

INTERNATIONAL JOURNAL OF RESEARCH IN COMMERCE, IT & MANAGEMENT

I
J
R
C
M



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

Indexed & Listed at:

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

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

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

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

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

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

CONTENTS

Sr. No.	TITLE & NAME OF THE AUTHOR (S)	Page No.
1.	E-GOVERNANCE IN INDIAN UNIVERSITIES: A CONCEPTUAL FRAMEWORK <i>VIJAY BHASKAR KOUDIKI & K JANARDHANAM</i>	1
2.	EMPIRICAL ANALYSIS ON THE ADOPTION OF QUALITY MANAGEMENT PRACTICES IN INFORMATION TECHNOLOGY SECTOR IN INDIA <i>DR. BEULAH VIJI CHRISTIANA. M & JOSEPH SASI RAJAN.M</i>	5
3.	IMPACT OF FOREIGN DIRECT INVESTMENT INFLOWS ON BRAZILIAN ECONOMY <i>ROBIN INDERPAL SINGH, DR. SANJEEV BANSAL & DR. JAGWANT SINGH</i>	12
4.	A STUDY OF ORGANIZATIONAL INVESTMENT IN EMPLOYEE TRAINING, WORK ENGAGEMENT AND TURNOVER INTENTION: A CROSS-LEVEL MEDIATION ANALYSIS <i>YU-PING HSU</i>	17
5.	ENTREPRENEURSHIP: IN A DYNAMIC WAY <i>DR. R. SATHYADEVI & SALMA.C.T</i>	24
6.	PARTICIPATION OF WOMEN IN SOCIO-ECONOMIC DECISION MAKING: A COMPARISON BETWEEN JOINT FAMILY AND NUCLEAR FAMILY <i>BHAGWATESHWARI KARKI & DR. B. P. SINGHAL</i>	26
7.	A STUDY OF INVESTORS' PERCEPTION TOWARDS STOCK MARKET IN JALANDHAR <i>DR. ANIL SONI</i>	29
8.	ROLE OF ORGANISATIONS TO COMBAT STRESS AMONG EMPLOYEES IN IT SECTOR <i>DR. SUDHAKAR B INGLE & ANITA D'SOUZA</i>	34
9.	THE EFFECT OF SOCIO-ECONOMIC FACTORS ON PUBLIC HEALTH SERVICE DELIVERY IN KENYA (A CASE OF MURANG'A COUNTY HOSPITALS) <i>CLIFFORD MACHOGU, DR. JAIRUS BOSTON AMAYI, DR. JOHN WEKESA WANJALA & LYDIAH KEYA ABUKO</i>	38
10.	A STUDY ON POSSIBLE PARTICIPATION OF MINING INDUSTRY IN MAKE IN INDIA CONCEPT <i>DR. MAMTA BRAHMBHATT & AMIT KUMAR SHARMA</i>	48
11.	IMPACT OF FOREIGN DIRECT INVESTMENT INFLOWS ON INDIAN ECONOMY <i>ROBIN INDERPAL SINGH, DR. SANJEEV BANSAL & DR. JAGWANT SINGH</i>	50
12.	GLOBAL PREVALENCE OF IFRS WITH SPECIAL REFERENCE TO INDIA <i>VAISHALI NAROLIA & AMIT KUMAR PASWAN</i>	55
13.	A STUDY ON THE CURRENT STATE OF INDIAN HEALTHCARE INDUSTRY <i>PRIYANKA SAHNI</i>	60
14.	DEMONETIZATION AND REMONETISATION OF INDIAN ECONOMY: AFTERMATH <i>GURVEEN KAUR</i>	63
15.	EFFICIENCY OF BANKS UNDER DIFFERENT OWNERSHIP GROUPS <i>RACHITA GARG</i>	66
16.	REVIVING UP INDIAN VC INDUSTRY: LESSONS FROM USA <i>NEHARIKA SOBTI</i>	71
17.	WOMEN ENTREPRENEURSHIP: ENTERING A MALE DOMAIN <i>BHAWNA MITTAL</i>	79
18.	STUDENTS ATTITUDE TOWARDS MATHEMATICS AT SECONDARY LEVEL IN SIKKIM <i>RAJESH SINGH</i>	84
19.	TRANSFER PRICING REGULATIONS AND ADVANCE PRICING AGREEMENTS IN INDIA <i>PRIYANKA SAHNI</i>	87
20.	DIGITAL INDIA OPPORTUNITIES AND CHALLENGES <i>SAPNA</i>	90
	REQUEST FOR FEEDBACK & DISCLAIMER	93

