

## INTERNATIONAL JOURNAL OF RESEARCH IN COMMERCE, ECONOMICS AND MANAGEMENT

### **CONTENTS**

Sr. No.	TITLE & NAME OF THE AUTHOR (S)	Page No.
1.	IMPACT OF GOVERNMENT INTERVENTION ON THE GROWTH OF SMALL AND MEDIUM SCALE ENTERPRISES IN IMO STATE VIVIAN CHIZOMA ONWUKWE & MARTIN IKECHUKWU IFEANACHO	1
<b>2</b> .	A STUDY OF FACULTY MOTIVATIONAL AND ROLE DYNAMICS IN HIGHER EDUCATION DR. DEEPANJANA VARSHNEY (SENGUPTA)	6
3.	THE ROLE OF SMALL URBAN TOWNS IN IMPROVING RURAL LIVELIHOOD - CASE STUDY: FERESMAY, RAMA AND MAYKINETAL CENTRAL ZONE, TIGRAY, NORTHERN ETHIOPIA BIHON KASSA ABRHA & GEBREMEDHIN YIHDEGOTEKLU	10
4.	FACULTY DEVELOPMENT IN DEVELOPING COUNTRIES: A CASE STUDY OF PAKISTAN MUHAMMAD ZAHEER	16
5.	HUMAN CAPITAL DEVELOPMENT IN INSTRUCTIONAL SUPERVISION: WINDOW OF HOPE OR WOE? MIGHT KOJO ABREH	21
6.	THE SUSTAINABILITY OF ICT ECONOMY DEVELOPMENT KEVIN LOCK-TENG, LOW	25
<b>7</b> .	EFFECT OF BOARD SIZE ON COMPANY PERFORMANCE IN THE LISTED FINANCIAL INSTITUTIONS IN SRI LANKA LINGESIYA YASOTHARALINGAM	32
8.	FUNDAMENTALS OF ENTREPRENEURIAL COMPETENCY: TIME ELEMENT AND DISCIPLINE IN SHG MODEL - AN EMPIRICAL ANALYSIS	37
9.	BASKET PEG OR FLEX: A TEMPLATE FOR ASSESSING THE COMPETITIVENESS OF PAKISTAN'S TRADE SECTOR SEEMAB RANA	43
<b>10</b> .	WOMEN ENTREPRENEURS IN INDIA: OPPORTUNITIES AND CHALLENGES ANIL KUMAR .S. HAGARGI & DR. RAJNALKAR LAXMAN	50
11.	ENTREPRENEURSHIP DEVELOPMENT – A CASE STUDY OF A VILLAGE IN YSR DISTRICT DR. G. VIJAYA BHARATHI, C. SIVARAMI REDDY, DR. P. MOHAN REDDY & P. HARINATHA REDDY	54
<b>12</b> .	LEADERSHIP AND ORGANISATIONAL EFFECTIVENESS - A CONCEPTUAL FRAMEWORK DR. ASHOK AIMA & NAVEEDA SEHER	58
<b>13</b> .	SHAREHOLDER WEALTH EFFECTS TO MERGER ANNOUNCEMENTS IN INDIAN IT INDUSTRY DR. MALABIKA DEO & MOHAMMAD AASIF SHAH	61
14.	ANALYZING BANK COMPETITIVENESS USING CUSTOMER VALUE: AN EMPIRICAL ANALYSIS PRIYA PONRAJ & DR. G. RAJENDRAN	67
15.	MERGER AND ACQUISITION ACTIVITY IN THE INDIAN MANUFACTURING SECTOR AND SHAREHOLDER VALUE ADDITION IN THE MERGED ENTITIES DR. V. K. SHOBHANA & DR. K. MANJULA	74
<b>16</b> .	FACTOR INFLUENCES AND INDIVIDUAL INVESTOR BEHAVIOUR: THE STUDY OF INDIAN STOCK MARKET B. G. SRINIVASA & DR. K. A. RASURE	79
17.	STUDY THE PERFORMANCE OF STATE BANK OF INDIA IN COMPARISON TO ICICI FOR THE PERIOD 2001-09: AN EMPIRICAL STUDY ANOOP MOHANTY, SUMEET BAJWA & ANUJ MOHANTY	84
<b>18</b> .	LIFE SATISFACTION AMONG ASHA WORKERS VIJAYA U. PATIL & RUKMINI S.	97
<b>19</b> .	MICROFINANCE THROUGH COOPERATIVES: PERFORMANCE AND PROSPECTS DR. SUBRATA MUKHERJEE	102
20.	A STUDY ON CUSTOMER SATISFACTION TOWARDS CROSS SELLING OF INSURANCE PRODUCT AND SUPPLEMENTARY SERVICES- WITH REFERENCE TO PRIVATE SECTOR BANKS IN COIMBATORE DISTRICT DR. C. MEERA & DR. M. ESWARI	107
21.	FINANCIAL DISTRESS: BANKRUPTCY MEASURES IN ALEMBIC PHARMA: Z-SCORE MODEL D. SASIKALA	112
<b>22</b> .	ESTIMATING THE CONTRIBUTION OF FOREST TO ECONOMIC DEVELOPMENT: A CASE STUDY OF NTFPS IN KARNATAKA A. R. KULKARNI & D. R. REVANKAR	117
<b>23</b> .	SUSTAINABILITY ISSUES IN EMERGING ECONOMIES - A STUDY WITH SPECIAL REFERENCE TO INDIAN ECONOMY ANIRUDH SRIRAAM, VIVEK PRATAP SINGH & DR. AJAY SHARMA	122
24.	STUDY OF CUSTOMER RELATIONSHIP MANAGEMENT IN RURAL GROCERY SHOPS DR. P. B. DESAI	128
<b>25</b> .	HEALTH AND DEVELOPMENT OF HEALTH CARE IN INDIA ZIBA ASL GHORBANI (PATANGIA)	131
	REQUEST FOR FEEDBACK	136

A Monthly Double-Blind Peer Reviewed Refereed Open Access International e-Journal - Included in the International Serial Directories Indexed & Listed at: Ulrich's Periodicals Directory ©, ProQuest, U.S.A., Index Copernicus Publishers Panel, Poland, Open J-Gage, Indea as well as in Cabell's Directories of Publishing Opportunities, U.S.A. Circulated all over the world & Google has verified that scholars of more than Hundred & Fifteen 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

## <u>CHIEF PATRON</u>

PROF. K. K. AGGARWAL Chancellor, Lingaya's University, Delhi Founder Vice-Chancellor, Guru Gobind Singh Indraprastha University, Delhi Ex. Pro Vice-Chancellor, Guru Jambheshwar University, Hisar

## <u>PATRON</u>

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

## CO-ORDINATOR

DR. BHAVET Faculty, M. M. Institute of Management, Maharishi Markandeshwar University, Mullana, Ambala, Haryana

## ADVISORS

PROF. M. S. SENAM RAJU Director A. C. D., School of Management Studies, I.G.N.O.U., New Delhi PROF. M. N. SHARMA Chairman, M.B.A., Haryana College of Technology & Management, Kaithal PROF. S. L. MAHANDRU Principal (Retd.), Maharaja Agrasen College, Jagadhri

## EDITOR.

**PROF. R. K. SHARMA** Dean (Academics), Tecnia Institute of Advanced Studies, Delhi

## CO-EDITOR

DR. SAMBHAV GARG Faculty, M. M. Institute of Management, Maharishi Markandeshwar University, Mullana, Ambala, Haryana

## EDITORIAL ADVISORY BOARD

DR. AMBIKA ZUTSHI Faculty, School of Management & Marketing, Deakin University, Australia DR. VIVEK NATRAJAN

Faculty, Lomar University, U.S.A.

DR. RAJESH MODI

Faculty, Yanbu Industrial College, Kingdom of Saudi Arabia

**PROF. SIKANDER KUMAR** 

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

**PROF. SANJIV MITTAL** 

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

PROF. RAJENDER GUPTA

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

**PROF. NAWAB ALI KHAN** 

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

INTERNATIONAL JOURNAL OF RESEARCH IN COMMERCE, ECONOMICS & MANAGEMENT

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

PROF. S. P. TIWARI
Department of Economics & Rural Development, Dr. Ram Manohar Lohia Avadh University, Faizabad
DR. ANIL CHANDHOK
Professor, Faculty of Management, Maharishi Markandeshwar University, Mullana, Ambala, Haryana
DR. ASHOK KUMAR CHAUHAN
Reader, Department of Economics, Kurukshetra University, Kurukshetra
DR. SAMBHAVNA
Faculty, I.I.T.M., Delhi
DR. MOHENDER KUMAR GUPTA
Associate Professor, P. J. L. N. Government College, Faridabad
DR. VIVEK CHAWLA
Associate Professor, Kurukshetra University, Kurukshetra
DR. SHIVAKUMAR DEENE
Asst. Professor, Government F. G. College Chitguppa, Bidar, Karnataka

## ASSOCIATE EDITORS

PROF. ABHAY BANSAL Head, Department of Information Technology, Amity School of Engineering & Technology, Amity University, Noida PARVEEN KHURANA Associate Professor, Mukand Lal National College, Yamuna Nagar SHASHI KHURANA Associate Professor, S. M. S. Khalsa Lubana Girls College, Barara, Ambala SUNIL KUMAR KARWASRA Vice-Principal, Defence College of Education, Tohana, Fatehabad DR. VIKAS CHOUDHARY Asst. Professor, N.I.T. (University), Kurukshetra

## TECHNICAL ADVISORS

AMITA Faculty, Government H. S., Mohali MOHITA Faculty, Yamuna Institute of Engineering & Technology, Village Gadholi, P. O. Gadhola, Yamunanagar

## FINANCIAL ADVISORS

DICKIN GOYAL Advocate & Tax Adviser, Panchkula NEENA

Investment Consultant, Chambaghat, Solan, Himachal Pradesh

## <u>LEGAL ADVISORS</u>

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

# **CALL FOR MANUSCRIPTS**

We invite unpublished novel, original, empirical and high quality research work pertaining to recent developments & practices in the area of Computer, Business, Finance, Marketing, Human Resource Management, General Management, Banking, Insurance, Corporate Governance and emerging paradigms in allied subjects like Accounting Education; 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; Monetary Policy; Portfolio & Security Analysis; Public Policy Economics; Real Estate; Regional Economics; Tax Accounting; Advertising & Promotion Management; Business Education; Business Information Systems (MIS); Business Law, Public Responsibility & Ethics; Communication; Direct Marketing; E-Commerce; Global Business; Health Care Administration; Labor 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; Public Administration; Purchasing/Materials Management; Retailing; Sales/Selling; Services; Small Business Entrepreneurship; Strategic Management Policy; Technology/Innovation; Tourism, Hospitality & Leisure; Transportation/Physical Distribution; Algorithms; Artificial Intelligence; Compilers & Translation; Computer Aided Design (CAD); Computer Aided Manufacturing; Computer Graphics; Computer Organization & Architecture; Database Structures & Systems; Digital Logic; Discrete Structures; Internet; Management Information Systems; Modeling & Simulation; Multimedia; Neural Systems/Neural Networks; Numerical Analysis/Scientific Computing; Object Oriented Programming; Operating Systems; Programming Languages; Robotics; Symbolic & Formal Logic and Web Design. The above mentioned tracks are only indicative, and not exhaustive.

Anybody can submit the soft copy of his/her manuscript **anytime** in M.S. Word format after preparing the same as per our submission guidelines duly available on our website under the heading guidelines for submission, at the email addresses: <u>infoijrcm@gmail.com</u> or <u>info@ijrcm.org.in</u>.

