

# INTERNATIONAL JOURNAL OF RESEARCH IN COMMERCE, IT & MANAGEMENT

I  
J  
R  
C  
M



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

*Indexed & Listed at:*

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

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

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

Circulated all over the world & Google has verified that scholars of more than 5555 Cities in 190 countries/territories are visiting our journal on regular basis.

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

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

# CONTENTS

Sr. No.	TITLE & NAME OF THE AUTHOR (S)	Page No.
1.	COMPREHENDING AND IMPLEMENTING BEST PRACTICES OF QUALITY MANAGEMENT ACROSS INDUSTRIES <i>BALAJI GOPALAN &amp; DR. REVATHI IYER</i>	1
2.	INVENTIVE USE OF INFORMATION AND COMMUNICATION TECHNOLOGY IN THE OPEN AND DISTANCE LEARNING SYSTEM: AN EMPIRICAL STUDY <i>B. RUPINI</i>	6
3.	A STUDY ON PROBLEM FACED BY VEGETABLE PRODUCING FARMERS IN NILIGIRI - DISTRICT <i>DR. S. NAMASIVAYAM &amp; K. ARTHI</i>	12
4.	STUDY ON CONSUMER BEHAVIOUR TOWARDS FROZEN FOOD IN JAMMU CITY OF J & K STATE <i>TAVLEEN KAUR, JYOTI KACHROO &amp; NAVEED HAMID</i>	16
5.	OPINION DIFFERENCE OF TEACHERS ON EXISTING PERFORMANCE APPRAISAL PRACTICES IN PRIVATE ENGINEERING INSTITUTIONS <i>CHANDRA MOHAN SINGH, DR. ASHOK CHANDRA &amp; DR. SANJAY SHARMA</i>	22
6.	COOPERATIVE INDUSTRIAL ESTATES: THE GOLDEN PLATFORM FOR SMALL SCALE INDUSTRIES <i>DR. ARVIND CHAUDHARI</i>	35
7.	ECONOMIC GROWTH, EDUCATION EXPENDITURE AND INCOME INEQUALITY IN INDIA <i>ANIRUDDHA KAYET &amp; DEBASISH MONDAL</i>	38
8.	LEADER MEMBER EXCHANGE QUALITY INFLUENCING COMMITMENT AND TRUST AMONG EMPLOYEES <i>OWAIS AHMED &amp; DR. MUSHTAQ AHMED SIDDIQI</i>	44
9.	EFFECTIVENESS OF TECHNOLOGY ENABLED LEARNING (TEL) IN LEARNING SCIENCE AT D.T.Ed. LEVEL <i>P. JAYANTHI NIRMALA &amp; DR. K. S. PREMILA</i>	47
10.	ROLE OF FIXED ASSETS MANAGEMENT <i>RAMESH VANKADOTH</i>	50
11.	A REVIEW OF LITERATURE ON THE INTER-LINKAGES OF STOCK MARKET DEVELOPMENT WITH ECONOMIC GROWTH <i>TANUJ NANDAN &amp; NIVEDITA SRIVASTAVA</i>	52
12.	A STUDY ON EMPLOYEE ATTRITION AND RETENTION IN BPO SECTOR <i>DR. SHAMSHER SINGH &amp; RAVEENA RANA</i>	60
13.	A STUDY ON THE INFLUENCE OF ATTITUDINAL AND ENVIRONMENTAL FACTORS ON ENTREPRENEURIAL INTENTION <i>DR. JOHNEY JOHNSON &amp; DR. SONIA KATHERIN MATHEW</i>	64
14.	E-GOVERNANCE: A BOON OR BLISS TO SOCIETY: A RESEARCH <i>DR. SHALINI SRIVASTAV, DR. SUMIT AGARWAL &amp; DR. GARIMA BHARDWAJ</i>	68
15.	BREXIT-AN END IN ITSELF OR THE BEGINNING OF A NEW ERA <i>DEEPA SHARMA</i>	71
16.	ROLE OF BUYER CHARACTERISTICS IN ONLINE SHOPPING <i>DR. ADIL RASOOL</i>	79
17.	FOREIGN INSTITUTIONAL INVESTORS (FIIs) FLOWS AND VOLATILITY IN STOCK MARKETS OF INDIA DURING SUB-PRIME CRISIS AND POST FPI ACT <i>RAJNISH KLER</i>	87
18.	ASSESSMENT OF KNOWLEDGE LEVEL, NEED AND IMPACT OF ICTS AMONG FARMERS IN DIFFERENT ASPECTS OF AGRICULTURE AT TALERA BLOCK OF BUNDI DISTRICT IN RAJASTHAN <i>DR. SUSMIT JAIN &amp; NEERAJ KUMAR PRAJAPATI</i>	92
19.	ESSENTIAL FACTORS FOR TRAINING TRANSFER: A STUDY OF PHARMACEUTICAL REPRESENTATIVES IN LUCKNOW AREA <i>ANA RIZVI &amp; DR. SURENDRA KUMAR</i>	104
20.	EXPLORING PSYCHOLOGICAL CAPITAL IN INDIAN CONTEXT AMONG MSME ENTREPRENEURS <i>MARIA TRESITA PAUL V. &amp; DR. N. UMA DEVI</i>	108
21.	FRUIT PROCESSING INDUSTRY IN MURSHIDABAD DISTRICT OF WEST BENGAL - PRESENT STATUS AND FUTURE PROSPECTS <i>MADHAB KUMAR BISWAS &amp; DR. SUDIPTA SARKAR</i>	113
22.	A COMPARATIVE STUDY ON REPORTING OF MERGERS AND ACQUISITIONS ACTIVITIES UNDER IGAAP AND IND AS <i>NARAYAN KAFLE</i>	117
23.	CULTURAL INTELLIGENCE: AN INTEGRAL PART OF CROSS CULTURAL ORGANISATIONS <i>JASLEEN KAUR ANEJA, VAISHALI JOSHI &amp; PRIYANKA MARWA</i>	120
24.	BILATERAL RELATION BETWEEN INDIA AND THAILAND <i>DR. SHEETAL ARUN KHANDRE</i>	122
25.	AN EVALUATION OF THE STATUS OF HIGHER EDUCATION IN INDIA <i>DR. YOGESH H S &amp; DR. KIRAN S P</i>	127
26.	STOCK PERFORMANCE OF AMERICA'S LARGEST BANKS AFTER MERGERS & ACQUISITIONS <i>SAL VILLEGAS</i>	131
27.	CORPORATE SOCIAL RESPONSIBILITY (CSR) AND CUSTOMER'S PERSPECTIVE OF INDIAN BANKS <i>PUNEET KAUR</i>	139
28.	WIRELESS ROUTING PROTOCOLS AND ITS SECURITY ISSUES IN AD HOC NETWORK <i>NEHA CHUGH</i>	147
29.	POLICY SUPPORT TO AUGMENT THE AGRIBUSINESS POTENTIAL OF KARNATAKA <i>NAGARAJA K.</i>	150
30.	WORK-LIFE BALANCE: ITS CORRELATION WITH JOB SATISFACTION, LIFE SATISFACTION AND STRESS LEVEL AMONGST EXECUTIVES OF PUBLIC SECTOR BANKS IN PUNJAB <i>JASPREET KAUR</i>	154
	<b>REQUEST FOR FEEDBACK &amp; DISCLAIMER</b>	<b>160</b>

**CHIEF PATRON****Prof. (Dr.) K. K. AGGARWAL**

Chairman, Malaviya National Institute of Technology, Jaipur  
 (An institute of National Importance & fully funded by Ministry of Human Resource Development, Government of India)  
 Chancellor, K. R. Mangalam University, Gurgaon  
 Chancellor, Lingaya's University, Faridabad  
 Founder Vice-Chancellor (1998-2008), Guru Gobind Singh Indraprastha University, Delhi  
 Ex. Pro Vice-Chancellor, Guru Jambheshwar University, Hisar

**FOUNDER PATRON****Late Sh. RAM BHAJAN AGGARWAL**

Former State Minister for Home & Tourism, Government of Haryana  
 Former Vice-President, Dadri Education Society, Charkhi Dadri  
 Former President, Chinar Syntex Ltd. (Textile Mills), Bhiwani

**FORMER CO-ORDINATOR****Dr. S. GARG**

Faculty, Shree Ram Institute of Business & Management, Urjani

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

Principal (Retd.), Maharaja Agrasen College, Jagadhri

**EDITOR****Dr. R. K. SHARMA**

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

**CO-EDITOR****Dr. BHAVET**

Faculty, Shree Ram Institute of Engineering & Technology, Urjani

**EDITORIAL ADVISORY BOARD****Dr. S. P. TIWARI**

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

**Dr. CHRISTIAN EHIOBUCHÉ**

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 & Managerial Sciences, University of Guadalajara, Guadalajara, Mexico