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

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

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

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

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

Faculty, Shree Ram Institute of Business & Management, Urjani

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

Principal (Retd.), Maharaja Agrasen College, Jagadhri

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

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

CO-EDITOR**Dr. BHAVET**

Faculty, Shree Ram Institute of Engineering & Technology, Urjani

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

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

Dr. CHRISTIAN EHIOBUCHÉ

Professor of Global Business/Management, Larry L Luig School of Business, Berkeley College, Woodland Park NJ 07424, 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, Terusan Buah Batu, Kabupaten Bandung, Indonesia

Dr. M. S. SENAM RAJU

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

Dr. CLIFFORD OBIYO OFURUM

Director, Department of Accounting, University of Port Harcourt, Rivers State, Nigeria

Dr. KAUP MOHAMED

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

SUNIL KUMAR KARWASRA

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

Dr. MIKE AMUHAYA IRAVO

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

Dr. S. TABASSUM SULTANA

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

Dr. NEPOMUCENO TIU

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

Dr. SANJIV MITTAL

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

Dr. ANA ŠTAMBUK

Head of Department in 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

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

Dr. SRINIVAS MADISHETTI

Professor, School of Business, Mzumbe University, Tanzania

Dr. NAWAB ALI KHAN

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

MUDENDA COLLINS

Head of the Department of Operations & Supply Chain, The Copperbelt University, Zambia

Dr. EGWAKHE A. JOHNSON

Professor, Babcock University, Ilishan-Remo, Ogun State, Nigeria

Dr. A. SURYANARAYANA

Professor, Department of Business Management, Osmania University, Hyderabad

Dr. MURAT DARÇIN

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

Dr. ABHAY BANSAL

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

Head of the Department, Badruka PG Centre, Hyderabad

SHASHI KHURANA

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

Dr. SEOW TA WEEA

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

Dr. OKAN VELI ŞAFAKLI

Associate Professor, European University of Lefke, Lefke, Cyprus

Dr. MOHENDER KUMAR GUPTA

Associate Professor, Government College, Hodal

Dr. BORIS MILOVIC

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

Dr. MOHAMMAD TALHA

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

Dr. V. SELVAM

Associate Professor, SSL, VIT University, Vellore

Dr. IQBAL THONSE HAWALDAR

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

Dr. PARDEEP AHLAWAT

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

Dr. ALEXANDER MOSESOV

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

Dr. ASHOK KUMAR CHAUHAN

Reader, Department of Economics, Kurukshetra University, Kurukshetra

YU-BING WANG

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

SURJEET SINGH

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

Dr. MELAKE TEWOLDE TECLEGIORGIS

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****DICKIN GOYAL**

Advocate & Tax Adviser, Panchkula

NEENA

Investment Consultant, Chambaghat, Solan, Himachal Pradesh

LEGAL ADVISORS**JITENDER S. CHAHAL**

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

CHANDER BHUSHAN SHARMA

Advocate & Consultant, District Courts, Yamunanagar at Jagadhri

SUPERINTENDENT**SURENDER KUMAR POONIA**

CALL FOR MANUSCRIPTS

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

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

GUIDELINES FOR SUBMISSION OF MANUSCRIPT

1. **COVERING LETTER FOR SUBMISSION:**

DATED: _____

THE EDITOR

IJRCM

Subject: SUBMISSION OF MANUSCRIPT IN THE AREA OF _____.

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

DEAR SIR/MADAM

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

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

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

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

NAME OF CORRESPONDING AUTHOR

Designation/Post* :

Institution/College/University with full address & Pin Code :

Residential address with Pin Code :

Mobile Number (s) with country ISD code :

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

Landline Number (s) with country ISD code :

E-mail Address :

Alternate E-mail Address :

Nationality :

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

NOTES:

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

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

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

PLEASE USE THE FOLLOWING FOR STYLE AND PUNCTUATION IN REFERENCES:

BOOKS

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

CONTRIBUTIONS TO BOOKS

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

JOURNAL AND OTHER ARTICLES

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

CONFERENCE PAPERS

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

UNPUBLISHED DISSERTATIONS

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

ONLINE RESOURCES

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

WEBSITES

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

EFFICIENCY OF BANKS UNDER DIFFERENT OWNERSHIP GROUPS

RACHITA GARG
GUEST FACULTY
DEPARTMENT OF COMMERCE
RAMANUJAN COLLEGE
UNIVERSITY OF DELHI
DELHI

ABSTRACT

Banking in India originated in the last decade of the 18th century. Banks are the backbone of the Indian economy. They play a great role in sustaining economic developments. Efficient operations of banks have become an important issue in India. With more and more number of private sector and foreign banks establishing themselves, competition has risen fairly. Government banks are facing new challenges every day. The current paper seeks to examine the efficiency differences among banks under different ownership groups.

