# INTERNATIONAL JOURNAL OF RESEARCH IN COMMERCE, ECONOMICS & MANAGEMENT



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

Indexed & Listed at:

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

The American Economic Association's electronic bibliography, EconLit, U.S.A.,

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

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

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

# **CONTENTS**

Sr. No.	TITLE & NAME OF THE AUTHOR (S)				
		No.			
1.	RANA PLAZA: A FAILURE OF GOVERNANCE DR. REVATHI IYER & DR. C N NARAYANA	1			
_	CUSTOMERS' EXPECTATION AND MANAGEMENT'S PERCEPTION OF SERVICE QUALITY: A STUDY OF HOTEL	7			
2.	INDUSTRY IN SELECTED CITIES OF TIGRAY REGION, ETHIOPIA	,			
	GUESH BERHE GEBREMICHAEL & DR. AMARINDER SINGH				
3.	STATUS OF TRIBAL WOMEN IN AGRICULTURE	16			
	DR. HEMA SRIKUMAR & C. ATHENA				
4.	WOMEN EMPOWERMENT THROUGH DISTRICT CO-OPERATIVE BANKS (DCBs) IN LUCKNOW AND	18			
	AMBEDKAR NAGAR DISTRICTS IN UTTAR PRADESH				
	K. ANBUMANI & DR. X.L.X.WILSON				
5.	AN ASSESSMENT OF THE AWARENESS OF EMPLOYEE STATE INSURANCE CORPORATION AND ITS BENEFITS	38			
	AMONG THE BENEFICIARIES IN COIMBATORE				
_	DR. N.A. KRISHNAMURTHI & D. SASIKALA  AN EMPIRICAL STUDY OF PROFITABILITY ANALYSIS OF SELECTED COMPANIES IN INDIAN PAINT INDUSTRY				
6.	S.KAMALADEVI & DR. A. VIJAYAKUMAR	41			
7.	PERFORMANCE ANALYSIS OF DISTRICT CENTRAL CO-OPERATIVE BANKS (DCCBs) IN TAMIL NADU - A STUDY	45			
7.	K.MARAGATHAM & DR. P.KANNAPIRAN	45			
8.	PROFITABILITY AND LIQUIDITY RATIOS ANALYSIS: AN EMPIRICAL STUDY OF SELECTED CEMENT COMPANIES	49			
0.	IN ANDHRA PRADESH	-13			
	B R MURTHY, V KIRANMAI & G. MALLAYYA				
9.	MICRO, SMALL AND MEDIUM ENTERPRISE IN INDIA: PERFORMANCE, TRENDS AND CHALLENGES	53			
	DR. N. LALITHA & DR. G. ARTI				
<b>10</b> .	ROLE OF PRIMARY AGRICULTURAL CO-OPERATIVE SOCIETY (PACS) IN AGRICULTURAL DEVELOPMENT IN	58			
	INDIA				
	DR. YASHODA	64			
11.	THE USE STUDY OF NEW COMMUNICATION TECHNOLOGY FOR ELECTRONIC COMMERCE CONSUMER  NIU LUNG-GUANG	61			
12.	FALLING LABOUR'S SHARE OF INCOME	70			
12.	NEHA GUPTA	70			
13.	TRENDS OF FDI IN INDIAN RETAIL SECTOR	74			
	DR. S. G. VAIDYA				
14.	A STUDY ON THE BANKING OMBUDSMAN SCHEME	76			
	SHITAL GANESH KENE				
<b>15</b> .	TESTING TECHNICAL INDICATORS: A STUDY WITH SPECIAL REFERENCE TO CNX IT	80			
	S. NAGARAJAN				
<b>16</b> .	GREEN HRM – A NEW PERSPECTIVE TO PROMOTE ENVIRONMENT MANAGEMENT SYSTEM INITIATIVES	85			
4-	AMRITA P. TAIDE				
<b>17</b> .	LENDING PRACTICES OF PRIVATE AND PUBLIC BANKS OF TAKHATPUR: A COMPARATIVE STUDY  SWATI PANDEY & DR. ARCHANA AGRAWAL	88			
18.	IDENTIFICATION OF SIGNIFICANT FINANCIAL RATIOS FOR DIAGNOSIS OF FINANCIAL DISTRESS IN INDIAN	96			
10.	POWER INDUSTRIES BY PARALLEL ANALYSIS USING MONTE CARLO SIMULATION	30			
	PARAG RAY & DR. G. SUNITHA				
19.	IMPACT OF NABARD IN JAMMU AND KASHMIR ECONOMY THE STUDY OF CREDIT FACILITIES AND CREDIT	100			
	ISSUES IN BARAMULLA DISTRICT				
	RIZWAN QAYOOM				
20.	REASONS AND FACTORS INFLUENCING SMSE: LEARNINGS OF SICKNESS IN UNREGISTERED INDIAN	103			
	INDUSTRIES				
	UMME KULSUM				
	REQUEST FOR FEEDBACK & DISCLAIMER	112			

## 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

## CO-ORDINATOR

#### Dr. BHAVET

Faculty, Shree Ram Institute of Engineering & Technology, 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

## FORMER CO-EDITOR

#### Dr. S. GARG

Faculty, Shree Ram Institute of Business & Management, Urjani

## EDITORIAL ADVISORY BOARD

#### **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. 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. CHRISTIAN EHIOBUCHE**

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. MIKE AMUHAYA IRAVO

Principal, Jomo Kenyatta University of Agriculture & Tech., Westlands Campus, Nairobi-Kenya **Dr. SANJIV MITTAL** 

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

#### Dr. NEPOMUCENO TIU

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

#### **Dr. RAJENDER GUPTA**

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

#### Dr. KAUP MOHAMED

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

#### **Dr. DHANANJOY RAKSHIT**

Dean, Faculty Council of PG Studies in Commerce and Professor & Head, Department of Commerce, Sidho-Kanho-Birsha University, Purulia

#### Dr. NAWAB ALI KHAN

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

#### Dr. ANA ŠTAMBUK

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

#### **SUNIL KUMAR KARWASRA**

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

#### Dr. SHIB SHANKAR ROY

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

#### Dr. S. P. TIWARI

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

#### **Dr. SRINIVAS MADISHETTI**

Professor, School of Business, Mzumbe University, Tanzania

#### Dr. ABHAY BANSAL

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

#### **Dr. ARAMIDE OLUFEMI KUNLE**

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

#### Dr. ANIL CHANDHOK

Professor, University School of Business, Chandigarh University, Gharuan

#### **RODRECK CHIRAU**

Associate Professor, Botho University, Francistown, Botswana

#### Dr. OKAN VELI ŞAFAKLI

Associate Professor, European University of Lefke, Lefke, Cyprus

#### **PARVEEN KHURANA**

Associate Professor, Mukand Lal National College, Yamuna Nagar

#### Dr. KEVIN LOW LOCK TENG

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

#### **Dr. BORIS MILOVIC**

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

#### SHASHI KHURANA

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

#### Dr. IQBAL THONSE HAWALDAR

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

#### Dr. DEEPANJANA VARSHNEY

Associate Professor, Department of Business Administration, King Abdulaziz University, Saudi Arabia

#### Dr. MOHENDER KUMAR GUPTA

Associate Professor, Government College, Hodal

#### Dr. BIEMBA MALITI

Associate Professor, School of Business, The Copperbelt University, Main Campus, Zambia

#### Dr. ALEXANDER MOSESOV

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

#### Dr. VIVEK CHAWLA

Associate Professor, Kurukshetra University, Kurukshetra

#### Dr. FERIT ÖLÇER

Professor & Head of Division of Management & Organization, Department of Business Administration, Faculty of Economics & Business Administration Sciences, Mustafa Kemal University, Turkey

#### Dr. ASHOK KUMAR CHAUHAN

Reader, Department of Economics, Kurukshetra University, Kurukshetra

#### Dr. RAJESH MODI

Faculty, Yanbu Industrial College, Kingdom of Saudi Arabia

#### **YU-BING WANG**

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

#### Dr. SAMBHAVNA

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

#### Dr. KIARASH JAHANPOUR

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

#### Dr. MELAKE TEWOLDE TECLEGHIORGIS

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

#### Dr. SHIVAKUMAR DEENE

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

#### **Dr. THAMPOE MANAGALESWARAN**

Faculty, Vavuniya Campus, University of Jaffna, Sri Lanka

#### Dr. VIKAS CHOUDHARY

Faculty, N.I.T. (University), Kurukshetra

#### **SURAJ GAUDEL**

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

#### Dr. DILIP KUMAR JHA

Faculty, Department of Economics, Guru Ghasidas Vishwavidyalaya, Bilaspur

## 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

## <u>SUPERINTENDENT</u>

**SURENDER KUMAR POONIA** 

1.

## CALL FOR MANUSCRIPTS

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

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

GUIDELINES FUR SUBMISSION OF MANUSCRIPT						
COVERING LETTER FOR SUBMISSION:						
	DATE	D:				
THE EDITOR						
URCM						
INCIVI						
Subject: SUBMISSION OF MANUSCRIPT IN THE AREA OF						
(e.g. Finance/Mkt./HRM/General Mgt./Engineering/Economics/Co	mputer/IT/ Education/Psychology/Law/Math	ı/other, <mark>please</mark>				
<mark>specify</mark> )						
DEAR SIR/MADAM						
Please find my submission of manuscript titled 'your journals.		ublication in one of				
I hereby affirm that the contents of this manuscript are original. Furfully or partly, nor it is under review for publication elsewhere.	hermore, it has neither been published anywhe	ere in any language				
I affirm that all the co-authors of this manuscript have seen the subtheir names as co-authors.	mitted version of the manuscript and have agr	eed to inclusion of				
Also, if my/our manuscript is accepted, I agree to comply with the f	ormalities as given on the website of the journ	ial. 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	:					

\* 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.