**Dr. M. N. SHARMA**

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

**Dr. TEGUH WIDODO**

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

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

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

**Dr. CLIFFORD OBIYO OFURUM**

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

**Dr. KAUP MOHAMED**

Dean & 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. SYED TABASSUM SULTANA**

Principal, Matrusri Institute of Post Graduate Studies, Hyderabad

**Dr. NEPOMUCENO TIU**

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

**Dr. SANJIV MITTAL**

Professor &amp; Dean, University School of Management Studies, GGS Indraprastha University, Delhi

**Dr. ANA ŠTAMBUK**

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

**Dr. RAJENDER GUPTA**

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

**Dr. SHIB SHANKAR ROY**

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

**Dr. ANIL K. SAINI**

Professor, Guru Gobind Singh Indraprastha University, Delhi

**Dr. SRINIVAS MADISHETTI**

Professor, School of Business, Mzumbe University, Tanzania

**Dr. NAWAB ALI KHAN**

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

**MUDENDA COLLINS**

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

**Dr. EGWAKHE A. JOHNSON**

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

**Dr. A. SURYANARAYANA**

Professor, Department of Business Management, Osmania University, Hyderabad

**Dr. MURAT DARÇIN**

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

**Dr. ABHAY BANSAL**

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

**Dr. YOUNOS VAKIL ALROAIA**

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

**WILLIAM NKOMO**

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

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

Faculty in Economics, KPB Hinduja College of Commerce, Mumbai

**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**

Associate Professor, European University of Lefke, Lefke, Cyprus

**Dr. MOHENDER KUMAR GUPTA**

Associate Professor, Government College, Hodal

**Dr. BORIS MILOVIC**

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

**Dr. MOHAMMAD TALHA**

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

**Dr. V. SELVAM**

Associate Professor, SSL, VIT University, Vellore

**Dr. IQBAL THONSE HAWALDAR**

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

**Dr. PARDEEP AHLAWAT**

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

**Dr. ALEXANDER MOSESOV**

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

**Dr. ASHOK KUMAR CHAUHAN**

Reader, Department of Economics, Kurukshetra University, Kurukshetra

**YU-BING WANG**

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

**SURJEET SINGH**

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

**Dr. MELAKE TEWOLDE TECLEGHIOGIS**

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

**Dr. RAJESH MODI**

Faculty, Yanbu Industrial College, Kingdom of Saudi Arabia

**Dr. SAMBHAVNA**

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

**Dr. THAMPOE MANAGALESWARAN**

Faculty, Vavuniya Campus, University of Jaffna, Sri Lanka

**Dr. SHIVAKUMAR DEENE**

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

**SURAJ GAUDEL**

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

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

Advocate & Tax Adviser, Panchkula

**NEENA**

Investment Consultant, Chambaghat, Solan, Himachal Pradesh

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

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

**CHANDER BHUSHAN SHARMA**

Advocate & Consultant, District Courts, Yamunanagar at Jagadhri

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

## CALL FOR MANUSCRIPTS

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

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

## GUIDELINES FOR SUBMISSION OF MANUSCRIPT

### 1. **COVERING LETTER FOR SUBMISSION:**

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

#### **THE EDITOR**

IJRCM

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

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

#### **DEAR SIR/MADAM**

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

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

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

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

#### **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>



# A REVIEW OF LITERATURE ON THE INTER-LINKAGES OF STOCK MARKET DEVELOPMENT WITH ECONOMIC GROWTH

**TANUJ NANDAN**  
**ASSOCIATE PROFESSOR**  
**SCHOOL OF MANAGEMENT STUDIES**  
**MOTILAL NEHRU NATIONAL INSTITUTE OF TECHNOLOGY**  
**ALLAHABAD**

**NIVEDITA SRIVASTAVA**  
**RESEARCH SCHOLAR**  
**SCHOOL OF MANAGEMENT STUDIES**  
**MOTILAL NEHRU NATIONAL INSTITUTE OF TECHNOLOGY**  
**ALLAHABAD**

## ABSTRACT

*Stock markets play a pivotal role in the growth and development of an economy. With the continuous rise in stock market operations worldwide, it is impossible to imagine a world without stock markets. Over the past two decades, stock markets have seen significant growths in market capitalisation globally. The relationship between the development of stock markets and economic growth has been an issue of debate for long. There have been studies defining the relationships between financial development and economic growth, but empirical and theoretical evidence pertaining to the clearly defining the relationship between stock market and economic growth is still limited. Growth-finance controversy is confined only to the examination of relationship between financial development (represented by only banking sector development) and real economy. It ignored the role of stock market in economic growth and development process of the country. The present paper seeks to assess the relationship between stock market development and economic growth, summarising the study conducted based on theory as well as empirical work. The present study tries to include around 118 papers which have been taken from various referred journals and reports covering different economies and countries world over. 89 studies conclude that stock market development positively impacts and accelerates the process of economic development, while 29 studies claim that development of stock market has negative or no impact whatsoever on economic growth. Based on extensive literature review, variables for measuring stock market development and economic growth have also been identified. The study also highlights and classifies studies based on positive and negative impact of stock market development on economic growth.*

## KEYWORDS

economic growth, financial development, market capitalisation, stock market development

## 1. INTRODUCTION

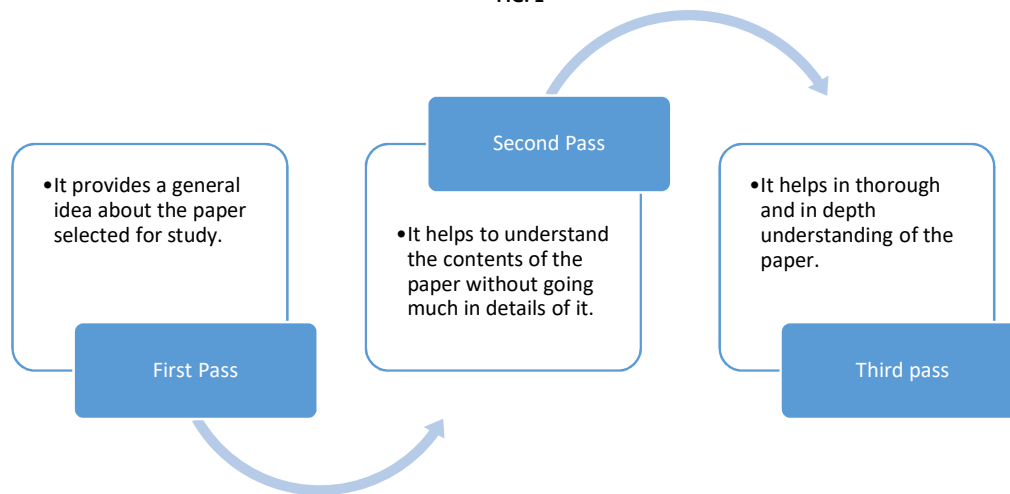
Stock market is an important ingredient of economic growth. It can be considered as a barometer to measure the economic growth of any country. In recent years decision makers and academicians have been inquisitive to assess the nature of relationship existing between economic growth and stock market, owing to dynamic and dramatic changes in stock market. Liua and Sinclair (2008). It has always been a debatable issue as to whether stock market can be used as a predictor of future economic growth or not. Some authors opine that considerable increase or decrease in stock market is indicative of future growth or recession in economic respectively. Mun.et.al. (2008). In another similar study conducted by Owusu and Odhiambo (2014) in Ghana using ARDL and Wald Statistics concluded that neither stock market developments nor capital account liberalisations have any positive effect on economic growth in long run. Matadeen and Seetana (2015) in their study using VECM found that stock markets play an important role in accelerating gains in economic growth in the long run in Mauritius but fail to significantly boost economic growth in short run. Masoud and Hardaker (2015) conducted a study on 42 emerging economies and suggested that stock market development has a significant impact on economic growth and also supported the fact that there exists a stable and long term equilibrium relationship between evolution of stock market and evolution of economy. Naik and Padhi (2015) on the basis of their study based on panel data of 27 emerging economies using Panel regression and Granger causality method concluded that stock market development has significant contribution in boosting economic growth and further added that there exists a unidirectional causality running from stock market to economic growth. The world recession due to the 1987 stock market crash and the 1997 Asian crisis raised doubts regarding the credibility of stock market to predict economic growth.

