# **INTERNATIONAL JOURNAL OF RESEARCH IN COMMERCE, IT & MANAGEMENT**



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

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

Circulated all over the world & Google has verified that scholars of more than 5896 Cities in 193 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.	TITLE & NAME OF THE AUTHOR (C)	Page
No.	TITLE & NAME OF THE AUTHOR (S)	No.
1.	LOCAL GOVERNMENT PERFORMANCE AND ITS ASSOCIATED REWARD POLICIES: THE	1
	CONSIDERATIONS OF ECONOMIC GROWTH AND ENVIRONMENT PROTECTION	
	Dr. PO-CHIN WU, TSAI,MENG-HUA & HSIAO,I-CHUNG	
2.	MEASUREMENT AND EVALUATION OF FINANCIAL PERFORMANCE OF SIYARAM SILK	7
	MILLS LIMITED THROUGH Z-SCORE MODEL	
	GARIMA MADAAN & Dr. N. S. RAO	
3.	A PRAGMATIC STUDY ON THE ASSOCIATION OF DEMOGRAPHICS ON INVESTOR'S	12
	INVESTMENT DECISION	
	SHAILAJA YADAV & Dr. NIRMALA JOSHI	
4.	SATISFACTION LEVEL OF MIGRANT EMPLOYEES WITH SPECIAL REFERENCE TO TIRUPUR	17
	GARMENT INDUSTRY	
	Dr. D. GNANASENTHIL KUMAR & T.SREEREKHA	
5.	CORPORATE SOCIAL RESPONSIBILITY IN INFORMATION TECHNOLOGY SECTOR – A STUDY	21
	WITH REFERENCE TO SELECT (IT) INDUSTRY IN CHENNAI	
	Dr. N. SUREGA	
6.	PERFORMANCE OF MGNREGS IN KERALA: A SPECIAL REFERENCE AT KADAPLAMATTOM	27
	GRAMA PANCHAYATH	
	ANUSHA K J & Dr. PRAKASH C	
7.	A COMPARATIVE ANALYSIS OF THE ROLE OF AGRICULTURAL POLICIES AS DRIVERS OF	30
	GROWTH AND DEVELOPMENT OF THE AGRICULTURAL SECTOR IN NIGERIA, 1981-2014	
	UDEORAH, S.F., VINCENT, M.O. & OHAM, N. R.	
8.	SATISFACTION LEVELS OF THE CUSTOMERS IN TELECOM SERVICE PROVIDERS – A STUDY	39
	IN ANANTAPURAMU DISTRICT	
	Dr. G.PAVAN KUMAR	
9.	ACCOUNTING METHODOLOGY OF SARVA SHIKSHA ABHIYAN PROJECT WITH SPECIAL	45
	REFERENCE TO GUJARAT STATE	
	NIRAV ASHOKBHAI PANDYA	
10.	DEMONETIZATION AND ITS IMPACT ON INDIAN ECONOMY	48
	SUMIT BANERJEE	
	REQUEST FOR FEEDBACK & DISCLAIMER	50

#### CHIEF PATRON

#### Prof. (Dr.) K. K. AGGARWAL

Chairman, Malaviya National Institute of Technology, Jaipur (An institute of National Importance & fully funded by Ministry of Human Resource Development, Government of India)

Chancellor, K. R. Mangalam University, Gurgaon

Chancellor, Lingaya's University, Faridabad

Founder Vice-Chancellor (1998-2008), Guru Gobind Singh Indraprastha University, Delhi Ex. Pro Vice-Chancellor, Guru Jambheshwar University, Hisar

#### FOUNDER PATRON

#### Late Sh. RAM BHAJAN AGGARWAL

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

#### FORMER CO-ORDINATOR

Dr. S. GARG

Faculty, Shree Ram Institute of Business & Management, Urjani

#### ADVISOR.

#### **Prof. S. L. MAHANDRU**

Principal (Retd.), Maharaja Agrasen College, Jagadhri

### **EDITOR**

#### **Dr. A SAJEEVAN RAO**

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

#### CO-EDITOR.

#### Dr. BHAVET

Faculty, Shree Ram Institute of Engineering & Technology, Urjani

#### EDITORIAL ADVISORY BOARD

#### Dr. S. P. TIWARI

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

Dr. CHRISTIAN 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. JOSÉ G. VARGAS-HERNÁNDEZ