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

Landline Number (s) with country ISD code

E-mail Address

Nationality

Alternate E-mail Address

#### NOTES:

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

#### THE MAIN TEXT SHOULD FOLLOW THE FOLLOWING SEQUENCE:

#### INTRODUCTION

REVIEW OF LITERATURE

NEED/IMPORTANCE OF THE STUDY

STATEMENT OF THE PROBLEM

**OBJECTIVES** 

**HYPOTHESIS (ES)** 

RESEARCH METHODOLOGY

**RESULTS & DISCUSSION** 

**FINDINGS** 

**RECOMMENDATIONS/SUGGESTIONS** 

CONCLUSIONS

LIMITATIONS

SCOPE FOR FURTHER RESEARCH

REFERENCES

APPENDIX/ANNEXURE

The manuscript should preferably be in 2000 to 5000 WORDS. But the limits can vary depending on the nature of the manuscript

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

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

#### BOOKS

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

#### **CONTRIBUTIONS TO BOOKS**

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

#### JOURNAL AND OTHER ARTICLES

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

#### **CONFERENCE PAPERS**

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

#### UNPUBLISHED DISSERTATIONS

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

#### **ONLINE RESOURCES**

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

#### WEBSITES

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

# REASONS AND FACTORS INFLUENCING SMSE: LEARNINGS OF SICKNESS IN UNREGISTERED INDIAN INDUSTRIES

#### UMME KULSUM ASPIRING Ph. D. #11, KGK LAYOUT, DEVASANDRA BANGALORE

#### **ABSTRACT**

Indian small-scale industries are key contributors to employment in India. Small Medium Scale Industries setup/started mainly to uplift the economic activities in rural areas. The set-up of Small Medium Scale Industries has resulted in creating employment opportunities, maximizing industrial output, exports, and capital formation. However, they are faced with challenges such as shortage of raw materials, lack of power supply, lack of financial assistance, lack of equipment facilities, and lack of infrastructure facilities. If the challenges are not solved on time; it leads to sickness. Rise of sickness in Small Medium Scale Industries is a cause of apprehension to the government and financial institutions because they are sucking the overall development of economy. Study primarily discusses factors, which are essential for success of small industries. Secondary data collected, analyzed using regression model. Results indicate working capital, marketing, equipment, management issues, women owners, and labour problems key factors influencing reasons for non-registration. Findings highlight need to focus on key aspects for developing effective strategies.

#### **KEYWORDS**

international monetary fund (IMF), micro small and medium enterprises (MSME), small scale industries (SSI), small medium scale enterprises (SMSE), over the counter exchange of india (OTCEI).

#### INTRODUCTION

lobalization, Liberalization, privatization and Information Technology have tailored the business environment (Ngai and Wat, 2002); the collective impact of aforementioned reforms has also impacted the working of MSMEs especially in developing economies, with a rule to "compete or perish" (Jeswal, 2012). Information technology has radically changed the operations of business environment. Physical and geographical distances gain no place in today's business world, due to extensive use of IT. Thus, this scenario has led to the development of e-globalization era (Singh, Garg and Deshmukh, 2010). In today's scenario of e-globalization era, big corporations are outsourcing and downsizing their business activities and are intensely concentrating in their core business activities. This scenario has provided an opportunity/challenges to SSIs to work with them in the form of partnership, joint venture, franchising, turnkey projects, etc (Abouzeedan, 2005). Small firms have their own uniqueness as compared to large firms (Flamholtz, 1986; Hanks, Watson, Jansen and Chandler, 1993; Kazanjian and Dranzin, 1990). Complicated administrative procedure and hierarchical thinking found less in small enterprises (Liao and Welsch, 2003). Therefore, MSME are the plantations of future entrepreneurs in a Country. Innovation is one of the driving forces of entrepreneurship.

As per the data released by IMF in World Economic Outlook (2016), Indian economy is the ninth largest economy in the world, with a growth rate of 7.56 percent in 2015-16 and one of the fastest growing world economies. As per the data presented by Planning Commission of India; at the current prices in the year 2014-15, agricultural & allied sector has contributed 4.43 percent of growth, industrial sector has contributed 7.67 percent of growth and service sector has contributed 13.81 percent of growth respectively. According to World Bank, India ranks 137 position in the world to do business and Indian rural population comprises of 67.25% as of 2015. Hence, major Indian population resides in rural areas.

As per data presented by Small and Medium Business Development Chamber of India, MSMEs sector, has 36 million units, employing 80 million people, producing more than 6000 products and contributing about 8% of Country's GDP. 45 percent of the manufactured output is contributed by MSMEs units as per the Report of the Working Group on "Effectively Integrating Industrial Growth and Environment Sustainability"- Twelfth Five Year Plan, 2012-2017. 49.86 percent of country's' exports were contributed by MSMEs products as per the data given by Ministry of Micro, Small and Medium Enterprises in the financial year 2015-16. The share of MSMEs in country's total direct exports is 35 percent.

Development of rural population is vital, for the development of overall economy. SMEs play a key role in nation building and alleviating poverty in developing economies (Agbeibor, 2006). Due to the presence of very large number of small business, substantial benefits will be aroused from the contribution of each individual firm. (Reynolds and Lancaster, 2007). MSMEs setup/started mainly to uplift the population of rural areas. The set-up of MSMEs' has resulted in creating employment opportunities, maximizing industrial output, exports, capital formation and so on. MSMEs are important for the economic and social development of a country since they provide self-employment opportunities and they represent major share of all industrial enterprises. Thus, this has led to entrepreneurship and innovation in an economy (Nishanth and Zakkariya, 2014). Numerous motives are the reasons for establishing small business in various economies. For example, in developing economies it's established with a motive to trigger entrepreneurship skills, empowerment of women, eradicate poverty, unemployment, etc. Whereas in developed economies the main motive is to be the sole proprietor of the firm. A study conducted by Ramadani (2011), in Macedonia, a developed economy; results from the study indicated 38.42 percent of the entrepreneur's set-up business mainly to be independent owners of the company, whereas 24.63 percent of the entrepreneur's set-up business mainly to be independent owners of the company, whereas 24.63 percent of the entrepreneur's set-up business.

In India, abundant supply of labor force found and thus most of the SMEs are labor-intensive industries. Mostly SSIs prevail in geographical clusters (Nagesha, 2008). Mico, Small and Medium enterprises governed by the "Micro, Small & Medium Enterprises Development (MSMED) Act, 2006". However, there is variation in the definition of MSME in every region/country of the world, but it is a fact that they are the pillars of the economy (Tavana and Puranam, 2014). In most of the countries, MSMEs defined based on employees. However, in Indian economy MSME defined because of investment in plant and machinery.

The definition of sickness in MSME sector is changing over time. Reserve Bank of India (RBI) has set up the Working Group on Rehabilitation of Sick Units (Kohli Committee) and the latest definition of sickness in MSME given by them, is given below, "A smallscale industrial unit is considered as sick when If any of the borrowal accounts of the units remains substandard for more than six months, i.e., principal or interest, in respect of any of its borrowal accounts has remained overdue for a period exceeding one year will remain unchanged even if the present period for the classification of an account as substandard is reduced in due course"; or

"There is erosion in the net worth due to accumulated losses to the extent of 50 percent of its net worth during the previous accounting year and the unit has been in commercial production for at least two years".

During fourth census, information on sickness and incipient sickness was collected. Continuous decline in gross output for three consecutive years, was identified as a suitable indicator for measuring incipient sickness; whereas, to measure sickness Latest definition given by Kohli Committee was used.

Criteria to identify sickness/ incipient sickness; following condition/s represents sickness in small enterprises, (a) Gross output is declined continuously compared to two previous financial years; (b) Outstanding loan for more than 12 months; loan is borrowed from the institutional sources; (c) During the previous accounting year, 50 percent of the net worth is eroded. The transition rule of association of mathematics, applied for the above criteria for identification of sickness in industry. As per the data compiled for the financial year 2014-15, by Reserve Bank of India 516619, micro, small and medium enterprises (MSME) were sick in India, with an outstanding loan of Rs.33378.17 crore. The state with maximum sick units operating in India is Uttar Pradesh with 77761 units, followed by 50006 units in Maharashtra, 49003 units in Gujarat, 44719 in Tamil Nadu, 43437 units in Andhra Pradesh and 38835 units in West Bengal. There has been increase in the sick units in the country by 10.25 percent. (i.e. During the previous financial year 2013-14, 468397 units were sick with an outstanding loan of Rs 32869.92 crore).

In developed as well as in developing economies, small enterprises established with an aim of eradicating poverty by providing employment opportunities. Few of the variables affecting the performance of MSME are; Small business units are small in number with less capital, less market accessibility, less information, less data etc. Thus, they are unable to face the intense competition from big corporations/enterprises. Another major challenge faced by entrepreneurs of small business units is the lack of faith by financial institutions in terms of lending. Lack of faith in small business units causes hurdles in their financial activities and operations. Most of the people employed in MSME are seasonal workers. They work during off-agricultural season. Hence, it becomes difficult to manage a stable workforce in MSME, in turn, which affects the overall functioning of the units. However, above mentioned challenges/problems were reflected in small business units, in a study conducted by Ramadani (2011) in a developed economy, Macedonia.

#### **REVIEW OF LITERATURE**

Well-built establishment and overall development plays a vital role in escalating the economic opportunities of economic agent in an economy. By creating employment opportunities, by nurturing the budding entrepreneurs, by contributing to social and regional development etc, MSMEs contribute a major share in overall development of economy. However, they are faced with challenges such as shortage of raw materials, lack of power supply, lack of financial assistance, lack of equipment facilities, lack of infrastructure facilities etc. A study conducted by World Bank Enterprise Surveys (WBES) reported "Lack of access to finance" is the foremost constraint faced by SMEs; second being the "Practices of the informal sector". However, the former has gained lot of academic attention worldwide (Beck, Demirguc-Kunt, Laeven, and Maksimovic, 2006; Beck, Demirguc,-Kunt, and Maksimovic, 2008; Demirguc, 1998) and the latter is neglected in SME literature (Albrecht, Navarro, and Vroman, 2009; Amaral and Quintin, 2006; Galiani and Weinschelbaum, 2007; Perry et al., 2007). (Distinguin, Rugemintwari and Tacneng, 2016).