# **GUIDELINES FOR SUBMISSION OF MANUSCRIPT**

1. COVERING LETTER FOR SUBMISSION:

THE EDITOR

IJRCM

#### Subject: SUBMISSION OF MANUSCRIPT IN THE AREA OF

(e.g. Computer/IT/Finance/Marketing/HRM/General Management/other, please specify).

DEAR SIR/MADAM

Please find my submission of manuscript titled '\_

' for possible publication in your journal.

DATED:

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

I affirm that all author (s) have seen and agreed to the submitted version of the manuscript and their inclusion of name (s) as co-author (s).

Also, if our/my manuscript is accepted, I/We agree to comply with the formalities as given on the website of journal & you are free to publish our contribution to any of your journals.

#### NAME OF CORRESPONDING AUTHOR:

Designation:

Affiliation with full address & Pin Code:

Residential address with Pin Code:

Mobile Number (s):

Landline Number (s):

E-mail Address:

Alternate E-mail Address:

- INTRODUCTION: Manuscript must be in British English prepared on a standard A4 size paper setting. It must be prepared on a single space and single column with 1" margin set for top, bottom, left and right. It should be typed in 8 point Calibri Font with page numbers at the bottom and centre of the every page.
- 3. MANUSCRIPT TITLE: The title of the paper should be in a 12 point Calibri Font. It should be bold typed, centered and fully capitalised.
- 4. **AUTHOR NAME(S) & AFFILIATIONS**: The author (s) full name, designation, affiliation (s), address, mobile/landline numbers, and email/alternate email address should be in italic & 11-point Calibri Font. It must be centered underneath the title.
- 5. ABSTRACT: Abstract should be in fully italicized text, not exceeding 250 words. The abstract must be informative and explain the background, aims, methods, results & conclusion in a single para.
- 6. **KEYWORDS**: Abstract must be followed by list of keywords, subject to the maximum of five. These should be arranged in alphabetic order separated by commas and full stops at the end.
- 7. **HEADINGS**: All the headings should be in a 10 point Calibri Font. These must be bold-faced, aligned left and fully capitalised. Leave a blank line before each heading.
- 8. **SUB-HEADINGS**: All the sub-headings should be in a 8 point Calibri Font. These must be bold-faced, aligned left and fully capitalised.
- 9. MAIN TEXT: The main text should be in a 8 point Calibri Font, single spaced and justified.
- 10. **FIGURES &TABLES:** These should be simple, centered, separately numbered & self explained, and titles must be above the tables/figures. 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.
- 11. **EQUATIONS:** These should be consecutively numbered in parentheses, horizontally centered with equation number placed at the right.
- 12. **REFERENCES**: The list of all references should be alphabetically arranged. It must be single spaced, and at the end of the manuscript. The author (s) should mention only the actually utilised references in the preparation of manuscript and they are supposed to follow **Harvard Style of Referencing**. The author (s) are supposed to follow the references as per 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 italics. 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 parentheses.
- The location of endnotes within the text should be indicated by superscript numbers.

#### 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.

#### 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, 19–22 June.

#### UNPUBLISHED DISSERTATIONS AND THESES

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.

#### WEBSITE

Garg, Bhavet (2011): Towards a New Natural Gas Policy, Economic and Political Weekly, Viewed on July 05, 2011 http://epw.in/user/viewabstract.jsp

### IMPACT OF GOVERNMENT INTERVENTION ON THE GROWTH OF SMALL AND MEDIUM SCALE ENTERPRISES IN IMO STATE

VIVIAN CHIZOMA ONWUKWE RESEARCH SCHOLAR SOCIOLOGY DEPARTMENT UNIVERSITY OF PORT HARCOURT RIVERS STATE

MARTIN IKECHUKWU IFEANACHO PROFESSOR SOCIOLOGY DEPARTMENT UNIVERSITY OF PORT HARCOURT RIVERS STATE

#### ABSTRACT

SMEs occupy a strategic place in economic growth, equitable and sustainable development; constituting as high as 90 percent of enterprises in most countries worldwide. Prior to the late 19<sup>th</sup> century, cottage industries, mostly small and medium scale businesses controlled the economy of Europe. The economic transformation and consistent growth in the Gross Domestic Product (GDP) of India in the 20<sup>th</sup> and 21<sup>st</sup> century was attributed to the success of its SMEs programme. In contrast, Nigeria has experienced massive unemployment and absolute poverty due to lack of recognition and proper implementation of sustainable development programme that promote SMEs. The study examined the impact of government intervention on SME growth and evaluated the role of Small and Medium scale Enterprises in socio-infrastructural development in Imo State. A sample of four hundred and fifty respondents was selected using stratified random sampling. Questionnaires were completed by respondents. Other techniques used in collecting the data include oral interview, participant observation and archival research. Regression analysis and coefficient of correlation was used as methods of data analysis. The findings show that in Imo State, despite several specialized institutions in charge of micro credit and policy instruments established to enhance development of Small scale enterprises, SMEs are being inhibited by the gap between policy and policy implementation in contributing effectively to sustainable development.

#### **KEYWORDS**

Entrepreneur, Growth, Intervention, Small and Medium Scale Enterprise.

#### INTRODUCTION

mall and Medium scale Enterprises (SMEs) have been acknowledged as veritable drivers of sustainable development. Historical facts show that prior to the late 19<sup>th</sup> century, cottage industries, mostly small and medium scale businesses controlled the economy of Europe (Akogu, 2003). The industrial revolution changed the status quo and introduced mass production. The twin oil shocks during the 1970's undermined the mass production model, which triggered an unexpected reappraisal of the role and importance of small and medium scale Enterprises in the global economy (IFC 2001). Empirical findings over the years show that small firms and entrepreneurships play a significant role in socio-economic growth and development. The American economy of the 1970's and 1980's owed its bubble and boom to the development of SMEs (Oboh, 2003). The economic transformation and consistent growth in the Gross Domestic Product (GDP) of India in the 20<sup>th</sup> and 21<sup>st</sup> century was attributed to the success of its SMEs programme (Dewett and Verma, 1981; Oboh, 2003; APEC, 2002).

In contrast, Nigeria has experienced massive unemployment and absolute poverty due to lack of recognition and proper implementation of sustainable development programmes such as the ones that encourage the growth of SMEs. The economic situation in our country breeds poverty, and the government through its attitude of apathy and indifference helps to service the machinery that manufactures poverty (Onwukwe, 2002). This has resulted into a situation whereby more than half of the Nigerian population has been immersed in vicious poverty followed by the shrinking of the per-capita income of the average man. Anya (1993) puts it clearly; "the per-capita income of the average Nigerian has shrunken from a figure equivalent of 1000 Dollars two decades ago to less than 300 hundred dollars today. Over 50% of our citizens live below the poverty line". According to the World Business Council on Sustainable Development (WBCSD), Global wealth has almost doubled since 1990, but nearly half the world's population subsists on less than US\$ 2 per day. Nigeria falls within this category. This is even more worrisome considering the statement by the Vice president; African Region of the World Bank on September 11, 2008 that Nigeria is not among the countries in Africa that will meet the 1<sup>st</sup> target of the Millennium Development Goals (MDGs), which is halving poverty by 2015 (Onwualu, 2008). Going by the World Economic Outlook, (2000) "progress in alleviating poverty in Africa remains fragile and inadequate"

Perhaps the latest World Development Report could be more frightening in that Nigeria is reported as one of the poorest countries in the world despite her abundant natural resources. While Ghana recorded an improvement from 36.7 percent to 29.9 percent in poverty reduction, Nigeria witnessed an increase in poverty, from 42.8 percent to 65.5 . In addition, Nigeria's export earnings decreased from 14,500 million dollars in 1990 to 9,855 million dollars in 1998; at the time her import expenditure increased from 6,909 million dollars in 1990 to 133,77 million dollars in 1998 (World Development Report 2000/2001). The Central Bank Annual Report in 2004 reported a dwindling performance of the domestic economy. In 2003, the economy was characterized by problems as in the previous years. Monetary expansion was excessive, giving rise to high demand pressure on foreign exchange and persistent depreciation of the Naira in all segments of the market. Besides, the continued structural bottlenecks in the economy frustrated the high expectation of a quick economic recovery. Furthermore, the depressed economy has continued to worsen the problem of poverty and unemployment particularly among high school and university graduates (CBN, 2004). Poverty remains a major challenge to sustainable development, environmental security, global stability and a truly global market.

The key to poverty alleviation is economic growth that is inclusive and reaches the majority of people. Improving the performance and sustainability of local entrepreneurs and small and medium enterprises (SMEs), which represent the backbone of global economic activity, can help achieve this type of growth. The problem with Nigeria is not shortage of laws rather the making of weak policies and programme which are left to die without reaching implementation level. According to Onwualu, (2008) for Nigeria to be able to compete at the global level, not only is sound policy formulation and implementation necessary, but a clear plan (vision) is required to take Nigeria to the top of the leading global economies.

Since the mid 1960's a new approach to SME development began to emerge due to a number of factors; first, there was a growing concern over low employment elasticity of modern large-scale production (Ekpenyong and Nyong, 1992). It was claimed that even with more optimal policies, this form of industrial organization was unable to absorb a significant proportion of the rapidly expanding labour force (Chinery et al 1974; ILO, 1973). Second, there was widespread recognition that the benefits of economic growth were not being fairly distributed, and that the use of large scale, capital- intensive techniques was partly to blame. Also the import substitution industrialization strategy turned out to have little sustainable development impact as the large industries promoted

were not in tune with the relative factor of endowments of a developing economy like Nigeria. Third, empirical diagnosis showed that the causes of poverty were not confined to unemployment and that most of the poor were employed in a large variety of small-scale low-productivity activities. Thus, it was thought that one way to alleviate poverty could be to increase the productivity of those engaged in small-scale production (Afab and Rahim, 1989 in Ekpenyong & Nyong, 1992).

In the developed and the developing countries, there are excellent examples of initiatives to promote indigenous entrepreneurship in small and medium enterprises. The main purpose is usually to reduce youth unemployment through appropriate education and training and other complementary measures. Other underlying reasons for this type of initiative include the desire to establish an enterprise culture (Britain), a need to assist minorities (Canada), the need to develop alternatives to stagnant sector of the economy (Canada), desire to reduce national dependence on imported goods and foreign enterprises (e.g. Malawi), rural transformation (e.g. Sierra Leone) and encouraging independence and self employment (Nigeria). Rao, Wright and Mukherjeo, 1990).

Nigeria desired to promote SMEs to reduce unemployment and poverty. Consequent upon this, several specialized financial institutions in charge of micro credit and policy instruments were established to enhance development of small scale enterprises. They include; Nigeria Agricultural Co-operative and Rural Development Bank (NACRDB), National Economic and Reconstruction Fund (NERFUND), and other commercial banks which are now replaced by Micro Finance Institution (MFI). Other policy oriented institutions includes; Small and Medium Enterprise Development Agency (SMEDA), Entrepreneurship Development Policy (EDP) run by the National Directorate of Employment (NDE), National Association of Small Scale Industries (NASSI), Small and Medium Enterprise Equity Investment Scheme (SMEEIS) etc. these institutions were established to offer financial and technical support to SMEs.

Despite these, SMEs seem to have performed poorly in contributing effectively to sustainable development. It is the thrust of this research work to examine the impact of government intervention on SME growth and the potential contribution of SMEs towards socio-infrastructural development.