Similar studies in the past have emphasised primarily on contribution of financial development in promoting economic growth, neglecting role of stock market. As per Garcio and Liu (1989) causal relationship between financial development and economic growth exists along three lines firstly financial deepening stimulates economic growth; secondly economic growth promotes the development of the financial sector and finally a circular relationship that financial development and economic growth simultaneously affect each other. Patrick (1966) highlighted direction of causality between economic growth and financial development through supply leading and demand following hypotheses. The supply leading hypotheses results in intentional creation of financial services leading to growth in economy whereas demand following hypotheses stated demand for financial services increases because of growth in economy leading to financial development. In emerging economy like India, since the inception of stock market its role in economic growth has increased manifold. Academic interest in role and importance of stock market has increased considerably in the last decade as activities of stock market have a direct bearing on several other sectors of the economy. Stock markets have assumed increased importance in policy formulation and transmission. It therefore, becomes important to investigate the causal linkage between stock market development and economic growth. The present paper seeks to assess the kind of relationship that exists between stock market and economic growth as empirical research investigations about the causal relationship between stock market development and economic growth is limited and requires further assessment. The paper is basically divided into four sections. The first section deals with methods and materials used, followed by literature review, third section is about discussion and findings and finally last section talks about conclusion of the study.

## 2. METHODS AND MATERIALS USED

For conducting the present study, the three pass approach of literature review developed by Keshav has been followed. This methodology of doing literature review not only helps to save by eliminating unnecessary and inferior studies in the first two passes, but also helps in conducting a detailed analysis of potential studies in the third pass. The process of conducting the three pass approach can be diagrammatically as:

FIG. 1



Each pass has unique goals to accomplish and paves the path for the next pass. In the first pass it is decided whether we want to proceed with the paper by just having a bird's eye view of the paper. The title, abstract, introduction, headings of section and sub section and finally conclusions are read. After this, paper is analysed on the basis of category, context, correctness such as assumptions, clarity and finally the contributions made in the paper.

In the second pass attempt is made to summarise the paper by highlighting its key points in such a way that it can be explained to anyone using supporting evidence. The background of paper is analysed based on evidences and methods used. In this step the diagrams, graphs, figures and references are also carefully analysed. Finally, if it is found suitable, we proceed ahead with the third pass.

In the third pass an attempt is made to virtually recreate the paper by putting our self in the place of author. We take the same assumptions, question and challenge them and try to reconstruct the paper in our own way. At the end of this step we should be able to highlight the strong, weak and missing aspects of the selected paper in detail. So in order to conduct the three pass approach firstly five recent papers were selected. Then papers with repeated citations in bibliography and key papers and researchers in the area were identified to conduct the literature review. Finally, the websites and conferences where key researchers published their papers were also identified.

### 3. LITERATURE REVIEW

There have always been two crucial viewpoints that arise as a result of extensive research done to measure the impact of changes in stock market on economic activity. Firstly, are the current or changes in price of stock, a result of economic fundamentals or speculation bubbles? Secondly does development of stock market act as an important macroeconomic indicator for growth of economy? (Liua and Sinclair, 2008). Studies to assess relationship between development of stock market and economic growth through financial intermediation have shown ambiguous results. (Schumpeter, 1932 and McKinnon, 1973). On the basis of results of studies, the impact of stock market development on economic growth can be summarised as:

1. Positive impact of development of stock market on economic growth.
2. Negative impact on economic growth.
3. No impact of development of stock market on economic growth.

On basis of direction of causality between economic growth and stock market development, the results can be classified as

1. Unidirectional causality arising from stock market development to economic growth.
2. Unidirectional causality arising from economic growth towards development of stock market.
3. Bidirectional causality existing between stock market development and economic growth.

The relationship existing between growth and finance is primarily classified into four schools of thought. The first is supply leading hypotheses advocating that financial development leads to economic growth. Many theoretical and empirical studies conducted support the above fact. (Levine, 1991; Levine and Zervos, 1996; Demirguc Kunt and Levine, 1996; Levine and Zervos, 1998; Atje and Jovanovic, 1993; King and Levine, 1993b; Beck and Levine, 2004; Chakraborty and Ray, 2006). On the contrary, some researchers doubt the ability of financial markets in promoting growth of economy. The volatile and arbitrary nature of stock market, macroeconomic instability due to sudden economic shocks negatively impact economic growth. (Lucas, 1988 and Singh, 1998).

The second school of thought is demand following hypothesis. It says that demand for financial services increases as the economic growth of the country increases. In order to meet the increasing demand of financial services, new financial institutions emerge. Therefore, economic growth promotes stock market development. (Robinson, 1952; Patrick, 1966; Apergis et al. 2007 and Pradhan et al. 2013).

Third is a feedback hypothesis which combines features of both supply leading and demand following hypotheses. It believes financial development induces growth of economy which in turn accelerates the pace of financial development. (Greenwood and Smith, 1997; Demetriades and Hussein, 1996; Greenwood and Jovanovic, 1990).

Fourthly few studies even suggest of no causal relationship between development of stock market and economic growth. Further some researchers even opine of stock market negligible effect of development of stock market on economic growth. (Rioja and Valev, 2004; Naceur et al., 2008; Anwar and Sun, 2011; Mukhopadhyay et al., 2011; Seetanah et al., 2012; Rioja and Valev, 2014)

#### 3.1. POSITIVE IMPACT OF STOCK MARKET DEVELOPMENT ON ECONOMIC GROWTH

In his study conducted in Sub Saharan African countries (Spears, 1991) concluded that financial intermediation boosts economic growth only in the initial phase. Ikiikii & Nzomoi (2013) in their study on Kenya used VAR and Granger Causality test. The measures for development of stock market are market capitalisation and turnover ratio and GDP for growth of economy. They concluded stock market development is correlated positively to economic growth in Kenya.

Levine and Zervos (1996) in their study on a sample of 41 countries using time series regression considered variables like market capitalisation, turnover ratio, liquidity, GDP, secondary school enrolment, income level and political instability to empirically check the relationship existing between the two in long run. They also had similar view that stock market development positively impacts economic growth through various channels like acquisition of information about firms, corporate governance risk diversifications, liquidity and savings mobilization in long run.

Antonios (2010) conducted a study on Germany to find of a possible causal relationship between economic growth and stock market development for a period spanning from 1965 to 2007. He used Vector Error Correction Model taking Stock Market Index and GDP as variables concluded of a unidirectional causality existing between the two.

Jefferis & Okeahalam (2000) conducted a study on South Africa, Botswana and Zimbabwe based on quarterly data. Using Vector Error Correction Model and taking stock market index, consumer price index, GDP and interest rates concluded with a positive and long term relationship between GDP and stock market index.

Agrawalla and Tuteja (2007) used monthly data for period for 1990 to 2002 and considered market capitalisation, Index of industrial production, turnover ratio and bank credit to commercial sector as variables of a study conducted on India. They found of long run causality running from stock market development to

economic growth in India. As stock market becomes more sophisticated, it positively impacts economic growth. They also found bidirectional causality between banking development and economic growth. In the long run development of stock market induces development of banking sector.

Stock market has direct impact on economic growth through mobilisation of domestic and foreign savings and efficient productive investments by firms. (Berthelemy and Varoudakis, 1996; Mishkin, 2001; Gerald, 2006 and Shahbaz et al., 2008).

To understand linkage between development of stock market and economic growth, many theoretical and empirical studies have been undertaken contrary to the traditional views. In their study on Indian economy using Granger non causality test (Deb and Mukherjee, 2008) in their study on India have concluded of a bi-directional causality between real GDP growth rate and market capitalization ratio and also of a positive nexus between the two.

Adjasi and Biekpe (2005) in their study on 14 African countries used Generalised model of moments modelling approach. The variables considered by them were market capitalisation, turnover ratio, and value of shares traded, investment and GDP. They concluded of a positive and significant impact of stock market development on economic growth in upper middle economies. Jahfer and Inoue (2014) in their study on Japan using quarterly data from 1957-2001 and applying Vector error correction model concluded of equilibrium and long term relationship among financial development, development of stock market and economic growth. Further stock market development positively influences economic growth. The variables considered for study were GDP per capita, market capitalisation and money supply.

The studies conducted on various developed and developing countries show of a strong positive association between economic growth and financial development. (Spears, 1991; King and Levine, 1993; Atje and Jovanovic, 1993; Comincioli, 1996; Demirguc and Maksimovic, 1996). The neo classical economists had a view that due to inflow of funds from foreign countries, capital market liberalization will have a positive impact on economic growth. Due to market trade openness and access to larger markets, competition increases thus stimulating economic growth. (Bonfiglioli, 2005).