If the challenges are not solved on time; it leads to sickness. Rise of sickness in SSIs is a cause of apprehension to the government and financial institutions because they are sucking the overall development of economy. Increase in the sickness of SMEs' leads to rising unemployment, underutilization of resources, wastage of capital assets and loss of production (Dalu and Deshmukh, 2001). Finance is considered as the lifeline of any business. It is needed to start business operations, in addition it plays essential role in upgradation and diversification of business activities, to meet day-to-day expenses, to finance the equipment (Nishanth and Zakkariya, 2014). SMEs are unable to avail the same kind of financial support as provided to large organizations; this disparity has restraint the growth and development of SMEs (Winborg and Landstrom 2001). For instance: Results of a study indicated that lack of finance constraints the growth and development of small manufacturing firms in more than 1,600 US firms (Carpenter and Petersen, 2002). In another scenario, augmentation of women owned enterprises is highly depended on the accessibility of financial resources (Carter and Allen, 1997). Thus, the literature clearly recommends that there is a sturdy link between the availability of finance and growth of SMEs, leading to a belief that major hurdles come in the path of owners/managers at the time of accessing capital (Hutchinson, 1995). Availing credit facilities from commercial banks as well as from government agencies is a cumbersome process for MSMEs as they ask statistical analysis, lots of information, time-consuming process. To avail a loan facility from government agencies, many entrepreneurs may hesitate due to its bureaucratic process (Kadam, 2012). Information about SMEs is a major factor, which influences the creditors, credit decision, and to assess the credit risk of the borrowers, the lender has to collect information about the SMEs contracts, their bills, suppliers, accounting systems, debtors, projects etc in order to allocate the loan efficiently. However, collection of information from SMEs is one of the toughest tasks for creditors. (Myers and Majluf, 1884). Information asymmetries can be reduced by sharing of credit information, this information can be seeked in private credit bureaus and public credit registries (Kallberg and Udell, 2003; Jappelli and Pagano, 2002). Lack of disclosure is a major hurdle for banks in granting credit to SMEs; however, adequate information by the firms enables the external financers to smoothen the lending process (Kallberg and Udell, 2003). Due to the non co-operative attitude of the banks, the enterprises that are capable of availing the loans may be denied by the banks because firms are unable to present their information properly.

Post OTCEI failure, stock exchange for SMEs in India was set-up on the recommendation of Prime Minister' task Force (Jan 2010). SEBI, a regulatory body for securities market in India, has amended SEBI (Issue of Capital and Disclosure Requirements Regulations, 2009; April 13, 2010). Through this notification SMEs can tap the capital market for raising funds; enabling them to access capital, better public profile image, improvement in R&D, Mergers and acquisitions, International collaborations etc. Thus, over reliance on self-finance, banks, indigenous bankers and government agencies will be reduced largely. However, SMEs should fulfill the norms to get listed in the capital market (Kulkarni and Chirputkar, 2014). To understand SMEs' capital structure decisions, it is quite essential to understand firms' characteristics and owners and/or manager's characteristics (Norton, 1991; Vos, Yeh, Carter and Tagg, 2007; Newman, Gunessee and Hilton, 2012). With the fear to loose control and independence, owners are disinclined to get their firms listed in the stock market and/or some firms may not full fill the norms of getting listed in the stock market (Vos, Yeh, Carter and Tagg, 2007; Bhaird, 2010). Various variables relating to capital structure decisions of SMEs have been identified in the literature of capital structure (Frank and Goyal, 2007). Size, profitability, age, asset tangibility, growth and debt have been identified as the factors influencing capital structure decisions of SMEs (Frank and Goyal, 2007). In explaining SMEs' capital structure size of a firm plays a vital role (Mcconnell and Pettit, 1984). The capacity to owe a debt is larger, if a firm size is larger, due to disclose of accurate information; risk of bankruptcy is less, sufficient earnings to repay their debt (Matias and Serrasqueiro, 2017). Many authors have a view that, larger firms represent greater capacity for debt, because of diversification of activities leading to less probability of bankruptcy (Warner, 1977; Smith and Warner, 1979; Ang, Chua and McConnell, 1982; Pettit and Singer, 1985; Ang, 1991, 1992; Degryse, De Goeij and Kappert, 2012). When ploughing back of profits is insufficient to manage business, SMEs look for debt finance (Norton, 1991; Scherr, Sugrue and Ward, 1993). Not all SMEs looks out for debt finance, many small firms aim to retain their independence and avoid issuance of debt (Vos, Yeh, Carter and Tagg, 2007). A firm searches more debt when it is younger than in later parts of life cycle (Petersen and Rajan, 1994). Results of study conducted across eight countries in Europe analyzed SME capital structure; suggest there are differences in firm capital structure across all countries (Hall, Hutchinson and Michaelas, 2004). Corporate credit portfolio in banks is less risky than SME loan portfolio in banks (Jacobson, Linde, and Roszbach (2005) and Dietsch and Petey 2004). SME loans will have many potential benefits, if a precise credit scoring model is used in the market (Altman and Sabato 2007); Some of the benefits are capital required by banks in SME lending will be lower, if precise credit scoring model is used by all the banks; due to this lower interest rate will be charged to SME loan customers (Li, Niskanen, Kolehmainen, and Niskanen, 2016). In SME lending, banks use credit risk evaluation model, since 1990s; this model is considered as a financial innovation (Akhavein, Frame, and White, 2005). Credit risk evaluation model is a recently developed model for lending loans to SMEs; under this model, the data regarding the firm and owners are processed by using traditional methods or artificial intelligence approaches to predict future loan performance of the applicant (Hand and Henley, 1997), Earlier, statistical methods were applied to evaluate credit scoring or credit risk model (Li. Niskanen, Kolehmainen, and Niskanen, 2016). Statistical methods were used to build a credit evaluation model by many researchers' (Altman, 1968; Altman and Sabato, 2007; Banasik, Crook, and Thomas, 2001; Boyes, Hoffman, and Low, 1989; Durand, 1941; Ewert, 1968; Makowski, 1985; Myers and Forgy, 1963; Orgler, 1970; Sarlija, Bensi, and cek, 2004; Steenackers and Goovaerts, 1989; Wiginton, 1980). Evolution of computation technology and information enabled artificial intelligence methods to be applied in credit scoring or credit evaluation model (Li, Niskanen, Kolehmainen, and Niskanen, 2016). An artificial intelligence method generates better results than traditional statistical methods, in credit scoring (Huang, Chen, and Wang 2007). In the recent years, it has been evident that a hybrid model, combination of traditional statistical methods and artificial intelligence, predicts better results than either of the two methods used individually (Li, Niskanen, Kolehmainen, & Niskanen, 2016). It's clear from literature traditional techniques are not superior to machine learning; however, a combination of both is highly recommended as supported by results of Schafer (2008), who suggested logistic regression prediction accuracy is lower than ANN.

In order to meet their day to day expenses, cash flow should be properly managed by the owners/managers of the firm, thereby enabling efficient liquidity management in a firm (Collis and Jarvis, 2000). Recent studies have shown that due to poor credit management small firms feel helpless to take any action against the irregular payment by their debtors (Peel, Wilson, and Howorth, 2000; Drever, 2005). For the prosperity and survival of small firms effective and efficient liquidity management is needed (Deakins, Logan, Morrison and Steele, 2000; Sardakis, Mole and Hay, 2007).

Efficient management of inventory, debtors and creditors are vital for the success and endurance of SMEs (Deloof, 2003). Providing credit to customer is a low-cost source of finance for them, on the other hand money is tied up in the working capital (Deloof, 2003). Delaying payment to suppliers can be a low-cost and flexible source of finance for firms, however late payment can be very dear to the firms (Deloof, 2003). Therefore, efficient management of working capital is required to maintain profitability and liquidity in a firm (Ekanem, 2010).

Half of the world population being employed in the informal sector; this reality has discouraged the government officials to take necessary action against them (OECD,2009). Poor quality of institutions and weak governance either can be a cause for the growth of informal firms (De Soto, 1989) or entrepreneur make a decision to be informal when initiating the firm's activities (Distinguin, Rugemintwari and Tacneng, 2016). Most of the studies have indicated that most of the firms lack information regarding easy registration process and lack of tax incentives have discouraged the firms to register their business (Bruhn, 2013; Maloney, 2004). Small firms choose to remain informal or unregistered because a major portion of their investment is lost in registration formalities and in conformity with the product regulations (Rand and Torm, 2012). With a view to limit their risk component, few owners of MSMEs register their firm's and utilize the schemes/incentives offered by the government (Siqueira, Webb and Bruton 2014). Maximization of profit is also the one of the factor influencing the owner's decision, whether to register their firms or not (McKenzie and Sakho, 2010). An Efficient legal system and its enforceability in the economy, assists in detecting informal enterprises (Dabla-Norris, Gradstein and Inchauste 2008; Ulyssea, 2010); in order to remain undetected MSMEs shrink their level of operations (Farrell, 2004). This act by entrepreneur would decline the potentiality of their firm's to compete against the large firms. In order to reduce the number of non-registration firms, government should reduce the tax rates (Ihrig and Moe, 2004); this measure should be adopted in an economy where corruption rate is higher, thereby inducing the owners to register their firms and instilling confidence in the government (Maloney, 2004). Frail contract enforceability, ineffective tax regime and increased corruption, fines, penalties, time consuming process etc. contributes to the growth of informal business (Quintin, 2008) and (Ihrig and Moe, 2004). Evasion of tax, incompliance with the labor laws, product laws, safety laws etc. are the acts which leads to decrease in cost of production in unregistered firms; Due to this, they charge economical prices and seize the market share from the formal firms (Distinguin, Rugemintwari and Tacneng, 2016). La Porta and Shleifer (2008) have discussed three views regarding informal firm's role in economic development-the romantic view, the parasite view and dual view. De Soto (1989, 2000), romantic view considers informal firms parallel to formal firms. This view suggest that informal firms are potential enough to be formal; due to official constraints like bureaucratic process, government taxes and lack of access to finance they are held back. Dual view treats informal firms are different from formal firms in various aspects, however not affected by government polices (La

Porta and Shleifer, 2008). Parasite view treats informal firms as the iniquitous competitor of formal firms since they evade taxes and regulations (Farrell, 2004; Levy, 2008); Potential Entrepreneurs are suppressed in a large informal economy (Barry and Tacneng, 2014).

In a decision to grow their business units or not, various factors will be considered by entrepreneurs (Wiklund and Shepherd, 2003). Some of factors are: Retaining ownership, gaining respect, difficulty in availing credit, raw materials', flexibility, limited human resource, locational factors, cultural factors, geographic factors, relationship with the suppliers and customers, economic condition, etc. (Anderson and Jack, 2000; Holland and Shepherd, 2011). Small firms compared to large one's lack economies of scale; however, have high potential due to combination of self and circumstances (Anderson, 2000). Most firms exert operation to what they can do rather than focusing resources on what should be done (Sarasvathy, 2008). High internal locus of control shapes individual's actions and motives (Ahl, 2006); Practices of firms are shaped mostly by owners whose behaviour may optimize financial aspirations (Preisendorfer, 1990); which are basically extensions of their behaviour including fulfillment of personal goals (Douglas and Shepherd, 2000; Wiklund, Patzelt and Shepherd, 2009). Growth of small firms is significantly dependent on owner's ability to manage and make effective decisions (Hurmelinna-Laukkanen, 2012; Sexton, 1989). An attitude of entrepreneur is pivotal as shapes growth motivation or reluctance to growth (Davidsson, 1991). It is evident from literature human behaviour has significant role in small firm's financial health.