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

#### Dr. M. N. SHARMA

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

#### Dr. TEGUH WIDODO

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

#### Dr. M. S. SENAM RAJU

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

#### Dr. D. S. CHAUBEY

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

#### Dr. CLIFFORD OBIYO OFURUM

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

Dr. KAUP MOHAMED

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

#### Dr. VIRENDRA KUMAR SHRIVASTAVA

Director, Asia Pacific Institute of Information Technology, Panipat

#### **SUNIL KUMAR KARWASRA**

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

#### Dr. MIKE AMUHAYA IRAVO

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

#### **Dr. SYED TABASSUM SULTANA**

Principal, Matrusri Institute of Post Graduate Studies, Hyderabad

#### Dr. BOYINA RUPINI

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

#### Dr. NEPOMUCENO TIU

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

#### **Dr. SANJIV MITTAL**

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

#### Dr. ANA ŠTAMBUK

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

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

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

#### **Dr. SHIB SHANKAR ROY**

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

#### Dr. ANIL K. SAINI

Professor, Guru Gobind Singh Indraprastha University, Delhi

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

Professor, School of Business, Mzumbe University, Tanzania

#### Dr. NAWAB ALI KHAN

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

#### **MUDENDA COLLINS**

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

#### Dr. EGWAKHE A. JOHNSON

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

#### Dr. A. SURYANARAYANA

Professor, Department of Business Management, Osmania University, Hyderabad

#### P. SARVAHARANA

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

#### Dr. MURAT DARÇIN

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

#### Dr. ABHAY BANSAL

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

#### **Dr. YOUNOS VAKIL ALROAIA**

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

#### WILLIAM NKOMO

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

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

Faculty in Economics, KPB Hinduja College of Commerce, Mumbai

#### **SHASHI KHURANA**

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

#### Dr. SEOW TA WEEA

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

#### Dr. OKAN VELI ŞAFAKLI

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

#### Dr. MOHENDER KUMAR GUPTA

Associate Professor, Government College, Hodal

#### Dr. BORIS MILOVIC

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

#### **Dr. LALIT KUMAR**

Faculty, Haryana Institute of Public Administration, Gurugram

#### Dr. MOHAMMAD TALHA

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

#### Dr. V. SELVAM

Associate Professor, SSL, VIT University, Vellore

#### Dr. IQBAL THONSE HAWALDAR

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

#### Dr. PARDEEP AHLAWAT

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

#### **Dr. ALEXANDER MOSESOV**

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

#### Dr. ASHOK KUMAR CHAUHAN

Reader, Department of Economics, Kurukshetra University, Kurukshetra

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

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

#### **SURJEET SINGH**

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

#### Dr. MELAKE TEWOLDE TECLEGHIORGIS

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

#### Dr. RAJESH MODI

Faculty, Yanbu Industrial College, Kingdom of Saudi Arabia

#### Dr. SAMBHAVNA

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

#### Dr. THAMPOE MANAGALESWARAN

Faculty, Vavuniya Campus, University of Jaffna, Sri Lanka

#### **Dr. SHIVAKUMAR DEENE**

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

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

#### FORMER TECHNICAL ADVISOR

#### **AMITA**

#### FINANCIAL ADVISORS

#### **DICKEN GOYAL**

Advocate & Tax Adviser, Panchkula

#### **NEENA**

Investment Consultant, Chambaghat, Solan, Himachal Pradesh

#### LEGAL ADVISORS

#### **JITENDER S. CHAHAL**

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

#### **CHANDER BHUSHAN SHARMA**

Advocate & Consultant, District Courts, Yamunanagar at Jagadhri

#### <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 SUBMISS	ION OF MANUSCRIPT
COVERING LETTER FOR SUBMISSION:	
	DATED:
THE EDITOR	
IJRCM	
Subject: SUBMISSION OF MANUSCRIPT IN THE AREA OF	
(e.g. Finance/Mkt./HRM/General Mgt./Engineering/Economics/C	omputer/IT/ Education/Psychology/Law/Math/other, please
<mark>specify</mark> )	
DEAR SIR/MADAM	
Please find my submission of manuscript titled 'your journals.	
I hereby affirm that the contents of this manuscript are original. Fur fully or partly, nor it is under review for publication elsewhere.	thermore, it has neither been published anywhere in any language