Bahadur G.C. and Neupane (2006) conducted a study on Nepal using Granger Causality test and taking market capitalisation, turnover ratio and GDP as variables concluded of a long term causality between development of stock market and economic growth, even in small economy like Nepal. Lina and Sinclair (2008) conducted a study on Greater China to study the association between stock prices and growth of the economy. Results showed that in short run causality flows one way from stock prices to economic growth whereas direction of causality is reversed in the long run, from growth to stock prices. Studies have emphasised on the fact that prices of stock reflect economic growth and other macroeconomic variables. (Ritter, 2004; Mauro, 2003; Cheung and Ng, 1998; Ferson and Harvey, 1993; Fama, 1990)

Hossain and Kamal (2010) conducted a study to test of existing causality between stock market development and economic growth in Bangladesh taking GDP per capita and market capitalisation as variables. By applying VECM they found of unidirectional causality from development of stock market to economic growth. To measure development of stock market (Beck et al., 1999) used size, activity and efficiency as three key indicators and found stock market development accelerates economic growth. Other researchers including (Bencivenga et al. 1995) believe that through efficient resource allocation the pace of economic growth can be accelerated.

Mishkin (2001) states that a well developed stock market attracts investment opportunities through implementation of productive projects which promotes economic growth, mobilises savings and also helps in diversification of risk and efficient allocation of capital. Amaral and Quintin (2007) stated that efficient stock market leads to economic growth through efficient and productive utilisation of capital.

Ahmad et al (2011) in their study on Pakistan and Bangladesh stock exchanges post liberalisation (1990) found that stock market development had positive impact on the economic growth of these countries. Further they found that market capitalisation had strong influence on Pakistan whereas liquidity and small size were responsible for influencing the economic growth positively in Bangladesh.

Demirguc-Kunt and Levine (1996) researched various features of stock markets contributing towards economic growth. They found that stock markets which are internationally diversified promote economic growth through risk diversification and channelizing investments towards productive uses. Ranjan and Zingales (1998) in their panel regression analysis performed on 24 countries and 36 industries concluded that externally financed industries flourish more in countries where the level of financial development is high.

The stock market generated liquidity resulting in capital generation, allocation and investment to firms. (Paudel, 2005). The domestic savings in the developing countries promotes economic growth through stock market. This has been well explained by the detailed literature review done by (Lean and Song, 2009) especially in context of developing countries. Greenwood and Smith (1997) opined large stock markets help to increase investment in productive technologies by decreasing the cost of mobilising savings. Beck and Levine (2003) and Rousseau and Wachtel (2000) state stock market development and real GDP per capita growth are highly correlated. They further concluded that stock market and banking development both contribute towards predicting economic growth but in different ways. There are various arguments which favour the fact that growth of equity market leads to growth of the economy. Firstly, a developed equity market promotes economic development through increase in domestic savings by lowering the cost of foreign capital and increase in liquidity. (Bencivenga et al, 1996 and Neusser and Kugler, 1998). Secondly, incentives given to managers for promoting investments of the firm through equity market also help in economic growth. (Dow and Gorton, 1997). Thirdly according to (Acemoglu and Zilibotti, 1997) developed equity market provides the opportunity to firms to diversify their portfolios and increase their productive efficiency. Lastly through generation of information regarding technology (Greenwood and Jovanovic, 1990) and entrepreneurs' innovative ability (King and Levine, 1993), developed equity markets aid in rapid economic growth.

Savings and efficient allocation of capital is encouraged through well developed stock market. The stock market provides altogether a different set of services than banking to provide a boost to growth and savings. (Levine and Zervos, 1996).

The traditional models have emphasised on nexus between prices of stock and economic growth. (Comincioli and Wesleyan, 1996) give the theoretical basis to support this nexus through traditional valuation models of stock prices and 'wealth effect. They emphasise that stock prices are reflective of people's expectations towards future economic activities. The wealth effect further suggests that variations in the real economy are due to changes in stock prices. In the lesser developed economies, the stock market helps in mobilising domestic savings which promote efficient capital allocation and economic growth. It is expected that stock market would accelerate economic growth by diversifying the risk of investors globally. They also promote wiser investment decisions by investors and force corporate managers to work in the interest of shareholders.

Benchivenga, Smith and Starr (1996) and Levine (1991) pointed out liquidity provided by stock exchanges increased the investments in new real estate in positively. Investors prefer to invest in common stocks due to their easy marketability which in turn motivates the corporate also to raise their funds through public. This ultimately leads to economic growth. Kyle (1984) and (Holmstrom and Tirole, 1998) stated that liquidity in stock markets help to increase the incentives for investors by providing information to them about firm and corporate governance.

Greenwood and Jovanovic (1990) and King and Levine (1993) stated that new stock exchange by providing information about the future growth prospects of the firm channelizes capital to investments with return, thereby increasing the productivity and economic growth.

North (1991) and Bencivenga and Smith (1992) said that by lowering the cost of exchanging ownership and holding assets physically leads to economic growth.

A well developed stock market helps to mobilise domestic savings by making available a wide variety of financial instruments to investors. These savings are efficiently allocated for productive uses thereby promoting economic growth at relatively less cost. (Dailami & Aktin, 1990). Stock market also reduces the risk due to lack of liquidity faced by investors. Investors can freely sell off their holdings whenever they face a liquidity crisis. The liquidity risk is considerably reduced due to the shared ownership. This helps in efficient allocation of capital to corporate through the stock markets.

Tachiwou (2009) studied the West African monetary Union to find the relationship between the development of stock market and economic growth. He concluded a positive and strong relationship exists between stock market development and economic growth. The demand stock market services are a derived demand and there should be efforts to promote productivity both in public and private sectors. He also found a unidirectional causality running from stock market to economic growth.

Deb and Mukherjee (2008) conducted a time series analysis in India using liquidity, volatility and volume of transactions as indicators of stock market. They concluded that there existed a bidirectional causality between market capitalisation and real GDP growth but unidirectional causality between real GDP growth

and stock market activity. They further added that liquidity in stock market if backed by a sound financial system would surely accelerate the process of economic growth.

Atje and Jovanovic (1993) found correlation between economic growth and stock market. They also identified factors like risk diversification, liquidity, acquisition of information and corporate governance, which have impact on the economic growth. Enisan and Olufisayo (2008) in their study on sub Saharan Africa countries found stock market development has significant influence on South Africa and Egypt. Nowbutsing and Odit (2009) conducted a time series analysis in Mauritius considering liquidity and size as stock market indicators GDP. A positive correlation between the stock market development and economic growth was found in short as well as long run.

Athapathu and Prabhath (2012) in their study based on time series data in Srilanka considered market capitalisation, all share Price Index, value of shares traded as variables for stock market development and GDP to measure economic growth and a positive correlation was seen between the two. Carp (2012) in his study based on annual data in Romania found that increase in real investment helps to promote economic growth, thereby affecting the stock market development indicators positively. He used turnover ratio, market capitalisation, value of shares traded for measuring stock market performance and growth of GDP for economic growth.

Kyle (1984) and Bamba (2001) in their respective studies found a positive correlation between stock market development and economic growth. Stock market boosts economic growth by providing alternative channels of investment to mobilise domestic savings. Saint-Paul (1992) found in his study that developed financial markets accelerate process of economic growth. They have a positive impact on the productivity and greater utilisation of resources thereby helping in growth of economy.

Beck and Levine (2004) conducted a study across 40 countries for examining effect of stock market and banks on economic growth. Using OLS panel regression analysis, considering market capitalisation, value of shares traded and liquidity as stock market indicators and GDP per capita as indicator of economic growth, found stock markets and banks help in promoting economic growth positively and also that the financial services provided by stock market are different from that of a bank.

Naik and Padhi (2015) in their study on 27 emerging economies used turnover ratio, market capitalisation and value of shares traded as stock market indicators and GDP as economic growth indicator. Using dynamic panel regression and granger causality concluded a positive and significant influence of stock market on economic growth. Ibrahim (2011) conducted a study in Thailand using VAR and considering capitalisation, aggregate price level, investment rate and GDP as variables for stock market development and economic growth respectively. He found a strong and long term relationship between the two. N'Zu'e (2006) found that stock markets help in creation of jobs directly and indirectly. For a well developed stock market good telecommunication systems, developed banks and financial institutions are important elements.