In order to be out there in the market with sustainability, MSME should be dynamic (White and Linden, 2002). Lean manufacturing paradigm is a methodology, which eliminates waste from all the operations and activities of an enterprise. By eliminating waste, cost will reduce and profitability will be increased. Few of the methods followed in lean manufacturing; on time-delivery of products or services, maximizing output/services, elimination of waste, providing better services/products than competitors do. However, Indian SME are unwilling to adopt lean manufacturing paradigm because of its complexity, illiteracy, conservative thought process, lack of information, high financial investment and high consultancy related expenses. (Panizzolo, Garengo, Sharma and Gore, 2012). In order to plan for lean paradigm, lot of complexity like complex mathematical calculations, budgeting, forecasting, statistical analysis, planning, sources of finance, size of the enterprise, credit terms, availability of raw materials, manufacturing lead time etc; is involved which cannot be managed/understood by entrepreneurs of MSME. Either software should be developed to simplify the lean manufacturing paradigm or expertise opinion should be provided at affordable prices to the entrepreneurs of MSME (Mathur, Mittal and Dangayach 2012).

Craft-based skills are frequently found in small firms; which is a hurdle in marketing of small firm products (Watkins and Blackburn, 1986). Small firms usually concentrate on daily earnings and neglect the long-term strategic policies. Lack of market information, penetration strategies, forecasting techniques, advertising campaigns etc. are few of the challenges faced by SSIs in marketing their products/services (Poutziouris, Binks and Bruce, 1999). World economy is growing into a globalize village. Largely consumers have increased the consumption of eco-friendly products. With the lack of awareness in change of technology and products, MSMEs produce outdated products; this involves the use of environmentally hazardous technology. MSMEs' contribute nearly 70% of the total industrial population in India. By being innovative, a firm can take advantage of the peculiar business opportunities (Wang, 2008). MSMEs should be cognized with the trend of eco-friendly products. Thus, the concept of Green Marketing should be introduced to MSMEs, in order to produce good quality eco-friendly products at minimal prices. Green Manufacturing not only helps the MSMEs' in producing eco-friendly products, it also reduces their cost through efficient management of natural resources, diversified use of raw materials, labor and manufacturing process (Paul, Bhole and Chaudhari 2014; Sangwan, 2011) and also enhances the image of enterprise as a social responsible unit Mittal and Sangwan (2014). As an initiative to produce eco-friendly products, an initiative is taken in Jute industry, a project named, "Jute: An eco-friendly alternative for a sustainable future" was started. It was a joint collaboration of an Indian enterprise named "Margadarshak Development Services" along with Tradecraft UK has jointly started a European Union sponsored project.

In this fast growing techo-savy world, where today's product is considered as obsolete in tomorrow's world, this has led to reduction in trade barriers, effective post sales service, intense competition, cost reduction strategies, influencing purchasing behaviours, efficient supply chain management, etc. among the business units (Massa and Testa, 2009). Knowledge is the most important aspect to face any competition, (Drucker, 1995). According to Peter Drucker it is "the coordination and exploitation of organizational knowledge resources, in order to create benefit and competitive advantage" (Drucker, 1999). Knowledge is gained not only by reading books, in fact it is gained enormously by maintaining good network with the customers, employees, suppliers, middlemen, creditors, traders etc. (Mahr, Lievens, and Blazevic, 2014). Knowledge management enables the firm to outperform the competitors by enabling the efficient allocation of factors of production (i.e. Land, Labor, Capital and Organization) (Grossman, 2006). Small firms must be strategic in order to be competitive, pioneer & progressive in the dynamic business environment (Mugler, 2002). To grow in their businesses SMEs should be innovative, (Thompson, Williams and Thomas, 2013). Innovation in a firm is knowledge-intensive business process, since it reflects how well the knowledge and intellectual assets are utilized in a firm (Subramaniam and Youndt 2005) and (Theoharakis and Wong, 2002). For a firm to be competitive in the market, it has to be flamboyant with its product and services offered (Nielsen 2006). Knowledge management enables the firms to be innovative as well competitive. A systematic KM is required by firms to tackle their problems (i.e. inefficient management, scare resource in terms of capital, labor, materials, equipments etc) efficiently (Sandhawalia and Dalcher, 2011). The aforementioned skill develops innovations in the firm's product or services and assists the firms to remain competitive in the globalized market (Wheeler, 2002). Knowledge and technology are the strategic assets of firms, which enables them to create competitive advantage. (Lai and Lin, 2012; Stump, Athaide, and Joshi, 2002). Therefore, with well-possessed knowledge resources in a firm, an innovative technology is developed which brings modification/up gradation in goods/services offered to the customers, thereby expanding the market share and retaining/increasing the competitive advantage.

Skilled human resource is the invaluable asset an organization can possess to achieve sustainability (Barney, 1991). Many authors have proposed that strong small, medium enterprises can built with the assistance of skilled human resource acquired at the managerial and employee level (Neace, 1999; Wells, Pfantz and Bryne, 2003). In small firm's organization, learning can take a form of tacit knowledge or formal knowledge (Ekanem, 2010). Outputs/services generated by a firm are highly influenced by the human capital employed in the firm. (Pennings, Lee and Van Witteloostuijn, 1998; Edelman, Brush and Manolova, 2002). Organizational adoption of human or social aspect, affects the individuals psychologically, cognitively and emotionally (Porras and Hoffer, 1986; Rosenthal, 1996; Strean, 1996). By balancing the needs of employees and organization, the climate within the organization should always be ready to adopt changes with minimum resistant;

which makes the firm more vibrant and helps the organization to grow (Laabs, 1996). In addition to aforementioned requisites, organizational culture and communication together also influences organization adaptation largely (Duck, 1993; Shaw and Maletz, 1995). Communication is key mediator to resolve any resistance to organizational changes by working with the organization culture (Frances, 1995). Compared to urban entrepreneurs, rural entrepreneurs face lot of difficulty in recruitment, financing, attracting efficient expertise and building networks (Van Horn and Harvey's, 1998). Organization should follow/frame such practices and policies, by which employees' feels motivated, valued which leads them to a sense of belongingness towards the firms (Hutchison and Garstka, 1996).

The major factor influencing the performance of MSME is lack of competition among them. Hence, MSME are encouraged to be innovative, so that there are economies of large-scale production along with the uniqueness in the products/services they offer in the market and attain market leadership. Innovation brings in competition and helps in gaining sustainable growth position in the market (Gerguri and Ramadani, 2011).

From a business perspective, innovation means "growth and profit" which benefits the firms with economies of large-scale production; thus enabling the firms to produce/deliver, products/services to a larger market share. From the customer's perspective, innovation means firms producing/delivering quality products or services at a minimal rate and thus enhancing a life of consumers' (Gerguri, Rexhepi and Ramadani, 2013). In order to face competition in the market, SMEs is confronted with following hurdles; Lack of resources, SMEs hesitate to enter the export market (Moen, 1999); to improve their manufacturing operations they lack proficiency, time and capital (Gunasekaran, Marri, Mcgauahey and Grieve, 2001); Hesitation to innovate and lack of intellectual rights (Stokes, 2002); information slit between marketing and production functions, in addition due to deficiency of funds expensive software such as ERP system cannot be used by the MSMEs (Xiong, Tor, Bhatnagar, Khoo and Venkat, 2006); Lack capabilities to meet huge demands (Narula, 2004); lack of skilled human resource in firms (Korea Federation of Small Businesses, 2003).

Management structure and independence of small firm places the entrepreneur in the most vital position in the business activities (Bird, 1995; Capaldo, Iandoli and Ponsiglione, 2004; Chandler and Jansen, 1992; Olson and Booker, 1995). In recent times, government institutions (Elenurm and Vaino, 2011) have recognized the role of women entrepreneurs, in SMEs and in nation building. A woman entrepreneur is defined as "the women or group of women, who initiate, organize and operate a business enterprise" (Pandian and Jesurajan, 2011). Challenges faced by women entrepreneur are diverse in different economies and societies that should be considered (Javadian and Singh, 2012). It is vital to understand the characteristics, aspirations and the performance level in a business of a women entrepreneur; who is starting a new business (Ramos, Maldonado and Hernandez, 2014). In recent years, the number of women who have entered the field showed encouraging improvements as the world has witnessed a constant growth of women entrepreneurship and their contributions to the national economic and employment (Hassan, Ramli and Desa, 2014). Women entrepreneurs give attention to building good relations with the clients, producing good/innovative things and controlling their own fate (Elenurm and Vaino, 2011). Brush (1992) stressed that women have the caliber to grow their own business by using their talent of maintaining/forming good social network and merge their business with their relatives' business or other concerns, in order to overcome competition, challenges like lack of power, resources etc and also to enjoy large scale of economies. Firms owned by women are private and her skills play a key role in running the business (Lerner, Brush and Hisrich, 1997). Employment experience, socio-economic background, personal life and culture are the factors influencing women entrepreneurs in accessing entrepreneurial capital (Carter and Shaw, 2006).

With their broad social networks, men can run their enterprises lucratively compared to women (Zuwarimwe and Kirsten, 2010; Martey, Annin and Attoh, Wiredu, Etiwire and Al-Hassan, 2013). In addition, in terms of lending financial institutions, exhibit greater faith in men compared to women. (Mapetla, 1999). Literature suggests that there is clear disparity in lending for women entrepreneurs by financial institutions. Women entrepreneurs are unacquainted of the schemes offered by the financial institutions, private agencies, etc (Singh and Belwal, 2008). With standing the challenges, in the recent times there is a considerable growth in women entrepreneurs and their contribution in nation building and in providing employment opportunities (Hassan, Ramli and Desa, 2014); as a result, woman's are performing exceptionally well in diverse professions ranging from academics, space politics, administration and social work (Mehta and Parekh, 2014).

Energy has versatile role being played in individual's life and in nation building (Bhattacharyya, 2007). However, energy resources are inadequate to meet our standard of living (Maureen, 2012). Reciprocated relationship exists between the economic activities of a country and energy; due to the vital role played by the energy sector in the economic activities of a country. For instance, energy sector and the key for a mixture of other sectors are using inputs from different sectors. This reciprocated relationship effects the demand for energy, possibilities of substitution within the energy and with the factors of production (land, capital, labor and organization). Energy sector is essential for economic growth as economy arises due to interdependence between economic activities and energy.