I affirm that all the co-authors of this manuscript have seen the su their names as co-authors.	omitted version of the manuscript and have agreed to inclusion of
Also, if my/our manuscript is accepted, I agree to comply with the discretion to publish our contribution in any of its journals.	formalities as given on the website of the journal. The Journal has
NAME OF CORRESPONDING AUTHOR	:
Designation/Post*	:
Institution/College/University with full address & Pin Code	:
Residential address with Pin Code	:
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

F-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

## MEASUREMENT AND EVALUATION OF FINANCIAL PERFORMANCE OF SIYARAM SILK MILLS LIMITED THROUGH Z-SCORE MODEL

GARIMA MADAAN
RESEARCH SCHOLAR
FACULTY OF MANAGEMENT STUDIES
JRNRV UNIVERSITY
UDAIPUR

Dr. N. S. RAO
PROFESSOR
FACULTY OF MANAGEMENT STUDIES
JRNRV UNIVERSITY
UDAIPUR

#### ABSTRACT

The textile industry of India plays a substantive role in the economy. This is one of the largest industries in India in terms of employment generation and earning foreign exchange. Finance is the significant facet of every business and financial analysis can be applied in a wide variety of situations to give business managers the information they need to make critical decisions. Therefore, it is important to monitor the financial position and strength of a company through its financial statement, which throws light on the operational efficiency and financial position of the company. The prediction and prevention of financial distress is one of the major factors, which will help to avoid financial distress. This evaluation should be done very carefully and rationally and it can be done by using various tools, such as-ratio analysis, decision theory etc. The result of analysis shows the present performances, but it cannot exhibit whether the company will have any chances of bankruptcy/financial distress in near future or not. Z score is a financial tool, which is used for bankruptcy prediction. It analyses financial data and the result of analysis categorize a company in a zone according to its performance out of three zones; the zones are-bankruptcy, grey and safe zone. This study was undertaken with a view to assess the financial strength of Siyaram Silk Mills Ltd. for five financial years 2009-10 to 2013-14 through the method of ratio analysis. The Z score model has been adopted for analyzing the financial strength of the company. The study reveals that financial strength of Siyaram Silk Mills Ltd. is lies in grey zone and future in this situation is uncertain to predict as per Altman guidelines of Z score.

#### **KEYWORDS**

Z score, bankruptcy, financial distress, ratio analysis, trend analysis.

#### **JEL CODE**

G33.

#### INTRODUCTION

he Indian textile industry is one of the largest in the world with a massive raw material and textiles manufacturing base. Our economy is largely dependent on the textile manufacturing and trade in addition to other major industries. The textiles and clothing sector contributes about 14% to the industrial production and 4% to the gross domestic product of the country. Around 8% of the total excise revenue collection is contributed by the textile industry. So much so, the textile industry accounts for as large as 21% of the total employment generated in the economy. Around 35 million people are directly employed in the textile manufacturing activities. Indirect employment including the manpower engaged in agricultural based raw-material production like cotton and related trade and handling could be stated to be around another 60 million. Textile is the largest single industry in India (and amongst the biggest in the world), accounting for about 20% of the total industrial production. Textile and clothing exports account for one-third of the total value of exports from the country. There are 1,227 textile mills with a spinning capacity of about 29 million spindles. While yarn is mostly produced in the mills, fabrics are produced in the power loom and handloom sectors as well. The Indian textile industry continues to be predominantly based on cotton, with about 65% of raw materials consumed being cotton. The manufacture of jute products ranks next in importance to cotton weaving.

Textile is one of India's oldest industries and has a formidable presence in the national economy in as much as it contributes to about 14 per cent of manufacturing value addition, accounts for around one-third of our gross export earnings and provides gainful employment to millions of people. They include cotton and jute growers, artisans and weavers who are engaged in the organized as well as decentralized and household sectors spread across the entire country. The fundamental strength of this industry flows from its strong production base of wide range of fibers / yarns from natural fibers like cotton, jute, silk and wool to synthetic /manmade fibers like polyester, viscose, nylon and acrylic.