#### THE PROBLEM

SMEs occupy an important and strategic place in economic growth, equitable and sustainable development; Constituting as high as 90 percent of enterprises in most countries worldwide (Working group report 2007-2012). A major gap in Nigeria's industrial development process in the past years has been the absence of a strong and virile Small and Medium scale Enterprises sub-sector. Today, SMEs represent about 90 percent of the industrial sector in terms of the number of enterprises; however, they contribute a meagre 1 percent of the Gross Domestic Product (GDP), (N.I.P.C. 2004). Selected indictors on the Nigerian economy showed that the contribution of the industrial sector to economic growth is meagre, when compared to other sectors (CBN Half Year Report 2008).

The little progress recorded from the courageous effort of the first generation of indigenous industrialists was almost completely wiped out by the massive dislocation and traumatic devaluation which took place under the Structural Adjustment Programme (SAP) (Udechukwu, 2003). With over 140million people, productive farmland, rich variety of mineral deposits, Nigeria should be a haven for SMEs. However like most developing countries, the country is witnessing high population growth, poverty and unemployment; and this contrasts with the less than average rate of development in communication, technology and social infrastructure (Udechukwu, 2003).

Economic and socio-political instability and high turnover have impacted negatively on the performance of primary institutions responsible for policy monitoring and implementation, resulting in distortion in the Macroeconomic structure and low productivity. These problems constitute a hindrance to the development of SMEs which is an important sector that will enhance the contribution of the private sector and provide the critical building blocks for industrialization and sustainable economic growth. Thus this study will examine the impacts of government intervention on the growth of SMEs and in the achievement of their target of sustainable development. It will also ascertain the contribution of SMEs to socio-infrastructural development.

#### **CLARIFICATION OF CONCEPTS**

#### SMALL AND MEDIUM SCALE ENTERPRISES

There is no generally accepted definition of a small business because the classification of businesses into large-scale or small-scale is a subjective and qualitative judgment (Ekpenyong & Nyong, 1992). In a global context, a general definition of small scale enterprise using size and scale of operation is not easy, but within the fixed coordinates of national boundaries, it might be easier (Olorunshola, 2001). Oyekanmi, (2006) confirms this when he opines that SMEs definition is individual country specific and is based on the size and level of development of each respective economy. Each country tends to derive its own definition based on the role small scale industries are expected to play in that country (Salami, 2003). In Nigeria, SMEs have been defined along a broad continuum, though they commonly use one or a combination of the following parameters; number of employees, turnover, invested capital and total assets. The Small and Medium scale Industries and Equity Investment Scheme (SMIEIS) defines SME as any enterprise with a maximum assets base of N120 million excluding land and working capital and with the number of staff employed not less than 10 or not more than 300 (IFC, 2001)

The Central Bank of Nigeria in its monetary policy circular No 22 of 1988, defined small scale enterprises as having an annual turnover not exceeding 500,000 Naira. In the 1990 budget of the federal government of Nigeria, small and medium scale enterprise for the purposes of commercial banks loans were defined as those with an annual turnover not exceeding 500,000 Naira, and for merchant bank loans, as those enterprises with capital investments not exceeding 2million Naira (excluding cost of land) (Ekpenyong & Nyong, 1992).

In line with the stipulations of the Committee for Economic Development Standard (1980 in Osuala, 2004) small scale businesses must meet the following criteria:

- a) management is not independent
- b) capital is supplied and ownership is held by an individual or small group of people
- c) the area of operation is mainly local
- d) the business is small when considered with the biggest unit in its field.

In terms of size, the measures used to classify SMEs include employment, assets and revenue. The Micro Small and Medium Scale Enterprise (MSME) policy of 2007 categorized them as follows:

S/N	SIZE CATEGORY	EMPLOYMENT	ASSETS (N million) excluding land and building)					
1	Micro Enterprises	Less than 10	Less than 5					
2	Small Enterprises	10 – 49	5 less than 50					
3	Medium Enterprises	50 -199	50 less than 500					

#### **TABLE 1: GENERAL CLASIFICATION**

Source: Adelaja, (2008) Overview of Micro, Small & Medium Enterprise Development process & opportunities

Small and Medium scale Enterprises (SMEs) in Nigeria share the following characteristics in common with its counterparts other less developed countries; sole proprietorship/partnership, labour intensive nature, sustainable and indigenous, High mortality rate and over dependence on imported raw materials (Udechukwu, 2003; Newberry, 2006; Chima, 2005; Omole, 2008; Onwualu, 2008).

#### INTERVENTION

This refers to several efforts made by the government in diverse ways in order to encourage the growth, survival and full participation of small scale enterprises in the socio-economic development of the country. They include NERFUND, NBCI, NERCRDB, SMEDA, SMIEIS, MFI, Etc.

#### GROWTH

Increase in capital base and performance of SMEs

#### **ENTREPRENEUR**

The person who perceives investment opportunities and organizes resources to sustain the growth of SMEs (Lawal, 1993)

#### SMALL AND MEDIUM SCALE ENTERPRISES AND THE PROBLEM OF INTERVENTION

It is clear that a vibrant SME sector holds much for an emerging economy, though these impacts are often overlooked due to what Kauffmann (2005) called the SMEs' "missing middle" status. A lot of problems have been identified as posing serious challenges to SME growth in Nigeria. Among these factors are- limited access to funds and higher interest rates, inimical government rules and regulation, lack of technical know-how, poor marketing strategy/development, lack of planning and isolation (Aftab and Rahim, 1989; Ekpenyong and Nyong, 1992; Akamokor, 1983; Sengenberger and Pyke 1992)

Funding is the most worrisome among the monumental challenges facing SMEs in Imo State. They lack easy access to credit facilities despite the various financial sources open to them which includes; micro finance institutions, federal and state governments, banks under the auspices of the SMEEIS and other informal/personal sources. The literature is rich with anecdotal and empirical studies describing inadequate financial resources as a primary cause of SME failure (Coleman 2000; Van Auken and Neeley 1996; Gaskill and Van Auken 1993; Welsch and White 1981; Jones 1979; and Wucinich 1979 in Gregory et al 2005). Wattanapruttipaisan, (2003) in his study of south East Asian countries reports that only 3-8 percent of SMEs could obtain financing from banks. In the same vein, the Inter-American Development Bank (IDB) estimates that in Latin America, 90 percent of entrepreneurs are forced to source much of their financing from personal savings (Smith, 2003). This is because of the logistical difficulties inherent in lending money to small businesses; banks tend to offer loans to SMEs on unfavourable terms because of the high fixed cost associated with these transactions. The result is that some SMEs secure financing only by agreeing to high amount of collateral and shorter pay-back periods while the rest must either rely on personal networks or high interest, illegal loans to generate start-up capital (Newberry 2006). The problem is typified in SME operator inability to satisfy lending rules. As a result, working capital is still a major constraint on production, as most small scale enterprise are restricted to funds from family members and friends and are therefore unable to respond timely to unanticipated challenges.(Odigbo, 2001; Olorunshola, 2001, Osuala, 2004).

Government policies that are harsh and inconsistent pose a serious problem to SME growth and sustainable development. Ekpenyong and Nyong, (1992) traced the beginning of harsh government policies to the 1982 introduction of "stabilization measure" which resulted in import control and drastic budget cuts. In his words "they in turn, adversely affect the subvention to the financial institutions established to provide financial assistance to the SME. For example in 1983, out of a total of 8,380 applications for loans received from SMEs a total of 559 million naira, only 18 percent (1,470 projects) for a total of 4666 million naira was disbursed". Njoku, (2002) identifies inconsistency in government policies and their inability to execute budgets on time as a major restriction on the ability of manufacturing firms to factor tariff measure into their trade decision. The second policy inconsistency is the sudden reversal of the backward integration policy that requires firms to source raw materials locally. Olorunshola (2001), is also of the view that poor implementation of policies, including administration of incentive and measure aimed at facilitating the growth and development of small scale enterprises have had unintended effects on the sub-sector. This has resulted, for instance into confusion and uncertainty in business decision and planning as well as weakened the confidence by the SME, on the government's capacity to faithfully execute its programme.

Inadequate provision of essential services such as telecommunication, access roads, electricity and water supply constitutes one of the greatest constraints to SME development, most SME resort to the private provisioning of these at huge cost. A World Bank study (1989) estimates that such cost accounts for 15-20 percent of the cost of establishing a manufacturing enterprise in Nigeria. Contemporary evidence has shown that the relative burden of the compensatory provision of infrastructural facilities is much heavier on small scale enterprises than large enterprise. In our study, 80 percent of the owner/managers interviewed reported that the lack of essential services as a major constraint. They complained of using more than two times their total labour cost on running generators due to epileptic electricity supply.

Overbearing regulatory and operational environment is part of the broad continuum of challenges. The plethora of regulatory agencies multiple tax, cumbersome importation procedure and high port charges has continued to exert serious burden on operation of SMEs. (Olorunshola, 2003). Others includes; poor capacity building, lack of institutional credit, dependence on imported materials/inputs, weak competitive advantage, vulnerability to foreign goods, poor governance, poor business history and knowledge of the risk facing their enterprise.(Osuala, 2004; Onuoha, 1985).

#### THEORETICAL ORIENTATION

The study uses Practical theory and dependency theory as theoretical framework. Practical theories are discursive approaches to entrepreneurial learning. They are derived from life story accounts of entrepreneurs which are "implicit, intuitive, tacit and situated resource of practice" as opposed to theory which is "abstract, generalized, explicit and seek to be provable" (Rae, 2003). In line with above, Rae (2003) defined it as a living body of learning, which emerges from the intuitive and tacit resource of practice, combining thinking and acting in personal praxis. For Shotter (1995), they are analytic tools that make people see links and create meaning between aspects of their lives and practices and account for their actions. They are practical theories of action which originates from social constructionism that enable entrepreneurs to find connection between "what we do" and abstract generalisable principles (Bruner 1990, Shotter 1993; 1995, Weick 1995, Wenger 1998, and Watson & Harris 1999 in Rae 2003). This theory is relevant to this study because most SMEs are entrepreneurship based. Rae (2003) observes that practice based theory governs such issues as decision making, dealing with recurrent situations, problem solving and the routing of managing relationships with others.

The dependency theory arose as a rebuttal to the Western Filter Model of development- a school of thought which argues that the backwardness of Africa is as a result of its traditional pattern of life and activity. It takes the Marxian perspective and argues that the underdevelopment of the third world exists in a dialectical relationship development of the 'west'. The thesis of this perspective is that imperialism with all its arsenals is the cause of African backwardness. This model agreeably explains the African situation as the macrocosm and that of Nigeria as a microcosm. The paradigm is appropriate even in the face of arguments that our leaders with their rudderless mismanagement of men and resources contribute significantly to the problem. It preaches independence both political and economic. Most SMEs are independent both in the decision making process and in the use of their finances. This economic independence according to Cbinweizu (1978) is what Africa needs most. He says; "what needs to be created is an integrated African economy oriented not to the needs of the west, but to the needs of Africa as defined politically by the African people. Anything short of that will prove incompatible with our aspirations for political and cultural autonomy."This is what the Nigerian economy needs- to be private sector driven and free from government/state control though there is need for government intervention in the area of funds and policies.

#### METHODS AND RESULTS

A cross sectional survey was carried out in Imo state using stratified random sampling technique. This study made use of four hundred and fifty (450) respondents drawn from the three senatorial zones in Imo state (Orlu, Owerri, Okigwe zones). The questionnaire method was used. In each zone, two industries were selected, making it a total of 6 SMEs. The population is divided into Owner-manager, Worker, non workers within the area. From the sample, 6 Owner or top management of SMEs were selected, (one from each SME) and interviewed.

The distribution covered the following sub-sectors:

Manufacturing: Chemicals and Allied products, Agro-based industries and Furniture making; Under these sub-sectors, Argon chemical and allied products Ltd (Villa Paints) Amaifeke (Orlu zone), Seamaster Nig. Ltd Amaifeke (Orlu zone), and Melody Furniture Anahara (Okigwe Zone) were chosen respectively.