To meet the increasing demand for energy; either the prices should be raised or fossil fuels should be shifted to renewable sources of energy (IEA, 2008). Adoption of renewable sources of energy cannot solve on its own, the problem of energy inadequacy since they are not sustainable. For instance, wind is needed to run the wind generators (Salonitis, 2015). As per IEA (2008) through the verified use of technologies and best practices, significant amount of energy and carbon dioxide can be saved. Adoption of such approaches on a global level would save between 25EJ and 37EJ of energy each year, which signify 18-26 percent of current primary usage in industry (Zein, 2012; Salonitis and Ball, 2013; Salonitis and Stavropoulos, 2013). In order to make monopoly industries work efficiently, economic regulation acts as a motivator (Kshetri, 2010; Viljanen, 2005). Itkis, Daim and Basoglu, (2009) stressed that to survive in this highly competitive and fast changing economic situation outsourcing of public enterprise is a good option.

#### RESEARCH METHODOLOGY

The study follows explorative approach using multivariate analysis techniques. Data collected from a secondary source from census data generated by Ministry of small and medium scale industry (MSME) India. The data collected by MSME India from a period of 2004 to 2005. The data sample had total data point 168654 out of which 13644 are selected to study reasons of non-registration of SSI; the other data points were incomplete. All variables are dichotomous except reason for non-registration and employee total.

#### **ANALYSIS**

As seen in table 1.1, all variables left skewed except, total employees (emp\_total) and (dmd\_prob); which indicates extreme values at lower end of data variable. Study uses logistic regression technique with dependent variable as 'reason\_nonreg'

**TABLE 1.1: DESCRIPTIVE STATISTICS** mean sd median trimmed mad min max range skew kurtosis se Reason nonreg 13644 3.44 1.86 0.02 5 3.55 0 1 5 4 -0.42 -1.74Woman ent 13644 1.84 0.36 2 1.93 0 -1.89 1.58 0 1 **Emp total** 13644 2.11 2 1.68 1.48 1 122 121 15.44 418.66 0.02 2.8 2 Os loan 13644 0.38 1.9 O -1.66 0.77 1.82 1 2 1 0 Dmd prob 13644 1.28 0.45 1 1.22 0 1 2 1 -0.990 Work cap\_prob 13644 1.6 0.49 2 1.63 0 1 2 1 -0.41 -1.83 0 Raw mtrl\_prob 13644 1.88 0.32 2 1.98 0 1 2 -2.39 3.7 0 1 Power rpob 13644 1.88 0.32 2 1.98 0 1 -2.34 3.48 0 Labour prob 13644 0 2 -4.52 18.44 0 1.96 0.2 2 1 1 13644 0.48 2 1.67 2 1 0 Mkt prob 1.64 0 1 -0.58 -1.66 **Equip prob** 13644 1.9 0.31 0 -2.6 4.74 0 Mgmt. prob 13644 1.97 2 0 -5.24 25.49

Source: Ministry of small and medium scale industry

A step-wise logistic regression with 11 independent variables and one dependent variable is used. The backward stepwise using AIC (Akaike information criterion) measuring relative quality of models. For initial model, the AIC score is high as seen in table 1.2; however, for eight independent variables the AIC is lowest among three models. Therefore, a logistic model with eight independent variables is used. The final model resulted in dropping variable loan taken (os\_loan), dmd problem (dmd\_prob) and power problem (power\_rpob).

**TABLE 1.2: AIC SCORES OF STEP MODELS** 

	AIC scores	No. Independent Variables				
Model1	AIC=55335.39	11				
Model2	AIC=55333.4	9				
Model3	AIC=55331.41	8				

#### **TABLE 1.3: LOGISTIC REGRESSION (STEPWISE)**

	Estimate (coefficients)	Std. Error	t value	Pr(> t )
(interest)		0.20071	15.016	< 2e-16 ***
(intercept)	4.03497	0.26871	15.016	
emp_total	-6.1406	0.68505	-8.964	< 2e-16 ***
woman_ent	-0.55119	0.04407	-12.506	< 2e-16 ***
work_cap_prob	0.12261	0.03306	3.709	0.000209 ***
raw_mtrl_prob	-0.08128	0.04982	-1.632	0.102804
labour_prob	-0.29045	0.07896	-3.679	0.000235 ***
mkt_prob	0.12183	0.03294	3.698	0.000218 ***
equip_prob	0.16401	0.0533	3.077	0.002095 **
mgmt_prob	0.24859	0.08859	2.806	0.005022 **

As seen in table 1.3; Total number of employees has a negative coefficient (-6.14) influence on reasons for non-registration. Total number of employees indicate strength of firms; however, in small-scale industries their influence is not significant as most are not highly skill tasks. Women entrepreneurs indicates whether the firm's owner is women. In table it is clear women entrepreneur have negative coefficient (-0.55) influence on reasons for non-registration. Women entrepreneur face significant challenges compared to men; literature suggests number of women entrepreneur in SSI is minuscule, could be the reason for lower interaction.

All operations are dependent on working capital (work\_cap\_prob); it has positive coefficient influence (0.12). This indicates SSI firm's reasons for non-registration significantly influenced by working capital problems. Firm's future depends on matching demands with present production/services, heavily dependent of working capital. Production of services and manufacturing are dependent on raw materials (raw\_mtrl\_prob); it has negative coefficient influence (-0.08). This indicates raw material issues do not significantly influence SSI firm's reasons for non-registration. Labour issues are common across firms; it has negative coefficient influence (-0.29). Labour problems is not a significant challenge for SSI firms; which has could be reason for not registration.

Marketing problems (mkt\_prob) has positive coefficient influence (0.12). This indicates marketing problems have influence on reasons for non-registration. SSI firms have lower capital and marketing budgets may not be available as marketing could not be an agenda. Equipment problems (equip\_prob) has positive coefficient influence (0.16). This means equipment problem is prevalent which could indicate why firms are hesitant in registration of their firms. Literature suggests firms in SSI sectors driven by owner's behaviour and beliefs; management problem (mgmt\_prob) has positive coefficient influence (0.24). Management's reluctance or entrepreneur's hard headedness could be reason for non-registration.

#### **CONCLUSIONS**

As the model in study represents loan, demand and power are not significant indicators for firms of SSI sector non-registration; as access to all these could be non-existence or they might not be eligible for these services. Gender does have an influence on non-registration though not highly significant; however, total number of employees does have significant influence, it is negative. Working capital, management issues, and equipment, are most essential aspects, pivotal for helping informal firms to register. Firms and institutes must take account of important factors, to provide essential support to minimize effects of problems faced. Institute must focus on developing strategies, which would enable in creating awareness, educating and managing issues. The model based on data collected much earlier; though has significance as it could enable in focusing on essential indicators for non-registration. Future studies must explore what are the moderators, which affect registration of SSI firms?

#### **REFERENCES**

#### JOURNAL AND OTHER ARTICLES

- 1. Abouzeedan, A. (2005). M&A impact on brand names in the new economy. *International mergers and acquisition (pp. 123Á125). Frankfurt am Main: Peter Lana.*
- 2. Agbeibor, W. (2006). Pro-poor economic growth: Role of small and medium sized enterprises. Journal of Asian Economics, 17(1), 35-40.
- 3. Ahl, H. (2006). Why research on women entrepreneurs needs new directions. Entrepreneurship theory and practice, 30(5), 595-621.
- 4. Akhavein, J., Frame, W. S., & White, L. J. (2005). The diffusion of financial innovations: An examination of the adoption of small business credit scoring by large banking organizations. *The Journal of Business*, 78(2), 577-596.
- 5. Albrecht, J., Navarro, L., & Vroman, S. (2009). The effects of labour market policies in an economy with an informal sector. *The Economic Journal*, *119*(539), 1105-1129.
- 6. Altman, E. I. (1968). Financial ratios, discriminant analysis and the prediction of corporate bankruptcy. The journal of finance, 23(4), 589-609.
- 7. Altman, E. I., & Sabato, G. (2007). Modelling credit risk for SMEs: Evidence from the US market. *Abacus*, 43(3), 332-357.
- 8. Amaral, P. S., & Quintin, E. (2006). A competitive model of the informal sector. Journal of monetary Economics, 53(7), 1541-1553.
- 9. Anderson, A. R. (2000). The protean entrepreneur: the entrepreneurial process as fitting self and circumstance. *Journal of Enterprising Culture, 8*(03), 201-234.
- 10. Anderson, A. R., & Jack, S. L. (2000). The Production of Prestige an Entrepreneurial Viagra. *The International Journal of Entrepreneurship and Innovation*, 1(1), 45-56.
- 11. Ang, J. S. (1991). Small business uniqueness and the theory of financial management. The Journal of Entrepreneurial Finance, 1(1), 1.
- 12. Ang, J. S. (1992). On the theory of finance for privately held firms. The Journal of Entrepreneurial Finance, 1(3), 185.
- 13. Ang, J. S., Chua, J. H., & McConnell, J. J. (1982). The administrative costs of corporate bankruptcy: A note. The Journal of Finance, 37(1), 219-226.
- 14. Banasik, J., Crook, J., & Thomas, L. (2001). Scoring by usage. Journal of the Operational Research Society, 52(9), 997-1006.
- 15. Barney, J. (1991). Firm resources and sustained competitive advantage. Journal of management, 17(1), 99-120.
- 16. Barry, T. A., & Tacneng, R. (2014). The impact of governance and institutional quality on MFI outreach and financial performance in Sub-Saharan Africa. *World Development*, 58, 1-20.
- 17. Beck, T., Demirgüç-Kunt, A., & Maksimovic, V. (2008). Financing patterns around the world: Are small firms different? *Journal of Financial Economics*, 89(3), 467-487.

