subscribers to download unlimited music to their devices, stream songs as per their preference, and also create their own personalized playlists in their preferred language.

According to International Federation of the Phonographic Industry (IFPI) Global Music Report 2016, there has been an increase of 10.2 % in digital music revenues, which have soared to \$6.7 billion, with a 45.2% increase in streaming revenue more than downloads and physical formats. Recently, industry revenues grew by 3.2 % to \$15.0 billion, leading to the industry's first significant year-on-year growth in nearly two decades.

Streaming is in demand as people are opting to stream music through their computers, smartphones and tablets. It has risen from 8 million users in 2010 to 68 million in 2015. Online radio and live performances known as performance rights contribute 14% of the total industry revenues. A miniscule portion of the industry earns from the synchronization of income which includes the use of music in TV ads, films, and brand partnerships.

**2. FUTURE PROSPECT OF MUSIC INDUSTRY & IT'S CONTRIBUTION TOWARDS INDIAN ECONOMY**

The Current size of Indian Music Industry is Rs 700 crore and the projected size by 2010: Rs 740 crore with CAGR of 1% Total contribution to the economy/ sales Music is the main important part of Indian film industry. Music contributes as much as 15% of an individual earnings in the Film Industry. The industry analyzers and estimations say approximately 15 crores of unit sales of music cassettes and cds in a year, with an average realization of Rs.40-45 crores. Which brings the size of the industry of the music industry to about Rs.670 crores.

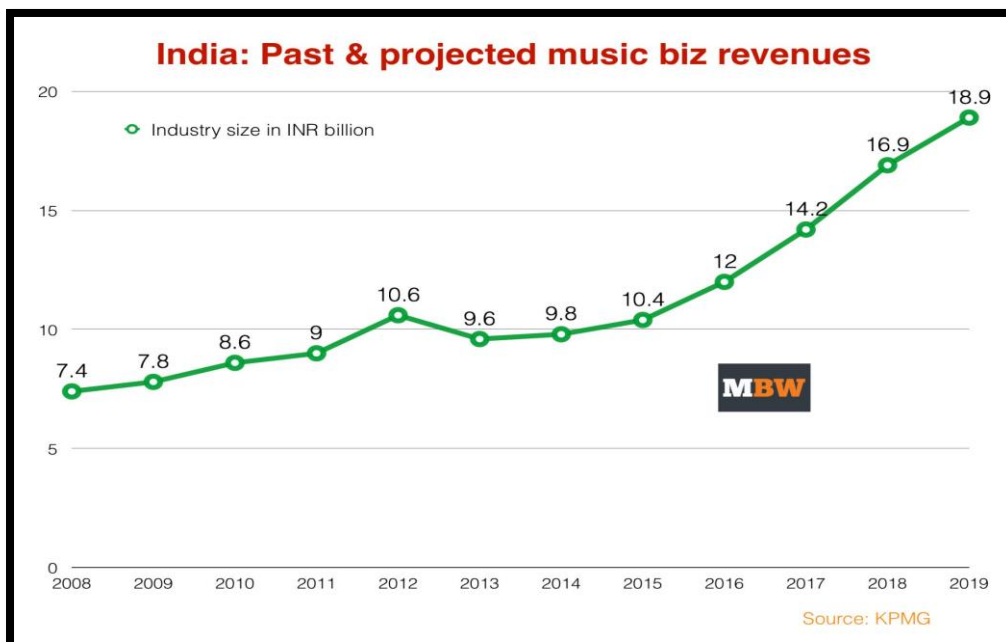
Indian Music Industry today currently stands at INR 10.4 billion. Till the last decade the Indian music industry at INR 18 billion (GBP) has more than doubled. The total Indian music cassette(MC) market constitutes 95% while the compact disc (CD) market is 5% in volume terms.

India has become increased significantly in the global economic arena - it is known to be the world's fourth largest economy in PPP (purchasing power parity) terms and is a strong founding member of the WTO. India is amongst the world's top five fastest growing economies, with real GDP growth at around 5.5% for some years.

India's recorded music business will nearly double over the next five years, bringing in an annual income of 18.9bn Indian Rupee (US \$300m) in 2019. That's according to projections from KPMG in a new report based on information from the Indian music business in association with FICCI (the Federation of Indian Chambers of Commerce and Industry). If India achieved this level of growth today, it would be elevated from its current position of 20th in the world's biggest music markets by value. It would take a comfortable spot in the Top 10, ahead of the likes of South Korea, The Netherlands, Italy, Brazil and Sweden.

KPMG's figures place India's music industry value for 2014 at 9.8bn Rupees (\$155m). That's higher than the trade value estimate in the IFPI's Recording Industry in Numbers 2015 – which pins India's 2014 industry revenues at 6.1bn Rupees (\$100m).

FIG. 1



KPMG's analysis shows its version 2014's cash tally is divided up: 55% from digital music (downloads and streaming), 20% from physical, 10% from public performance and 20% from TV and Radio (also presumably performance royalties, but split out).

According to IFPI data, physical made up 31% of total recorded music industry income in India in 2014, with digital making up 58%. The digital music industry in India is in a growth mode. According to a report 'Digital Media: Rise of On-demand Content' presented by a consulting firm Deloitte, India's digital music industry is expected to reach ₹3,100 crore in revenue while the number of online music listeners is expected to reach 273 million by 2020. It is estimated that the video subscription market will make a profit of ₹3000-4000 crore by 2020.

### OBSTACLES AHEAD MUSIC INDUSTRY

Even though the sector has benefited hugely, it is plagued with certain problems that need to be resolved to ensure its growth. One of the major challenges faced by the industry is related to the revenue sharing pattern. There is disagreement on how the streaming income is divided among record labels, music publishers, recording artists and songwriters. Although rights' owners are guaranteed minimum per-stream payments, streaming deals are mostly revenue-sharing arrangements. As streaming services are unable to sustain loss making ventures without end, DSPs need to focus where revenue sharing arrangements outperform the minimum guarantees.

Secondly, the IFPI's numbers are generally less positive on India as a current legitimate music market. Not only did download revenues decrease 24.8% in India in 2014, but – in a reversal of the business story in most global markets – subscription streaming income for the music business was almost cut in half, down 42% from US \$21.4m to \$12.3m.

There appears to have been at least some migration from these paid-for platforms to free streaming services, which were up 108.1% in value terms in 2014 according to the IFPI, to \$22.72m. Piracy and licensing bottlenecks continue to plague the digital music industry in India. KPMG notes that just 1%-2% of music is consumed by way of legal purchase in India, whereas 99% of the music consumption is still illegal. There is a growing mismatch between the value that user uploaded services such as YouTube extract from music, and the revenues returned to artists and record companies. The Indian courts have started to act to support legitimate digital and creative industries. In February 2012, the Calcutta High Court issued an injunction ordering 11 ISPs to block access to the infringing website songs.pk. A further judgment in March 2012 ordered 387 ISPs to block access to 104 infringing websites. IFPI estimates that with this single action, nearly 10 million internet users stopped accessing these sites. In February 2013, the courts ordered all these ISPs to block a further 162 websites. However, more action is needed to tackle other unlicensed sites to enable emerging licensed services to grow.

### CONCLUSION

Today Indian Music Industry has undergone a complete change with the process of internationalization. The Music Industry today reaches every nook and corner all over the world reaching the Indian and even Non-Indians. This mainly is due to the Retail revolution in music distribution and increased penetration of CDs. Initiatives taken by the government of impending radio privatization which would de-regulate radio frequencies, assigning 150 new FM stations to an industry which, up until now, has benefited from less than 10 radios broadcasting music hit.

Even Promotion of music is done by the way of satellite music channels like the one of Indian versions of MTV and News Corp's and majority of them own local channel V. Hence we can say that the Indian music scene has traditionally been driven by Bollywood, but changing demographics, massive internet exposure to global music trends and a progressive youth culture are leading to evolving tastes and this growing market is set to be much more diverse in the future.

### REFERENCES

1. Alexander, P. (1994). "Entry Barriers, Release Behaviour and Multi-Product Firms in the Music Recording Industry", *Review of Industrial Organizations*, 9.
2. Baskerville, D. (1995). *Music Business Handbook and Career Guide*. Sage Publishing, Thousand Oaks, California
3. Coombs, R. and Metcalfe, S. (1998). Distributed capabilities and the governance of the firm, CRIC Discussion Paper, No. 16.
4. Daley, W. (1999). Remarks made during WIPO Conference on Electronic Commerce and Intellectual Property, 14 September, Geneva, Switzerland

### WEB RESOURCES

5. [www.forbes.com/sites/cheriehu/2017/09/23/how-india-the-global-music-industrys-sleeping-giant-is-finally-waking-up/](http://www.forbes.com/sites/cheriehu/2017/09/23/how-india-the-global-music-industrys-sleeping-giant-is-finally-waking-up/)
6. [www.ifpi.org/india.php](http://www.ifpi.org/india.php)
7. [www.mirrortouch.com](http://www.mirrortouch.com)
8. [www.musicbusinessworldwide.com/indias-music-business-will-double-by-2019-kpmg/](http://www.musicbusinessworldwide.com/indias-music-business-will-double-by-2019-kpmg/)
9. [www.statista.com/outlook/202/119/digital-music/india#contentlist](http://www.statista.com/outlook/202/119/digital-music/india#contentlist)
10. [www.thehindubusinessline.com/companies/with-revenues-up-26-in-2016-music-industry-on-a-song-says-ifpi-study/article9974013.ece](http://www.thehindubusinessline.com/companies/with-revenues-up-26-in-2016-music-industry-on-a-song-says-ifpi-study/article9974013.ece)
11. [www.wikipedia.com](http://www.wikipedia.com)

**FACTORS AFFECTING PURCHASING BEHAVIOR OF COSMETIC PRODUCTS THROUGH DIGITAL MARKETING**

**TASHA JAVED**  
**RESEARCH SCHOLAR**  
**RKDF UNIVERSITY**  
**BHOPAL**

**Dr. N.K SHRIVASTAVA**  
**DEAN & HEAD**  
**RKDF UNIVERSITY**  
**BHOPAL**

**ABSTRACT**

*The rise of Digital Marketing in India has shifted the market from customer oriented marketing to technological customer oriented marketing. With the tremendous growth seen in Indian cosmetic industry, and rise in the digital world has corroboratory bought boom in GDP of India. This paper focuses on what affect the audience to purchase the cosmetic products using Digital Marketing. The paper core area too focuses on what attracts the customers to go for digitalization. India being a late comer in the digitalized field is yet to see the increase in online sales rate in next few years. Indian government is also likely to invest in internet infrastructure. Digital marketing is seen to be effective on the youth mainly, where social media seems to be a transport for communication.*

**KEYWORDS**

digital marketing, cosmetic products, consumers, social media.