Services: Information and Communication Technology (ICT), General goods importers and merchant trading; here two enterprises were selected; Expert Institute of Technology Ofekata Mbaitoli LGA (Owerri zone). Iyke International Ventures Owerri (Owerri zone).

Agriculture: Farming: C Six Farms Nzerem Isiala Mbano (Okigwe zone).

#### **RESULTS OF NULL HYPOTHESIS**

#### Hypothesis I

Ho There is no significant relationship between the growth of SMEs and government intervention.

TABLE 1: REGRESSION OF GOVERNMENT INTERVENTION (Y1) ON SMEs GROWTH (X) Coefficient of correlation = -0.8019 > 0.05

		-	1		1 1 2 2 2 2 2
SOURCE	Df	S.S	MS	F	SIGNIFICANCE F
REGRESSION	1	10614.6573	10614.6573	5.4052	0.1026
RESIDUAL	3	5891.3427	1963.7809		
TOTAL	4	16506.0000			

From table 1, F-calculated is 5.4052, the significance F is 0.1026. Since the significance F=0.1026 is greater than 0.05 (0.1026 > 0.05) we accept the null hypothesis and reject the alternative. Thus our decision is that there is no significant positive relationship between the growth of SMEs and government intervention. The coefficient of correlation has a value of 0.8019. This indicates a negative relationship. The graphical representation is shown in figure 1

#### 300 250 200 GOVERNMENT INTERVENTION 150 Y 100 <mark>1=-<mark>1.9</mark>25 X+197.327</mark> 50 0 0 <sup>50</sup> SME GROWTH 100 150 200

### GRAPH OF SME GROWTH(X) AND GOVERNMENT INTERVENTION(Y1)

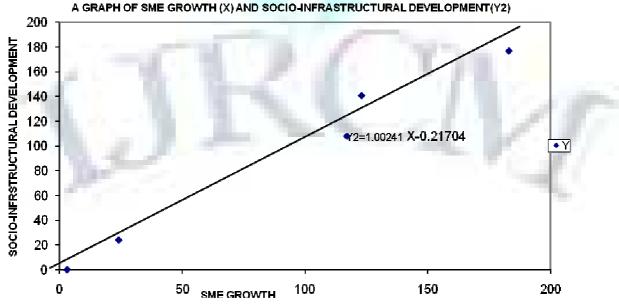
#### Hypothesis II

Ho There is no significant relationship between SMEs growth and socio-infrastructural development.

TABLE 2: REGRESSION OF SOCIO-INFRASTRUCTURAL DEVELOPMENT (Y2) ON SME GROWTH(X2) Coefficient of correlation =0.9902 > 0.05

SOURCE	Df	S.S	MS	F	SIGNIFICANCE F
REGRESSION	1	7500 <mark>.04</mark> 35	7500.0435	150.0443	0.0012
RESIDUAL	3	149.9 <mark>56</mark> 5	49.9855		
TOTAL	4	7650.0000			

From table 2, F- calculated is 150.0443 and F- tabulated (significance F) is 0.0012. Since 0.0012 is less than 0.05 we reject the null hypothesis (Ho). This means that there is a significant positive relationship between SME growth and socio-infrastructural development. Furthermore, the coefficient of correlation yielded a high value of 0.9902 > 0.05. This means that as SME growth increases sustainable development increases. The graphical representation is shown in figure 2



#### **DISCUSSION OF FINDINGS**

The first which states that there is no significant relationship between the growth of SMEs and government intervention was accepted. The reason for this outcome may be as a result of the following reasons: although most of the SMEs studied agreed to the fact that government intervention can boost their businesses but the intervention programme only existed on paper and does not reach the target SMEs. Olorunshola (2001) supports this finding by stating that the poor implementation of government policies has weakened the confidence of the SMEs, on the government's capacity to faithfully execute its programme. As such the little growth recorded by them is achieved outside government's support.

The second hypothesis which proposes that there is no significant relationship between SMEs growth and socio-infrastructural development was rejected. This is plausible because Small and Medium scale Enterprises contribute to socioeconomic development of the state. This finding is in consonance with the work of Hu and Liu (2003) who found that small business is conducive to economic prosperity. Furthermore, Medina and Medina (2001) maintain that, by being socially responsible, SMEs contribute to sustainable development. Other studies that confirm this finding are; Cohen and Klepper's (1992), Acs, Carlsson, and Karlsson (1999), Ekpenyong and Nyong (1992).

#### RECOMMENDATIONS

Small and Medium scale Enterprises hold enormous prospects for sustainable development. In order to strengthen their workability in the light of our findings, the following recommendations are made; The government and the private sector should join hands in the development, upgrading and expansion of infrastructural facilities such as rural/urban roads, electricity and telecommunication.

The government should guarantee SMEs access to funds by providing fiscal incentive and support through the establishment of credit guarantee scheme, resolution of collateral issue and the provision of tax rebate for young SMEs and those who source local raw materials.

Technological, industrial development centers like the Industrial Development Center (IDC) which was established in 1962 in Imo state, and Raw Material Research and Development Council (RMRDC) should be revitalized. These bodies will provide extension services to small businesses.

#### CONCLUSION

In this study we examined the impact of government intervention on the growth of Small and Medium scale Enterprises and their contributions to development. Employing regression analysis and coefficient of correlation on the influence of government intervention on SME growth, our study indicated a negative relationship between these conjectures. This is as a result of the gap between policy and policy implementation.

#### **BIBLIOGRAPHY**

Acs, Z. J., Carlsson B, and Karlsson C. (1999) "The Linkages among Entrepreneurship, SMEs and the Macroeconomy," in Acs, Carlsson, and Karlsson, eds., Entrepreneurship, Small Medium-& Sized Enterprises and the Macroeconomy, chapter 1, 3-42, Cambridge University Press.

Adelaja, M. A. (2008), "Overview of Micro, Small and Medium Enterprise Development process and Opportunities". A paper presented at the Grow African Conference, Abuja. 17 March

Akogu, A. D, (2003) Nigerian Economy depends on the recognition of SMEs, in the role of small scale industries in Nigerian. Viewed on January 2009 www.wikianswer.com

Anya, A.O., (1999): "The Entrepreneurial University in the knowledge driven economy of the 21<sup>st</sup> century; A Nigerian perspective" Paper presented at the 1999 convocation ceremony of Imo state University, Owerri.

Asian-Pacific Economic Cooperation (2002) APEC Small and Medium Enterprise Working Group, "Profile of SMEs and SME issues in APEC 1990-2000" Singapore, world scientific publishing.

Central Bank of Nigeria (2008): Half Year Report viewed on March 17, 2009. http://www.cenbank.org/OUT/PUBLICATIONS/REPORTS/STD/2008/2008%20 HYR%20-%20CONTENT %20&%20SUMMARY.PDF

Chima, G. U. K. (2005: Organizational Leadership Strategies in Indigenous Companies in a Developing Economy. Viewed February 3, 2009 http://www.stclements.edu/grad/gradchima.htm

Chinery, H. et al (1974) "Redistribution with Growth" Oxford; Oxford printing press.

Cohen, Wesley M., and Steven Klepper (1992) "The Tradeoff Between Firm Size and Diversity in the Pursuit of Technological Progress," Small Business Economics, Vol 4 No.1 pp. 1-14.

Ekpenyong, D. B. & Nyong, M. O., (1992) "Small and Medium scale Enterprise in Nigeria". AERC research paper 16. Africa economic research consortium, Nairobi Gregory, B. T., Rutherford, M. W., Oswald, S., and Gardiner, L. (2005): An empirical investigation of the growth cycle theory of small firm financing. Journal of Business Management October 01. www.blackwell-synergy.com/doi/abs

Hu M. W and Liu M. C (2003) "SME and Economic Growth: Evidence from Taiwan", paper Prepared for International Council for Small Business 48th World Conference, Track R, 15-18 June

International Labour Organization (1973) "sharing in Development": a programme of employment equity and growth in the Philippines, Geneva ILO.

Newberry, D. (2006) "The Role of Small and Medium scale Enterprises in The Future of Emerging Economies", New Ventures Programme of World Resources Institute.

Oboh, G. (2003) "Investment and economic development in Africa (111") This day, June 13 pp. 39.

Olorunshola, J. A. (2001), Industrial Financing in Nigerian: some Institutional arrangements. CBN Economic and Financial Review; 24 (4).

Omole, F. (2008), MSMEs and problems of Financial Management, Daily Independent, March 14: pp. 23.

Onuoha, B. C., (1985), The problems and prospects of managing a Limited Liability Company in Rural Areas. A case study of Scipta International Industries Ltd. Aba, A BSc. Project. June.

Onwualu, A. P., (2008) Finding and Accessing Raw Materials; paper presented at the 1<sup>st</sup> annual conference of NASSI summit on Sustainable Development. International conference centre Abuja October 20<sup>th</sup> - 24<sup>th</sup>

Onwukwe, V.C., (2002) The Socio-psychological effects of poverty on rural families in Orodo town. Research dissertation submitted to Department of Sociology, Imo State University Owerri.

Oyekanmi, R., (2006) Small and Medium scale Enterprises (SMEs). A paper presented at the 6<sup>th</sup> African Venture Capital Association Conference. Dakar, Senegal. Viewed on March 19,2009 http://www.avcanet.com/presentation2006/spkpre2/RotimiOyekanmi AVCA 2006.ppt

Rae, D. (2003) Practical Theories from Entrepreneurs' Stories: discursive approaches to entrepreneurial learning. Paper presented at the International Council for Small Business 48 World Conference, Northern Ireland. Viewed on February 21, 2009 http://www.sbaer.uca.edu/research/icsb/2003/papers/200.doc

Rao, T., Weight, C. and Mukukjee, H. (1990)" Designing Entrepreneurship Skill Development Programme", London: Common Wealth.

Report of the Working Group on Science & Technology for Small and Medium scale Enterprises for the Eleventh Five Year Plan (2007-2012); India. Salami, A. T. (2003), Guidelines and Stakeholders Responsibilities in SMIEIS. Central Bank of Nigeria seminar on Small and Medium scale Industry Equity

Investment Scheme (SMIEIS). CBN training Centre Lagos No.4. viewed on march 19, 2009 www.cenbank.org/out/publication/guidelines/dfd/2004/smieis.pdf Sengenberger, W. & Pyke, F. (1992)" Industrial Districts and Local Economic Regeneration", International Institute for labour Studies, Geneva.

Udechukwu, F. N., (2003) Survey of Small and Medium scale Industries and their potentials in Nigeria. Central Bank of Nigeria seminar on Small and Medium scale Industry Equity Investment Scheme (SMIEIS). CBN training Centre Lagos No.4

World Development Report, (2000/2001), "Alleviating Poverty", Washington DC, Oxford University Press.

World Economic Outlook (2000) Published by International Monetary Fund (IMF) May: 19

### A STUDY OF FACULTY MOTIVATIONAL AND ROLE DYNAMICS IN HIGHER EDUCATION

### DR. DEEPANJANA VARSHNEY (SENGUPTA) SR. FACULTY FACULTY OF ECONOMICS AND BUSINESS ADMINISTRATION MINISTRY OF HIGHER EDUCATION KING ABDUL AZIZ UNIVERSITY JEDDAH KINGDOM OF SAUDI ARABIA

#### ABSTRACT

Education in developing countries is at a critical juncture: a potential crisis in the teaching profession threatens the ability of national governments to reach internationally agreed targets to expand and improve education. In many developing countries, the teaching force is demoralized, and fractured. Teachers previously benefiting from considerable public respect, and reasonable financial reward, feel that their status is in decline. As a result, the teaching profession in developing countries is characterized by high attrition rates, constant turnover, lack of confidence and varying levels of professional commitment. The paper does empirical analysis on select sample of respondents and provides insights on the significance of faculty motivation perspectives and its significant impact upon imparting quality higher education in a contingent academic framework.