#### SIYARAM SILK MILLS LTD.

Siyaram Silk Mills Ltd. is an Indian blended fabric and garment manufacturer having retail outlets and branded showrooms. It is also called as Siyaram's and as SSM. Siyaram's manufactures and sells fabrics ready-made men's and women's apparel, home furnishing, and yarns. Siyaram's is associated with over 1 lakh retail outlets, and has over 170 branded showrooms spread across the nation. In the March 2014 quarter, the company's annualized net profit was Rs 20.2 Cr. Siyaram's produces over 4 million meters of fabric produced per month; over 60 million meters of fabric annually. Siyaram's brands include J Hampstead, Oxemberg among others

According to the Economic Times, polyester viscose, derived from crude oil, forms nearly 85% of Siyaram's raw material In 2014, Siyaram's saw 80% of revenues from fabric sales, 16% from garments, and 4% from yarn Siyaram's weaving capacity is 8 crore meters; garment capacity is 40 lakh pieces per annum. Like some other textile manufacturers, Siyaram's has entered the readymade-garment (RMG) sector. Beginning in 2004, it has developed product lines in home furnishing, uniform, children's clothing, and a women's line. On 24th September, 2015, Siyaram's Silk Mills announced its global venture with a prominent Italian brand, Cadin at Sahara Star, Mumbai. The company plans to develop an exclusive range of fabrics in long staple cotton, Giza cotton, linen, wool cashmere, wool-silk-linen, Silk, wool blends, jacketing fabrics in Linen.

#### **IMPORTANCE OF THE STUDY**

Finance is the significant facet of every business. Both excessive as well as inadequate finance positions are dangerous from the business point of view. Therefore, finance is the back bone of any business. The financial analyst is responsible to monitor the financial position of the business regularly. As there is an increasing competition from other global players, the management has to initiate appropriate steps to assess the financial strength of the company. Financial strength will

provide valuable insights into its financial performance. Financial soundness of a firm is reflected through various financial parameters. By establishing a close relationship between variables, a firm can analyze its financial performance in terms of liquidity, profitability, viability and sustainability. Distress prediction model will assist a manger to keep track of a company's performance and help in identifying important trends.

A company can continue its operation when it has adequate amount of funds and such funds utilizes in an efficient way. The funds are used to meet short term as well as long term obligations. Short term obligation includes- payment of creditors, salary, wages, interest, dividend etc. and long term obligation includes- acquisition of fixed assets, making investments, acquisition of company etc. Investors provide funds to a company in the way of investment to get some positive return in future. But if they don't get expected return then it will be difficult for the company to arrange funds in next time. So it is the duty of the management to ensure the effective utilization of funds. Different stakeholders (such as- shareholders, creditors, banks, employees, management etc.) analyze the financial information for making various decisions. The result of the analysis shows the present performance and future prospects of the company.

Distressed analysis is a part of financial analysis, which shows whether there is any possibility of bankruptcy of a company in near future or not. Actually bankruptcy refers to the situation when a company is unable to pay its debts. When a company faces financial distress for long period then company's liquidity position, solvency position become very poor. Revenue collection go down due to reduction of sales, as a result company cannot pay its due and cannot earn profit. Thus the amount of net worth gradually reduces and all these things adversely effect on company's share price and goodwill. There are different reasons for the distress of a business entity, such are- lack of finance, lack of demand of the product in the market, conflict between management and employees, lack of managerial efficiencies and some other internal and external problems. If these problems persist for a long period of time in a company, then it can be declared as bankrupt and goes into liquidation. As a result, it reduces employment opportunities, Government earnings, industrial growth etc. and also deeply effects on the surrounding areas where the entity belonged. So it is very clear that prediction of bankruptcy of business firm has a great value to the stakeholders. Because if the result of bankruptcy prediction shows that a firm has the chances of bankruptcy in near future then investors can be concerned about their investment as well as management can be taken remedial actions to avoid it and make the firm in good position. An attempt has been made in the present study to have an insight into the examination of financial strength of the selected company.