### 3.2. NEGATIVE IMPACT OF STOCK MARKET DEVELOPMENT ON ECONOMIC GROWTH

The traditional growth theorists denied of any correlation between stock market development and economic growth. Studies were unclear regarding direction of causality between financial sector development and economic growth. (Robinson, 1952 and Lucas, 1988). Some studies believe that the volatile nature of stock market often results in market failure and thus harming the economic development in developing countries. Stock market development does not have much impact on the economic growth.

Singh (1997) in his study argues that expansion in the activities of stock market prevents the growth of economic development rather than accelerating it. He further adds that high volatility and arbitrariness in prices of stock hinder efficient allocation of resources for investment. Further the prevailing economic conditions and unfavourable economic shocks cause macroeconomic instability hindering the process of long term growth. As a result, risk fearing investors and firms are discouraged to invest further thereby negatively affecting the economic growth. Akyuz (1993) in his paper concluded that financial deepening always does not lead to economic growth. According to him the markets do not channelize the resources only towards productive uses. Therefore, it leads to increase in speculation in the economy. He further adds that beyond a certain extent, financial deepening may have negative impact, thereby retarding the process of economic growth. Owusu and Odhiambo (2014) conducted a study in Ghana. For stock market development market capitalisation, stock market development index, value of shares traded and stock turnover were used as variables while real GDP per capita was chosen to measure economic growth. Using ARDL and Wald statistics, no positive effect of stock market development was found on economic growth in the long run. Ake and Ognaligui (2010) in their study based on time series data considered turnover ratio, value of shares traded, and stock market trade value as indicators of stock market and GDP for economic growth. Using Granger Causality test, he found that the Cameroon stock exchange in no way influences or affects its economic growth.

Sarkar (2006) in his study on India covering a period of over half a century took stock price Index, Wholesale price Index, GDP and gross fixed capital formation as variables for study. He concluded that there is no long term relationship existing between total gross capital formation expressed as percentage of GDP and share prices both in real and nominal terms. Nagaraj (1996) conducted a comprehensive empirical study in Indian context. The results of his study show that increase in the stock market activity is not correlated to either the increase in gross domestic savings or financial savings. He further added that post 1980s the corporate profitability declined and that the small firms which did not have access to stock market performed better than large firms having access to the stock market.

## 4. DISCUSSION AND FINDINGS

It is evident from extant literature review that several variables are used to measure stock market development. From literature review it is found that most commonly used variable for stock market development is stock market capitalisation. Stock market capitalisation is the total market value of all listed shares divided by GDP. (Demircuc-Kunt & Levine, 1996). The reason for choosing market capitalisation as a variable is that it has the ability to not only diversify risk but also mobilise capital positively. (Felix, 2006). Several authors like (Ikikii & Nzomoi, 2013; Levine and Zervos, 1996; Agrawalla and Tuteja, 2007; Adjasi and Biekpe, 2005; Jahfer and Inoue, 2014; Bahadur G.C. and Neupane, 2006; Hossain and Kamal, 2010; Ahmad et al, 2011; Nowbutsing and Odit, 2009; Athapathu and Prabhath, 2008; Carp, 2012 and Beck and Levine, 2004) have used this as an indicator of market capitalisation or size.

The second major variable considered in the study is liquidity to measure the development to stock market. Liquidity can be defined as the speed and ease with which investors can buy and sell securities. (Levine and Zervos, 1996). Liquidity is strongly correlated with development of stock market. (Agrawalla and Tuteja, 2007). It can be measured in two ways.

- Total value of shares traded- As per (Ahmad et al, 2011) it is the total number of shares traded in stock market multiplied by their respective prices. The justification for selecting it as a measure of liquidity is that it is representative of the size of the stock market transactions in relation to economy as a whole. (Cavenaile et al, 2014). It measures the organised trading of equities as share in the total national output and therefore represents the liquidity on an economy wide basis positively. (Bismal and Kamaiah, 2000)
- Turnover ratio. – It is arrived by dividing the total value of shares traded by market capitalisation (Athapathu and Prabhath, 2012). It represents the level of transaction costs and also used as an index to compare market liquidity. It measures the size of securities market in relation to the stock market (Ake and Ognaligui, 2010). High turnover ratio represents low transaction cost. Turnover ratio complements the total value of shares total value of shares traded represents the trading in relation to the size of economy whereas trading in relation to size of the stock market is represented by turnover. It is therefore possible that a small liquid market may have high turnover ratio but a small value of shares traded. So the turnover ratio is a better representative of liquidity of stock market as compared to total value of shares traded. (Bismal and Kamaiah, 2000)

Some of the authors who have used liquidity as a measure of stock market development are (Levine and Zervos, 1996; Agrawalla and Tuteja, 2007; Adjasi and Biekpe, 2005; Bahadur G.C. and Neupane, 2006; Ahmad et al, 2011; Paudel, 2005; Levine 1991; Benchivenga, Smith and Starr 1996; Kyle 1984; Holmstrom and Tirole, 1998; Deb and Mukherjee, 2008; Atje and Jovanovic, 1993; Nowbutsing and Odit, 2009; Athapathu and Prabhath, 2012; Carp 2012; Beck and Levine, 2004; Naik and Padhi, 2015). Holmstrom and Tirole (1993) and Kyle (1994) state that higher liquidity of stock market provides incentives to investors to get more information about firms. Benceivenga et al, (1995) and Levine (1991) state that liquidity in stock market motivates investor to invest in projects with term duration as they can easily sell off their investments if need arises even before maturity. This boosts the economic growth productively in the long term. However, Shleifer and Vishny (1986); and Bhide (1993) argue that increased liquidity reduces the incentives for investors as they have to bear the increased cost of paying portfolio managers.



Few authors have also used Stock Market Index as a variable for stock market development. (Liua and Sinclair, 2008 and Athapathu and Prabath, 2012). The stock market index represents listing of stocks and it is a statistic representing the composite value of its components. (Tetty, 2008). The justification for choosing this as an indicator of stock market development is that it represents stock market in better way than any other financial indices. It shows that the characteristics of all the component stocks have some commonality between them. (Tetty, 2008).

Volatility is another variable used by some of the researchers to measure the development of stock market. It is measured by fluctuations in the stock prices. The reason for considering it as a variable is that increasing volatility in the market discourages investors and firms to invest in the stock market. Few researchers like (Deb and Mukherjee, 2008; Singh, 1997) used volatility as an indicator for measuring stock market development. The increased liquidity causes volatility which prevents investment thereby reducing growth. The higher volatility increases the risk and causes upward pressure on prevailing interest rates. (DeLong et.al (1989) and Federer (1993)

For measuring the economic growth, the variable which is commonly used by most of the researchers is GDP. GDP growth rate is nothing but the annual growth in GDP at market prices which in turn is based on local currency. (Carp, 2012). The reason for considering GDP as an indicator of economic growth is that, the annual growth in standard of living of people of a country is measured by it. Few researchers who have used GDP as an indicator for economic growth are (Bahadur G.C. and Neupane, 2006; Jahfer and Inoue, 2014; Adjasi and Biekpe, 2005; Deb and Mukherjee, 2008; Jefferis & Okeahalam, 2000; Antonios, 2010; Liua and Sinclair, 2008; Rousseau and Wachtel, 2000; Beck and Levine, 2003; Atje and Jovanovic, 1993; Nowbusting and Odit, 2009; Athapathu and Prabath, 2012; Carp, 2012; Beck and Levine, 2004 and Naik and Padhi, 2015).

Some of the researchers have also used Index of Industrial Production as a measure of economic growth wherein the data of GDP was not available. (Gupta and Paramati, 2011; Laopodis, 2009; Hussainey and Ngoc, 2009; Ahmad 2008; Agrawalla and Tuteja 2007; Padhan, 2007; Dritsaki and Bargiota, 2005; Chen et al 2003) Out of 118 papers considered for the present study, to assess the relationship and causality between development of stock market and economic growth researchers have mostly employed Granger causality test. (Ikiki & Nzomoi, 2013; Ake and Ognaligui, 2010; Dritsaki and Bargiota, 2005; Athanasios and Antonios (2010); Filer et al., 2000; Ahmad, 2008; Bahadur G.C. and Neupane 2006; Lean and Song, 2009; Liua and Sinclair, 2008; Agrawalla and Tuteja, 2007; Hossain and Kamal, 2010; Carp, 2012; Felix, 2006; Naik and Padhi, 2015; Mun et al., 2008; Paramati and Gupta, 2011) The procedure for testing statistical causality between stock prices and the economy is the direct "Granger-causality" test proposed by C. J. Granger in 1969. According to Granger, X causes Y if the past values of X can be used to predict Y more accurately than simply using the past values of Y. In other words, if past values of X statistically improve the prediction of Y, then we can conclude that X "Granger-causes" Y. (Comoncioli, 1995).