#### **KEYWORDS**

Faculty motivation; role; teaching; work load.

#### INTRODUCTION

eachers often feel powerless either to create positive learning experiences and outcomes for their pupils or to improve their own situations. Despite the pivotal nature of the teachers' contribution to education, there is a tendency on the part of national and international policy-makers to by pass teachers in decision-making, and to neglect their needs when considering new policy directions.

"If teaching and learning are beginning and end of the educational planning process then all matters that bear on the welfare, professional development and effectiveness of the teacher must be of prime importance (Coombe, 1988).

An exploration of teacher's motivation provides an opportunity to develop a holistic understanding of the interplay between teacher's remuneration needs, professional and pedagogic support needs and their relationship to wider society. Both the public and policy makers fail to give professional development a high priority. The public and policymakers perceive (instructors) are working only when they are with their students...Education must respond to the changing needs of students and (faculty), just as business has reacted to its changing needs by implementing employee training (Darling-Hammond, 1991).

Institutes have tended to undervalue professional development, making faculty members responsible for their own continuing education. In reality, if staff development for instructors is to be truly effective, administrators must not simply pay lip service to the cause. They must take supporting action (Persky, 1990).Research shows faculty motivation can be grounded with three dimensions: needs, directions and goals (Workshop, 2004).There was found to be five different aspects of motivation: competence, autonomy, goals, Relatedness and Context believes. Today Motivation must be understood by those doing educational programming, particularly those working directly with people. Beaudoin (2003) stressed the importance for institutional leaders "to be informed and enlightened enough to ask fundamental questions that could well influence their institution's future viability. Decision makers often rely on long-term demographic and economic projections, based on current trends and foreseeable influences, in their strategic planning (Reeve, 2002). The traditional faculty roles are shifting or unbundling. Rather than incorporating the responsibility for all technology-and competency -based functions into a single concept of 'faculty member', universities are disaggregating faculty instructional activities and (assigning) them to distinct professionals (Paulson, 2002). Initially the studies of Wergin, Mason and Munson (1976) and Bess (1982) both indicate that the factor most predictive of success in faculty motivation is depth of knowledge about the faculty members and their personal characteristics. Instructional approaches are becoming more learner-centered: "recursive and non-linear, engaging, selfdirected, and meaningful from the learner's perspective (McCombs, 2000). Whereas in the past, most instructors followed a "transmission" or lecture-style approach to teaching, more instructional diversity is occurring among teachers who are trying a larger variety of approaches (Eckert, 2003). Faculty work is traditionally demarcated in three areas: teaching, scholarship, and service (Boyer, 1990). That is, while teaching four courses per semester (including class preparation, reading and responding to student work, advising, office hours, etc.) and serving on department, college, and university committees, faculty are also expected to do their research and writing and give service to some part of the professional and education communities. It can be a daunting workload even without external forces begging for time. In their study of Promotion and Tenure: Community and Socialization in Academe, Tierney and Bensimon (1996) reject the myth that IHE faculty "work short hours and occupy their time with globe-trotting to conferences and lingering over leisurely lunches at the faculty club" (p. 59). Examples drawn from their interview data indicate that faculty work six and seven days a week, and during summer recesses. They report that "faculty in business, engineering or the sciences who had been in industry or business previously... said they worked harder in and spent longer hours in their academic positions" (p. 61).

#### WORKLOAD

Layzell (1996) reported that the typical faculty work week ranged from 47 hours (two-year institutions) to 57 hours (research universities). Although there are not great differences between actual and desired amounts of time faculty devote to the three areas of their working lives, it would appear that they feel that administrative and teaching responsibilities impinge on their research time and that they would like to reduce administrative tasks more than teaching activities to reallocate time toward research. Teacher education faculty reported that they spend about 48 hours per week on professional activities (RATE V, 1991). Approximately 65 percent of their time is spent on teaching-related activities, about 16 percent on research, and about 18 percent on service. They would like to spend about 57 percent of their time on teaching, 25 percent on research, and 18 percent on service. Howey (1994) found that "the majority of teacher education faculty workload are the institution-specific retention, tenure and promotion (RTP) policies that hold faculty accountable for their professional lives. The way in which local RTP policies reward (or punish or ignore) faculty work on program revision that lies outside the traditional boundaries of teaching, scholarship and service can affect faculty eagerness to work on mandated projects. In contrast, Castle and Schutz (2002) reported that senior faculty feel more relaxed about their working lives. They do not necessarily work any less hard than they did previously, but the added stress of worrying about tenure and promotion is behind them.

#### COLLABORATION

Faculty collaboration on program development often transcends departments and programs. Since content in teacher preparation draws on several disciplinary foundations, developing a credential program can require working with unfamiliar colleagues with different disciplinary backgrounds and different perspectives on all the issues. Collaboration therefore requires willingness and skill on the part of faculty. Consensus on key issues about how best to prepare teachers has to be reached. Differences on course content as well as unit allocation to different courses have to be resolved. As faculty withdraw, they take their history, expertise and experience with them and they are replaced by faculty who has to be brought up to speed with the project. The turnover of participating faculty can have an adverse impact on the project's timeline and can also contribute to an increase in workload for some of the remaining veterans. Labaree (2003) identifies how the different working cultures of practitioners and professors lead to different assumptions about the role and validity of forms of knowledge generated by practice and research. He suggests that a greater understanding of "the traits that teachers bring with them... need not [lead faculty members] to apologize for seeking to change these teachers into researchers. That, after all, is their job" (p. 21). Most faculty members at institutions of higher learning began their career in academia; and most individuals with doctorate degrees entered graduate school with plans to teach after graduation (Hoffer & Selta, 2001). From a sample of faculty in a large, research-oriented university. Sorcinelli and Andrews (1987) examined the way faculty members articulate their career goals. Results show that both male and female faculty tended to focus primarily on research goals with a desire to contribute significantly to their discipline through scholarship, followed by teaching and outreach goals. It is argued that this finding is parallel to the stated mission of the university

While there is abundant literature on the correlates of faculty teaching effort and behaviour (Blackburn, et al., 1986) there are few empirical studies designed to understand how these institutional and faculty characteristics affect role performance. Most of the research has assumed that features of the organizational context-mainly reward and merit incentives-strengthen and encourage desired behaviour or that individual characteristics-such as values and beliefs –determine how faculty spend their time. Critics of this literature (Lawrence and Blackburn,1988) note that motivation is more likely due to interactions between environmental properties and individual dispositions, beliefs, and perceptions. In other words people respond differently to the same organizational conditions depending on how they understand them and whether they accept them.

Aldefer (1972) indicates that frustration of growth (generativity and self-actualization) needs increase the desires of relatedness satisfaction, and frustration of related needs leads to the desire for existence gratification. For example, frustrated researchers might turn to affiliation available through teaching, frustrated teachers might move to another institution, extend their education, or participate more in administration. MacKeachie (1982), Csikszentmihalyi (1982) and Deci and Ryan (1982) all suggest that faculty are intrinsically motivated and have limited positive extrinsic motivation possibilities. Intrinsic motivation is coincident with the higher levels of Maslow's need hierarchy, while extrinsic motivators are appropriate for the lower levels of the hierarchy.

#### **ORGANIZATIONAL CONTEXT**

Organizational structure, external rewards, (such as promotion and pay) and feedback are examples of extrinsic rewards – which are seen as somewhat selfdefeating when used in a controlling manner. If extrinsic rewards are used, then faculty may slacken their efforts once full professorship and tenure have been obtained; such administration may build in a never-ending spiral of salary increases in hopes of continuing faculty motivation. However, providing external evaluation in an informational way can lead to motivation. Slight discrepancies from a faculty's self image may motivate change; however, large external evaluation discrepancies are rejected. Finally to little extrinsic feedback can lead to de-motivation.(Sloan,1997).

Deci and Ryan (1982) indicate that intrinsic motivation appears to work equally well for both teachers and learners. A teacher who is intrinsically motivated seems to enjoy the activity for its own sake and has a good chance to get the student to seek the intrinsic rewards of learning. If a teacher is extrinsically motivated, students might conclude that learning is worthless in and of itself, and lacks inherent value. Whitehead (1929) says that the ideal of a technical education is to be ".. a commonwealth in which work is play, and play is life."

It appears that education largely succeeds or fails via motivation. Professing means to live a way of life, almost in a religious sense of devotion. Csikszentmihalyi (1982) suggests that education is the process whereby the young agree to become adults –not just behaving like adults – enjoying being an educated adult. We can help students enjoy learning if their professors enjoy learning. If the professor does not enjoy learning, should the young emulate the alienated? At the heart of all classroom experiences, Csikszentmihalyi (1982) indicates there is subliminal question in the students' minds, "Does it make any sense to become an educated adult like this person at the front of the classroom?"

Climate is defined by Ferris and Gilmore (1984) as "individual perceptions of the favorability of the work context". Others have defined it as "a characteristic of organizations which is reflected in descriptions employees make of the policies, practices and conditions which exist in the work environment (Schnake, 1983) Peterson (1988) identified three types of organizational climate that operate simultaneously in the educational environment: the objective, or observable, climate; and the psychological or felt climate.

#### **RESEARCH METHODOLOGY**

The research used Motivation-Hygiene theory of Herzberg. Herzberg et al. (1959) examined motivation and job satisfaction within an organization; findings were not specific to education, however, the results have been generalized to various career fields including education (Betts, 1998; Chyung, 2005; Lee 2001). Herzberg et al. emphasized that motivation was not limited by individual views and opinions, but the administrative support and practices of the organization influenced a person's motivation to work. As noted by Herzberg based on the findings of the study, "The results indicated that motivators were the primary cause of satisfaction and hygiene factors the primary cause of unhappiness on the job" (Herzberg, 1968, p. 57). The study outlined two sets of factors defined as the motivators and hygiene factors.

Motivator factors included both intrinsic and extrinsic factors. Outlined in the motivation hygiene theory are seven motivator factors; "the factors are achievement, recognition for achievement, the work itself, responsibility, growth or advancement (Herzberg, p. 58, 1968). The factors are based on a person's ability to achieve and maintain a positive attitude towards their specific organization and career.

The study was conducted in select universities and technical institutes of North India and the sample size was 230 out of 300, among which 60 did not respond.

#### **RESEARCH QUESTION**

What are the major motivators that drive the faculty in higher education scenario?

#### FINDINGS

The factors examined in this study were the motivation factors detailed by faculty members who participated in this study. Of the seven motivation factors explored in this study the ranked order was (a) Remuneration, (b) Job Responsibility, (c) Accomplishment (d) Progress, (e) company policy (f) the nature of job and (g) Recognition.

Population The target population for this study was restricted to full-time faculty members (N=300) who taught in the various Universities and higher technical Institutions.

Table displays the ranked order of motivation factors and the mean responses with standard deviations.

r	1		
Motivation Factors	Mean	Standard Deviation	N= 230
Remuneration	3.89	1.04	230
Job Responsibility	3.51	1.29	230
Accomplishment	3.44	1.13	230
Progess	3.31	.97	230
Co. Policy	3.28	.88	230
Nature of job	3.12	1.05	230
Recognition	3.05	1.03	230

#### DATA ANALYSIS AND FINDINGS

The level of significance that was used for this study was set at an alpha level of 0.05 ( $\alpha$  = 0.05).