**JEL CODES**

M31, M37, M39.

**INTRODUCTION**

Indian market size for cosmetic industry has industry got its popularity mainly from the social media channels like Instagram, Face-book and You-tube. These channels created a platform for our emerging industry, which gave rise to Digitalization. Digital Marketing is a type of marketing which promotes products and services using Digital Channels. Digital Marketing has posed a cut throat competition to the retailers. This online shopping revolution is seen emerging in our Indian economy, where customers who go for online shopping of cosmetic products are found delighted with this new mechanism, with prompt delivery and so easy payment mechanism, which has built trust in consumers mind.

If we throw some light on the scenario of digital marketing, India is seen to be the world's largest internet population on 3<sup>rd</sup> position. That is digital marketing has bought astonishing change in the marketing sector. Also according to various studies, India stands on 5<sup>th</sup> position as nation to use You-tube. That is, it has also over-showed Television also.

Indian online advertising is growing at a fast pace, which is seemed to be the most affective factor that pursue consumers to buy a cosmetic product online. This sector is constantly growing by innovating their strategies day by day. Youth is their main focus or targeted segment as they are the constant and consistent of customers for online shopping.

There are ample of factors that affect the choice of customers for cosmetic products through online shopping. The choice differs from customers to customers, and what compels, pursued them to go for online shopping for cosmetic products varies.

**OBJECTIVES OF THE STUDY**

1. Reasons that affect consumers to buy cosmetics products online.
2. Examining the influence of online marketing strategies on consumers.
3. Do online offers create a change in consumer buying behavior for cosmetic products

**RESEARCH METHODOLOGY**

The methodology used in this study is followed by secondary data, where the data was taken from various published journals, newspapers, articles etc. The researches based on primary data was studied and analyzed. Websites were also referred for few references.

**FACTORS THAT AFFECT THE PURCHASING BEHAVIOR OF CUSTOMERS**

As the digital era is shooting up in our Indian Economy, there are lot of factors that affect the purchasing behavior of customers when they purchase any cosmetic product online. But the decisions of online shopping are speculative and individual consumers are hard to predict.

**1. PRICE FACTOR**

Consumers buying behavior based on the price is utmost factor that affect the purchasing for any product. And similarly, digital marketing also faces this. Mostly consumers go for digitalization as they've seen price cut-off for cosmetic products. As digitalization removes the middlemen, the price already gets cut, and the final price which is offered to customers is less than the market price. Customers find easy to compare the prices of cosmetic products online than offline store.

**2. RETURN POLICY**

This factor is the most important factor that gives the ability to customers to return the product if it doesn't match with their needs and expectations. The feeling of money being wasted or invested wrongly can be saved which persuades consumers to buy more according to their choice.

**3. VARIED VARIETY**

Digitalization is in itself a wide and interest concept which offers variety of cosmetic products and variety of cosmetic brands. Whether be it skin care products, hair care products, gels, kits etc. that is, all under one roof is available where a customer can easily match his/her need according to the will, even according to the habit of consumer, comparison with other brand with similar product line can be done.

**4. EXPANDING INFORMATION THROUGH ADS**

Advertising is that communication channel which communicates or informs or delivers the message to the consumers, with detail to make consumers aware of the new launch or existing of products. Thus, social media is the best vehicle update consumers about the digital marketing. As through ads consumers get to know about the new and latest product which is available online. The goal of advertisement itself says to persuade consumers to shop online.

**5. TIME SAVING**

In this time lock era, consumers have less time to go to a shop, compare the products and prices and then purchase, thus, this factor seems to be most effective for purchasing any cosmetic product online. That is the time and money for going is saved. Thus, the major problem of consumers is saved and by sitting at one place, they can make order according to their choices and needs.

**ONLINE MARKETING STRATEGIES THAT INFLUENCE CONSUMERS**

As Digital Marketing have opened various alternatives for consumers, which is not possible in offline shopping at once, the most important strategy that online marketers are following in this cut throat competitive market is the promotion by sellers all over and have made direct communication, or interaction with customer online.

Online marketing strategy which mainly they follow-

1. Online marketing gives 1000's of alternatives for a particular cosmetic products.
2. Provides flexibility to consumer according to their taste and preference.
3. Varied variety of choice, as product choice, brand choice, dealer choice is given to them.
4. Some product characteristics are suitable for online shopping like CD's, Books, magazines etc.
5. Online marketers have provided with security and privacy that has left mark on the consumer trust.

**CHANGE IN CONSUMER BUYING BEHAVIOR REGARDING ONLINE FACILITIES****1. ACCESSIBILITY**

This facility of shopping anytime is only available with the digital marketing. This is the important factor that changes the mind of consumers from offline to online shopping. The 24\*7 hours shopping has attracted many customers surprisingly.

**2. QUICK SEARCH**

According to the habits of customers, they want full satisfaction with the product features, to compare it with other products, and this facility is only provided in a simple way by this latest and emerging technology. This is again proved to be the successful strategy to attract more consumers.

**3. MOTIVATIONS BY OTHER CONSUMERS**

As consumer behavior is easily influenced by other consumers, there is a mouth to mouth publicity of any product. If a consumer motivates other consumer about the flexibility and variety available to the consumers they easily get's motivated and try to purchase online, rather than going for offline process.

**EXPECTED OUTCOME**

Online shopping has gained popularity in young generation and professionals. The outcome of the study is pretty clear that it has built trust on price, quality and quantity on consumer's mind and heart. Through this study the factor that motivates to go with the digital or emerging technology is pretty much clear. Trust is found to be the backbone of digital marketing regarding cosmetic products.

**CONCLUSION**

After the success of this emerging technology, it is clear with the study, that many factors like, price, time, confidence, quality after sale service, quantity, discounted price are the influencing factors that attract the customer's buying behavior for online purchase regarding cosmetic products. Online buying is proved to be great beneficial to consumers, in terms of time saving, money and convenience.

**REFERENCES**

1. Amber Yasmin Khan, Emadul Karim, Omair Abbas et al (2016), "Identifying the factors affecting the customer's buying behavior: A case study of Men's cosmetic market in Karachi, Pakistan, *Journal of Business Strategies*, Vol 10, No.3, pp-147-156.
2. Anjana SS (2018), "A study on factors influencing cosmetic buying behavior of consumers", *International Journal of Pure and Applied Mathematics*, Vol 118, No 9, pp-453-459.
3. Rodsomboon. Sujittra, Hongkajorn. Kornkanok (2016), "Factors affecting on purchasing behavior of skin care supplements through online marketing on facebook on Thailand", *Journal of Business and Economics*, ISSN-2155-7950.
4. Ratnam. E (2015), "A study on customer buying behavior of cosmetic product in Jaffa district", *International Journal of emerging trends in science and technology*, Vol 2, No 2, pp-1885-1893.
5. V.Suresh, Dr Chitra. M and Dr Maran.K (2016), "A study on factors determining social media on cosmetic product", *Journal of Pharmaceutical Sciences and Research*, Vol 8, No 1, pp1-5.
6. Dr. Sivasankaran.S (2017), "Digital Marketing and its impact on buying behavior on youth (Special Reference to kanyakumari District), *International Journal of research in Management and Business studies*, Vol 4, No 3.
7. Kumar.A, H.Hemanth, John.S.Franklin, Senith.S (2014), "A study on factors influencing consumer buying behavior in cosmetic products", *International Journal of scientific and Research Publications*, Vol 4, No 9, pp1-6.
8. Ioanas.Elisabeta, Stoica Ivona (2014), "Social Media and its impact on consumers behavior", *International Journal of economic Practices and theories*. Vol 4, No 2 pp-295-303.
9. Sivasankaran. Dr. S (2017), "Digital Marketing and its impact on buying behavior of youth (Special Reference to Kanyakumari District), *International Journal of Research in management and business studies (IJRMBS)*, Vol 4, No 3.
10. S. Lakmi (2016), "Consumer Buying Behavior towards online shopping", *International Journal of Research Granthaalayah, A Knowledge Repository*, Vol 4, No 8, pp-60-65.

## FINANCIAL PERFORMANCE AND DIVERSIFICATION STRATEGY OF INDIAN BUSINESS GROUPS

V.SUNDARA PRASAD  
ASST. PROFESSOR  
PSG COLLEGE OF ARTS & SCIENCE  
COIMBATORE

Dr. R.KRISHNAKUMAR  
ASSOCIATE PROFESSOR  
ST. JOSEPH'S COLLEGE OF ARTS & SCIENCE (AUTONOMOUS)  
CUDDALORE

## ABSTRACT

Product focus based on strong core competencies combined with international diversification has been the success mantra, propounded by academicians and consultants alike. This strategy is adopted by many a successful transnational corporation such as Microsoft, Nokia, Lafarge and Coca-Cola, to name a few, in the western world, especially during the last two decades of growing liberalization and globalization. Most of the business groups in the eastern world adopting this strategy were also successful, contrary to some recent theories proposing product diversification as a success mantra in the emerging markets vis-à-vis focused strategy as success mantra in the developed world. Large number of business groups, which diversified their product range more and more claiming synergies, which were either illusory or were over-rated, eroded their shareholder's wealth, while, the ones which diversified internationally had a higher success rate.

## KEYWORDS

Indian business groups, financial performance.

## JEL CODES

M10, M20.

## BACKGROUND

Business groups are defined in the literature as collections of formally independent firms (or affiliates) under single common administrative and financial controls, owned by either families or trusts or foundations. These business networks are usually owned through investment firms with crossholdings in affiliates. In most countries of the eastern world, industrial scenario has been and continues to be dominated by these business houses. India's industrial sector remains no different and continues to be dominated by business houses.

First, we would argue that each Indian business group could be regarded as a corporate with a larger scope of operation, since:

- The managers of member firms are appointed by the business group (or after taking the consent of the business group) to exercise control over their member firms.

Moreover, we do observe member firms helping one another with financial and/or real resource transfers in times of financial distress or business hardship or otherwise. Therefore, for our purpose, the business groups with affiliated companies under them are not radically different from the U.S. conglomerates with many divisions under them or the Japanese keiretsus with member firms under them.