KEYWORDS

Indian banking, private banks, government banks.

INTRODUCTION

In India, until the early 1990's the role of financial system was primarily restricted to the function of channeling resources from surplus to deficit sectors. The banking sector also suffered from lack of competition, low capital base, low productivity and high intermediation cost. After the nationalization of banks in 1969 and 1980, the government owned banks have dominated the banking sector. The role of technology was limited and quality was given adequate importance. Banks did not follow proper risk management system and the prudential standards were weak. Poor asset quality and low profitability was the ultimate result. The banking sector in India has undergone several changes in the areas of prudential, regulatory, disclosure and supervisory norms. The financial reforms launched during the early 1990's have dramatically changed the banking scenario in the country. New capital norms, capital adequacy prescriptions, identification of bad debts, etc. were enforced and interest rates were deregulated. As a result of these reforms, new private sector banks were allowed entry into the market. These new private sector banks have built a wide network of branches, set superior standards in productivity, they introduced global best practices and more importantly they have built durable competencies. Another major player in the banking industry are the foreign banks. These banks were allowed to set up their subsidiaries in India from the year 2002. To open branches in India foreign banks, have to fulfill certain conditions as required by RBI. Foreign banks have an important role in the Indian economy, especially in the priority sectors. Globalization has compelled the banking sector to reach out to more customers in order to expand their business. The presence of these banks in India brought a lot technical development. One can witness cut throat competition in the banking sector with the presence of foreign banks.

Existing empirical evidence on the ownership performance issue is weighted towards the property rights hypothesis that private enterprises are superior to public enterprises. The relationship between ownership and performance has been a vexing and, to a large extent unresolved issue. According to the property rights hypothesis, private enterprises should perform more efficiently and more profitably than public enterprises. The potentially higher vulnerability of private sector enterprises to takeover, coupled with the threat of losing jobs and the resultant adverse reputation effects in the managerial market are argued to be effective mechanisms in disciplining management and aligning shareholder and managerial interests in private enterprises. The potential of such shareholder rebellion is virtually absent in public enterprises due to the non-tradability of its shares. It is also argued that government officials are inclined to pursue their own interests, or the interests of the pressure groups rather than the interests of the public at large.

In the present study we shall address the ownership performance issue through study of the efficiency of banks as ownership groups.

LITERATURE REVIEW

The banking industry in India has been examined by many researchers on various parameters. A study of the efficiency of a sample of 16 large and medium scale Turkish commercial banks over the period 1990-1997 found quite wide disparities in the level of efficiency, both over time and between banks. In general, it was found that large scale banks were on an average slightly more efficient than the medium scaled banks. In contrast when the banks were categorized according to ownership, state owned banks exhibited the lowest level of efficiency. In the Indian case for 1993-94 and 1994-95, it was observed that, in so far as profitability is concerned, foreign banks outperformed domestic banks and there was no discernible difference between unlisted domestic private and state owned banks.

The productive efficiency of 103 banks in India for the year 1997-98 was measured using DEA. Two models were constructed to show how efficiency scores vary with change in input and outputs. The study measured the efficiency scores, for three groups of banks, that is, publicly owned, privately owned and foreign owned. The results show that the mean efficiency scores of the Indian banks compares well with the world mean efficiency scores and the efficiency of private sector commercial banks as a group is, paradoxically lower than that of public sector banks and foreign banks in India. The study recommends that the existing policy of reducing non-performing assets and rationalization of staff and branches may be continued to obtain efficiency gains and make the Indian banks internationally competitive.

Technical and scale efficiencies of 149 Japanese banks were analyzed using the data for the year ending March 1997. The study used the non-parametric frontier approach, DEA, to analyze efficiency. Efficiency analysis was conducted across individual banks, banks type, and bank size groups. Problem loans were controlled for as an exogenous influence on bank efficiency. Powerful size efficiency relationships were established with respect to both technical and scale efficiency. Larger banks were found to be operating above the minimum efficient scale and to have limited opportunity to gain from eliminating X-inefficiencies. The opposite results were found for the smaller banks. The results suggest that controlling for the exogenous impact of problem loans is important in Japanese banking, especially for the smaller regional banks.