- 18. Beck, T., Demirgüç-Kunt, A., Laeven, L., & Maksimovic, V. (2006). The determinants of financing obstacles. *Journal of International Money and Finance*, 25(6), 932-952.
- 19. Bhattacharyya, S. C. (2007). Energy sector management issues: an overview. International Journal of Energy Sector Management, 1(1), 13-33.
- 20. Bird, B. (1995). Towards a theory of entrepreneurial competency. Advances in entrepreneurship, firm emergence and growth, 2(1), 51-72.
- 21. Boyes, W. J., Hoffman, D. L., & Low, S. A. (1989). An econometric analysis of the bank credit scoring problem. Journal of Econometrics, 40(1), 3-14.
- 22. Bruhn, M. (2013). A tale of two species: Revisiting the effect of registration reform on informal business owners in Mexico. *Journal of Development Economics*, 103, 275-283.
- 23. Brush, C. G. (1992). Research on women business owners: Past trends, a new perspective and future directions. *Entrepreneurship: Theory and Practice*, *16*(4), 5-31.
- 24. Capaldo, G., Iandoli, L., & Ponsiglione, C. (2004, July). Entrepreneurial competencies and training needs of small firms: A methodological approach. In 14th Annual IntEnt Conference, Napoli.
- 25. Chandler, G. N., & Jansen, E. (1992). The founder's self-assessed competence and venture performance. Journal of Business venturing, 7(3), 223-236.
- 26. Coleman, J. S. (1988). Social capital in the creation of human capital. American journal of sociology, 94, S95-S120.
- 27. Collis, J., & Jarvis, R. (2000). Financial Information: The Vital Spark in Small Enterprise Management. In NATIONAL SMALL FIRMS POLICY AND RESEARCH CONFERENCE (Vol. 1, pp. 101-126). Leeds; ISBA; 1997.
- 28. Dabla-Norris, E., Gradstein, M., & Inchauste, G. (2008). What causes firms to hide output? The determinants of informality. *Journal of development Economics*, 85(1), 1-27.
- 29. Dalu, R. S., & Deshmukh, S. G. (2001). SWOT analysis of small and medium scale industry: a case study. Productivity, 42(2), 201-209.
- 30. Davidsson, P. (1991). Continued entrepreneurship: Ability, need, and opportunity as determinants of small firm growth. *Journal of business venturing*, 6(6), 405-429
- 31. De Soto, H. (1989). The Other Path: The Invisible Revolution in the Third. World. Harper & Row Publishers, New York.
- 32. De Soto, H. (2000). The mystery of capital: Why capitalism triumphs in the
- 33. Deakins, D., Logan, D., Steele, L., & Anderson, M. (2000). Financial management in the small firm. In NATIONAL SMALL FIRMS POLICY AND RESEARCH CONFERENCE (Vol. 1, pp. 211-226). Leeds; ISBA; 1997.
- 34. Degryse, H., de Goeij, P., & Kappert, P. (2012). The impact of firm and industry characteristics on small firms' capital structure. Small Business Economics, 38(4), 431-447.
- 35. Delmar, F., & Wiklund, J. (2008). The effect of small business managers' growth motivation on firm growth: A longitudinal study. *Entrepreneurship Theory and Practice*. 32(3), 437-457.
- 36. Deloof, M. (2003). Does working capital management affect profitability of Belgian firms. Journal of business finance & Accounting, 30(3-4), 573-588.
- 37. Demirgüç-Kunt, A., & Maksimovic, V. (1998). Law, finance, and firm growth. The Journal of Finance, 53(6), 2107-2137.
- 38. Dietsch, M., & Petey, J. (2004). Should SME exposures be treated as retail or corporate exposures? A comparative analysis of default probabilities and asset correlations in French and German SMEs. *Journal of Banking & Finance*, 28(4), 773-788.
- 39. Distinguin, I., Rugemintwari, C., & Tacneng, R. (2016). Can Informal Firms Hurt Registered SMEs' Access to Credit? World Development, 84, 18-40.
- 40. Douglas, E. J., & Shepherd, D. A. (2000). Entrepreneurship as a utility maximizing response. Journal of Business Venturing, 15(3), 231-251.
- 41. Drever, M. (2005, June). Advising small and medium-sized enterprises (SMEs) on their liquidity issues. In *International Council for Small Business Conference, Washington, DC* (pp. 15-18).
- 42. Duck, J. D. (1993). Managing change: The art of balancing. Harvard Business Review, 71(6), 109-118.
- 43. Durand, D. (1941). Risk elements in consumer installment lending. Studies in consumer installment financing, 8.
- 44. Edelman, L. F., Brush, C. G., & Manolova, T. S. (2002). The impact of human and organizational resources on small firm strategy. *Journal of small business and enterprise development*, *9*(3), 236-244.
- 45. Ekanem, I. (2010). Liquidity management in small firms: a learning perspective. Journal of Small Business and Enterprise Development, 17(1), 123-138.
- 46. Elenurm, T., & Vaino, E. (2011, January). Interpretations of entrepreneurial success factors by female entrepreneurs and executives in a catch-up economy. In ICSB World Conference Proceedings (p. 1). International Council for Small business (ICSB).
- 47. Ewert, D. C. (1968). Trade-credit management: Selection of accounts receivable using a statistical model. The Journal of Finance, 23(5), 891-892.
- 48. Farrell, D. (2004). The hidden dangers of the informal economy. McKinsey quarterly, 26-37.
- 49. Flamholtz, E. (1986). Managing the Transition from an Entrepreneurship to a professionally managed firm. /E. Flamholtz. San Francisco, CA: JosseyBass.
- 50. Frances, M. (1995). Organizational change and personal mythology. Personnel Review, 24(4), 58-68.
- 51. Frank, M. Z., & Goyal, V. K. (2007). Trade-off and pecking order theories of debt.
- 52. Galiani, S., & Weinschelbaum, F. (2012). Modeling informality formally: households and firms. Economic Inquiry, 50(3), 821-838.
- 53. Gerguri, S., Rexhepi, G., & Ramadani, V. (2013). Innovation strategies and competitive advantage. Современная экономика: проблемы, тенденции, перспективы, (8 (1))
- 54. Grossman, M. (2006). An overview of knowledge management assessment approaches. Journal of American Academy of Business, 8(2), 242-247.
- 55. Gruber, M. J., & Warner, J. B. (1977). Bankruptcy costs: Some evidence. The journal of Finance, 32(2), 337-347.
- 56. Gunasekaran, A., Marri, H. B., McGaughey, R., & Grieve, R. J. (2001). Implications of organization and human behaviour on the implementation of CIM in SMEs: an empirical analysis. *International Journal of Computer Integrated Manufacturing*, 14(2), 175-185.
- 57. Gunerergin, M., Penbek, Ş., & Zaptçıoglu, D. (2012). Exploring the Problems and Advantages of Turkish SMEs for Sustainability. *Procedia-Social and Behavioral Sciences*. 58. 244-251.
- 58. Hall, G. C., Hutchinson, P. J., & Michaelas, N. (2004). Determinants of the capital structures of European SMEs. *Journal of Business Finance & Accounting*, 31(5-6), 711-728.
- 59. Hand, D. J., & Henley, W. E. (1997). Statistical classification methods in consumer credit scoring: a review. *Journal of the Royal Statistical Society: Series A (Statistics in Society)*. 160(3), 523-541.
- Hanks, S. H., Watson, C. J., Jansen, E., & Chandler, G. N. (1993). Tightening the life-cycle construct: A taxonomic study of growth stage configurations in high-technology organizations. Entrepreneurship: Theory and Practice, 18(2), 5-30.
- 61. Hasan, F. S., & Almubarak, M. M. S. (2016). Factors influencing women entrepreneurs' performance in SMEs. World Journal of Entrepreneurship, Management and Sustainable Development, 12(2), 82-101.
- 62. Hassan, F., Ramli, A., & Desa, N. M. (2014). Rural women entrepreneurs in Malaysia: what drives their success? *International Journal of Business and Management*, 9(4), 10.
- 63. Holland, D. V., & Shepherd, D. A. (2013). Deciding to persist: Adversity, values, and entrepreneurs' decision policies. *Entrepreneurship Theory and Practice*, 37(2), 331-358.
- 64. Huang, C. L., Chen, M. C., & Wang, C. J. (2007). Credit scoring with a data mining approach based on support vector machines. *Expert systems with applications*, 33(4), 847-856.
- 65. Hurmelinna-Laukkanen, P. (2012). Constituents and outcomes of absorptive capacity–appropriability regime changing the game. *Management Decision*, 50(7), 1178-1199.
- 66. Hutchinson, R. W. (1995). The capital structure and investment decisions of the small owner-managed firm: some exploratory issues. *Small Business Economics*, 7(3), 231-239.