The A review of the empirical research related to motivation factors revealed that faculty motivation was extremely important. The factors identified in the literature review were inconsistent and varied depending on demographics, survey instruments applied, and research strategies used. The common motivation factors that appeared in several studies were: the availability of resources, a transparent system of rewards and incentives, consistent growth, supportive company policy

#### **CONCLUDING NOTES**

The study was conducted to assess the degree of faculty motivation and commitment required for the higher education industry. Motivation factors of faculty are personal and vary reflecting the needs of the particular population assessed (Betts, 1998; Hood, 2002; Lawyer & King, 2003, Schifter, 2000; Smylie, 1988). Results were mixed but certain key findings were there: faculty roles are varied and are at times conflicting, the intrinsic factors play a pivotal role as compared to salary, the perception of restricting company policy demotivates the faculty members to some extent. Thus faculty role and motivational dynamics cannot be overlooked in the domain of higher education and the time has come when the human resources management in the higher educational industry needs to be redefined and rejuvenated.

#### REFERENCES

#### BOOKS

- Aldefer, C.P., (1972), "Human Needs in Organizational Settings", Free Press, New York.
- Herzberg, F., Mausner, B., & Snyderman, B. B. (1959). "The Motivation to work" (2nd ed.). New York: John Wiley & Sons.

#### CONTRIBUTIONS TO BOOKS

- Layzell D.T., (1996) "Faculty workload and productivity: Recurrent issues with new imperatives". Review of Higher Education, 19, pp 267-281. Referenced in Menges R. J. & Austin A.E., "Teaching in higher education". In Richardson V. (Ed.), "Handbook of research on teaching", 4th ed. (pp. 1122-1156). Washington, DC: American Educational Research Association.2001.
- Peterson, M. W. (1988), "The Organizational Environment for teaching and learning" In Stark, J.S. and Mets, L.A., (Eds.). Improving Teaching and Learning Through Research, No.57. San Francisco: Jossey- Bass Publishers.23-38
- Wergin J.F., Mason E.G., and Munson P.J., "The Practice of Faculty Development: An Experience-Derived Model", (1976) J. High. Ed., 47, pp 289.

#### JOURNAL AND OTHER ARTICLES

- Beaudoin M.F., (2003) "Distance Education leadership for the new century". Online Journal of Distance learning Administration (6) 2.
- Blackburn R.T., Lawrence J.H., Okoloko V.P., Bieber J.P., Meiland R. & Street T., (1986) "Faculty as a key resource". Ann Arbor, MI: University of Michigan, NCRIPTAL.
- Boyer E.L., (1990) "Scholarship reconsidered: Priorities of the professoriate". Princeton, NJ: The Carnegie Foundation for the Advancement of Teaching.
- Deci, E.L., and R.M. Ryan, (1982) "Intrinsic Motivation to Teach: Possibilities and Obstacles in Our College and Universities," in New Directions for Teaching and Learning: Motivating Professors to Teach Effectively, 10, Jossey-Bass, San Francisco, 27.
- Eckert E.,(2003) "Review-New Directions for adult and continuing education: Contemporary viewpoints on teaching adults effectively". Adult Basic Education 13 (1): 62-64.
- Ehrenberg, R., Kasper, H., & Rees, D. (1990). "Faculty turnover at American colleges and universities: Analyses of AAUP data". Economics of Education Review, 10(2), 99–110.
- Ferris , G., Gilmore, D., (1984) "The moderating role of Work context in job design research: a test of competing models, Academy of Management Journal, 27: 885-892.
- Herzberg, F. (1968). "One more time: How do you motivate employees?" Harvard Business Review, 53-62.
- Howey K.,(1994) "RATE VI: The context for the reform of teacher education. Research About Teacher Education Project". Washington, DC: American
  Association of Colleges of Teacher Education.
- Labaree D.F. ,(2003) "The peculiar problems of preparing educational researchers". Educational Researcher, 32(4), pp13-22.
- Lawler, P. A., & King, K. P. (2003). "New perspectives on designing and implementing professional development of teachers of adults". Chester, PA: Widener University.
- Lawrence J.H., & Blackburn R.T., (1998) "Age as a predictor of faculty productivity: Three conceptual approaches". Journal of Higher Education, 59(1), pp 23-38.
- Lee, J. (2001). "Instructional support for distance education and faculty motivation, commitment, satisfaction. British Journal of Education Technology", 32(2), 153-160.
- McKeachie, W.J.,(1982) "The Rewards of Teaching," in New Directions for Teaching and Learning: Motivating Professors to Teach Effectively, 10, Jossey-Bass, San Francisco, 7.
- Paulson K., (2002) "Reconfiguring faculty roles for virtual settings". The Journal of Higher Education 73 (1) : pp 123 140.
- RATE V.,(1991) "Teaching teachers: Facts and figures. Research About Teacher Education Project". Washington, DC: American Association of Colleges of Teacher Education.
- Reeve R.T. & Perlich P.S., (2002) "Uttah economic and business review". Bureau of Economic and Business Research (BERB), 62 (9-10), pp 1-15.
- Rosenfeld, R., and Jones, J. (1988). "Exit and re-entry in higher education". Breneman, D. W., and Youn, T. (Eds.), Academic labor markets and careers, pp. 74-97. New York: Falmer.
- Schifter, C. C. (2000). "Faculty participation in asynchronous learning networks: A case study of motivating and inhibiting factors". Journal of Asynchronous Learning Networks, 4(1), 15-22.
- Schneke, M. (1983), "An Empirical assessment of the effects of affective response in the measurement of Organizational Climate", Personnel Psychology.36:791-807.
- Smart, J. C. (1990). "A causal model of faculty turnover intentions. Research in Higher Education", 31(5), 405-424.
- Smylie, M. A. (1988). "The enhancement function of staff development: Organizational and psychological antecedents to individual teacher change". American Educational Research Journal, 25(1), 1-30.

- Tiemey E.G. & Bensimon E.M., (1996) "Promotion and tenure: Community and socialization in academe". Albany, NY: State University of New York Press.
- Zhou, Y., & Volkwein, J. F. (2004). "Examining the influences on faculty departure intentions: A comparison of tenured versus nontenured faculty at research universities using NSOPF: 99". Research in Higher Education, 45(2), 139–176.

#### CONFERENCE PAPERS

- Coombe T.,(1988) "Integral Planning for the Staffing Function in Education", Paper presented at the workshop on the Future of Strategic Education Planning, IIEP.
- Darling-Hammond,(1991)"The Meaning of Professional Development in the 21<sup>st</sup> century, Restructuring to Promote Learning in America's Schools", Videoconference, North Central Regional Educational Laboratory.
- Hoffer T., & Selfa L.,(2001), "Academic employment of recent science and engineering doctorate holders (NSF 01-332)". National Science Foundation, Directorate for Social, Behavioral and Economic Sciences.
- Kumar, Manoj, (2006), "Attracting and Retaining Faculty in Technical Educational Institutions", Fourth AIMS International Conference on Management.
- McCombs B.L., (2000) " Assessing the role of educational technology in the teaching and learning process: A learner-centered perspective". The Secretary's Conference on Educational Technology. Retrieved June, 2003.
- http://www.ed.gov/Technology/techconf/2000/mccombspaper.html]
- Persky S.E.,(1990) "What contributes to teacher". Workshop, first meeting of SCIL Communities of eLearning Expects at the 12<sup>th</sup> and 13<sup>th</sup> of May 2004 in St. Gallon.
- E. Dendy Sloan, Jr., Professing: Stages, Motivation, and Meaning , Faculty Senate Distinguished Lecture, December 10, 1997

#### ONLINE RESOURCES

- Hood, P. (2002). "Perspectives on knowledge utilization in education". Retrieved June 12, 2006, from http://www.wested.org/online\_pubs/perspectives.pdf
- Times News Network (2006). "IIMs face quality faculty crunch". Economic Times (Online edition) assessed on 21.02.2006.

#### UNPUBLISHED RESOURCES

• Betts, K. S. (1998). "Factors influencing faculty participation in distance education in postsecondary education in the United States: An institutional study". Unpublished doctoral dissertation, George Washington University, Washington, DC.



### THE ROLE OF SMALL URBAN TOWNS IN IMPROVING RURAL LIVELIHOOD CASE STUDY: FERESMAY, RAMA AND MAYKINETAL CENTRAL ZONE, TIGRAY, NORTHERN ETHIOPIA

**BIHON KASSA ABRHA RESEARCH SCHOLAR, UNIVERSITY OF SOUTH AFRICA** ASST. PROFESSOR DEPARTMENT OF MANAGEMENT **COLLEGE OF BUSINESS AND ECONOMICS** MEKELLE UNIVERSITY **ETHIOPIA** 

### **GEBREMEDHIN YIHDEGOTEKLU** RESEARCH SCHOLAR, UNIVERSITY OF SOUTH AFRICA ASST. PROFESSOR **DEPARTMENT OF MANAGEMENT COLLEGE OF BUSINESS AND ECONOMICS** MEKELLE UNIVERSITY **ETHIOPIA**

#### ABSTRACT

This research tries to assess the role of small urban towns in improving rural livelihoods. Specifically, the main objective of this paper is to assess the role of small urban towns in improving rural livelihood of rural Tabias around the towns of Feresmay, Rama and Mykineta in the Central Zone of Tigray, Ethiopia. To achieve this objective, relevant data were gathered from both primary and secondary sources. The major primary instrument of data for the study was questionnaire that was distributed to the rural Tabias surrounding these small urban centres. A sample of 225 household heads were selected using systematic random sampling method from the villages of each selected Tabias and responses of the questionnaire survey were entered into STATA Software for analysis. Focus group discussions were also conducted to supplement the results of the data collected through structured questionnaire. The result of the finding shows, small urban towns are serving as a market and service centres to surrounding hinterlands. Formers sell their agricultural products and by industrial products both agricultural inputs and household goods in this centres. Residents of these towns are the primary consumers of agricultural output. In addition to this, they serve as transit market for rural products. Furthermore, they serve as administrative, educational, health and credit service centres. Investment in these urban centres can create job opportunity and contain migration to larger towns. This indicates the relationship between small urban towns and the rural areas is the real and first ladder in the urban-rural linkage.

#### **KFYWORDS**

Linkage, Livelihood, Rural, Small, Urban.

#### INTRODUCTION

#### ACKGROUND OF THE STUDY

It is believed that when a country becomes more developed measured in terms of per capita income, the population living in the urban areas will be larger. Nowadays, it is the least developed countries that have a faster rate of urbanization. According to Todaro (2000), the rapid growth of cities in developing countries is one of the most significant of all post war demographic phenomena and the one that promises to loom even larger in the future. He further stated that, with regard to particular cities, current rate of urban population growth range from under 1% per annum in two of the world's largest cities, New York and Tokyo, to over 6% per annum in many African cities including Nairobi, Lagos, and Accra. However, the rapid growth of urban poverty and deepening inequalities in cities are the main concerns. Solutions to today's urban problems, call for good urban governance and appropriate strategies and intervention to ensure local development, whether the issues concern the infrastructure, housing, service provision, environmental quality or violence (UN, 2001).

Considering the first city bias, the largest or the first city receives a larger share of the investment and incentives for private investment in relation to the country's second city and the second city in relation to medium and small sized tows. Furthermore, Hansen (1990) has strengthened this assertion as large cities and particularly national capitals of developing countries are given preference in the allocation of investment that support industry, create employment opportunities, provide health, education and social services, and offer amenities to attract better domestic and foreign investment. This leads to concentration of population in large cities, mainly by migration, which has created sever urban management problem such as more pressure on the services provided and infrastructure, high unemployment rate, slum and shanty areas, etc. To ensure a balanced population distribution and managed cities, the new perspective is to increase and emphases on small towns. Emphasis on small towns helps to control migration to congested cities and to enhance their contribution to the development of the rural communities. This paper deals with the role small urban centres have in improving rural livelihood. It shows how the small towns serve as input and output markets for rural households. It also deals with the public and administrative services that rural households receive in the small towns.