Existing empirical evidence on the ownership-performance issue is weighted towards the property rights hypothesis that private enterprises are superior to public enterprises. Doubts over the conclusion of the property rights and public choice arguments have been made in recent theoretical contributions that highlight the existence of free rider problem associated with takeover of private enterprises and operation of the voting market as a substitute for the market for corporate control in disciplining public enterprises. Finally, several contributors have argued that ownership does not matter in the presence of sufficient competition between private and public enterprises. Existing empirical evidence on the ownership performance issue closely mirrors the diversity in theoretical opinion and surveys of such evidence reach no consensus in their conclusions. While on one hand, a survey concludes that there is no systematic evidence that public enterprises are less cost effective than private firms, on the other hand, there are two surveys, one nearly concurrent with the abovementioned and another more recent that find the weight of evidence to be in favour of the property rights and public choice viewpoints.

RESEARCH METHODOLOGY AND DESIGN

In the present study data envelopment analysis (DEA) approach has been used. DEA is a non-parametric method in operations research and economics for the estimation of production frontiers. It is used to empirically measure productive efficiency of decision making units. Although DEA has a strong link to production

theory in economics, the tool is also used for benchmarking in operations management, where a set of measures is selected to benchmark the performance of manufacturing and service operations. DEA generally focuses on technological or productive efficiency rather than economic efficiency. The efficiency score is usually expressed as either a number between 0-1 or 0-100%. A decision making unit with a score less than 1 is deemed inefficient relative to other units. There are a number of DEA models. We will use the two most frequently used models: the CCR Model (after Charnes, Cooper, Rhodes, 1978) and the BCC Model (after Banker, Charnes and Cooper, 1984).

Decision making units are assigned different efficiencies in case of CCR models and the BCC models viz. technical and scale efficiencies. The CCR model assumes that operations follow constant returns to scale (CRS). It estimates the gross efficiencies of a DMU. The efficiency comprises of technical and scale efficiency. Technical efficiency describes the efficiency in converting inputs into outputs, while scale efficiency recognizes that economy cannot be attained at all scales of production, and that there is one most productive scale size where the scale efficiency is maximum at 100%. CRS was one of the crucial limiting factors for the applicability of DEA and hence the model did not receive widespread attention in the initial years. Banker et al (1984) then came up with a simple and remarkable modification to the CCR model in order to handle variable returns to scale. The scores obtained under BCC model are called "pure technical efficiency" scores, since they are obtained from a model that allows variable returns to scale and hence eliminates the scale part from the analysis.

The CRS efficiency of a DMU is always less than or equal to the pure technical efficiency (VRS efficiency).

CRS efficiency \leq VRS efficiency

The above equality holds when the scale efficiency is unity, or when the DMU is operating at the Most Productive Scale Size (MPSS).

VARIABLES

The study measured the efficiency scores of 103 banks divided into four ownership groups which are:-

1. State Bank of India and Its Associates
2. Nationalized Banks
3. Indian Private Sector Banks
4. Foreign Banks

To measure the efficiency as directly as possible inputs and outputs have been based on the profit and loss account. The input and output data for each bank is as follow:

INPUT 1(X_{1j})	=	INTEREST EXPENDED
INPUT 2(X_{2j})	=	PERSONNEL EXPENSES
INPUT 3(X_{3j})	=	RENT, TAXES AND LIGHTING EXPENSES
OUTPUT 1(Y_{1j})	=	INTEREST EARNED
OUTPUT 2(Y_{2j})	=	NON INTEREST INCOME (FEE, BROKERAGE AND COMMISSION)

The above set of inputs and outputs is described as Model A for further purposes.

(These inputs and outputs are selected on the basis of prescribed reporting standards to be adopted by banks. The data is adopted from the website of RBI, www.rbi.org.in)

SAMPLE PERIOD

Data has been taken for all banks under different groups covering a period of 1995-96 to 2007-08.

OBJECTIVES AND HYPOTHESIS

The aim of the study is to examine whether the efficiency of government owned banks is less as compared to their private and foreign counterparts. The study will highlight the trend of the banks both collectively and under different ownership groups. Ownership groups for this group have been considered as under:

1. State bank of India and its associates
2. Nationalized banks
3. Indian private sector banks
4. Foreign banks

HYPOTHESIS

Government owned banks are less efficient as compared to their private and foreign counterparts.

FINDINGS OF THE STUDY

TABLE 1 shows the efficiency scores of various banks ownership groups over the entire study period. The efficiency scores have been worked out by taking geometric mean of the technical efficiency scores of all banks falling in a particular ownership group in each year.