- 67. Hutchison, S., & Garstka, M. L. (1996). Sources of perceived organizational support: goal setting and feedback1. *Journal of Applied Social Psychology*, 26(15), 1351-1366.
- 68. IEA (2008), "Worldwide trends in energy use and efficiency key insights from IEA indicator analysis", available at: www.iea.org/papers/2008/indicators\_2008.pdf (accessed 30 May 2012).
- 69. Ihrig, J., & Moe, K. S. (2004). Lurking in the shadows: the informal sector and government policy. Journal of Development Economics, 73(2), 541-557.
- 70. Jacobson, T., Linde, J., & Roszbach, K. (2005). Credit risk versus capital requirements under Basel II: are SME loans and retail credit really different? *Journal of Financial Services Research*, 28(1-3), 43-75.
- 71. Jappelli, T., & Pagano, M. (2002). Information sharing, lending and defaults: Cross-country evidence. Journal of Banking & Finance, 26(10), 2017-2045.
- 72. Javadian, G., & Singh, R. P. (2012). Examining successful Iranian women entrepreneurs: an exploratory study. *Gender in Management: An International Journal*, 27(3), 148-164.
- 73. Jeswal, R. (2012). Role of SME in Indian economy. In National Conference on Emerging challenges for sustainable business (pp. 289-310).
- 74. Kadam, R. K. (2012). Financial Management: The key strategy for the sustained growth of small scale industries of India. *International Journal of Research in Finance & Marketing*, 2(2).
- 75. Kallberg, J. G., & Udell, G. F. (2003). The value of private sector business credit information sharing: The US case. *Journal of Banking & Finance*, 27(3), 449-469.
- 76. Kazanjian, R. K., & Drazin, R. (1990). A stage-contingent model of design and growth for technology based new ventures. *Journal of business venturing*, *5*(3), 137-150.
- 77. Kshetri, N. (2010). Cloud computing in developing economies. Computer, 43(10), 47-55.
- 78. Kulkarni, P., & Chirputkar, A. V. (2014). Impact of SME Listing on Capital Structure Decisions. Procedia Economics and Finance, 11, 431-444.
- 79. La Porta, R., & Shleifer, A. (2008). The unofficial economy and economic development. Brookings Papers on Economic Activity, 39(2), 275–363, Economic Studies Program, The Brookings Institution.
- 80. Laabs, J.J. (1996), "Leading organizational change", Personnel Journal, Vol. 75 No. 7, pp. 54-63.
- 81. Lai, Y. L., & Lin, F. J. (2012). The effects of knowledge management and technology innovation on new product development performance an empirical study of Taiwanese machine tools industry. *Procedia-Social and Behavioral Sciences*. 40. 157-164.
- 82. Lee, V. H., Foo, A. T. L., Leong, L. Y., & Ooi, K. B. (2016). Can competitive advantage be achieved through knowledge management? A case study on SMEs. Expert Systems with Applications, 65, 136-151.
- 83. Lerner, M., Brush, C., & Hisrich, R. (1997). Israeli women entrepreneurs: An examination of factors affecting performance. *Journal of Business Venturing*, 12(4), 315-339.
- 84. Levy, S. (2010). Good intentions, bad outcomes: Social policy, informality, and economic growth in Mexico. Brookings Institution Press.
- 85. Lewis Reynolds, P., & Lancaster, G. (2007). Predictive strategic marketing management decisions in small firms: A possible Bayesian solution. *Management Decision*, 45(6), 1038-1057.
- 86. Li, K., Niskanen, J., Kolehmainen, M., & Niskanen, M. (2016). Financial innovation: Credit default hybrid model for SME lending. Expert Systems with Applications, 61, 343-355.
- 87. Liao, J., & Welsch, H. (2003). Social capital and entrepreneurial growth aspiration: a comparison of technology-and non-technology-based nascent entrepreneurs. The Journal of high technology management research, 14(1), 149-170.
- 88. Lin, S. L. (2009). A new two-stage hybrid approach of credit risk in banking industry. Expert Systems with Applications, 36(4), 8333-8341.
- 89. M. Carter, N., & R. Allen, K. (1997). Size determinants of women-owned businesses: choice or barriers to resources? *Entrepreneurship & Regional Development*, 9(3), 211-220.
- 90. Mac an Bhaird, C. (2010). The Modigliani–Miller proposition after fifty years and its relation to entrepreneurial finance. Strategic Change, 19(1-2), 9-28.
- 91. Mahr, D., Lievens, A., & Blazevic, V. (2014). The value of customer cocreated knowledge during the innovation process. *Journal of Product Innovation Management*, 31(3), 599-615.
- 92. Makowski, P. (1985). Credit scoring branches out. Credit World, 75(1), 30-37.
- 93. Maloney, W. F. (2004). Informality revisited. World development, 32(7), 1159-1178.
- 94. Maloney, W. F. (2004). Informality revisited. World development, 32(7), 1159-1178.
- 95. Mapetla, M. (1999). Gendered access to land and housing in Lesotho. Agenda, 15(42), 70-77.
- 96. Martey, E., Annin, K., Attoh, C., Wiredu, A. N., Etwire, P. M., & Al-Hassan, R. M. (2013). Performance and constraints of small scale enterprises in the Accra Metropolitan Area of Ghana.
- 97. Massa, S., & Testa, S. (2009). A knowledge management approach to organizational competitive advantage: Evidence from the food sector. *European Management Journal*, 27(2), 129-141.
- 98. Mathur, A., Mittal, M. L., & Dangayach, G. S. (2012). Improving productivity in Indian SMEs. Production Planning & Control, 23(10-11), 754-768.
- 99. Matias, F., & Serrasqueiro, Z. (2017). Are there reliable determinant factors of capital structure decisions? Empirical study of SMEs in different regions of Portugal. Research in International Business and Finance, 40, 19-33.
- 100. Maureen, G. (2012), Flourishing, Penguin, London.
- 101. McConnell, J. (1984). Application of the Modern Theory of Finance to Small Business Firms, Small Business Finance, Problems in Financing Small Businesses, (eds.) Horvitz. PM e Pettit. RR.
- 102. McKenzie, D., & Sakho, Y. S. (2010). Does it pay firms to register for taxes? The impact of formality on firm profitability. *Journal of Development Economics*, 91(1), 15-24.
- 103. McNamara, A., Murro, P., & Donohoe, S. O. (2016). Countries lending infrastructure and capital structure determination: The case of European SMEs. *Journal of Corporate Finance*.
- 104. Mehta, B., & Parekh, S. (2014). Women Entrepreneurs: Leading the Way Ahead. Journal of Social Welfare and Management, 6(1), 35.
- 105. Mitchelmore, S., & Rowley, J. (2013). Entrepreneurial competencies of women entrepreneurs pursuing business growth. *Journal of Small Business and Enterprise Development*, 20(1), 125-142.
- 106. Mittal, V. K., & Sangwan, K. S. (2014). Prioritizing barriers to green manufacturing: environmental, social and economic perspectives. *Procedia CIRP*, 17, 559-564.
- 107. Moen, O. (1999). The relationship between firm size, competitive advantages and export performance revisited. *International Small Business Journal*, 18(1), 53-72.
- 108. Mugler,J.(2002), "StrategicdevelopmentofSMEsinturbulentenvironments", in Piasecki, B.(Ed.), Entrepreneurship and Small Business Development in the 21st Century, Lodz University Press, Lodz, pp. 305-13.
- 109. Myers, J. H., & Forgy, E. W. (1963). The development of numerical credit evaluation systems. *Journal of the American Statistical association*, 58(303), 799-806.
- 110. Myers, S. C., & Majluf, N. S. (1984). Corporate financing and investment decisions when firms have information that investors do not have. *Journal of financial economics*, 13(2), 187-221.
- 111. Nagesha, N. (2008). Role of energy efficiency in sustainable development of small-scale industry clusters: an empirical study. *Energy for Sustainable Development*, 12(3), 34-39.
- 112. Narula, R. (2004). R&D collaboration by SMEs: new opportunities and limitations in the face of globalisation. Technovation, 24(2), 153-161.

- 113. Neace, M. B. (1999). Entrepreneurs in emerging economies: Creating trust, social capital, and civil society. The Annals of the American Academy of Political and Social Science, 565(1), 148-161.
- 114. Newman, A., Gunessee, S., & Hilton, B. (2012). Applicability of financial theories of capital structure to the Chinese cultural context: A study of privately owned SMEs. *International Small Business Journal*, 30(1), 65-83.
- 115. Ngai, E. W., & Wat, F. K. T. (2002). A literature review and classification of electronic commerce research. Information & Management, 39(5), 415-429.
- 116. NK Saunders, M., E. Gray, D., & Goregaokar, H. (2013). SME innovation and learning: the role of networks and crisis events. *European Journal of Training and Development*, 38(1/2), 136-149.
- 117. Norton, E. (1991). Capital structure and small public firms. Journal of Business Venturing, 6(4), 287-303.
- 118. OECD (2009). Employment, poverty reduction and development: What's New? In J. Ju" tting, & J. de Laiglesia (Eds.), In Is informal normal? Towards more and better jobs in developing countries. An OECD development centre perspective, Paris.
- 119. Olson, P. D., & Bokor, D. W. (1995). Strategy process-content interaction: Effects on growth performance in small, start-up firms. *Journal of small business management*, 33(1), 34.
- 120. Orgler, Y. E. (1970). A credit scoring model for commercial loans. Journal of money, Credit and Banking, 2(4), 435-445.
- 121. Paarup Nielsen, A. (2006). Understanding dynamic capabilities through knowledge management. Journal of knowledge management, 10(4), 59-71.
- 122. Pandian, S. P. K., & Jesurajan, S. V. (2011). An empirical investigation on the factors determining the success and problems faced by women Entrepreneurs in Tiruchirapalli District—Tamilnadu. *Interdisciplinary Journal of Contemporary Research in Business*, 3(3), 914-922.
- 123. Panizzolo, R., Garengo, P., Sharma, M. K., & Gore, A. (2012). Lean manufacturing in developing countries: evidence from Indian SMEs. *Production Planning & Control*, 23(10-11), 769-788.
- 124. Paul, I. D., Bhole, G. P., & Chaudhari, J. R. (2014). A review on green manufacturing: it's important, methodology and its application. *Procedia Materials Science*, *6*, 1644-1649.
- 125. Peel, M. J., Wilson, N., & Howorth, C. (2000). Late payment and credit management in the small firm sector: some empirical evidence. *International Small Business Journal*, 18(2), 17-37.
- 126. Pennings, J. M., Lee, K., & Van Witteloostuijn, A. (1998). Human capital, social capital, and firm dissolution. Academy of management Journal, 41(4), 425-440.
- 127. Perry, G., Maloney, W., Arias, O., Fajnzylber, P., Mason, A., & Saavedra-Chanduvi, J. (2007). Informality: Exit and Exclusion (Washington, DC, World Bank).
- 128. Peter, F. D. (1995). Managing in a time of great change. New York, Truman Talley.
- 129. Petersen, M. A., & Rajan, R. G. (1994). The benefits of lending relationships: Evidence from small business data. The journal of finance, 49(1), 3-37.
- 130. Pettit, R. R., & Singer, R. F. (1985). Small business finance: a research agenda. Financial management, 47-60.
- 131. Porras, J. I., & Hoffer, S. J. (1986). Common behavior changes in successful organization development efforts. *The Journal of Applied Behavioral Science*, 22(4), 477-494.
- 132. Poutziouris, P., Binks, M., & Bruce, A. (1999). A problem-based phenomenological growth model for small manufacturing firms. *Journal of Small Business and Enterprise Development*, 6(2), 139-152.
- 133. Preisendörfer, P., & Voss, T. (1990). Organizational mortality of small firms: The effects of entrepreneurial age and human capital. *Organization Studies*, 11(1), 107-129.
- 134. Press Information Bureau, Government of India, Ministry of Micro, Small & Medium Enterprises.
- 135. Quintin, E. (2008). Contract enforcement and the size of the informal economy. Economic Theory, 37(3), 395-416.
- 136. R. Anderson, A., & Ullah, F. (2014). The condition of smallness: How what it means to be small deters firms from getting bigger. *Management Decision*, 52(2), 326-349.
- 137. Raj, P. (Ed.). (2014). Handbook of research on cloud infrastructures for big data analytics. IGI Global.
- 138. Ramadani, V. (2011a). The Economic Power of Small Businesses—The Case of Republic of Macedonia.
- 139. Ramadani, V. (2011b), "Theoretical Framework of Innovation and Competitiveness and Innovation Program in Macedonia", European Journal of Social Sciences, Vol. 23 No. 2, pp. 268-276.
- 140. Ramadani, V., & Gerguri, S. (2011). Innovations: principles and strategies. Strategic Change, 20(3-4), 101-110.
- 141. Ramos, L. A. G., Maldonado, E. R., & Hernández, E. F. M. (2014, July). Comparison of women entrepreneurs' profiles in Coahuila, Mexico and San Juan, Puerto Rico. In *Global Conference on Business & Finance Proceedings* (Vol. 9, No. 2, p. 190). Institute for Business & Finance Research.
- 142. Rand, J., & Torm, N. (2012). The benefits of formalization: Evidence from Vietnamese manufacturing SMEs. World development, 40(5), 983-998.
- 143. Rantšo, T. A., & Rantšo, T. A. (2016). Factors affecting performance/success of small-scale rural non-farm enterprises in Lesotho. *Journal of Enterprising Communities: People and Places in the Global Economy*, 10(3), 226-248.
- 144. Report of the Working Group on "Effectively Integrating Industrial Growth and Environment Sustainability" Twelfth Five Year Plan, 2012-2017.
- 145. Robson, P. J., & Bennett, R. J. (2000). SME growth: the relationship with business advice and external collaboration. Small business economics, 15(3), 193-208
- 146. Rosenthal, L. (1996). Phenomena of resistance in modern group analysis. American journal of psychotherapy, 50(1), 75.
- 147. Salonitis, K. (2015). Energy efficiency assessment of grinding strategy. International Journal of Energy Sector Management, 9(1), 20-37.
- 148. Salonitis, K., & Ball, P. (2013). Energy efficient manufacturing from machine tools to manufacturing systems. Procedia Cirp, 7, 634-639.
- 149. Salonitis, K., & Stavropoulos, P. (2013). On the integration of the CAx systems towards sustainable production. Procedia CIRP, 9, 115-120.
- 150. Sangwan, K. S. (2011). Quantitative and qualitative benefits of green manufacturing: an empirical study of Indian small and medium enterprises. In *Glocalized Solutions for Sustainability in Manufacturing* (pp. 371-376). Springer Berlin Heidelberg.
- 151. Sarasvathy, S. D. (2008). Effectuation: Elements of entrepreneurial orientation.
- 152. Sardakis, G., Mole, K., & Hay, G. (2007, November). Do liquidity constraints in the first year of trading reduce the likelihood of firm growth and survival? Evidence from England. In 30th ISBE Conference, International Entrepreneurship, Glasgow (pp. 7-9).
- 153. Šarlija, N., Benšić, M., & Bohaček, Z. (2004, September). Multinomial model in consumer credit scoring. In 10th International Conference on Operational Research (10: 2004).
- 154. Schafer, D. H. (2008). Effect of train length on railroad accidents and a quantitative analysis of factors affecting broken rails. *University of Illinois at Urbana-Champaian*.
- 155. Schafer, D. H. (2008). Effect of train length on railroad accidents and a quantitative analysis of factors affecting broken rails. *University of Illinois at Urbana-Champaian*.
- 156. Scherr, F. C., Sugrue, T. F., & Ward, J. B. (1993). Financing the small firm start-up: Determinants of debt use. The Journal of Entrepreneurial Finance, 3(1), 17.
- 157. Sexton, D. L. (1989). Growth decisions and growth patterns of women-owned enterprises. Woman-owned businesses, New York: Praeger, 135-150.
- 158. Sharma, S., & Sharma, M. (2010). Analyzing the technical and scale efficiency of small industries in India: state-wise cluster study. *Measuring Business Excellence*, 14(2), 54-65.
- 159. Shaw, B., & Maletz, M. (1995). Business processes: embracing the logic and limits of reengineering. *Discontinuous Change: Leading Organizational Transformation, edited by. D. Nadler, R. Shaw, and E. Walton. San Francisco: Jossey-Bass.*
- 160. Singh Sandhawalia, B., & Dalcher, D. (2011). Developing knowledge management capabilities: a structured approach. *Journal of Knowledge Management*, 15(2), 313-328.
- 161. Singh, G., & Belwal, R. (2008). Entrepreneurship and SMEs in Ethiopia: Evaluating the role, prospects and problems faced by women in this emergent sector. *Gender in management: An international journal*, 23(2), 120-136.