#### LITERATURE REVIEW

#### THE CONCEPT OF RURAL-URBAN TOWNS AND RURAL LIVELIHOOD

Small urban towns may be defined differently under deferent contexts. The demographic and economic criteria are used to define urban and rural areas although the criteria can vary widely between different nations (Tacoli, 1998). In Ethiopia, demographic and economic criteria are used to define rural and urban areas. According to the Ethiopian Urban Plans Proclamation No. 574/2008 Article 2/8, "Urban centre" means any locality with established municipality or having a population size of 2,000 or above inhabitants of which 50% of its labour force is primarily engaged in non-agricultural activities. On the other hand, settlements whose economic base is dominantly agriculture are considered to be rural areas.

For the sake of administration and management, urban towns in Tigray are divided into three: Infant/emerging, Town and Metropolitan (Proclamation 107/1998 Article 9/1). According to this proclamation, an emerging town is a town with no less than 2000 population provided that it is recognized as a town by the regional government. The growing town can have the status of municipal administration according to the regulation to be enacted by the regional government

INTERNATIONAL JOURNAL OF RESEARCH IN COMMERCE, ECONOMICS & MANAGEMENT A Monthly Double-Blind Peer Reviewed Refereed Open Access International e-Journal - Included in the International Serial Directories

executive committee (Proclamation 107/1998 Article 29/1). Thus, the above definitions of emerging and growing towns comply with the description and purpose of this research project. This means the emerging/infant and growing towns are considered in this research as small urban centres.

Another important concept in this research is household livelihood. A livelihood comprises the capabilities, assets (including both material and social resources) and activities for a means of living (Scoones, 2009). Livelihoods include specifically, natural, physical, human, financial and social assets. Human capital emphasises the importance of labour, health, education, and skill assets required to achieve household livelihood (Ellis, 2000 in Boli 2005) in Educated and trained and healthy labour is important to increase productivity and thereby improve livelihoods. Financial capital refers to the amount of money and financial assets such as loan, deposits, shares etc., and household possessions, which can be converted into other assets though the purchase of household consumable items or the conversion into other items such as livestock, commercial items or fixed assets (Boli, 2005). It can be also used to buy agricultural inputs.

Rural-urban linkages or relationship are vital for integrated rural-urban development. This linkage takes different forms. According to the United Nations (UN) (2005), however, rural-urban linkages refer to the flow of people, capital and goods, ideas, innovation and information between rural and urban areas. Nevertheless, lack of integration of Urban and rural development plans is one of the problems of rural-urban linkage. One of the reasons for the separation of the development plans is that urban areas are generally recognized as engines of economic growth as well as the focus of most development policies (UN, 2005). As a result, capital cities and large urban agglomerations became the focus of government to address urban-based economic growth and the reduction of urban poverty while the potential of small towns for economic growth, reducing poverty and mitigating rural-urban migration from larger cities has often been neglected (UN, 2005).

#### THE ROLE OF SMALL URBAN TOWNS IN IMPROVING RURAL LIVELIHOOD

Small urban towns provide access to markets for agricultural and non-agricultural goods produced by rural households, improved access to inputs needed for agricultural production and better access to consumer goods and employment and investment opportunities to both kinds of residents and attract temporary and permanent migrants from the rural areas (Kammeier, 2003; Dercon and Hoddinott 2005). According to Dercon and Hoddinott (2005), urban markets are important sources of demand for rural products and rural residents are sources of demand goods sold in urban areas. They further stated that small and intermediate urban towns provide improved access to public services such as health, education and administrative services to rural residents.

Small urban towns serve as market centres for the production and/or distribution of goods and services to the rural area. The location of service supply points supplying a variety of services, agricultural inputs and consumer goods to the rural areas plays a crucial role in rural development (Tacoli, 1998). Tacoli also wrote that proximity to urban markets improves farmers' access to the inputs and services required to increase agricultural productivity. The urban towns serve as centres for agricultural inputs such as fertilizer and farming tools which are important for agricultural intensification.

Small urban towns serve as markets for agricultural and non-agricultural products for the small urban town population and function as nodes in a wider marketing network, channelling demand from outside the small urban towns (Satterthwaite and Tacoli, 2003; Kammeier 2003). They serve as market centres for rural agricultural products either as direct consumers or as transit markets. They are major markets for agricultural inputs and sales of crops and livestock for rural households (John & Stefan 2005). This market opportunity motivates farmers to improve agricultural productivity and thereby their income (Kammeier, 2003).

Access to markets is a prerequisite to increase rural agricultural incomes, and the proximity of local small urban towns to production areas is assumed to be a key factor. Whether small urban towns develop as markets for rural producers, among others, depends on a number of factors such as accessibility and affordability of transport and roads infrastructure; the presence of local urban demand which is much influenced by population and income levels and links with a wider network of markets and the relations between producers and traders (Satterthwaite and Tacoli, 2003). Traders are the main link with urban markets. They often provide a vital link for small and diversified production flows that are not sufficiently profitable to attract large-scale trading organizations. According to Pedersen (2000), Traders are a vital link between farm and non-farm activities and between local markets and national and international markets. They often provide credit and technological advice to producers.

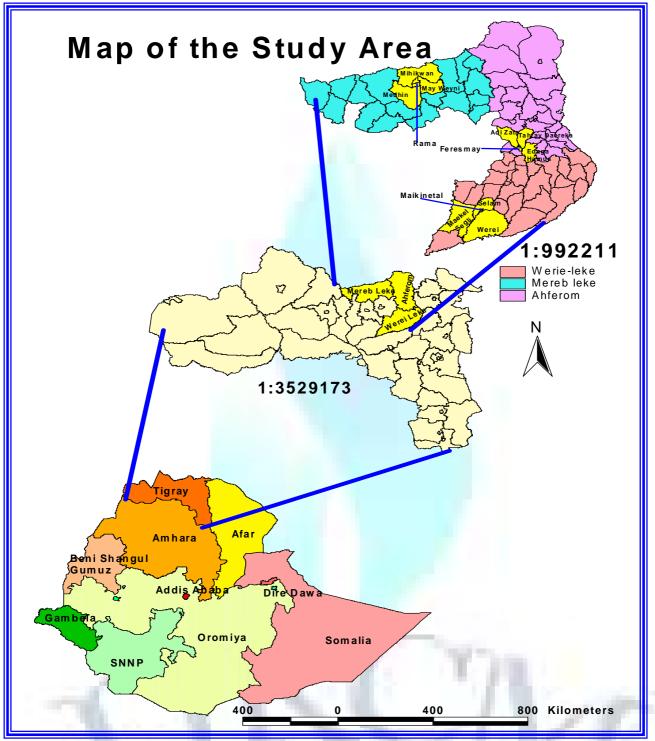
Small towns provide public services such as education, health and administrative services to rural areas (Bryceson, 1999; Kammeier 2003; Satterthwaite & Tacoli 2003). Higher-level health and educational rural services are located in small urban towns. The health and educational services include clinics/health centres and high schools for both rural and urban population. Furthermore, the services rural people receive from small urban towns include agricultural extension, credit services, postal and telephone services, transportation services, etc. Access to improved road infrastructure results more access to transportation services and reduced transportation cost (Dercon and Hoddinott, 2005). This means the connection of the small urban towns with the rural areas is assumed to reduce costs and improve access to a variety of services. The basic services have a major impact on livelihoods of the rural people for they improve individuals' and households' capabilities. For instance, educational service skills knowledge and information are generally seen as a prerequisite for households to be able to take advantage of many new livelihood opportunities. Access to education is generally required for the formation of human capital (Boli, 2005). Moreover, credit enables individuals and households to widen their income earning options.

According to Mendola (2010), the mobility of people for temporary or permanent labour purposes is a routine part of agricultural activity. People migrate to smaller towns from rural areas for search of education and health services and employment opportunities (Braun 2007). Migration is the source of remittance which can play a very important role in supplementing incomes in receiving households (Dercon and Hoddinott, 2005; Braun 2007). Therefore, one of the key potential roles of small urban towns is that of attracting rural migrants from their surrounding rural through demand for off-farm labour and thereby increase local opportunities for income diversification and decrease the pressure on larger urban towns (Satterthwaite and Tacoli, 2003). Off-farm activities help as a means of employment or additional income for the farmers who lack land or have inadequate land, or suffer from seasonal income fluctuations.

The migrants can be both the seasonal workers and those who want to change their settlement from rural to urban. An essential pre-condition for migrants moving to small urban towns is the availability of employment in different activities such as trade, services and construction. Migration is increasingly recognized as an essential component of the livelihoods of most households.



FIGURE 1: MAP DESCRIPTION OF THE STUDY AREA



#### METHODOLOGY AND STUDY AREA DESCRIPTION STUDY AREA DESCRIPTION

Tigray is one of the National Regional States of Ethiopia found in the northern part of the country. It is bounded by Eritrea in the north, Sudan in the West, Amhara National Regional State in the south and Afar National Regional State in the East. The Region covers approximately 54,527 square kilometres and has a total population of 4.33 million of which 82% live in rural areas (Central Statistics Authority - CSA 2007). The region has 34 rural Woredas (districts) and 12 urban Woredas. There are also towns having municipal status but subordinated to the rural Woreda administrations. The study area covers the small urban towns categorized as emerging/infant or small towns in Tigray National Regional State in the Central Zone, Ahferom, Mereb-Leke and Worie-Leke woredas (Figure 1). The small towns of the study area are Fersmay, Rama and Maykinetal while the rural Tabias include Adizata, Tahtay-Da-Ereka, Edaga-Hamus, Miquan, Mayweine, Medhin, Werie, Selam and Felafil (Figrure 1). The economic base of the region is dominantly agriculture. The economic base of these small urban towns is mainly merchandise, service businesses and agriculture while the economic base of the rural households is dominantly agriculture. **DATA TYPE AND SOURCE** 

In this research a mix of qualitative and quantitative methods is used. The qualitative method focused on focus group discussion while the quantitative method involved household survey. This mixture of qualitative and quantitative method of data collection has been gaining acceptance in the literature on development research methods (Bryman 2008). Moreover, the research used both primary and secondary sources. One of the primary source instruments was questionnaire

INTERNATIONAL JOURNAL OF RESEARCH IN COMMERCE, ECONOMICS & MANAGEMENT A Monthly Double-Blind Peer Reviewed Refereed Open Access International e-Journal - Included in the International Serial Directories that was distributed to the rural household respondents in Tabias surrounding the small urban towns. The second primary instrument was in depth focus group discussion with different stakeholders such as woreda administration representative, town administrators, high school directors, woreda educational office heads, selected Tabias and villages chair persons, Tabia rural development office supervisors and health centre heads from the town and rural areas. Secondary data were collected to complement the primary data from publications, documents from urban and rural organizations and institutions, woreda administration offices.

#### SAMPLING AND SURVEY DESIGN

As shown in figure 1, the study areas covered were three small urban towns and their surrounding rural Tabias in the central zone of Tigray Werie-leke, Ahferom and Mereb-leke Woredas (Figure 1). The unit of analysis of this research are the small urban towns and rural Tabias. From the rural Tabias around Feresmay and Rama three Tabias were selected and from each Tabia three villages were selected, based on lottery method, to distribute the questionnaire (**n=180**). But in the case of Mykinetal, three Tabias are having a dominant proximity to the town. These Tabias were selected based on judgmental method and household heads were given their responses (**n=45**). The total sample size from all rural Tabias is 225 household head respondents. These respondents were chosen from the list of households of the villages in the rural Tabia administrations based on systematic random sampling method.