TABLE 1

YEAR	SBI GROUP	NATIONALISED BANKS	PRIVATE BANKS	FOREIGN BANKS
1995	0.81	0.67	0.78	0.89
1996	0.8	0.63	0.75	0.87
1997	0.74	0.55	0.67	0.83
1998	0.7	0.46	0.56	0.63
1999	0.94	0.78	0.83	0.58
2000	0.79	0.66	0.72	0.63
2001	0.74	0.78	0.76	0.63
2002	0.62	0.49	0.62	0.57
2003	0.72	0.73	0.74	0.56
2004	0.65	0.66	0.62	0.56
2005	0.65	0.65	0.4	0.46
2006	0.76	0.75	0.7	0.75
2007	0.73	0.74	0.7	0.51
MEAN	0.74	0.65	0.68	0.62

GRAPH 1

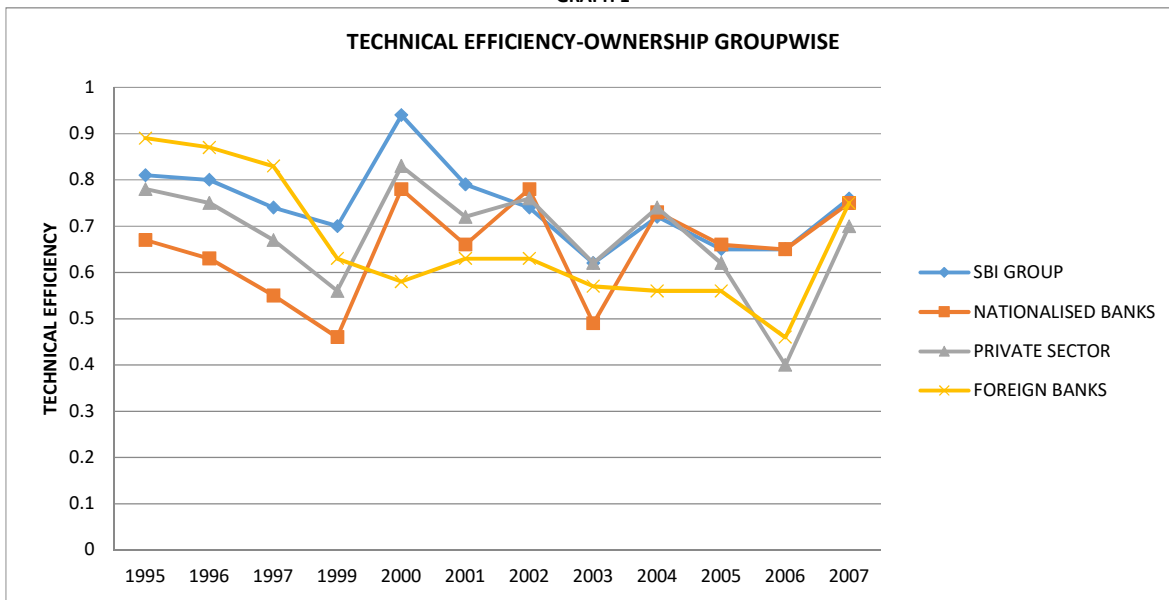


TABLE 1 shows that SBI has the highest technical efficiency scores (geometric mean for all years) in Model A followed by Indian private sector banks and foreign banks. Foreign banks have been ranked the lowest. Further, the consistency in performance of various banks falling under the same ownership group has been the highest in SBI group. The foreign banks again have the highest standard deviation.

The fluctuations in performance of individual banks in a group are also evident from table 2 containing the distribution of banks in various efficiency groups. Foreign banks found place in both the groups-from highest to lowest. SBI group on the other hand finds place only in two quartile range-Q4 and Q3.

OWNERSHIP GROUP

DISTRIBUTION OF BANKS BASED ON OWNERSHIP GROUP ACCORDING TO TOTAL TECHNICAL EFFICIENCY (GEOMETRIC MEAN)

TABLE 2

EFFICIENCY RANGE	SBI	NATIONALISED BANKS	PRIVATE SECTOR	FOREIGN	TOTAL
HIGHEST EFFICIENCY GROUP(Q4)	1	0	14	14	29
NEXT TO LOWEST EFFICIENCY GROUP(Q3)	7	5	8	9	29
NEXT TO LOWEST EFFICIENCY GROUP(Q2)	0	12	11	6	29
LOWEST EFFICIENCY GROUP(Q1)	0	2	7	19	28
TOTAL	8	19	40	48	115

In model A, while the efficiency frontier has been dominated by foreign banks followed by Indian private sector banks all through the years, the lowest efficiency range is also dominated by the foreign banks and the Indian private sector banks. Most of the public sector banks (both SBI group and nationalized banks) are falling in Q3 and Q2.