TABLE 1: DESCRIPTIVE STATISTICS OF SELECT VARIABLES OF SAMPLE BUSINESS GROUPS

Name of the Variable	Mean			Standard Deviation		
	2010-11	2011-12	2010-11	2010-11	2011-12	2010-11
Annual Growth in Total Assets (in %age)	52.91	64.14	8.26	66.99	73.84	15.59
Return on Capital Employed (in %age)	15.54	15.13	10.86	6.04	5.46	7.77
Modified Tobin's Q Ratio	1.20	1.56	1.08	0.29	0.67	0.50
Age of the Group (in Years)			45.71			26.49
Net Exports of the Group (in %age)	-3.60	-1.48	-0.02	12.46	13.35	14.94
International Trade of the Group (in %age)	14.89	20.31	23.96	15.26	19.87	21.88
Product Diversity (Montgomery's 3-digit SIC measure)	0.45	0.52	0.54	0.28	0.26	0.24
Total Assets (in Rs. crores)	271.14	700.59	1534.74	667.45	1695.93	3722.75

After independence, India has seen large-scale industrialization. In this expansion business groups adopted varied strategies, some more successfully than others did. Business groups' long-term performance would chiefly be an outcome of their corporate strategy including their product and international diversity. This choice and implementation of strategies got a boost after 1985, with the arrival of the era of de-licensing of industries. Such strategies comprise decisions to efficiently utilize, add, retain, or divest its resources relative to their portfolio of resources. Little empirical work has been done on the relationship between Indian groups' financial performance and product/international diversification strategies. The primary objective of our study is to look into the relationship between these diversification strategies and financial performance of large Indian business groups.

## DIVERSIFICATION ISSUES OF GROUPS

**Product Diversification:** Galbraith (1998) suggested that there are three types of product diversification. They are – related, linked, and unrelated diversification. While in unrelated diversification the common features are generally limited to finance and business management; in related diversification, on the other hand, additional synergies are present, such as technological know-how, marketing and distribution expertise, or facilities in production. Linked diversification, unlike related diversification, involves moving into new industries and operating at different centers of concern in those industries. However, there is some kind of a chain (integration) among various businesses.

Research on business groups has been scanty in comparison to firm-level research (Granovetter, 1994). Previous empirical studies have mostly compared the performance between business group affiliated firms and unaffiliated firms. We list some of the important research done in the area:

- Chang and Choi (1988) found that the top four Korean chaebols outperform other domestic firms of the economy including smaller chaebol and unaffiliated firms.
- Khanna and Palepu (1999) found that Indian business groups have strengthened the ties that bind their affiliate's together post-liberalization and that their product and geographic scope has generally increased after 1991.<sup>8</sup>
- Khanna and Palepu (2000) aggregated the affiliate members' performance measures to construct group Tobin's Q and group ROA measures. They found that accounting and stock market based measures of firm (affiliate) performance initially decline with business group product diversification and subsequently

increase once group product diversification exceeds a certain threshold level. They constructed an industry-adjusted Tobin's Q by subtracting from group Tobin's Q a weighted average of industry Tobin's Q's. As in firm level estimations, a regression of industry adjusted group Tobin's Q on group size and group product diversification revealed a quadratic relationship between performance and group diversification.

## FRAMEWORK OF OUR STUDY

Shareholder value (i.e., 'owner's wealth') maximization is a widely accepted objective of business organizations. Value maximization also provides a good conceptual and operational framework for assessing corporate diversification strategies (Alberts and McTaggart, 1979) of groups. This is done by identifying shareholder value as a measure and locating four determinants of value, namely; profitability, growth, risk and capital market conditions (Branch and Gale, 1983). Varaiya et al. (1987) demonstrated theoretically and empirically that growth and profitability of an organization decide its shareholder value. Since, the market value of a firm is a function of its financial return, given the level of its risk (Fruhan, 1979), we focus on risk as a third determinant of value. Risk affects both growth and profitability of an organization, and would indirectly determine value.

## RESEARCH METHODOLOGY

**Data Sources:** The financial statement and capital market data for our research are obtained primarily from publicly available databases maintained by Centre for Monitoring the Indian Economy (CMIE) and Bombay Stock Exchange (BSE)<sup>12</sup>. The product-wise sales data for calculating the product diversification indices was also obtained from CMIE. These standard Indian databases are most widely used by academic researchers and executives to analyze Indian firms/business groups.

**Identifying Group Affiliation<sup>13</sup>:** The data set we used in our analysis consists of all Indian business groups affiliated to private sector and listed on the stock exchanges with the required data and a listing history of at least 10 years by their affiliates. For this purpose, we adopted the CMIE database's classification of firms into groups. There is no ambiguity between CMIE's classification of firms into groups and those attempted by other reliable sources against which we have cross-checked. In the case of family controlled groups, succession from one generation to another often results in the group being split into multiple parts. We identified several groups that had gone through such periods of succession in the past two decades, and checked to see that CMIE had indeed classified each sub-group separately.

**Sample and Size:** For the purpose of our research, we take a firm as belonging to a particular business group in which the sample business group has at least 10 percent of the control rights of the company and which is not controlled by anybody else (similar to Claessens et al., 1999). This study covers public limited companies only, quoted in any one of the Indian stock exchanges. Availability of data being the constraint, the study included all dominant business houses (final size of 240) in India in the sample.

**Time Span of Study:** To avoid factors such as temporal stability and economic/business cycles influencing our study, we used a longer time frame of study of a twelve-year period. As the business houses and firms were at liberty to choose their diversification strategy from 1985 onwards (due to delicensing of industries), the study would be carried out for the period 1987-1999. This total period of study of 12 years was divided into 3 equal sub-periods of 4 years each. Period 1 would be from financial year 1987-88 to financial year 1990-91 (period of pre-liberalization). Period 2 would be from 1991-92 to 1994-95 (period of post-liberalization; growth phase). Period 3 would be from 1995-96 to 1998-99 (period of post-liberalization; recession phase).

**Measures of Independent Variables:** Give the constraints on the data availability for using the best measures such as international diversification, we computed the aggregate group independent variables based on their ratios and formulas given in table 3. To make our results comparable with previous studies in the area we will use one categorical product diversification measure and two continuous product diversification measures.

**Econometric Analysis:** We tested the diversification strategy and financial performance linkage using linear multiple regression techniques which model group performance as a function of size of the group, its diversification, leverage, and industry fixed effects among others as shown as follows:

$$\text{Performance} = f(\text{product diversification, size, leverage, long-term solvency, short-term solvency, insider ownership, foreign ownership, domestic institutional ownership, international diversification, net exports, age, industry fixed effects})$$

The regressions were computed all the three periods for each of dependent variable with the nine relevant explanatory variables. For period 3, the regressions were also performed using each of dependent variables with the twelve explanatory variables. These linear multiple full model regressions were performed using both the best variables and the standard variables. We also made use of transformations of product diversification variable in the multivariate regression techniques to look into the exact fit between performance and diversification variable given all the control variables. Both the continuous and non-continuous measures of diversification were used separately for performing these multiple regressions. Also regressions using the ten industry control dummy variables were performed separately.

## PRODUCT DIVERSIFICATION RESULTS

We found that shareholder value creation was negatively related to product diversification level of business houses during all the three periods. The econometric results were quite robust considering the large sample size, multiple diversification measures, long time frame, multiple aggregate group performance measures, and more control variables used. On further analysis, we found that during period 1 and 2, the result was driven by the negative relationship between a group's product diversification strategy and its profitability. For period 1, *ceteris paribus*, we found that more diversified business groups had lesser profit margins and higher levels of risk in comparison to less diversified groups driving the negative product diversification-profitability relationship. For period 2, *ceteris paribus*, we found that highly diversified business groups had both, lesser margins and lower sales turnover in comparison to more focused groups. *Ceteris paribus*, we found highly diversified groups growth and sales turnover ratio to be lower than less diversified groups in period 3. Presumably, the adverse capital market outlook towards diversified business groups in India, as in other parts of the world (see Servaes, 1996; Lamont and Polk, 1999), also drove the relation during the later period of study.

## INTERNATIONAL DIVERSIFICATION, NET EXPORTS AND PERFORMANCE

International diversification was positively related to business groups growth, profitability, profit margin, and shareholder value during period 1 and 2, while in period 3 we find that net exports was positively related to business groups' profitability and shareholder value. Either international diversification or net exports positive significance indicates benefits to the business groups having high international exposure. Therefore, movement into international markets may allow groups to achieve a long-term strategic competitiveness and hence higher shareholder value. The result apparently conveys that geographic diversification allows groups to exploit their core competencies and distinctive group capabilities across units in different international markets (Hoskisson and Hitt, 1990). International exposure might have also provided a broader base of markets for obtaining returns from innovation and provide new market possibilities (Wan, 1998).

The positive relation between net exports and performance in later periods probably suggests that exporters benefited from incentives given by the state. Also, business groups with high exports, probably gained from the learning they had in the global markets (say, in terms of better packaging, technological innovation). Moreover, capital markets seem to have favored businesses and business groups that were net exporters during this period.

## LIMITATIONS

We deleted in our study all Indian business groups that had a size lower than Rs. 5 crores during the period of study; or had a negative net-worth during one of the periods of the study. Thus, the sample may contain relatively large number of better performing large business groups. Data constraints also led us to use coefficient of variance in earnings as the measure for risk. A better measure based on the market returns could have revealed more information. Also use of

market based performance measures such as Sharpe and Treynor measures, apart from tested strategic variables such as brand value could have led to more insights into the factors determining excellence.