The error correction mechanism (ECM) developed by Engle and Granger is a means of reconciling the short-run behavior of an economic variable with its long-run behavior. (Gujrati, 2009). If a certain pair of variables is co integrated, then the long-run relationship between such variables can be modelled using the error correction mechanism. (Atapathu and Prabath, 2012). Co integration means that despite being individually non stationary, a linear combination of two or more time series can be stationary. Economically speaking, two variables will be co integrated if they have a long-term, or equilibrium, relationship between them. (Gujrati, 2003). So study the long term or equilibrium relationship researchers have also used VECM and Co integration to test the nature of relationship. (Paramati and Gupta, 2011; Odhiambo, 2014; Matadeen and Seetanah, 2015; Lean and Song, 2009; Cavennaile et al., 2014; Nyasha and Odhiambo, 2014; Felix, 2006; Carp, 2012; Hossain and Kamal, 2010; Agrawalla and Tuteja, 2007; Liua and Sinclair, 2008; Lean and Song, 2009; Jahfer and Inoue, 2014; Jefferis & Okeahalam, 2000). Panel regression analysis have also been used by some of the researchers for finding the nature of relationship between stock market development and economic growth.

From the above literature it can be concluded that several studies have been conducted to study the causal nexus between financial development and economic growth. In India the contribution of stock market in the process of economic development has increased manifold, especially after the New Economic Policy of 1991. This has given rise to the debate as to whether development of stock market promotes economic growth or vice versa. Some studies conducted to study the causal relationship conclude stock market development has positive impact on economic growth while few studies conclude that stock market negatively impacts economic growth.

TABLE I: STUDIES ON IMPACT OF STOCK MARKET DEVELOPMENT ON ECONOMIC GROWTH

Impact of Stock market development on Economic growth	Literature Support
Stock Market development has a Positive Impact on economic growth.	Naik and Padhi (2015); Matadeen and Seetanah (2015); Cavennaile, Gengenbach and Palm (2014); Kagochi, Nasser and Kebede (2013); Uddin et al. (2013); Ikiki & Nzomoi (2013); Masoud and Hardaker (2012); Kim et al (2012); Ibrahim (2011); Ahmad et al (2011); Anyamele (2010); Aboudou (2009); Vazakidis and Adamopoulos (2009); Brasoveanu et al (2008); Deb and Mukherjee (2008); Amaral and Quintin (2007); Naceur (2007); Shahbaz (2007); Capasso (2006); Carporale, Howello and Soliman (2005); Dritsaki and Bargiota (2005); Paudel (2005); Blackburn et. al (2005); Mohtadi and Agarwal (2004); Beck and Levine (2004); Carlin and Mayer (2003); Calderon and Liu (2003); Creane et al (2003); Arestis et al. (2001); Rousseau and Wachtel (2000), Tsuru (2000); Rajan and Zingales (1998); Boyd and Smith (1998); Levine and Zervos (1998); Greenwood and Smith (1997); Bencivenga, Smith and Starr (1996); Levine and Zervos (1996); Fry (1995); Japillo and Pagano (1994); Atje and Jovanic (1994); King and Levine (1993); Greenwood and Jovanovic (1990); Gelb (1989); Boyd and Prescott (1986); Friedman and Schwartz (1963)
Stock Market development has a Negative Impact on economic growth.	Owusu and Odhiambo (2014); Ake and Ognaligui (2010); Halkos and Trigoni (2010); Sarkar (2007); He (2006); Ram (1999); Singh (1997); Fry (1997); Corbett and Jenkinson (1994); Stiglitz (1994); Jappeli and Pagano (1994); Bhide (1993); Bencivenga and Smith (1991); Lucas (1988); Mayer (1988); Shleifer and Vishny (1986); Pearce (1983); Stiglitz and Weiss (1981); McKinnon (1973); Shaw (1973)

5. CONCLUSION

There is still a lack of consensus among researchers regarding the impact of stock market development on economic growth of different countries. The majority of papers considered for study show a positive impact of development of stock market on economic growth. Gurley and Shaw (1955) opine that well developed stock markets promote capital accumulation thus improving financial capacity and efficiency of trade of investors thereby enhancing economic growth. The development of stock market results in creation of financial services and markets which induce investment and promote efficient allocation of resources thereby accelerating the process of economic growth. On the other hand, as the economy grows, there is an increased demand for financial services and institutions which in turn promote the development of financial markets including the stock markets. The review of literature also suggests a different view regarding the relationship between stock market development and economic growth. Some researchers argue that development of stock market has a negative or no affect whatsoever on the economic growth of the country. As Singh (1997) states that arbitrariness and high volatility in prices of stock in developing countries do not boost the long term economic growth as it prevents efficient allocation of resources. Moreover Morck et al (1990) believe that stock market development has a negative effect on economic growth as it promotes counterproductive corporate takeovers. Further excessive liquidity and volatility of stock market discourages investment and growth, thereby reducing the incentives available for investors. (DeLong et al. 1989)

As suggested by empirical literature, direction of causality between development of stock market and economic growth has not been clearly defined. The results vary depending on the methods applied, context and data used for the study. Results also differ on basis of time period considered and the country chosen. (Odhiambo, 2008). So further studies can be conducted to find the direction of causality between development of stock market and economic growth as it would be of great help to policymakers for decision making. Further the rapid increase in stock market capitalisation in emerging economies as compared to developed economies has garnered the attention of researchers and academia towards this relationship. El-Wassal (2005) states that stock market capitalisation have increased by over 32 times in emerging economies as compared to only 11 times in developed economies between periods of 1980-2000. With the rapid increase in the activities of stock market in last two decades, it is impossible to imagine a world without stock markets. Therefore, studies need to be conducted to study

the causal relationship between stock market and economic growth especially in emerging economies like India. The econometric evidence pertaining to the causality between the two is limited in India, so empirical studies can be conducted to study the same. (Agrawalla and Tuteja, 2007).