To get deeper insights into the relative performance of the public sector banks vis-à-vis the Indian private sector banks and foreign banks, we shall now decompose the technical efficiency to see whether the results are different when pure technical efficiency and scale efficiency are considered on a standalone basis.

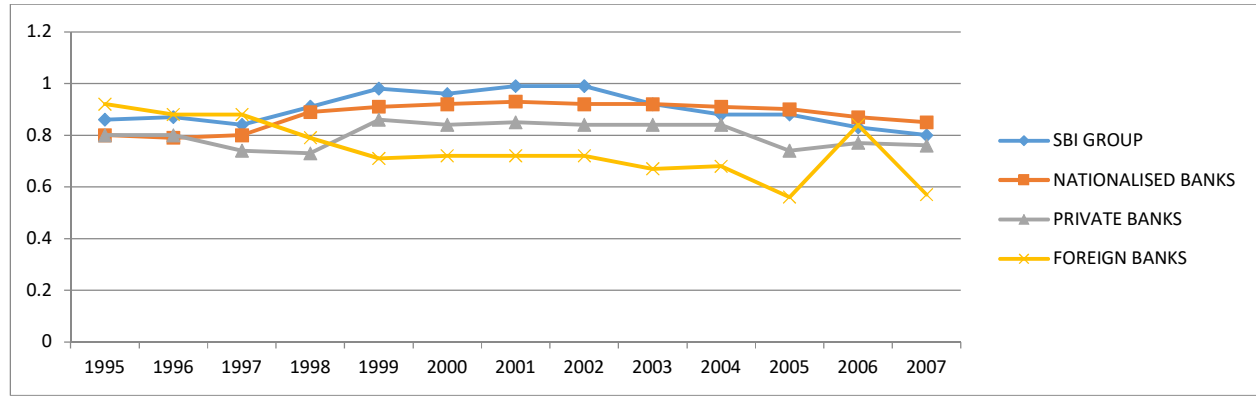
PURE TECHNICAL EFFICIENCY – BANK OWNERSHIP GROUPWISE

TABLE 3: MODEL A

YEAR	SBI GROUP	NATIONALISED BANKS	PRIVATE BANKS	FOREIGN BANKS
1995	.86	.80	.80	.92
1996	.87	.79	.80	.88
1997	.84	.80	.74	.88
1998	.91	.89	.73	.79
1999	.98	.91	.86	.71
2000	.96	.92	.84	.72
2001	.99	.93	.85	.72
2002	.99	.92	.84	.72
2003	.92	.92	.84	.67
2004	.88	.91	.84	.68
2005	.88	.90	.74	.56
2006	.83	.87	.77	.84
2007	.80	.85	.76	.57
MEAN	.90	.88	.80	.72