## REFERENCES

1. Ahuja, Gautam and Sumit Majumdar; An assessment of the performance of the Indian state-owned enterprises; University of Michigan, School of Business Administration; Working Paper # 9550-10; 1995.
2. Alberts, William, and James McTaggart; The divestiture decision: an introduction; Mergers and Acquisitions; Fall 1979; p. 18-30.
3. Brief, Richard P. and R. A. Lawson; The role of the accounting rate of return in financial statement analysis; Accounting Review; Vol. 67(2); April 1992; p. 411-426.
4. Buhner, Rolf; Accessing international diversification of West German corporations; Strategic Management Journal; Vol. 8; 1987; p. 25-37.
5. Caves, R. E.; Multinational Enterprise and Economic Analysis; Cambridge University Press; Cambridge: England; 1982.
6. Caves, Richard, and Uekusa, M.; Industrial Organization in Japan; Brookings; 1976.
7. Dubofsky, P., and P. R. Varadraj; Diversification and measures of performance: additional empirical evidence; Academy of Management Journal; Vol. 30, 1987, p. 597-608.
8. Dutta, Sudit; Family Business in India; Response Books Sage Publications: New Delhi; 1997.
9. Encarnation, D.; Dislodging Multinationals: India's Comparative Perspective; Cornell University Press: Ithaca New York; 1989.
10. EXIM (Export Import Bank of India); Exim banks in Asia: A comparative analysis; Occasional paper no. 47; Export import bank of India: Mumbai; 1996.
11. Fama, Eugene F., and K. R. French; The cross-section of expected stock returns; Journal of Finance, Vol. 47; 1992; p. 427-465.
12. Fruhan, William E. Jr.; Financial Strategy: Studies in the Creation, Transfer and Destruction of Shareholder Value; R. D. Irwin: Homewood IL.; 1979.
13. Gadgil, D. R., Notes on the rise of Business Communities in India; Gokhale Institute of Politics and Economics: Poona; 1951.
14. Gup, Benton; Principles of Financial Management; John Wiley & Sons: New York; 1983.
15. Hall, Ernest H., Jr.; Corporate diversification and performance: An investigation into causality; Australian Journal of Management; Vol. 20(1); June 1995.
16. Pinches, George; Essentials of Financial Management; Harper & Row Publishers: New York; 1990.
17. Piramal, Gita and Margaret Herdeck; India's Industrialists; Three Continent Press Inc.; Washington, D.C.; 1985.
18. Porter, M. E.; Competition in global industries: A conceptual framework; In M. E. Porter (Ed.), Competition in global industries: 15-60. Boston: Harvard Business School Press; 1986.
19. Renneboog, L.; Prediction of control concentration in German and UK initial public offerings; Document # 2010; Working Paper Series 2000; Manchester School of Management; 2000.
20. Risseuw, Peter; Estimating determinants of financial performance of small service firms; Economic & Social Institute; Vrije Universiteit: Amsterdam; 1997.
21. Salter, M., and W. Weinhold; Diversification through acquisition: strategies for creating economic value; New York: Free Press; 1979.
22. Tricker, R. I.; Corporate Governance: Practices, Procedures, and Powers in British Companies and their Board of Directors; Harts: Gower: 1984.
23. Utton, M. A.; Large firm diversification in British manufacturing industry; Economic Journal; Vol. 87; March 1977; p. 96-113.
24. Venkatraman, N. and V. Ramanujam; Measurement of business performance in strategy research: a comparison of approaches; Academy of Management Review; Vol. 11(4); Oct 1986; p. 801-814.
25. Williamson, Oliver E.; Strategizing, economizing and economic organization; Strategic Management Journal; Vol. 12, 1991; p. 75-94.
26. World Bank, India: Reducing Poverty, Accelerating Development; Oxford University Press; New Delhi; 2000.



## AN ANALYSIS OF THE SAVING MOTIVES OF THE HOUSEHOLDS IN NORTH GUJARAT

**NC RAGHAVI CHAKRAVARTHY**  
**SENIOR RESEARCH FELLOW**  
**S. D. SCHOOL OF COMMERCE**  
**GUJARAT UNIVERSITY**  
**NAVRANGPURA**

### ABSTRACT

*For doing any activity, there needs to be some motivation. The act of saving is no different. The present study tries to identify if the households in North Gujarat Region have similar motives to save or not. In this study, fifteen motives were identified. A questionnaire was designed for this purpose and ranks were collected from the households living in the North Gujarat Region. Data from 860 units was collected. They were classified as per the district, area, age of the head of the household, their education, occupation, the type of the family and residence. About 399 homogeneous groups were created. The ranks given by the units were converted into Garret Score and then they were combined into five needs categories as proposed by Maslow (1943). With the help of Kruskal–Wallis Independent sample test it was tested if the ranks given by the units under the study were similar or not. The results of the study indicate that area and the occupation of the head of the household had a significant influence on the ranks given by the household while residence type had no influence on the ranks given by the household.*

### KEYWORDS

North Gujarat, saving motives, households.

### JEL CODES

D14, E21.

### INTRODUCTION

It is a known fact that for doing any activity, some motivation is required. The act of saving is no different. In order to postpone the desire to spend today for having money to spend tomorrow, some motivation is required. Keynes (1936) identified eight such motives for saving viz. precautionary needs, foresight, calculation, improvement, independence, enterprise, pride and avarice.

One of the most popular motivational theories was propounded by Abraham Maslow also known as the Need Hierarchy theory. Maslow (1943) identified five levels of needs which any individual has which motivate him to work to satisfy those needs. At the first level were the basic needs. Once they are satisfied, a person would work more to satisfy the second level needs namely safety needs. At the third level there are love/family needs. Retirement and old age needs were placed at the fourth level and Self Esteem needs were placed at the fifth level. The present study tries to identify if the households in North Gujarat Region have similar motives to save or not.

### LITERATURE REVIEW

While studying savings and investments of households it is important to understand the motives with which the households save and invest. According to Keynes (1936) there are eight main motives which lead the individuals to refrain from spending out their income. They include building a reserve against unforeseen contingencies, retirement savings, to earn interest and appreciation, to meet the increasing expenditures, to have financial independence, for speculative activities, to leave fortune and to satisfy miserly needs.

Nasir, Khalid and Mahmood (2004) found that people mainly save to cover future expenditures of education, marriages etc. Euwalss, Eymann and Supan (2004) found that those households in which the husbands consider savings for old age as important have large amounts of discretionary wealth and were more likely to hold stocks and whole life insurance. Husband's pension rights play a significant role in deciding the old age savings.

Kwack and Lee (2005) found that one of the main reasons why Koreans saved was to buy a house. Gosh and Pain (2005) concluded that the most important motive of savings is for providing for retirement which is followed by saving for precaution against any emergency. They also observed that very few people thought of saving for next generation. Another reason that they found which influences the savings is the need for money to meet the demands of life. Further they found that tax incentives only matter to the extent of changing the savings basket.

In another study conducted by Fisher and Montalto (2010), the results point out that the savings for retirement, savings for emergency and savings for education of children or grand-children increases the likelihood of savings. The payment and bequest motive do not affect the likelihood of savings over the past year or of being regular savers. They found that by having a specific saving motive does not relate to increases probability of savings. It means that by getting the respondents to establish certain goal for savings does not mean that savings will occur.

According to Chakraborty and Digal (2011), the main motive for savings among the salaried class and professionals is to save for retirement. The entrepreneurial class saved to meet the future contingencies.

Amu and Amu (2012) found that the primary motive for savings is to prepare against financial contingencies. In the study conducted by Lewis and Messy (2012) the main factors that motivate an individual to save are retirement savings, necessities, to improve the living conditions and to carry out speculative activities. They found that people also saved to leave an inheritance, to hoard money. They found that people also saved when they get surplus during a certain period so that this surplus can be used when the need arises.

Lee and Hanna (2015) found that retirement motive the most frequently mentioned motive by the households while self-actualization goals were the least frequently mentioned motive.

### OBJECTIVES OF THE STUDY

The following are the objectives of the study:

1. To understand the reasons for which the households save.
2. To find out if the reasons for saving are same across all the households under the study.

### RESEARCH METHODOLOGY

#### SAMPLE SIZE

For the purpose of the study, the data was collected from 860 households wherein they were asked to give ranks to 15 saving motives which have been identified.

#### AREA OF THE STUDY

The data was collected from the households which are based in five districts of North Gujarat namely, Banaskantha, Gandhinagar, Mehsana, Patan and Sabarkantha.

**QUESTIONNAIRE**

A questionnaire was developed for collecting the data of the demographics of the household and for collecting the information of the ranks that they would allocate to the various saving motives. The following are the 15 different motives which the households were asked to rank:

1. Reserve for unforeseen situations
2. Retirement/Old age
3. Interest and appreciation
4. To sustain even when there is gradual increase in cost of living
5. To have independence regarding financial decisions
6. To undertake speculation
7. To invest in business
8. To leave something as heirloom
9. To fulfill the desire to save money
10. For Children's education
11. For Children's marriage
12. To purchase a house
13. To purchase other consumer durables
14. To make down payments
15. To clear debts

The respondents were asked to rank these motives from 1 to 15, wherein 1 signified the most important motive while 15 indicated the least important reason for saving. The ranks were then converted into Garret Score.

The collected responses were classified as per their district, area, age group, type of family, type of residence, education and occupation. The below table indicates the classification categories:

**TABLE A: CATEGORIES IN WHICH THE RESPONSES COLLECTED WERE CLASSIFIED**

District	Area	Age group	Type of family	Type of residence	Education	Occupation
Banaskantha	Rural	30 years or below	Joint Family	Own House	Uneducated	Labourer
Gandhinagar	Urban	31 to 40 years	Nuclear Family	Rented House	Below Primary	Farmer
Mehsana		41 to 50 years			Primary	Business
Patan		51 to 60 years			SSC	Private Job
Sabarkantha		Above 60 years			HSC	Government Job
					Diploma	Retired
					Graduates	Housewife
					Post Graduates	

The ranks given by the respondents 15 motives identified were combined into five different hierarchical categories which were specified by Abraham Maslow. The motives were classified into the different needs on the basis of the methodology suggested by Lee and Hanna (2015). The below table shows as to which motive was included into each group.

**TABLE B: CATEGORIES OF SAVING GOALS**

Sr. No.	Needs as per Maslow's classification	Sr. No. of the Motive to be included
1.	Basic Needs	13, 14, 15
2.	Safety Needs	1, 3, 4, 5, 9, 12
3.	Love/Family Needs	8, 10, 11
4.	Retirement Needs	2
5.	Self Esteem Needs	6, 7

Once the classification was undertaken, units having similar characteristics were grouped into same category and such 399 groups were formed.

**TOOL AND TECHNIQUES USED**

1. Garret ranking score
2. Independent Samples Kruskal-Wallis test

**HYPOTHESIS**

- H<sub>01</sub>: Similar ranks were given to the saving motives by the head of the households belonging to the various age groups.
- H<sub>11</sub>: Similar ranks were not given to the saving motives by the head of the households belonging to the various age groups.
- H<sub>02</sub>: Similar ranks were given to the saving motives by the head of the households belonging to different district.
- H<sub>12</sub>: Similar ranks were not given to the saving motives by the head of the households belonging to different district.
- H<sub>03</sub>: Similar ranks were given to the saving motives by the head of the households belonging to rural and urban areas.
- H<sub>13</sub>: Similar ranks were not given to the saving motives by the head of the households belonging to rural and urban areas.
- H<sub>04</sub>: Similar ranks were given to the saving motives by the head of the households belonging to Joint and nuclear families.
- H<sub>14</sub>: Similar ranks were not given to the saving motives by the head of the households belonging to Joint and nuclear families.
- H<sub>05</sub>: Similar ranks were given to the saving motives by the head of the households belonging to Own and rented houses.
- H<sub>15</sub>: Similar ranks were not given to the saving motives by the head of the households belonging to Own and rented houses.
- H<sub>06</sub>: Similar ranks were given to the saving motives by the head of the households having different educational qualifications.
- H<sub>16</sub>: Similar ranks were not given to the saving motives by the head of the households having different educational qualifications.
- H<sub>07</sub>: Similar ranks were given to the saving motives by the head of the households engaged in different occupations.
- H<sub>17</sub>: Similar ranks were not given to the saving motives by the head of the households engaged in different occupations.