#### LITERATURE REVIEW

The need for reliable financial statement data and the importance of financial ratios for analysis and prediction is well established in the literature. Beginning with Beaver's (1966) contention that standard financial ratios can predict the financial performance of firms, many subsequent studies have attempted to demonstrate the predictive value of various techniques for estimating actual business performance.

Khatik S.K, Varghese Titto (2013) "Financial analysis of steel authority of India limited" states that financial analysis is used to analyze whether an entity is stable, solvent, liquid or profitable enough to be invested in financial analysis is just like doctor who examine the fitness of the human body. For analysis of the financial position of the SAIL, gross profit ratio, net profit and operating ratio, productivity investment and solvency ratios are calculated.

Marimuthu, K.N (2012) "Financial performance of Textile industry: A study of listed company of Tamil Nadu" states that Coimbatore is known as Manchester of South India. 76% of India's total textile market is from Erode (Tex-City or Loom-City of India) and 56% of knitwear exports come from Tirupur. Each company could invest on the basis of current performance compared with previous year or with other company. Decision making, additional investment, liquidity position changes in working capital depend upon the performance & return of company reports. Funds are highly required for day to-day business operations of the firm and how to utilize it and in what way should avoid loses from the investment are discussed here plus, it happens by ineffective management. The objective of the paper is to analyze the performance of textile industry in the selected companies from Tamil Nadu. In addition, the data collected from the CMIE and used the tools of ANOVA and descriptive statistics.

J.R.Raiyani and Dr. R.B. Bhatasna (2011) "A study on Financial Health of Textile Industry In India; A Z – Score Approach". Concluded that predictive viability of a company's financial health by using financial ratios ultimately predicts a score and determine the financial performance of an industry.

Suriyamurthi and Velavan.M (2010) tested the sample units through Z score and finally concluded that predictive viability of company's financial health using a combination of financial ratio ultimately predicts a score which can be used to determine the financial health of company. Kannadhasan(2007) in his study analysed the financial health of a public limited company using 'Z' score model and found that the company's financial position is healthy, management of working capital was satisfactory, and correlation coefficient of the financial ratios are positive.

Gupta R.L. and Radhaswamy.M, (1995) attempted a refinement of Beavers method with the objective of building a forewarning system of corporate sickness. A sample non parametric test for measuring the relative differentiating power of various financial ratios was used. The study, among 728 textiles and non-textile group of industries, revealed that earnings before depreciation, interest and taxes to sales and operating cash flows to sales had higher degree of sickness. The analysis is based on logistic regression, where the bankrupt event is explained by accounting and market based variables. In accordance with the literature, the liquidity and profitability ratios turned out to be the most important variable in forecasting default followed by the company size and its activity.

Perttunen and Martikainen, (1990) explained some listing of ratios to be aware of in analyzing a Company's balance sheet and income statement. They expressed that these ratios fall into four categories — liquidity, profitability, asset management (efficiency), and debt management (leverage).

Fieldsend, Longford and McLeay, (1987) explained how financial ratios can also give mixed signals about a company's financial health, and can vary significantly among companies or industries over a time. Other factors should also be considered such as a company's products, management, competitors, and vision for the future.

Altman, (1968), "Financial ratio discriminate analysis and prediction of corporate Bankruptcy" analyzed the bankruptcy with five financial ratios for predicting the risk of failure and developed a model as 'Z' score. Altman used multiple discriminate analyses (MDS) in his effort to find out a bankruptcy prediction model. He selected 33 publicly traded manufacturing bankrupt companies between 1946 and 1965 and matched them to 33 firms on a random basis. The result of MDS exercise yielded equations called 'Z' score that correctly classified 94% of the bankrupt companies and 97% of the non-bankrupt companies a year prior to bankruptcy. This percentage dropped when trying to predict bankruptcy two or more years before it occurred. The ratios used in Altman model are working capital over total assets, retained earnings over total assets, earnings before interest and taxes over total assets market value of the equity over book value of total liabilities and sales over total assets.