PURE TECHNICAL EFFICIENCY – BANK OWNERSHIP GROUPWISE

GRAPH 3



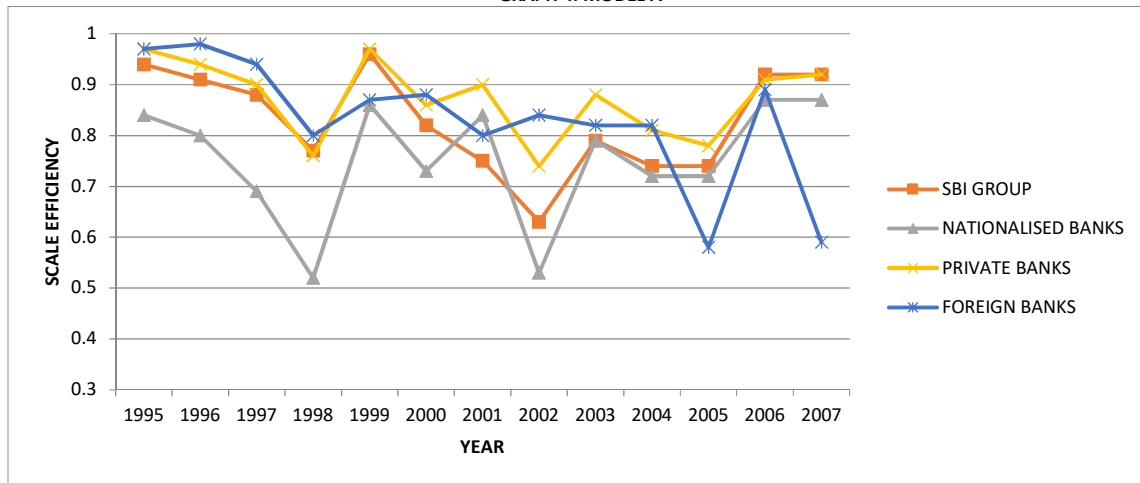
SCALE EFFICIENCY – OWNERSHIP GROUPWISE

TABLE 4: MODEL A

YEAR	SBI GROUP	NATIONALISED BANKS	PRIVATE BANKS	FOREIGN BANKS
1995	.94	.84	.97	.97
1996	.91	.80	.94	.98
1997	.88	.69	.90	.94
1998	.77	.52	.76	.80
1999	.96	.86	.97	.87
2000	.82	.73	.86	.88
2001	.75	.84	.90	.80
2002	.63	.53	.74	.84
2003	.79	.79	.88	.82
2004	.74	.72	.81	.82
2005	.74	.72	.78	.58
2006	.92	.87	.91	.89
2007	.92	.87	.92	.59
MEAN	.82	.74	.86	.81

SCALE EFFICIENCY – OWNERSHIP GROUPWISE

GRAPH 4: MODEL A



Graph 4 and 5 provides a bird’s eye view of the pure technical efficiency and scale efficiency scores respectively, for various banks ownership groups. The results of decomposing the technical efficiency and scale efficiency presents a similar picture to the one obtained on the basis of overall technical efficiency scores though there are slight variations in the ranks of various banks ownership groups.

Nationalized banks rank next to SBI group leaving the private sector banks at no. 3. This position gets reversed when the aggregate technical efficiency was considered, however the difference was not significant. Going further, the variations in the individual banks’ pure technical efficiency are quite significant in case of foreign banks. The variation in individual banks’ pure technical efficiency and scale efficiency can also be examined through the number of banks falling in various efficiency ranges. Table 5 and 6 provides distribution of banks based on ownership group on pure technical efficiency and scale efficiency respectively.

TABLE 5: DISTRIBUTION OF BANKS BASED ON OWNERSHIP GROUPS - PURE TECHNICAL EFFICIENCY

EFFICIENCY RANGE	SBI GROUP	NATIONALISED BANKS	PRIVATE SECTOR BANKS	FOREIGN BANKS	TOTAL
HIGHEST EFFICIENCY GROUP(Q4)	2	6	6	15	29
NEXT TO HIGHEST(Q3)	6	5	11	7	29
NEXT TO LOWEST(Q2)	0	8	16	5	29
LOWEST(Q1)	0	0	7	21	28
TOTAL	8	19	40	48	115

TABLE 6: DISTRIBUTION OF BANKS BASED ON OWNERSHIP GROUPS - SCALE EFFICIENCY

EFFICIENCY RANGE	SBI GROUP	NATIONALISED BANKS	PRIVATE SECTOR BANKS	FOREIGN BANKS	TOTAL
HIGHEST EFFICIENCY GROUP(Q4)	0	0	11	18	29
NEXT TO HIGHEST(Q3)	3	0	14	12	29
NEXT TO LOWEST(Q2)	4	7	12	6	29
LOWEST(Q1)	1	12	3	12	28
TOTAL	8	19	40	48	115

So far as pure technical efficiency is concerned, the results are consistent with the ones obtained for technical efficiency. While 25% of the banks falling in SBI group are in highest efficiency group, the foreign banks are spread all over the efficiency range with as many as 44% in the lowest efficiency group. Among the private sector banks 58% falls below the median efficiency scores and among the nationalized banks, 58% have an efficiency scores above the median score.

In terms of scale efficiency, none of the nationalized banks lie in the uppermost two quartiles. In the SBI group also, only 37.5% of the banks lie above the median range. This clearly shows that the public sector banks in India are scale inefficient. Among the foreign banks, only 38% banks lie below the median score, while 63% of the banks among the private sector group lie above the median in model A. thus, the private sector banks seem to be more scale efficient than all other banks groups.

We also examined the number of profit and loss making banks in India in various ownership groups.

TABLE 7: PERCENT OF PROFIT MAKING BANKS

YEAR	SBI & ASSOCIATES	NATIONALISED BANKS	PRIVATE SECTOR	FOREIGN BANKS
1995	100%	95%	96%	96%
1996	100%	42%	96%	96%
1997	100%	37%	92%	100%
1998	100%	58%	94%	96%
1999	100%	63%	94%	85%
2000	100%	84%	100%	87%
2001	100%	89%	97%	81%
2002	100%	89%	94%	70%
2003	100%	95%	97%	79%
2004	100%	89%	96%	75%
2005	100%	89%	97%	81%
2006	100%	100%	90%	82%
2007	100%	100%	93%	79%

TABLE 7 clearly shows that there has not been even a single year in which any of the banks in SBI group has suffered a loss. Till 1999, the nationalized banks have shown dismal performance. However, there seems to have been a turnaround in the performance of nationalized banks since 1999. In the last two years, all the nationalized banks have started earning net profits. Amongst the private and foreign sector banks, there continues to be wide variations within the group, while some of the banks are highly profitable, a significant proportion of the total banks have not been able to show a positive bottom line.