**DATA ANALYSIS**

The data analysis was undertaken under the following heads:

**1. AGE AND MOTIVES**

For understanding if the saving motives of the households under the study having a head belonging to different age groups was same or not, Independent Samples Kruskal-Wallis test was undertaken. For this purpose, the below hypothesis was formulated:

- H<sub>01</sub>: Similar ranks were given to the saving motives by the head of the households belonging to the various age groups
- H<sub>11</sub>: Similar ranks were not given to the saving motives by the head of the households belonging to the various age groups

The Table 1 presents the results of the independent samples Kruksal- Wallis test:

TABLE 1: RESULTS OF INDEPENDENT SAMPLES KRUSKAL – WALLIS TEST FOR FINDING DIFFERENCES IN PATTERNS OF MOTIVES ACROSS AGE GROUPS

Sr. no	Null Hypothesis	Test	Test Statistic	Sig.	Decision
1.	Similar ranks were given to the basic needs by the head of the households belonging to the various age groups	Independent Samples Kruskal – Wallis Test	1.930	0.749	Retain the null hypothesis
2.	Similar ranks were given to the Safety needs by the head of the households belonging to the various age groups	Independent Samples Kruskal – Wallis Test	2.221	0.695	Retain the null hypothesis
3.	Similar ranks were given to the Love/Family needs by the head of the households belonging to the various age groups	Independent Samples Kruskal – Wallis Test	10.719	0.030	Reject the null hypothesis
4.	Similar ranks were given to the Retirement needs by the head of the households belonging to the various age groups	Independent Samples Kruskal – Wallis Test	16.338	0.003	Reject the null hypothesis
5.	Similar ranks were given to the Self Esteem needs by the head of the households belonging to the various age groups	Independent Samples Kruskal – Wallis Test	2.146	0.709	Retain the null hypothesis

**Note:** Asymptotic Significances are displayed; Significance Level is 0.05; N= 398 and Degrees of freedom is 4; Test Statistics are adjusted for ties  
 The results of the Independent Samples Kruskal – Wallis Test indicate that similar ranks were given to the basic needs; safety needs as well as Self Esteem needs by the heads belonging to different age groups. This indicates that they were considered at the same level by the heads of the households. On the other hand, similar ranks were not given by the heads to the Love/Family needs (Adj. Sig. = 0.030). Pair wise comparisons reveal that the ranks to the Love and family needs given by the units having a head of the households who was between 41 to 50 years and those who had a head who was below 30 years of age were statistically different.

The ranks given to the Retirement needs by the head belonging to the various age groups were significantly different (Adj. Sig. 0.003). Pair wise comparisons reveal that the ranks given to the Retirement needs by the units having a head who were between the ages of 51 to 60 years as well as the ones between 31 to 40 years and also those above 60 years and the ones between 31 to 40 years were also statistically different.

Overall, it can be concluded that the ranks given by the heads of the household belonging to different age groups were similar in case of basic needs, safety needs and self-esteem needs while the ranks given by them were not similar in case of love/family needs as well as retirement needs.

**2. DISTRICT AND MOTIVES**

For understanding if the saving motives of the households under the study having a head belonging to different districts was same or not, Independent Samples Kruskal-Wallis test was undertaken. For this purpose, the below hypothesis was formulated:

H<sub>02</sub>: Similar ranks were given to the saving motives by the head of the households belonging to different district

H<sub>12</sub>: Similar ranks were not given to the saving motives by the head of the households belonging to different district

The Table 2 presents the results of the independent samples Kruskal- Wallis test:

TABLE 2: RESULTS OF INDEPENDENT SAMPLES KRUSKAL – WALLIS TEST FOR FINDING DIFFERENCES IN PATTERNS OF MOTIVES ACROSS VARIOUS DISTRICTS

Sr. no	Null Hypothesis	Test	Test Statistic	Sig.	Decision
1.	Similar ranks were given to the basic needs by the head of the households belonging to different district	Independent samples Kruskal-Wallis Test	6.748	0.150	Retain the null Hypothesis
2.	Similar ranks were given to the Safety needs by the head of the households belonging to different district	Independent samples Kruskal-Wallis Test	11.519	0.021	Reject the null hypothesis
3.	Similar ranks were given to the Love/family needs by the head of the households belonging to different district	Independent samples Kruskal-Wallis Test	36.356	0.000	Reject the null hypothesis
4.	Similar ranks were given to the Retirement needs by the head of the households belonging to different district	Independent samples Kruskal-Wallis Test	9.791	0.044	Reject the null hypothesis
5.	Similar ranks were given to the Self-Esteem needs by the head of the households belonging to different district	Independent samples Kruskal-Wallis Test	41.016	0.000	Reject the null hypothesis

**Note:** Asymptotic Significances are displayed; Significance Level is 0.05; N= 398 and Degrees of freedom is 4; Test Statistics are adjusted for ties  
 The results of the Kruskal – Wallis Test indicate that similar ranks were given only to the basic needs by all the units in various districts. Differences in the ranks given by the units were observed in case of the safety needs (Adj. Sig. = 0.021) and Retirement needs (Adj. Sig. = 0.044). Pair wise comparisons indicate overall there were differences in the ranks given by the units.

The ranks assigned to Love/Family Needs were also significantly different (Adj.Sig. 0.000). Pair wise comparisons indicate that the ranks given by the units belonging to Patan were significantly different from the ranks given by the units belonging to Gandhinagar and Sabarkantha. In the same manner, the ranks given by the units of Banaskantha were significantly different from the ranks given by the units of Gandhinagar and Sabarkantha. Due to this the null hypothesis was rejected. The ranks given to the Self Esteem Needs were also different (Adj. Sig. = 0.000). Pair wise comparison indicates that the ranks given by units of Sabarkantha were significantly different from the ranks given by the units of Patan, Mehsana, Banaskantha. In the same manner, the ranks given by the units belonging to Gandhinagar significantly differed from the ranks given by the units living in Mehsana, Banaskantha and Patan. Due to this, the null hypothesis was rejected.

Overall, it can be said that there is no significant difference in the ranks given to the basic needs but there were significant differences in the ranks given to safety needs, retirement needs, love/family needs as well as Self-esteem needs.

**3. AREA AND MOTIVES**

For finding if the area in which the household is based has an effect on the ranks given by them to the saving motives, Independent Samples Kruskal – Wallis Test was undertaken. For this purpose, the following hypothesis was formulated:

H<sub>03</sub>: Similar ranks were given to the saving motives by the head of the households belonging to rural and urban areas

H<sub>13</sub>: Similar ranks were not given to the saving motives by the head of the households belonging to rural and urban areas

The Table 3 presents the results of the independent samples Kruskal- Wallis test:

**TABLE 3: RESULTS OF INDEPENDENT SAMPLES KRUSKAL – WALLIS TEST FOR FINDING DIFFERENCES IN PATTERNS OF MOTIVES ACROSS RURAL AND URBAN AREAS**

Sr. no	Null Hypothesis	Test	Test Statistic	Sig.	Decision
1.	Similar ranks were given to the Basic Needs by the head of the households belonging to rural and urban areas	Independent samples Kruskal-Wallis Test	13.913	0.000	Reject the null hypothesis
2.	Similar ranks were given to the Safety Needs by the head of the households belonging to rural and urban areas	Independent samples Kruskal-Wallis Test	8.269	0.004	Reject the null hypothesis
3.	Similar ranks were given to the Love/Family Needs by the head of the households belonging to rural and urban areas	Independent samples Kruskal-Wallis Test	17.409	0.000	Reject the null hypothesis
4.	Similar ranks were given to the Retirement Needs by the head of the households belonging to rural and urban areas	Independent samples Kruskal-Wallis Test	18.081	0.000	Reject the null hypothesis
5.	Similar ranks were given to the Self Esteem Needs by the head of the households belonging to rural and urban areas	Independent samples Kruskal-Wallis Test	18.135	0.000	Reject the null hypothesis

**Note:** Asymptotic Significances are displayed; Significance Level is 0.05; N= 398 and Degrees of freedom is 1; Test Statistics are adjusted for ties  
The results of the test indicate that the ranks given by the units of the rural areas as well the urban areas differ as their perceptions which need are more important might be different. So the null hypothesis was rejected.

**4. FAMILY TYPE AND MOTIVES**

For finding out if the type of family in which the household lives has any influence on the ranks given by them to the saving motives, Independent Samples Kruskal – Wallis Test was undertaken. For this purpose, the below hypothesis was formulated:

H<sub>04</sub>: Similar ranks were given to the saving motives by the head of the households belonging to Joint and nuclear families

H<sub>14</sub>: Similar ranks were not given to the saving motives by the head of the households belonging to Joint and nuclear families

The Table 4 presents the results of the independent samples Kruskal- Wallis test:

**TABLE 4: RESULTS OF INDEPENDENT SAMPLES KRUSKAL – WALLIS TEST FOR FINDING DIFFERENCES IN PATTERNS OF MOTIVES ACROSS JOINT AND NUCLEAR FAMILIES**

Sr. no	Null Hypothesis	Test	Test Statistic	Sig.	Decision
1.	Similar ranks were given to the Basic needs by the head of the households belonging to Joint and nuclear families	Independent samples Kruskal-Wallis Test	0.137	0.711	Retain the null hypothesis
2.	Similar ranks were given to the safety needs by the head of the households belonging to Joint and nuclear families	Independent samples Kruskal-Wallis Test	2.201	0.138	Retain the null hypothesis
3.	Similar ranks were given to the Love/Family needs by the head of the households belonging to Joint and nuclear families	Independent samples Kruskal-Wallis Test	9.577	0.002	Reject the null hypothesis
4.	Similar ranks were given to the Retirement needs by the head of the households belonging to Joint and nuclear families	Independent samples Kruskal-Wallis Test	0.036	0.850	Retain the null hypothesis
5.	Similar ranks were given to the Self – Esteem needs by the head of the households belonging to Joint and nuclear families	Independent samples Kruskal-Wallis Test	9.747	0.002	Reject the null hypothesis

**Note:** Asymptotic Significances are displayed; Significance Level is 0.05; N= 398 and Degrees of freedom is 1; Test Statistics are adjusted for ties  
The results of the Independent Samples Kruskal – Wallis Test indicate that similar ranks were given by the units belonging to joint and Nuclear families to basic needs, safety needs and retirement needs. Differences in the ranks were observed in case of Love/ Family needs as well as Self – Esteem Needs.

Overall, it can be said that there is no significant difference in the ranks given to the basic needs, safety needs and retirement needs but there was significant differences in the ranks given to love/family needs as well as Self-esteem needs.