- 162. Singh, J., & Singh, D. (2014). Problems related to the Financing of Small Firms in India. *International Journal of Innovative Research and Development* | ISSN 2278–0211, 3(1).
- 163. Singh, R. K., Garg, S. K., & Deshmukh, S. G. (2010). Strategy development by small scale industries in India. *Industrial Management & Data Systems*, 110(7), 1073-1093.
- 164. Sigueira, A. C. O., Webb, J. W., & Bruton, G. D. (2014). Informal entrepreneurship and industry conditions. Entrepreneurship Theory and Practice.
- 165. Small and Medium Business Development Chamber of India
- 166. Smith, C. W., & Warner, J. B. (1979). Bankruptcy, secured debt, and optimal capital structure: Comment. The Journal of Finance, 34(1), 247-251.
- 167. Steenackers, A., & Goovaerts, M. J. (1989). A credit scoring model for personal loans. Insurance: Mathematics and Economics, 8(1), 31-34.
- 168. Stokes, D.R. (2002), Small Business Management, 4th ed., Continuum, London.
- 169. Strean, H. S. (1996). Resistance viewed from different perspectives. American journal of psychotherapy, 50(1), 29.
- 170. Stump, R. L., Athaide, G. A., & Joshi, A. W. (2002). Managing seller-buyer new product development relationships for customized products: a contingency model based on transaction cost analysis and empirical test. *Journal of Product Innovation Management*, 19(6), 439-454.
- 171. Subramaniam, M., & Youndt, M. A. (2005). The influence of intellectual capital on the types of innovative capabilities. *Academy of management Journal*, 48(3), 450-463.
- 172. Szamosi, L. T., Duxbury, L., & Higgins, C. (2004). Toward an understanding of people management issues in SMEs: a South-Eastern European perspective. Education+ Training, 46(8/9), 444-453.
- 173. Thanki, S., Govindan, K., & Thakkar, J. (2016). An investigation on lean-green implementation practices in Indian SMEs using analytical hierarchy process (AHP) approach. *Journal of Cleaner Production*, 135, 284-298.
- 174. Theoharakis, V., & Wong, V. (2002). Marking high-technology market evolution through the foci of market stories: the case of local area networks. *Journal of Product Innovation Management*, 19(6), 400-411.
- 175. Thompson, P., Williams, R., & Thomas, B. (2013). Are UK SMEs with active web sites more likely to achieve both innovation and growth? *Journal of Small Business and Enterprise Development*, 20(4), 934-965.
- 176. Tunberg, M. (2014). Approaching rural firm growth: a literature review. Journal of Enterprising Communities: People and Places in the Global Economy, 8(4), 261-286.
- 177. Ulyssea, G. (2010). Regulation of entry, labor market institutions and the informal sector. Journal of Development Economics, 91(1), 87-99.
- 178. Van Horn, R. L., & Harvey, M. G. (1998). The rural entrepreneurial venture: creating the virtual megafirm. Journal of Business Venturing, 13(4), 257-274.
- 179. Viljainen, S. (2005). Regulation Design in the Electricity Distribution Sector: Theory and Practice (pp. 1-6). Lappeenranta University of Technology.
- 180. Vos, E., Yeh, A. J. Y., Carter, S., & Tagg, S. (2007). The happy story of small business financing. Journal of Banking & Finance, 31(9), 2648-2672.
- 181. Wang, C. L. (2008). Entrepreneurial orientation, learning orientation, and firm performance. Entrepreneurship theory and practice, 32(4), 635-657.
- 182. Watkins, T., & Blackburn, R. (1986). The role of marketing in the small firm: evidence from a regional survey. Marketing Intelligence & Planning, 4(4), 26-38.
- 183. Watson, J., Newby, R., & Mahuka, A. (2009). Gender and the SME "finance gap". International Journal of Gender and Entrepreneurship, 1(1), 42-56.
- 184. Wells, B. L., Pfantz, T. J., & Bryne, J. L. (2003). Russian women business owners: evidence of entrepreneurship in a transition economy. *Journal of Developmental Entrepreneurship*, 8(1), 59.
- 185. Wheeler, B. C. (2002). NEBIC: A dynamic capabilities theory for assessing net-enablement. Information Systems Research, 13(2), 125-146.
- 186. White, S., & Linden, G. (2002). Organizational and industrial response to market liberalization: The interaction of pace, incentive and capacity to change. *Organization Studies*, 23(6), 917-948.
- 187. Wiginton, J. C. (1980). A note on the comparison of logit and discriminant models of consumer credit behavior. *Journal of Financial and Quantitative Analysis*, 15(03), 757-770.
- 188. Wiklund, J., & Shepherd, D. (2003). Aspiring for, and achieving growth: The moderating role of resources and opportunities. *Journal of management studies*, 40(8), 1919-1941.
- 189. Wiklund, J., Patzelt, H., & Shepherd, D. A. (2009). Building an integrative model of small business growth. Small Business Economics, 32(4), 351-374.
- 190. Winborg, J., & Landström, H. (2001). Financial bootstrapping in small businesses: examining small business managers' resource acquisition behaviors. *Journal of business venturing*, 16(3), 235-254
- 191. Xiong, M. H., Tor, S. B., Bhatnagar, R., Khoo, L. P., & Venkat, S. (2006). A DSS approach to managing customer enquiries for SMEs at the customer enquiry stage. *International Journal of Production Economics*, 103(1), 332-346.
- 192. Zakkariya, K. A., & Nishanth, P. (2014). Barriers Faced By Micro, Small And Medium Enterprises In Raising Finance.
- 193. Zein, A. (2012). Transition towards energy efficient machine tools. Springer Science & Business Media.
- 194. Zuwarimwe, J., & Kirsten, J. (2010). The role of social networks in development of small-scale enterprises in the Chimanimani district of Zimbabwe. *Agrekon*, 49(1), 17-38.

#### WEBSITES

- 195. http://www.tradingeconomics.com/india/rural-population-percent-of-total-population-wb-data.html
- 196. http://economictimes.indiatimes.com/news/economy/policy/budget-2017-reduced-tax-rate-for-msmes-to-benefit-96-of-indias-companies/articleshow/56924663.cms
- 197. http://www.paisabazaar.com/business-loan/articles/12119-budget-2017-18-benefits-for-small-and-medium-sized-enterprises.
- 198. http://statisticstimes.com/economy/gdp-growth-of-india.php
- 199. http://www.margdarshak.org.in/non\_farm\_livelihoods\_jdp.php
- 200. http://www.knowledge-management-tools.net/knowledge-management.html

## REQUEST FOR FEEDBACK

#### **Dear Readers**

At the very outset, International Journal of Research in Commerce, Economics & 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 <a href="mailto:infoijrcm@gmail.com">infoijrcm@gmail.com</a> for further improvements in the interest of research.

If you have any queries, please feel free to contact us on our e-mail infoijrcm@gmail.com.

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

Looking forward to an appropriate consideration.

With sincere regards

Thanking you profoundly

**Academically yours** 

Sd/-

Co-ordinator

# **DISCLAIMER**

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

## **ABOUT THE JOURNAL**

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