#### IMPORTANCE OF THE STUDY

The textile industry holds significant status in the Indian Economy. Textile industry provides one of the most fundamental necessities of the people. It generates massive potential for employment in the sectors from agricultural to industrial. The textile industry is the second largest employer, after agriculture. Sickness and inter-sector contradictions that are regular features of the industry have to be solved through a wise approach and well-calibrated steps, to ensure healthy growth. Therefore, the sector should be analyzed to identify the weakness and find solution for the same.

It is important to measure the financial sustainability and growth in this competitive world for existence and to grow further. If the company monitors the financial strength at regular interval, it can identify the sign of financial distress and thereby avoid bankruptcy. It is also helps to monitor the entry of new players in this field. All the above reviews show the significance of measurement of financial strength. The present study made an attempt to measure the financial strength along with liquidity, solvency with the help of Z score model of selected textile company in India.

#### **RESEARCH METHODOLOGY**

The study is concerned with Siyaram Silk Mills Ltd. from textile industry listed in stock exchange. This study is based on the data obtained from the Annual Reports of Siyaram Silk Mills Ltd. for five financial years (2009-10 to 2013-14). The collected data was analyzed with the help of ratio analysis and the Z score model. Financial distress is the event of special interest. Beaver was first to use statistical techniques to predict corporate failure. He found that financial ratios for failed companies deteriorated markedly as failure approached. In similar type of study, Edward I Altman, an economist developed the Z score model for predicting the

financial health of a company. This model uses five financial ratios that combine to form a number. This number called the Z score is a general measure of the corporate financial health. Altman's Z score model is based on Multiple Discriminate Analyses (MDA); the model predicts a company's financial health based on a discriminate function of the firm. The specific variable used is explained below and the interpretation of 'Z' score value is presented below in a tabular form.

	Z Score	Zones	Remarks
Situation-I	Below 1.80	Not Safe	Failure would likely occur probably within a period of two years.
Situation-II	Between 1.80 and 2.99	Indeterminate	Financial viability is considered to be indeterminate. The failure in this situation is uncertain
			to predict
Situation-III	3.00 and above	Safe	Financial health is viable and not to fall.

In addition, the study used statistical tools like mean, standard deviation, correlation and t-test.

0.012 X1 + 0.014 X2 + 0.033 X3 + 0.006 X4 + 0.999 X5

Where

Working capital/total assets. Х1 X2 Retained earnings/total assets.

ХЗ Earnings before interest and taxes/total assets. Х4 Market value of equity/book value of total liabilities.

X5 Sales/total assets.

Based on the above methodology, the following hypothesis has been tested:

Ho<sub>1</sub>: There is no significant relationship between Working Capital (WC) and Total Assets (TA)

Ho<sub>2</sub>: There is no significant relationship between Retained Earnings (RE) and Total Assets (TA)

Hoa: There is no significant relationship between Earnings before Interest and Tax (EBIT) and Total Assets (TA)

Ho4: There is no significant relationship between Market Value of Equity (MV) and Total Liabilities (TL) Ho<sub>5</sub>: There is no significant relationship between Sales and Total Assets (TA)

Ho<sub>6</sub>: There is no significant difference between the 5 years average of Z–Score ratio of the standard.

#### **Z-SCORE ANALYSIS OF FINANCIAL RATIOS**

TABLE I: Z-SCORE VALUE BASED ON FINANCIAL RATIOS

Ingredients	Financial Ratios	2009-10	2010-11	2011-12	2012-13	2013-14	Mean	Correlation
X1	WC/TA	46.13	41.97	30.06	10.63	18.22	29.40	-0.775
X2	RE/TA	01.03	01.32	02.57	08.76	12.48	04.96	0.985
X3	EBIT/TA	04.96	07.83	12.81	14.74	14.60	10.81	0.927
X4	MV/BVTL	23.69	12.76	46.16	49.31	36.81	33.78	0.766
X5	Sales/TA	01.03	01.27	01.47	01.39	01.36	01.32	0.944
	Z-Score	01.86	01.97	02.48	02.31	02.34	02.19	

WC = Working Capital; TA = Total Assets; RE = Retained Earnings;

EBIT = Earnings Before Interest and Taxes; MV = Market Value of Equity; and

BVTL = Book Value of Total Liabilities.

Source: Computed from the Balance Sheet of the Company.