**5. RESIDENCE TYPE AND MOTIVES**

For understanding if the type of residence has any impact on the ranking given by the households for the saving motives, Independent Samples Kruskal – Wallis Test was undertaken. For this purpose, the below hypothesis was formulated:

H<sub>05</sub>: Similar ranks were given to the saving motives by the head of the households belonging to Own and rented houses

H<sub>15</sub>: Similar ranks were not given to the saving motives by the head of the households belonging to Own and rented houses

The Table 5 presents the results of the independent samples Kruskal- Wallis test:

**TABLE 5: RESULTS OF INDEPENDENT SAMPLES KRUSKAL – WALLIS TEST FOR FINDING DIFFERENCES IN PATTERNS OF MOTIVES ACROSS OWN AND RENTED HOUSES**

Sr. no	Null Hypothesis	Test	Test Statistic	Sig.	Decision
1.	Similar ranks were given to the basic needs by the head of the households belonging to Own and rented houses	Independent samples Kruskal-Wallis Test	1.873	0.171	Retain the null hypothesis
2.	Similar ranks were given to the safety needs by the head of the households belonging to Own and rented houses	Independent samples Kruskal-Wallis Test	0.378	0.538	Retain the null hypothesis
3.	Similar ranks were given to the love/family needs by the head of the households belonging to Own and rented houses	Independent samples Kruskal-Wallis Test	0.041	0.839	Retain the null hypothesis
4.	Similar ranks were given to the retirement needs by the head of the households belonging to Own and rented houses	Independent samples Kruskal-Wallis Test	0.428	0.513	Retain the null hypothesis
5.	Similar ranks were given to the Self esteem needs by the head of the households belonging to Own and rented houses	Independent samples Kruskal-Wallis Test	0.068	0.794	Retain the null hypothesis

**Note:** Asymptotic Significances are displayed; Significance Level is 0.05; N= 398 and Degrees of freedom is 1; Test Statistics are adjusted for ties  
The results of the test indicate that the ranks given by the own house dwellers as well as the rented house dwellers were statistically same. So, it can be concluded the null hypothesis is accepted.

**6. EDUCATION AND MOTIVES**

For understanding if the ranks given by the households differ due to the educational qualifications of the head of the household, Independent Samples Kruskal – Wallis test was undertaken. The following hypothesis was formulated for this purpose:

H<sub>06</sub>: Similar ranks were given to the saving motives by the head of the households having different educational qualifications

H<sub>16</sub>: Similar ranks were not given to the saving motives by the head of the households having different educational qualifications

The Table 6 presents the results of the independent samples Kruskal- Wallis test:

TABLE 6: RESULTS OF INDEPENDENT SAMPLES KRUSKAL – WALLIS TEST FOR FINDING DIFFERENCES IN PATTERNS OF MOTIVES ACROSS DIFFERENT EDUCATIONAL QUALIFICATIONS

Sr. no	Null Hypothesis	Test	Test Statistic	Sig.	Decision
1.	Similar ranks were given to the basic needs by the head of the households having different educational qualifications	Independent samples Kruskal-Wallis Test	11.215	0.129	Retain the null hypothesis
2.	Similar ranks were given to the safety needs by the head of the households having different educational qualifications	Independent samples Kruskal-Wallis Test	11.224	0.129	Retain the null hypothesis
3.	Similar ranks were given to the love/family needs by the head of the households having different educational qualifications	Independent samples Kruskal-Wallis Test	16.556	0.020	Reject the null hypothesis
4.	Similar ranks were given to the retirement needs by the head of the households having different educational qualifications	Independent samples Kruskal-Wallis Test	23.209	0.002	Reject the null hypothesis
5.	Similar ranks were given to the self esteem needs by the head of the households having different educational qualifications	Independent samples Kruskal-Wallis Test	6.736	0.457	Retain the null hypothesis

**Note:** Asymptotic Significances are displayed; Significance Level is 0.05; N= 398 and Degrees of freedom is 1; Test Statistics are adjusted for ties

The results of the test indicate that the similar ranks were given by the all the households to the basic needs, safety needs and Self-esteem needs. But differences in the ranks were observed in the ranks given to Love/family needs as well as Retirement needs by the heads of the households with different educational qualifications. Pair wise comparisons indicate that the ranks given by the heads of the household educated till primary level and those educated till Graduate level differed significantly in case of Love/ family needs (Adj. Sig.= 0.000) while the ranks given to retirement needs by the households with heads who were graduates and those who were uneducated differed significantly (Adj. Sig,0.020).

Overall, it can be concluded that the null hypothesis is accepted for the basic needs, safety needs and self-esteem needs while it was rejected in case of love/family needs and retirement needs.

**7. OCCUPATION AND MOTIVES**

For understanding if the ranks given by the households differ due to the occupation of the head of the household, Independent Samples Kruskal – Wallis test was undertaken. The following hypothesis was formulated for this purpose:

H<sub>07</sub>: Similar ranks were given to the saving motives by the head of the households engaged in different occupations

H<sub>17</sub>: Similar ranks were not given to the saving motives by the head of the households engaged in different occupations

The Table 7 presents the results of the independent samples Kruksal- Wallis test:

TABLE 7: RESULTS OF INDEPENDENT SAMPLES KRUSKAL – WALLIS TEST FOR FINDING DIFFERENCES IN PATTERNS OF MOTIVES ACROSS DIFFERENT OCCUPATIONS

Sr. no	Null Hypothesis	Test	Test Statistic	Sig.	Decision
1.	Similar ranks were given to the basic needs by the head of the households engaged in different occupations	Independent samples Kruskal-Wallis Test	21.263	0.002	Reject the null hypothesis
2.	Similar ranks were given to the safety needs by the head of the households engaged in different occupations	Independent samples Kruskal-Wallis Test	27.205	0.000	Reject the null hypothesis
3.	Similar ranks were given to the love/family needs by the head of the households engaged in different occupations	Independent samples Kruskal-Wallis Test	27.975	0.000	Reject the null hypothesis
4.	Similar ranks were given to the retirement needs by the head of the households engaged in different occupations	Independent samples Kruskal-Wallis Test	36.721	0.000	Reject the null hypothesis
5.	Similar ranks were given to the self-esteem needs by the head of the households engaged in different occupations	Independent samples Kruskal-Wallis Test	19.959	0.003	Reject the null hypothesis

**Note:** Asymptotic Significances are displayed; Significance Level is 0.05; N= 398 and Degrees of freedom is 1; Test Statistics are adjusted for ties

The results of the test indicate that the ranks given to all the needs were different as therefore the null hypothesis cannot be accepted. Pair wise comparisons indicate that the ranks given to the basic needs by the Labourers and businessmen as well as by the farmers and businessmen also differed significantly. The ranks given to the safety needs by the ones who had retired differed significantly with the businessmen, Labourers and farmers.

The ranks given by the farmers to the love/family needs differed significantly from the ranks given by the ones engaged in Government jobs and those who had retired. Further the ranks given by the ones retired differed significantly from the ones who were engaged in farming, the ones doing labour work as well as with housewives. Similarly, the ranks given by the ones engaged in government job differed significantly than the farmers and Labourers. The units having a head employed in a private job had significantly different ranks than the ones engaged as Labourers.

The ranks given to the self-esteem needs by the ones engaged in business and those employed as farmers differed significantly.

Overall, it can be concluded that the null hypothesis cannot be accepted for all the needs as the ranks given by the units having a head engaged in various occupations are different.

**FINDINGS OF THE STUDY**

The following are the major findings of the study:

1. Age group of the head of the household, the district, family type and residence of the household had no influence on the ranks given by the household while the area and occupation of the head of the household had an influence on the ranks given by the household to the basic needs.
2. Age, family type, residence type and education of the head of the household had no influence on the ranks given by the household to safety needs while district, area and the occupation of the head of the household influenced the ranks given by the household to the safety needs.
3. The ranks given by the heads of the household to love/family needs were influenced by the age of the head of the household, district, area, family type, education of the head and the occupation of the head while the residence type had no influence on the ranks given by the household.
4. Ranks given to Retirement needs were influenced by the age of the head of the household, district, area, education of the head and occupation of the head. Family and residence type had no influence on the ranks given by the household to family type and the residence type of the household.
5. Ranks given to Self-esteem needs was influenced by the district, area, family type and occupation of the head of the household. Age of the head, residence type and education of the household had no influence on the ranks given to self-esteem needs.

**CONCLUSION**

Behind any activity that a human being performs, there are some reasons for which they undertake those activities. Saving money is also no different than that. Maslow’s Need Hierarchy theory suggested that the needs of the individual are divided into five different categories. tries to identify if the households in North Gujarat Region have similar motives to save or not.

The first objective of the study was to understand the reasons for which the households save. In the present study fifteen reasons for which the households save were identified. The reasons which were identified include saving for reserve for unforeseen situations, for having a reserve for unforeseen situations, for earning

interest and appreciation, for sustaining even when there is gradual increase in cost of living, for having independence regarding financial decisions, for undertaking speculation, for investing in business, to leave something as heirloom, to fulfill the desire to save money, for the education of their children, for the marriage of their children, for purchasing a house, for purchasing other consumer durables, for making down payments and for clearing debts.

The second objective of the study was to find out if the reason for saving are same across all the household under the study. Age group of the head of the household, the district, family type and residence of the household had no influence on the ranks given by the household while the area and occupation of the head of the household had an influence on the ranks given by the household to the basic needs.

Age, family type, residence type and education of the head of the household had no influence on the ranks given by the household to safety needs while district, area and the occupation of the head of the household influenced the ranks given by the household to the safety needs.

The ranks given by the heads of the household to love/family needs were influenced by the age of the head of the household, district, area, family type, education of the head and the occupation of the head while the residence type had no influence on the ranks given by the household.

Ranks given to Retirement needs were influenced by the age of the head of the household, district, area, education of the head and occupation of the head. Family and residence type had no influence on the ranks given by the household to family type and the residence type of the household.

Ranks given to Self esteem needs were influenced by the district, area, family type and occupation of the head of the household. Age of the head, residence type and education of the household had no influence on the ranks given to self esteem needs.

Overall, it can be said that area and the occupation of the head of the household had a significant influence on the ranks given by the household while residence type had no influence on the ranks given by the household.

### LIMITATIONS OF THE STUDY

1. This study is based on the primary data collected. As a result, all the limitations of the primary data are present in this study.
2. The responses were collected only from North Gujarat Region.
3. For testing if the ranks are same, a non-parametric test was used.