## REFERENCES

1. Acemoglu, D., & Zilibotti, F. (1997). Was Prometheus unbound by chance? Risk, diversification, and growth. *Journal of political economy*, 105(4), 709-751.
2. Adjasi, C. K. D., & Biekpe, B. N. (2005). Stock market returns and exchange rate dynamics in selected African countries: A bivariate analysis. *The African Finance Journal*, 2(6), 17-28.
3. Agarwal, S., & Mohtadi, H. (2004). Financial markets and the financing choice of firms: Evidence from developing countries. *Global Finance Journal*, 15(1), 57-70.
4. Agrawalla, R. K., & Tuteja, S. K. (2007). Causality between stock market development and economic growth: a case study of India. *Journal of Management Research*, 7(3), 158.
5. Ake, B., & Ognaligui, R. W. (2010). Financial stock market and economic growth in developing countries: The case of Douala Stock Exchange in Cameroon.
6. Akyüz, Y. (1993). Financial liberalization: the key issues (No. 56). UNCTAD.
7. Amaral, P. S., & Quintin, E. (2007). Financial Intermediation and Economic Development: A Quantitative Assessment, pmimeo. Southern Methodist University and Federal Reserve Bank of Dallas.
8. Anwar, S., & Sun, S. (2011). Financial development, foreign investment and economic growth in Malaysia. *Journal of Asian Economics*, 22(4), 335-342.
9. Anyamele, O. D. (2010). Foreign direct investment, exports, and education on economic growth in Sub-Saharan African. *International Research Journal of Finance and Economics*, 51(2), 66-78.
10. Apergis, N., Filippidis, I., & Economidou, C. (2007). Financial deepening and economic growth linkages: a panel data analysis. *Review of World Economics*, 143(1), 179-198.
11. Arestis, P., Demetriades, P. O., & Luintel, K. B. (2001). Financial development and economic growth: the role of stock markets. *Journal of money, credit and banking*, 16-41.
12. Athanasios, V., & Antonios, A. (2010). The effect of stock and credit market development on economic growth an empirical analysis for Italy. *International Research Journal of Finance and Economics*, 41(3), 33-42.
13. Athapathu, A. R., & Jayasinghe, P. (2012). Stock market performance and economic growth: the case of Sri Lanka.
14. Atje, R., & Jovanovic, B. (1993). Stock markets and development. *European Economic Review*, 37(2-3), 632-640.
15. Beck, T., & Levine, R. (2004). Stock markets, banks, and growth: Panel evidence. *Journal of Banking & Finance*, 28(3), 423-442.
16. Beck, T., Demirgüç-Kunt, A., & Levine, R. (2003). Law, endowments, and finance. *Journal of Financial Economics*, 70(2), 137-181.
17. Bencivenga, V. R., & Smith, B. D. (1991). Financial intermediation and endogenous growth. *The Review of Economic Studies*, 58(2), 195-209.
18. Bencivenga, V. R., Smith, B. D., & Starr, R. M. (1995). Transactions costs, technological choice, and endogenous growth. *Journal of economic theory*, 67(1), 153-177.
19. Bencivenga, V. R., Smith, B. D., & Starr, R. M. (1996). Equity markets, transactions costs, and capital accumulation: an illustration. *The World Bank Economic Review*, 10(2), 241-265.
20. Berthelemy, J. C., & Varoudakis, A. (1996). Economic growth, convergence clubs, and the role of financial development. *Oxford economic papers*, 48(2), 300-328.
21. Bhide, A. (1993). The hidden costs of stock market liquidity. *Journal of financial economics*, 34(1), 31-51.
22. Biswal, P. C., & Kamaiah, B. (2000). On stock market development, banks and economic growth in India.
23. Blackburn, K., Bose, N., & Capasso, S. (2005). Financial development, financing choice and economic growth. *Review of Development Economics*, 9(2), 135-149.
24. Bonfiglioli, A., & Favero, C. A. (2005). Explaining co-movements between stock markets: The case of US and Germany. *Journal of International Money and Finance*, 24(8), 1299-1316.
25. Boyd, J. H., & Prescott, E. C. (1986). Financial intermediary-coalitions. *Journal of Economic Theory*, 38(2), 211-232.
26. Boyd, J. H., & Smith, B. D. (1998). The evolution of debt and equity markets in economic development. *Economic Theory*, 12(3), 519-560
27. Brasoveanu, L. O., Dragota, V., Catarama, D., & Semenescu, A. (2008). Correlations between capital market development and economic growth: The case of Romania. *Journal of applied quantitative methods*, 3(1), 64-75.
28. Calderón, C., & Liu, L. (2003). The direction of causality between financial development and economic growth. *Journal of development economics*, 72(1), 321-334.
29. Caporale, G. M., Howells, P. G., & Soliman, A. M. (2004). Stock market development and economic growth: the causal linkage. *Journal of economic development*, 29(1), 33-50.
30. Carlin, W., & Mayer, C. (2003). Finance, investment, and growth. *Journal of financial Economics*, 69(1), 191-226.
31. Carp, L. (2012). Can stock market development boost economic growth? Empirical evidence from emerging markets in Central and Eastern Europe. *Procedia Economics and Finance*, 3, 438-444.
32. Cavenaile, L., Gengenbach, C., & Palm, F. (2014). Stock markets, banks and long run economic growth: a panel cointegration-based analysis. *De Economist*, 162(1), 19-40.
33. Chakraborty, S., & Ray, T. (2006). Bank-based versus market-based financial systems: A growth-theoretic analysis. *Journal of Monetary Economics*, 53(2), 329-350.
34. Cheung, Y. W., & Ng, L. K. (1998). International evidence on the stock market and aggregate economic activity. *Journal of empirical finance*, 5(3), 281-296.
35. Comincioli, B. (1996). The stock market as a leading indicator: An application of granger causality. *University Avenue Undergraduate Journal of Economics*, 1(1), 1.
36. Corbett, J., & Jenkinson, T. (1996). The financing of industry, 1970-1989: an international comparison. *Journal of the Japanese and international economies*, 10(1), 71-96.
37. Creane, S., Mobarak, A. M., & Sab, R. (2003). Financial development and growth in the Middle East and North Africa. International Monetary Fund.
38. Dailami, M., & Atkin, M. (1990). Stock markets in developing countries: key issues and a research agenda (Vol. 515). World Bank Publications.
39. Deb, S. G., & Mukherjee, J. (2008). Does stock market development cause economic growth? A time series analysis for Indian economy. *International Research Journal of Finance and Economics*, 21(3), 142-149.
40. Demetriades, P. O., & Luintel, K. B. (1996). Financial development, economic growth and banking sector controls: evidence from India. *The Economic Journal*, 359-374.
41. Demirgüç-Kunt, A. (1992). Developing country capital structures and emerging stock markets (Vol. 933). World Bank Publications.
42. Demirgüç-Kunt, A., & Levine, R. (1996). Stock markets, corporate finance, and economic growth: an overview. *The World Bank Economic Review*, 10(2), 223-239.
43. Demirgüç-Kunt, A., & Maksimovic, V. (1996). Stock market development and financing choices of firms. *The World Bank Economic Review*, 10(2), 341-369.
44. Dow, J., & Gorton, G. (1997). Stock market efficiency and economic efficiency: is there a connection?, *The Journal of Finance*, 52(3), 1087-1129.
45. Dritsaki, C., & Dritsaki-Bargiota, M. (2005). The causal relationship between stock, credit market and economic development: an empirical evidence for Greece. *Economic Change and Restructuring*, 38(1), 113-127.