TABLE II: 't' TEST DISTRIBUTION INFERENCES

Relationship	Calculated Value	Table Value @ 5% Confidence	Remarks
Correlation between WC/TA	- 2.1268	2.256	Not Significant
Correlation between RE/TA	7.7562	2.256	Significant
Correlation between EBIT/TA	4.3794	2.256	Significant
Correlation between MV/BVTL	1.9974	2.256	Not Significant
Correlation between Sales/TA	4.8654	2.256	Significant

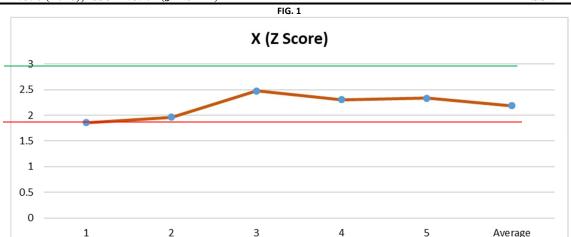
Source: Computed Data.

TABLE III: 't' TEST FOR Z-SCORE ANALYSIS

(5 Years average of Z Score values to the standard norms as prescribed by Altman)

Year	X (Z Score)	Critical Value	Result
1	01.86	Z Score = In between 1.81 and 2.99	Grey Zone
2	01.97	Z Score = In between 1.81 and 2.99	Grey Zone
3	02.48	Z Score = In between 1.81 and 2.99	Grey Zone
4	02.31	Z Score = In between 1.81 and 2.99	Grey Zone
5	02.34	Z Score = In between 1.81 and 2.99	Grey Zone
Avg	02.19	Z Score = In between 1.81 and 2.99	Grey Zone

Source: Table 1



From above, we can clearly see that the company had neither been in safe zone nor been in unsafe zone under the period taken for study. The company's z score indicates grey zone for the entire period. As per Altman's guideline, the Company's financial viability is considered to be Indeterminate. The failure in this situation is uncertain to predict.

#### **ANALYSIS**

#### WORKING CAPITAL (WC) TO TOTAL ASSETS (TA)

Working capital is the difference between current assets and current liabilities. This ratio considers liquidity of the company. A company with consistent operating losses will have shrinking current assets in relation to total assets. It can be seen from the Annual Reports of the Company for the last five years that the working capital of the company is fluctuating during the last five years' period; whereas the total assets increased year by year without any proportion to working capital. The correlation coefficient between WC and TA is tested through the hypothesis and the result has been shown in the Table-II.

#### **RETAINED EARNINGS (RE) TO TOTAL ASSETS (TA)**

This ratio measures the cumulative profitability over the life of the company. Significant retained earnings mean a history of profitable operation and ability to withstand periods of losses. The Annual Reports of the Company show that the Retained Earnings to Total Asset are very less compared to the conventional ratio of 1:1. The correlation between RE and TA was positive which was tested through the hypothesis and the result has been shown in the Table-II.

#### EARNINGS BEFORE INTEREST AND TAX (EBIT) TO TOTAL ASSETS (TA)

This ratio measures the productivity of capital or the earning power of the company. The survival of a company depends on its earnings power. EBIT to TA shows the operational performance and earning power of the company. The Annual Report of the Company depicts that the EBIT and TA increased year by year during the last five years i.e. from 2009-10 to 2013-14 but not at the same proportion. The correlation between EBIT to TA tested through the hypothesis and the result has been shown in the Table-II.

#### MARKET VALUE OF EQUITY (MV) TO TOTAL LIABILITY (TL)

A significant Market Value of Equity signifies investors' belief on the earning power of the company and its solid financial position. Moreover, a company who has significant market capitalization can issue new shares to mobilize funds to overcome the temporary financial difficulties. The Market value of Equity and Total Assets were fluctuating during the last five years. The correlation between MV to TA tested through the hypothesis and the result has been shown in Table-II.

#### NET SALES (NS) TO TOTAL ASSETS (TA)

This ratio measures how efficiently the company uses its assets to generate sales. It measures the capability of the company in dealing with competitive conditions. It is clear from the tables mentioned above that Sales to Total Asset were increased in the same trend during the last five years. The correlation between Sales to TA tested through the hypothesis and the result has been shown in Table-II.