### REFERENCES

1. Amu, M.E.K. and Amu, E.K., 2012. Savings behavior in Ghana: A study of rural households in the ho municipality of Volta region. *Online Journal of Social Sciences Research*, 1(2), pp.54-61.
2. Digal, S.S.K. and Chakraborty, S., 2012. A study on saving and investment behaviour of individual households—An empirical evidence from Orissa. *The International Journal's-Research Journal of Economics & Business Studies*, ISSN, pp.2251-5.
3. Euwals, R., Eymann, A. and Börsch-Supan, A., 2004. Who determines household savings for old age? Evidence from Dutch panel data. *Journal of Economic Psychology*, 25(2), pp.195-211.
4. Fisher, P.J. and Montalto, C.P., 2010. Effect of saving motives and horizon on saving behaviors. *Journal of Economic Psychology*, 31(1), pp.92-105.
5. Ghosh, R. and Pain, A.K., 2005. What Determines Household Savings in India?.
6. Keynes, J.M., 2018. *The general theory of employment, interest, and money*. Atlantic Publishers & Dist.
7. Kwack, S.Y. and Lee, Y.S., 2005. What determines saving rates in Korea?: The role of demography. *Journal of Asian Economics*, 16(5), pp.861-873.
8. Lee, J.M. and Hanna, S.D., 2015. Savings goals and saving behavior from a perspective of Maslow's hierarchy of needs. *Journal of Financial Counseling and Planning*, 26(2), pp.129-147.
9. Lewis, S. and Messy, F.A., 2012. Financial Education, Savings and Investments. *OECD Working Papers on Finance, Insurance and Private Pensions*, (22), 1.
10. Maslow, A.H., 1943. A theory of human motivation. *Psychological review*, 50(4), p.370.
11. Nasir, S., Khalid, M. and Mahmood, A., 2004. Saving-investment behaviour in Pakistan: An empirical investigation [with Comments]. *The Pakistan Development Review*, pp.665-682.

**IMPACT OF DOMESTIC CURRENCY (INR) DEVALUATION ON EXPORTS OF INDIA  
(A STUDY FOR THE PERIOD OF 2000-2017)**

**ESMATULLAH MOHAMMADY  
MBA (FINANCE AND INTERNATIONAL BUSINESS) STUDENT  
UNIVERSITY SCHOOL OF BUSINESS  
CHANDIGARH UNIVERSITY  
MOHALI**

**ABSTRACT**

*This paper is concerned with foreign trade of India in which impact of currency devaluation on export has been studied. Currency devaluation is a measure for promotion of foreign trade in respect of exports. For this, 18 years of data related to exports and USD/INR exchange rate has been collected for financial years of 2000 to 2017. Statistical methods which are applied are Co-efficient of Correlation and Co-efficient of Determination to know the impact of devaluation on exports promotion of India. In this research paper it has been found that a positive correlation is there between exports of India and Rupee devaluation. It shows that nearly 46.9% increase in exports is associated with currency devaluation.*

**KEYWORDS**

foreign trade, currency devaluation, exchange rate, exports.

**JEL CODE**

F31

**1. INTRODUCTION**

In 1973 Bretton Woods International Monetary System collapsed and this put an end to the era of fixed exchange rate regime. Since then most of the countries has started to follow floating exchange rate regimes which brought about advancement in economy but also increased the risk of international trade due to increased volatility in exchange rates.

The Republic of India follows managed floating exchange rate regime, Supply and demand in the market determine the value of INR against other currencies and not by Reserve Bank of India (Central Bank of India) or any other government institution. However sometimes RBI does intervene in the market and that also depends on the situation of Rupee in market. If RBI feels that Rupee is overvalued or undervalued, then using different tools it tries to stabilize the Rupee value against other currencies specifically USD.

Exchange rate fluctuations in the market has a significant impact on the total well being of an economy. Mild and slow fluctuations are said to be healthy while rapid and significant fluctuations can have devastating impact on the trade and general economy. Exchange rate fluctuations can increase or decrease the volume of trade between nations. A developed nation such as Japan which has an export oriented economy can get effected by the fluctuations of exchange rate. In case of a rise in value of Yen against US \$ in the market, export volume of Japan to the United States of America can significantly decline, because now that the Yen is stronger, goods and services from Japan gets more expensive and demands for imported goods and services from Japan decline. This is why central Bank of Japan tries to keep Yen weaker against US \$ and other major currencies in the market.

India has an open economy where prices are determined by supply and demand in the market and it is not intact from positive and negative impacts of exchange rate fluctuations. Definitely fluctuation of INR value against other currencies specially US \$ in the market can have certain impacts on the well being of Indian economy.

USD/INR exchange rate can impact on export and import prices. In case of Rupee devaluation against USD, manufactured goods in India become cheaper for foreigners. It is because of increase in purchasing power of foreign buyers who have US \$ and so they can purchase more Rupees with their dollars to pay for Indian goods and services. In case of appreciation the opposite situation may arise.

**2. THEORETICAL BACKGROUND AND LITERATURE REVIEW**

Exchange rate fluctuations can make goods and services cheap or expensive for countries involved in international trade and also it increases uncertainties in international trade. Volatility of domestic exchange rate for a country can decrease the total volume of exports due to the uncertainties and higher risks associated. Elahi, Salimi & Masoomzadeh (2015), have concluded that fluctuations in exchange rates have an important role in a nation's economy. Devaluation of national currency which is due to increasing exchange rate can increase competitiveness of a country in international market and promote its exports and effect its trade balance positively (More exports means less trade deficit). If promotion of export is not attained this will rise prices and cause inflation. So, for developing nations, it is of high priority to have more attention toward stabilizing exchange rates through formulation of sound and comprehensive fiscal policies and monetary policies.

Srinivasan & Kalaivani (2012) found out that higher volatility and fluctuations in exchange rates can decrease Indian exports to other countries. And also the real exchange rates in long run has a significant positive effect on real exports, which indicates that devaluation of national currency can be an effective tool in long run for promotion of exports in India. However, in short run the effect of exchange rates are negative.

Sandu & Ghiba (2011) results shows that in Romania the exchange rate had little impact on volume of exports. The devaluation of Leu in Romania resulted a decrease in domestic exports.

Hussain, Hussain & Hussain (2015), found that there is a negative relationship between exchange rate volatility and real export growth in Pakistan. With increase in exchange rate volatility the real export growth decreases and exchange rate volatility resulted in variability in Pakistan's export.

Zukarnain (2013), Concluded that fluctuations in exchange rate has a profound impact over the total volume of exports from Malaysia to the United States of America and Japan. But this impact differs, where in case of Japan there is a positive impact; while in case of the USA the impact is more negative. This indicates that exchange rate volatility of USD and Ringgit can decrease volume of exports to USA. While an increase in exchange rate volatility between Ringgit and Yen leads to an increase in volume of exports from Malaysia to Japan.

Satawatananon (2014), Has concluded that the bilateral exchange volatility between The United States and Thailand has short run significant impact on 27 American imports and 87 American exports. However, the exchange rate volatility impact is not significant in the long run, since only 29 exporting industries and 10 importing industries are significantly impacted by the exchange rate volatility.

Senadza & Diaba (2018), have studied the impacts of exchange rate fluctuations on imports & exports of around 11 Sub Saharan countries where floating exchange rate regime has been adopted. The study has concluded that there isn't any significant effect of exchange rate fluctuations on imports of these nations. With respect to exports, it found that volatility in short run has a negative effect on exports but positive effects in long run.

Simakova (2014), studied the relationship between volatility of Koruna and foreign trade of Czech Republic and did not find any relationship between these two. So this study indicates that for bringing any improvement in trade balance, influencing exchange rate development is not the solution. Therefore, Czech Republic's foreign trade is not effected by the development of exchange rate but effected by some other factors.

**3. DATA COLLECTION AND RESEARCH METHODOLOGY**

The “Co-efficient of Correlation” or “Correlation Co-efficient” is a statistical tool which is used to find out the relationship between two variables, namely dependent variable and independent variable. The Co-efficient of Correlation is shown with abbreviation of (r) and it has a range of (+1) to (-1). If the Co-efficient of Correlation (r) indicating a negative value such as (-0.85), it means that there is a strong inverse relationship between dependent and independent variables which means an increase in independent variable will result in a decrease in another variable which is dependent (Variables move in opposite directions). And if the (r) value is a positive number such as (+0.85), it indicates a strong relationship between the two variables where if one variable increases (Independent Variable), the other variable (Dependent Variable) will also increase (Both Variables move in same direction).

A Correlation Co-efficient of +0.85 or -0.85 shows a strong correlation between variables (Dependent and independent Variables). But when Correlation Co-efficient value is (-0.2) or (+0.2) then it shows a weak relationship between variables and when the (r) value is equal to (0) then correlation is absent between independent and dependent variable.

After squaring the (r) value the result will be the Co-efficient of Determination. This indicates that when (r) of +0.85 or -0.85 is squared it will result in Co-efficient of Determination with a value of 0.72 or 72% which means that 72% of the change in dependent variable is related with the change in independent variable. A Co-efficient Correlation of +0.2 or -0.2 shows that 4% (0.2<sup>2</sup>) change in dependent variable is associated with change in independent variable.

In this paper we use Co-efficient of Correlation and Co-efficient of Determination as tools to find out the relationship between USD/INR exchange rate and Indian export and to understand the degree of dependency between these two variables. In this paper IBM SPSS software is used for calculation of Co-efficient of Correlation.

The data in this paper are mostly secondary data (Secondary data are those data which are already have been collected by some other individuals or institutions and are accessible for researchers and general public. Secondary data is different from primary data where the data is collected from its source directly. Sources of secondary data includes libraries, journals, reports published by public and private sector entities, information available on internet and etc., such as the data published by Reserve Bank of India, Ministry of Commerce, DGFT, World Bank Group Data Bank, OECD reports etc.

In this paper we have collected our data from journals and reliable websites. Data related to exchange rates are collected through OECD (Organization for Economic Cooperation and Development) website and exports related data are collected from world bank group online data bank. The data has been chosen with great care in order to give us an exact and reliable result.