46. Enisan, A. A., & Olufisayo, A. O. (2009). Stock market development and economic growth: Evidence from seven sub-Saharan African countries. *Journal of Economics and Business*, 61(2), 162-171.
47. Fama, E. F. (1990). Stock returns, expected returns, and real activity. *The Journal of Finance*, 45(4), 1089-1108.
48. Ferson, W. E., & Harvey, C. R. (1993). The risk and predictability of international equity returns. *Review of Financial Studies*, 6(3), 527-566.
49. Friedman, M., & Schwartz, A. (1963). A monetary history of the United States.
50. Fry, W. (1995). Money, Interest, and Banking in Economic Development. *Canadian Journal of Development Studies*, 16, 312-312.
51. Gelb, A. H. (1989). Financial policies, growth, and efficiency (Vol. 202). World Bank Publications.
52. Greenwood, J., & Jovanovic, B. (1990). Financial development, growth, and the distribution of income. *Journal of Political Economy*, 98(5, Part 1), 1076-1107.
53. Greenwood, J., & Smith, B. D. (1997). Financial markets in development, and the development of financial markets. *Journal of Economic Dynamics and Control*, 21(1), 145-181.
54. Gupta, R. & Paramati, S. (2011) An Empirical Analysis of Stock Market Performance and Economic Growth: Evidence from India, *International Research Journal of Finance and Economics*, 73, pp 133-149
55. Halkos, G. E., & Trigioli, M. K. (2010). Financial development and economic growth: evidence from the European Union. *Managerial Finance*, 36(11), 949-957.
56. He, L. T. (2006). Variations in effects of monetary policy on stock market returns in the past four decades. *Review of Financial Economics*, 15(4), 331-349.
57. Holmström, B., & Tirole, J. (1998). Private and public supply of liquidity. *Journal of Political Economy*, 106(1), 1-40.
58. Hossain, M. S., & Kamal, K. M. M. (2010). Does stock market development cause economic growth? A time series analysis for Bangladesh economy. In international conference on applied economics-ICOAE.
59. Hosseini, S. M., Ahmad, Z., & Lai, Y. W. (2011). The role of macroeconomic variables on stock market index in China and India. *International Journal of Economics and Finance*, 3(6), 233.
60. Hussainey, K., & Khanh Ngoc, L. (2009). The impact of macroeconomic indicators on Vietnamese stock prices. *The Journal of Risk Finance*, 10(4), 321-332.
61. Ibrahim, M. H. (2007). The Role of the Financial Sector in Economic Development: The Malaysian Case. *International Review of Economics*, 54, 463-483
62. Ikiki, S. M., & Nzomoi, J. N. (2013). An analysis of the effects of stock market development on economic growth in Kenya. *International Journal of Economics and Finance*, 5(11), 145.
63. Jahfer, A., & Inoue, T. (2014). Financial development, foreign direct investment and economic growth in Sri Lanka. *International Journal of Economic Policy in Emerging Economies*, 7(1), 77-93.
64. Jappelli, T., & Pagano, M. (1994). Saving, growth, and liquidity constraints. *The Quarterly Journal of Economics*, 109(1), 83-109.
65. Jefferis, K. R., & Okeahalam, C. C. (2000). The impact of economic fundamentals on stock markets in southern Africa. *Development Southern Africa*, 17(1), 23-51.
66. Kagochi, J. M., Al Nasser, O. M., & Kebede, E. (2013). Does financial development hold the key to economic growth? The case of sub-Saharan Africa. *The Journal of Developing Areas*, 47(2), 61-79.
67. Keshav, S. (2007). How to read a paper? *ACM SIGCOMM Computer Communication Review*, 37(3), 83-84.
68. King, R. G., & Levine, R. (1993). Finance, entrepreneurship and growth. *Journal of Monetary Economics*, 32(3), 513-542.
69. Kyereboah-Coleman, A., & Agyire-Tettey, K. F. (2008). Impact of macroeconomic indicators on stock market performance: The case of the Ghana Stock Exchange. *The Journal of Risk Finance*, 9(4), 365-378.
70. Kyle, A. S. (1984). Market structure, information, futures markets, and price formation.
71. Kyle, A. S. (1985). Continuous auctions and insider trading. *Econometrica: Journal of the Econometric Society*, 1315-1335.
72. Laopodis, N. T. (2009). Real Investment and Stock Prices in the USA. *Managerial Finance*, 35(1), 78-100
73. Levine, R. (1991). Stock markets, growth, and tax policy. *The Journal of Finance*, 46(4), 1445-1465.
74. Levine, R., & Zervos, S. (1996). Stock market development and long-run growth. *World Bank Economic Review*, 10(2), 323-39.
75. Levine, R., & Zervos, S. (1998). Stock markets, banks, and economic growth. *American Economic Review*, 537-558.
76. Liu, X., Burrigge, P., & Sinclair, P. J. (2002). Relationships between economic growth, foreign direct investment and trade: evidence from China. *Applied Economics*, 34(11), 1433-1440.
77. Lucas, R. E. (1988). On the mechanics of economic development. *Journal of Monetary Economics*, 22(1), 3-42.
78. Lucas, R. E. (1997). On the Mechanics of Economic Development', *Journal of Monetary Economics*, 22, July, 3-42. INTERNATIONAL LIBRARY OF CRITICAL WRITINGS IN ECONOMICS, 77, 210-249.
79. Masoud, N., & Hardaker, G. (2012). The impact of financial development on economic growth: Empirical analysis of emerging market countries. *Studies in Economics and Finance*, 29(3), 148-173.
80. Matadeen, J., & Seetanah, B. (2015). Stock market development and economic growth: Evidence from Mauritius. *The Journal of Developing Areas*, 49(6), 25-36.
81. Mauro, P. (2003). Stock returns and output growth in emerging and advanced economies. *Journal of Development Economics*, 71(1), 129-153.
82. Mayer, C. (1988). New issues in corporate finance. *European Economic Review*, 32(5), 1167-1183.
83. McKinnon, R. I. (2010). Money and capital in economic development. Brookings Institution Press.
84. Mishkin, F. S. (2001). The transmission mechanism and the role of asset prices in monetary policy (No. w8617). National bureau of economic research.
85. Morck, R., Shleifer, A., Vishny, R. W., Shapiro, M., & Poterba, J. M. (1990). The stock market and investment: is the market a sideshow? *Brookings papers on economic Activity*, 1990(2), 157-215.
86. Naceur, S. B., & Ghazouani, S. (2007). Stock markets, banks, and economic growth: Empirical evidence from the MENA region. *Research in International Business and Finance*, 21(2), 297-315.
87. Nagaraj, R. (1996). India's capital market growth: Trends, explanations and evidence. *Economic and Political Weekly*, 2553-2563.
88. Naik, P. K., & Padhi, P. (2015). On the linkage between stock market development and economic growth in emerging market economies. *Review of Accounting & Finance*, 14(4), 363.
89. Neusser, K., & Kugler, M. (1998). Manufacturing growth and financial development: evidence from OECD countries. *Review of Economics and Statistics*, 80(4), 638-646.
90. North, D. C. (1991). Institutions, ideology, and economic performance. *Cato J.*, 11, 477.
91. Nowbutsing, B. M., & Oditi, M. P. (2011). Stock market development and economic growth: The case of Mauritius. *International Business & Economics Research Journal (IBER)*, 8(2).
92. N'Zue, F. F. (2006). Stock market development and economic growth: evidence from Cote D'Ivoire. *African Development Review*, 18(1), 123.
93. Odhiambo, N. M. (2008). Financial depth, savings and economic growth in Kenya: A dynamic causal linkage. *Economic Modelling*, 25(4), 704-713.
94. Owusu, E. L., & Odhiambo, N. M. (2014). Stock market development and economic growth in Ghana: ARDL-bounds testing approach. *Applied Economics Letters*, 21(4), 229-234.
95. Patrick, H. T. (1966). Financial development and economic growth in underdeveloped countries. *Economic Development and Cultural Change*, 14(2), 174-189.
96. Paudel, N. P. (2005). Financial system and economic development. *Nepal Rastra Banking Fifty Years, Part -II, Financial System*. Kathmandu: NRB.
97. Pearce, D. K. (1983). Stock prices and the economy. *Federal Reserve Bank of Kansas City Economic Review*, 68(9), 7-22.
98. Pradhan, R. P., Arvin, M. B., Hall, J. H., & Bahmani, S. (2014). Causal nexus between economic growth, banking sector development, stock market development, and other macroeconomic variables: The case of ASEAN countries. *Review of Financial Economics*, 23(4), 155-173.



99. Rajan, R., & Zingales, L. (1998). Financial Development and Growth American Economic Review.
100. Ram, R. (1999) Financial development and economic growth: additional evidence. *Journal of Development Studies* 35: 164–1
101. Rioja, F., & Valev, N. (2004). Does one size fit all: a re-examination of the finance and growth relationship. *Journal of Development economics*, 74(2), 429-447.
102. Ritter, A. R. (2004). Cuba's underground economy.
103. Robinson, J. (1952). The Generalization of the General Theory", In: *The Rate of Interest and Other Essays*, London: MacMillan.
104. Rousseau, P. L., & Wachtel, P. (2000). Equity markets and growth: cross-country evidence on timing and outcomes, 1980–1995. *Journal of Banking & Finance*, 24(12), 1933-1957.
105. Saint-Paul, G. (1992). Technological choice, financial markets and economic development. *European Economic Review*, 36(4), 763-781.
106. Sarkar, P. (2006). Stock Market Development, capital accumulation and growth in India since 1950.
107. Schneider, G., & Troeger, V. E. (2006). War and the World Economy Stock Market Reactions to International Conflicts. *Journal of conflict resolution*, 50(5), 623-645.
108. Schumpeter, Joseph A. 1932. *The Theory of Economic Development*. Translated by Redvers Opie. Cambridge, Mass.: Harvard University Press.
109. Seetanah, B., Subadar, U., Sannasee, R. V., Lamport, M., & Ajageer, V. (2012). Stock market development and economic growth: Evidence from least developed countries (No. 1205). Hochschule fuer Technik und Wirtschaft, Berlin.
110. Shahbaz, M., Ahmed, N., & Ali, L. (2008). Stock market development and economic growth: ARDL causality in Pakistan. *International Research Journal of Finance and Economics*, 14(1), 182-195.
111. Shaw, E. S. (1973). Financial deepening in economic development.
112. Shleifer, A., & Vishny, R. W. (1986). Large shareholders and corporate control. *Journal of political economy*, 94(3, Part 1), 461-488.
113. Singh, A. (1997). Financial liberalisation, stockmarkets and economic development. *The Economic Journal*, 107(442), 771-782.
114. Singh, A. (1998). Liberalisation, the stock market and the market for corporate control: a bridge too far for the Indian economy?
115. Spears, A. (1991). Financial development and economic growth—causality tests. *Atlantic Economic Journal*, 19(3), 66-66.
116. Stiglitz, J. E. (1993). The role of the state in financial markets. *The World Bank Economic Review*, 7(suppl 1), 19-52.
117. Stiglitz, J. E., & Weiss, A. (1981). Credit rationing in markets with imperfect information. *The American economic review*, 71(3), 393-410.
118. Surya Bahadur G.C. and Suman Neupane, (2006), Stock Market and Economic Development: a Causality Test *The Journal of Nepalese Business Studies Vol. III No. 1*.
119. Tachiwou, A. M. (2009). Causality tests between stock market development and economic growth in West African Monetary Union. *Economia. Seria Management*, 12(2), 14-27.
120. Tsuru, K. (2000). Finance and growth: some theoretical considerations and a review of the empirical literature (No. 228). OECD Publishing.
121. Uddin, G. S., Tiwari, A. K., Arouri, M., & Teulon, F. (2013). On the relationship between oil price and exchange rates: A wavelet analysis. *Economic Modelling*, 35, 502-507.

## REQUEST FOR FEEDBACK

Dear Readers

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

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

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

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

Looking forward to an appropriate consideration.

With sincere regards

Thanking you profoundly

**Academically yours**

Sd/-

**Co-ordinator**

## DISCLAIMER

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

## ABOUT THE JOURNAL

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

### *Our Other Journals*