COMPARISON OF RESULTS OF PRESENT STUDY WITH OTHER STUDIES

The results of the present study compare well with the findings of Sathey M (2001). The study by Sathey indicated that as group more foreign banks are in the highest efficiency quartile (11 as against 9 in Model A) than the public banks and also vis-à-vis the private sector banks (11 as against 3 in Model A). The study showed that foreign banks are much more efficient as a group in use of inputs of staff and deposits as compared to public and private sector deposits. As a group, the private sector banks displayed lower efficiency levels. In 1997-98 as many as 11 banks were in the highest efficiency quartile in Model A of our study. These numbers compare well with the findings of Sathey M.

Das A (1997) has also arrived at similar findings in his study relating to efficiency of public sector banks in India. His results indicate that state bank group is more efficient than the nationalized banks. The study reported that while in 1970, 25% banks falling in the very high efficiency range were from the SBI group, as many as 87.5% of the very highly efficient banks were from the SBI group in 1990. In 1996, the percentage though has fallen to 62.5% for the SBI group whereas the nationalized bank group has 19 banks, this percentage assumes significance. It implies that as many as 62.5% of all the banks in SBI group were highly efficient whereas compared to this, only 15.8% of the nationalized banks were highly efficient. Further, all the banks in the low efficiency category are from the nationalized banks.

CONCLUSION

The results of the tests applied on various banks under different ownership groups shows that public sector banks are as efficient as the foreign and private banks when the revenue and expense based indicators alone are considered. Moreover, the public sector banks are most efficient in terms of pure technical efficiency whereas private sector banks are most efficient when scale efficiencies are compared on a standalone basis. These results are consistent with the fact that the public sector banks operate on a very high scale with a huge network of branches (partly of course, to meet the social objective), some of them being simply unviable, the scale inefficiency, thus, creeps in naturally.

On the overall basis the public sector banks outweigh both the private sector banks as well as foreign banks. Within, the public sector banks, the SBI group has performed much better compared to the nationalized banks on all parameters. This shows that, with operational flexibility, public sector banks are giving a tough competition to the private sector and foreign banks. The market discipline imposed by the listing of most public sector banks has probably contributed to this improved performance.

REFERENCES

1. Casu B. and Molyneux P. "A comparative study of efficiency in European banking" centre for financial institutions working paper 2000-17, Wharton school center for financial institutions, University of Pennsylvania.
2. Charnes, A., Cooper, W.W. and Rhodes, E. (1978) "Measuring the efficiency of decision making units, European Journal of Operational Research" 2, pp 429-444.
3. Das A "Technical, allocative and scale efficiency of public sector banks in India" RBI Occasional Paper, 1997, 18, June- September.
4. Denizer, C; M. Tarimcilar and M. Dinc. "Measuring banking efficiency in the pre and post liberalization environment: evidence from the Turkish banking system" World Bank policy research paper no. 2476, November 2000.
5. Sathey M. "Efficiency of banks in a developing economy: the case of India" in proceedings examining ten years of economic reforms in India, Anu, Canberra, Australia, 2001.
6. Technical Efficiency = Pure Technical Efficiency* Scale Efficiency. Thus, if pure technical efficiency score is higher, scale efficiency will be lower and vice-versa.

REQUEST FOR FEEDBACK

Dear Readers

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

I would like to request you to supply your critical comments and suggestions about the material published in this issue, as well as on the journal as a whole, on our e-mail infoijrcm@gmail.com 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, indirect, incidental, special, consequential or punitive damages arising out of the use of information/material contained in the journal. The journal, neither its publishers/Editors/ Editorial Board, nor any other party involved in the preparation of material contained in the journal represents or warrants that the information contained herein is in every respect accurate or complete, and they are not responsible for any errors or omissions or for the results obtained from the use of such material. Readers are encouraged to confirm the information contained herein with other sources. The responsibility of the contents and the opinions expressed in this journal are exclusively of the author (s) concerned.

ABOUT THE JOURNAL

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

Our Other Journals