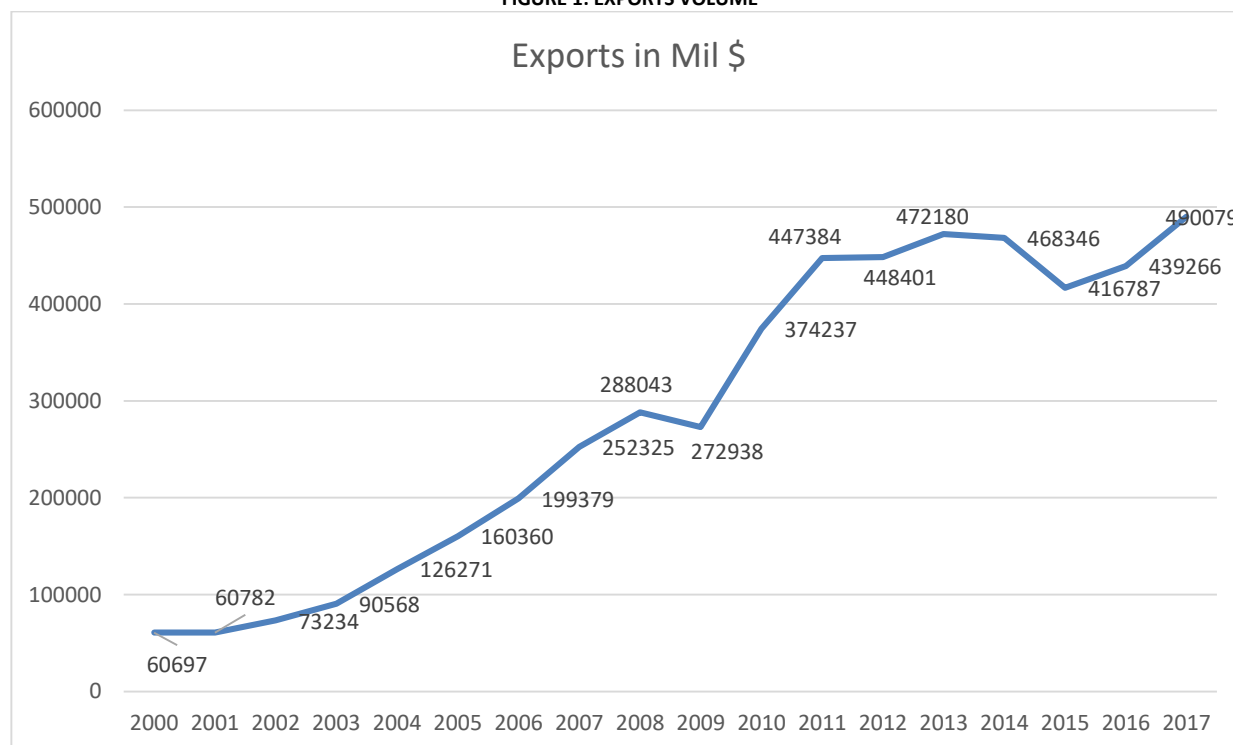
**4. DATA ANALYSIS**

Exchange rate fluctuations can effect foreign trade in positive and negative ways. An increase in the value of Indian Rupee means that goods and services produced in India are more expensive and in case of Rupee devaluation, goods and services produced in India become cheaper for foreign buyers (Importers). In this paper we will find out if Rupee devaluation has any significant relationship with exports.

In the 1965 Ministry of Commerce of the government of India established “Federation of Indian Export Organizations” in order to promote India’s trade with other nations. Now India is among top 10 exporter nations in the world. India’s export has seen a major growth in last few years.

Following chart shows India’s Exports during last 18 years (2000-2017):

**FIGURE 1: EXPORTS VOLUME**



**Note.** Data for Exports of India from World Bank Data bank (2018)

Through figure 1 it is quite clear that Indian export volume is very volatile. India’s exports from 2000 till 2008 have an increasing upward trend and in 2008 when financial crisis originated from USA, hit the world economy it also effected Indian economy in negative manner. Indian exports show a decline in the year 2008-2009 and then again starts growing upwardly up to 2013 and again starts declining for 2 subsequent years and then again starts growing. To find out relationship between exports and Rupee’s value fluctuations we need to compare both variables. Table 1 shows average USD/INR exchange rate and Indian Export volume for last 18 years (2000-2017):



TABLE 1: USD/INR EXCHANGE RATE &amp; EXPORTS IN MILLION USD

Year	USD/INR Exchange Rate	Exports in MIL USD
2000	44.94	60697
2001	47.19	60782
2002	48.61	73234
2003	46.58	90568
2004	45.32	126271
2005	44.10	160360
2006	45.31	199379
2007	41.35	252325
2008	43.51	288043
2009	48.41	272938
2010	45.73	374237
2011	46.67	447384
2012	53.44	448401
2013	58.60	472180
2014	61.03	468346
2015	64.15	416787
2016	67.20	439266
2017	65.12	490079

**Note.** Data for Exports of India from World Bank Data bank (2018), Data for Exchange Rates from OECD Indicators (2018)

Using table 1 data we find out relationship between USD/INR exchange rate and exports 18 years by calculating "Co-Efficient of Correlation". To calculate Co-efficient of Correlation IBM SPSS software has been used.

TABLE 2: CO-EFFICIENT OF CORRELATION

Correlations			
		Exports	ExchangeRate
Exports	Pearson Correlation	1	.685**
	Sig. (2-tailed)		.002
	N	18	18
ExchangeRate	Pearson Correlation	.685**	1
	Sig. (2-tailed)	.002	
	N	18	18

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

In table 2, Co-efficient of correlation between Exports and Exchange Rate fluctuations ( $r = +0.685$ ) on  $n=18$  observations indicates highly positive correlation between the two variables. To find out the "Co-efficient of Determination" we square the  $r$  value:

$$r^2 = +0.685^2$$

$$r^2 = 0.469 \text{ or } 46.9\%$$

So a "Co-efficient Correlation" of  $r = +0.685$  will lead to a "Co-efficient of Determination" of (0.469) or (46.9%). This shows us that 46.9% change in exports is associated with the change in USD/INR exchange rate.

## 5. CONCLUSION AND DISCUSSION

This paper empirically examines the relationship between USD/INR exchange rate fluctuations and exports in India. We calculated "Co-efficient of Correlation" value and "Co-efficient of Determination" to find out the relationship between these two variables. Our findings indicate a significant high positive correlation between currency (INR) devaluation and exports of India. If value of USD increases against Indian Rupee (Devaluation of Rupee), demand for Indian goods and services increases because goods and services produced in India become cheaper and attractive for foreign buyers (Importers) and in case of Rupee appreciates, goods and services become unattractive or expensive so demand for Indian goods and services fall. So it is very important to keep Indian Rupee (INR) value low against US \$ and other major currencies in order to boost and promote exports and decrease trade deficit.

There is also a High volatility and fluctuations in USD/INR exchange rate that can impact foreign trade in a negative manner and discourage demand for goods and services produced in India due to the uncertainty of exchange rate so it is also very crucial for India to stabilize a lower Rupee value against other major currencies such as USD and avoid high volatility.

## REFERENCES

- Accounting Coach, terminologies 2018, Co-efficient of Determination, <https://www.accountingcoach.com/blog/what-is-the-coefficient-of-determination>. Accessed on September 2018
- Elahi, Salimi & Masoomzadeh (2016) "Investigating asymmetric effects of monetary shocks on the exchange rate and trade balance, with an emphasis on inflation targeting" *Procedia Economics and Finance* 36(2016), pp.165-176
- Hussain, Hussain & Hussain (2015) "Exchange rate volatility during different exchange rate regimes and its relationship with exports of Pakistan" *ISSRA Paper* (2015), pp. 75-96
- OECD. Indicators, Exchange Rate, 2018, <https://data.oecd.org/conversion/exchange-rates.html>. Accessed on September 2018
- Reserve Bank of India, Publications 2015, <https://rbi.org.in/scripts/PublicationsView.aspx?id=16589>. Accessed on September 2018
- Sandu & Ghiba (2011) "The relationship between exchange rate and exports in Romania using a vector autoregressive model" *Annale Universitatis Apulensis Series Oeconomica* 13(2), 2011, pp. 476-482
- Satawatananon (2014) "The effects of exchange rate volatility on commodity trade flows between the US. And Thailand" *UWM Digital Commons* (2014)
- Senadza & Diaba (2017) "Effects of exchange rate volatility on trade in Sub-Saharan Africa" *Journal of African Trade* 4 (2017), pp. 20-36
- Simakova (2014) "The impact of exchange rate development on Czech trade flows" *Procedia Economics and Finance* 15(2014), pp. 129-136
- Srinivasan & Kalaivani (2012) "Exchange rate volatility and export growth in India: An empirical investigation" *MPRA Paper No.43828* (2013)
- World Bank Group, Data Bank, 2018, <https://data.worldbank.org/indicator/NE.EXP.GNFS.KD.ZG?end=2017&start=2000>. Accessed on September 2018
- World Bank Group, Indicators 2018, Exports of goods and services (Annual % growth), <https://data.worldbank.org/indicator/NE.EXP.GNFS.KD.ZG>. Accessed on September 2018
- Zakarnain (2013) "The relationship between export and exchange rate volatility: Empirical evidence based on the trade between Malaysia and its major trading partners" *Journal of emerging issues in economics, finance and banking* 2(2013), pp.668-684

## **REQUEST FOR FEEDBACK**

**Dear Readers**

At the very outset, International Journal of Research in Computer Application & Management (IJRCM) acknowledges & appreciates your efforts in showing interest in our present issue under your kind perusal.

I would like to request you to supply your critical comments and suggestions about the material published in this issue, as well as on the journal as a whole, on our e-mail [infoijrcm@gmail.com](mailto:infoijrcm@gmail.com) for further improvements in the interest of research.

If you have any queries, please feel free to contact us on our e-mail [infoijrcm@gmail.com](mailto:infoijrcm@gmail.com).

I am sure that your feedback and deliberations would make future issues better – a result of our joint effort.

Looking forward to an appropriate consideration.

With sincere regards

Thanking you profoundly

**Academically yours**

Sd/-

**Co-ordinator**

## **DISCLAIMER**

The information and opinions presented in the Journal reflect the views of the authors and not of the Journal or its Editorial Board or the Publishers/Editors. Publication does not constitute endorsement by the journal. Neither the Journal nor its publishers/Editors/Editorial Board nor anyone else involved in creating, producing or delivering the journal or the materials contained therein, assumes any liability or responsibility for the accuracy, completeness, or usefulness of any information provided in the journal, nor shall they be liable for any direct, indirect, incidental, special, consequential or punitive damages arising out of the use of information/material contained in the journal. The journal, neither its publishers/Editors/ Editorial Board, nor any other party involved in the preparation of material contained in the journal represents or warrants that the information contained herein is in every respect accurate or complete, and they are not responsible for any errors or omissions or for the results obtained from the use of such material. Readers are encouraged to confirm the information contained herein with other sources. The responsibility of the contents and the opinions expressed in this journal are exclusively of the author (s) concerned.

## ABOUT THE JOURNAL

In this age of Commerce, Economics, Computer, I.T. & Management and cut throat competition, a group of intellectuals felt the need to have some platform, where young and budding managers and academicians could express their views and discuss the problems among their peers. This journal was conceived with this noble intention in view. This journal has been introduced to give an opportunity for expressing refined and innovative ideas in this field. It is our humble endeavour to provide a springboard to the upcoming specialists and give a chance to know about the latest in the sphere of research and knowledge. We have taken a small step and we hope that with the active co-operation of like-minded scholars, we shall be able to serve the society with our humble efforts.

## *Our Other Journals*