#### **FINDINGS**

(a) The study had made an attempt to analyze the financial strength of Siyaram Silk Mills Ltd. by Z score model. It is clear that the financial strength is not in distress as it did not lie in the unsafe zone during the period under study. In the initial years of the study period, the financial strength showed improvement and in later years it remained range bound. Therefore, it is difficult to predict the future in such situations.

(b) Working capital to total assets ratio has been fluctuating during the period under study. Perhaps, one of the reasons may that the company is not capable of collecting materials on credit and has less credit worthiness in the market.

(c) EBIT and RE of the company has improved over the period under study showing improved performance of the company under study.

(d) Investment in fixed assets has increased year by year, which is considered to be positive sign. The cause may be that the company has taken expansion programme.

(e) There is significant positive correlation between Retained Earnings and Total Assets, EBIT and Total Assets and Sales and Total Assets.

#### **CONCLUSION**

Financial strength of the company is a matter of concern for every stakeholder. In this arena Altman's Z score plays an important role in judging the financial soundness of the company. This study reveals that financial strength of Siyaram Silk Mills Ltd. is in grey zone and future in this situation is uncertain to predict as per Altman's guidelines. If the healthy condition is to be sustained in the years ahead it has to strive for improved productivity and optimal utilization of all the resources by following the growth path that it has set for itself.

Since increasing sales of the company had been yielding sufficient earnings to meet the obligation, additional debt will not remain unpaid. The management should depend on low cost debt capital to finance its investment programme. As operating leverage depends on techniques of production it is difficult to change the production system. In market the available cost should be reduced and gross margin is to be improved. The company should try to minimize its cost of goods sold, enhance working capital and convert debt capital into equity capital.

#### REFERENCES

- 1. Altman. (1968) Financial ratios discriminate analysis and prediction of corporate bankruptcy, Journal of Finance, Sep. pp. 598-609.
- 2. Beaver, W. H. (1966) Financial Ratios as Predictors of Failure empirical research in according selected studies, Journal of Accounting Research, Supplement, pp. 71-127.
- 3. Deakin, E. (1972) A Discriminant Analysis of Predictors of Business Failure, Journal of Accounting Research, Spring, 1972, pp. 167-179.

- 4. Gupta R.L. and Radhaswamy.M, (1995) Financial Management Analysis, 5th edition, Sultan Chand and Sons, New Delhi.
- 5. J.R.Raiyani and Dr. R.B. Bhatasna (2011) A study on Financial Health of Textile Industry In India; A Z Score Approach, Indian Journal of Finance, Jan.pp.09-
- 6. Kannadhasan. M (2007) Measuring Financial Health of a Public Limited Company using 'Z' Score Model A Case Study, Management Accountant, June, 2007, pp 469-479.
- 7. Khatik S.K, Varghese Titto (2013) Financial Analysis of Steel Authority of India Limited, Research Journal Madhya Bharti, Vol..1 Jan.
- 8. Marimuthu, K.N (2012), Financial performance of textile industry: A study on listed companies of Tamil Nadu, International Journal of Research in Management, Economic and Commerce, Vol 2, Nov.
- 9. Perttunen and Martikainen, 1990, The functional form of earnings and stock prices: international evidence and implications for the E/P anomaly, Journal of Business Finance and Accounting, Pg. 395-408.
- 10. Report of South Asia Network of Economic Research Institute (2011), Impact of financial crisis on Textile industry of Pakistan.
- 11. Suriyamurthy. S and Velavan. M (2010), Measuring Financial Health of E.I.D Parry sugar Limited Using 'Z' Score Model A case Study, Indian Journal of Finance, November, pp.30-43.
- 12. Zavgren, C. V. (1985), Assessing the Vulnerability of American Industrial Firms: A Logistic Analysis, Journal of Business Finance and Accounting, Spring, pp.19-45.

### REQUEST FOR FEEDBACK

#### **Dear Readers**

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

I would like to request you to supply your critical comments and suggestions about the material published in this issue, as well as on the journal as a whole, on our e-mail <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 <a href="mailto:infoijrcm@gmail.com">infoijrcm@gmail.com</a>.

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.