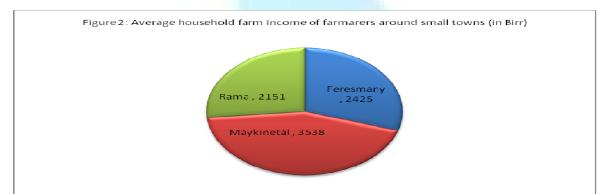
#### DATA PROCESSING AND ANALYSIS

Responses of the questionnaire survey were entered into STATA Soft Ware for analysis. In the analysis of the data, averages and percentages are presented in the form of tables. To see the relationship of two variables, the scatter plot is used. The information gathered from the secondary source and from the focus group discussions was also summarized and analyzed together with the information gathered through the household survey questionnaire.

#### **RESULT AND DISCUSSIONS**

The respondents considered in the survey were household head respondents and focus groups. The households are sample representatives from the rural Tabias in the study area while the focus group members are rural Tabia and Village chairpersons, small urban town administration, clinic/health centre, and agricultural office and high school representatives.

For the sake of fair representation, 28% of the total household respondents are female. With regard to age, the majority of the households were between 30 and 51 (61.3%) years. As far as educational level is concerned the majority (51.6%) of the respondents are illiterates. On the other hand, education is vital human capital required to improve rural household livelihood. The average household size of the total sample of the study is 5.6 persons which is similar to the national household size. The average land holding size of the total sample size of the study is 0.77 hectare and the land holding size is small for the households. In addition to this, there is large number of landless farmers. The survey result indicates that farm income is positively related with land size. The household head farm income increases with the increase of land holding size. This indicates that the productivity of the land is almost similar with the exception of certain individual variations.



The economic base of the rural people is mainly land. The average annual farm income for the rural households, as indicated figure 2, around Feresmay, Rama and Maykinetal is Birr 2,425, 2,151 and 3,538 respectively. Nevertheless, majority (86.89%) of the households are food unsecured due to lack of adequate land size and low productivity. 47% of the households said that their farm income covers for less than six months time while 43% of them said that their farm income covers six to eleven months. Thus, the rural household income depends on diversified sources such as farm and off-farm income, income from safety net, food aid and from other sources. To fill the income deficit, 44% of the respondents use safety net whereas, 22% of them use off-farm income.

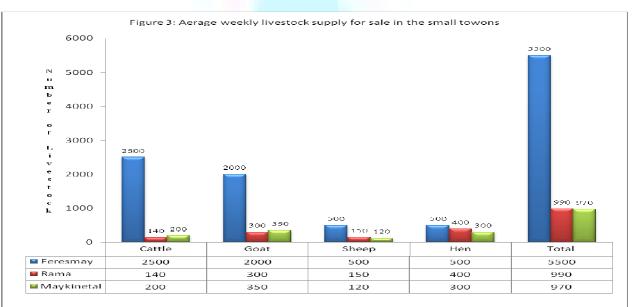
The safety net and off-farm income sources seem play a significant role to cover the food deficit of the households. But how sustainable are they? Except the offfarm income, the safety net income source cannot be sustained because the purpose of safety net is to heal food deficit resulted from certain shocks. Therefore, the main means of ensuring sustained food security are farm and off-farm income sources. To this end, the small urban towns contribute to increase the offfarm income of farmers and provide more job opportunity for the rural households.

Agricultural inputs Number of respondents of Rural Tabias								- 61				
	Fersmay (n=90)			Rama (n=90)			Mykinetal (n=45)					
	Yes	%	No	%	Yes	%	No	%	Yes	%	No	%
Selected seed	84	93.3	6	96.7	82	91.1	8	8.9	30	66.7	15	33.3
New breed	70	77.8	20	22.2	84	93.3	6	6.7	30	66.7	15	33.3
Fertilizer	87	96.7	3	3.3	83	92.2	7	7.8	30	66.7	15	33.3
Pesticide	73	81.1	17	18.9	85	94.4	5		45	100	-	-
Herbicide	71	78.9	19	11.1	83	92.2	7	7.8	31	68.9	14	31.1
Agricultural tools	88	97.8	2	2.2	83	92.2	7	7.8	45	100	-	-

All small urban towns in the study area have periodic weekly markets mostly for rural agricultural and non-agricultural products. Most rural households (86.2%) obtain their major agricultural inputs such as selected seed, new breed, fertilizer, pesticide, herbicide and agricultural tools from their respective nearby towns. This similar with the study of Satterthwaite and Tacoli (2003) that says small urban centres serve as market for agricultural produce. The small urban towns are also centres for all household goods. The focus group discussants also confirmed Small urban towns are the centres for all agricultural inputs and household goods. The response of the focus groups substantiates that the small urban towns are serving as market centres for agricultural inputs and services as well as household goods and services. The urban towns are serving as market intermediaries between the rural people and the higher level towns and among the rural households. This is in accordance of the statement of Demse (2006) that small towns play a key bridging role between rural farming and larger urban centres. Nonetheless, government supports are more concentrated on larger towns (UN, 2005)

TABLE 2: MAJOR RURAL PRODUCTS SOLD IN URBAN TOWNS							
Agricultural output Number of respondents of Rural Tabias							
	Fersmay ( <b>n=90</b> )	%	Rama ( <b>n=90</b> )	%	Mykinetal ( <b>n=45</b> )	%	
Crop and cereals	82	91	82	91	45	100	
vegetable	81	99	62	100	45	100	
Animals and animal products	86	96	83	92	45	100	
Bee/honey	53	99	52	100	16	100	
Craft	33	100	49	100	16	100	
Forest products	55	100	49	100	16	100	
mining	14	97	29	96	-	-	

Small rural towns constitute an important market outlet for rural farm and non-farm products. It is certainly true that access to markets is essential for rural households. For instance, the small urban towns are market centres for the products of more than 90% of the households (Table 1). The focus group discussants also replied that almost all rural products are sold in the small towns. They have indicated that there is no demand problem for almost all agricultural products. Residents of small urban towns greatly depend on the farm and rural based non-farm products of the rural produces. Small and medium-scale traders also play a crucial role in collecting and channelling agricultural and non-agricultural products from diverse and often geographically dispersed rural areas. The buyers of the rural products include consumers in the urban towns and the rural area as well as the retailers, wholesalers and transit traders. The primary buyers of agricultural products are consumers in the small urban towns and farmers who have no land or inadequate land in rural areas. The buyers at the second level are consumers, wholesalers, retailers in the small urban towns and other higher level towns. For instance, the buyers of most livestock (Figure 3), hides and skin are traders either from the small towns or outside of the small towns.



The annual potential supply of live stock as calculated by the researchers is cattle 147,680 (2,840\*52 weeks), goat 111,800, sheep 39,000 and hen 62,400. The main supply sources of the livestock are all rural households around the small urban towns. In addition to the livestock, milk is sold both in the rural and small urban towns.

Most of the population in rural areas depend on small urban towns for educational, health, credit, infrastructural, telephone, electricity and administrative services. For example, all rural households depend on the small urban towns for high school (9<sup>th</sup> -10<sup>th</sup>) educational services. This shows each small urban town provides high school educational services to seven rural Tabias and itself. Health is another vital household asset that improves household livelihood. Adequate health service creates healthy and productive workforce. All the rural communities get health service from health centres in the urban towns. For instance, a total of 31, 294 (14, 428 male and 16, 866 female) patients from rural areas got medical services in the clinics/health centres located in urban towns within one year.

Formal credit systems are providing a significant support to individuals and groups of households of the rural people to fill their financial need. The two main formal financial sources for rural households are package and Dedebit Credit and Saving Institution. 50% of the rural households around Feresmay and Rama use package as a source of credit; but, only 27% of households around Maykinetal use package as a source of credit. The mean credit amount per year is computed to be Birr 2,278, 1893 and 1358 for rural households around Feresmay, Rama and Maykinetal respectively. However, there is unwise utilization of borrowed money among borrowers. Some borrowers use the money for non-value added activities such as for consumption and ceremonial purposes. Defaults are also another problem to the institution and the borrowers.

One of the key potential roles of small urban towns is attracting rural migrants from rural areas. People migrate for off-farm labour as well as the need for urban settlement. This increases opportunities for rural household income diversification and at the same time decrease pressure on larger urban towns whose unemployment rate is greater than 20% (ILO, 2009). Remittances from rural-migrants are a vital part of rural household income and main blend for the continued links between the migrants and their home areas (*Bah M. et al 2003*). As the survey indicates, there are 3,283 rural households who live in their own houses and 1,800 households who live in rented houses in the small urban towns while their economic activity is mainly agriculture. In addition to this, there are farmers doing business in the small towns. For instance, in the small town of Feresmay, there are 621 farmers engaged in trading activities living in rural areas.

#### CONCLUSION AND RECOMMENDATON

The finding shows that small urban towns are market centres for almost all rural products. They channel industrial products of higher level towns to rural buyers and the rural products to the higher level town buyers. This in accordance with the study of Tacoli (2004) that exchanges of goods between urban and rural areas are an essential element of rural-urban linkages. The buyers are urban residents, rural households, wholesalers, retailers and transit traders. The small urban towns serve as intermediaries between the rural and the higher level towns. Small urban towns are market centres for goods and services required by rural areas either as agricultural inputs or household consumable and non-consumable goods. The rural people buy industrial goods from the traders in the small urban towns or transit traders. Agricultural inputs such as fertilizer, herbicides, pesticides, farming tools, etc are distributed to farmers from the urban towns. The finding also indicates that there is no demand problem for the rural products rather than shortage of supply. This means farmers have good market opportunity for their products which encourages their productivity and improve their income and thereby their livelihoods.

The small urban town are market centres for rural products. Residents of these towns are the primary consumers of agricultural products. Agricultural products of the rural areas are sold either directly to consumers in the rural areas and towns, to wholesalers and retailers or to transit traders in who sale to higher level towns. The periodic weekly markets help sellers and buyers from both rural and urban areas to transact in the urban towns. Mining products such as stone and sand from the rural areas are sold in the urban towns for construction purpose.

The small urban towns play an important role in providing government administrative services such as court, police, training, marriage contract, meeting, conference, extension supervisory, and food aid distribution services because they have better facilities and accommodation than the rural Tabias. They provide high school ( $9^{th} - 10^{th}$ ) educational services and health services at clinic/health centre level because these services are located in the small urban towns to serve both the urban and rural people. The credit service agencies and institutions are located in the urban towns. The money borrowed by rural households is mainly used to buy agricultural inputs. Nevertheless, there are two controversies with regard to access to credit services. On one hand there a complaint that the borrowed money is small. On the other hand, there is unwise use of the fund because some borrowers use the money for non-value added activities such as for consumption and ceremonial purposes.

Migrants in small the small urban centres are both job seekers in the small urban towns and those who want to change their settlement. Small urban towns create non-farm employment opportunities for rural farmers temporarily and permanently. For instance, many farmers are engaged in different trade activities permanently and in construction as well as other activities temporarily. This indicates the small urban towns have good potential for containing migration and generating non-farm income to rural households. However, the extent of job opportunity created and the degree of the containment of migration depends on the size and degree of development of the small towns. If the growth of the small urban towns is not accelerated, people will bypass them and migrate to larger towns because they will neither have the capacity to accommodate the migrants nor attract them to work or settle in the towns.

The small urban towns have better road and transportation access to higher level towns than the rural areas. The towns have access to infrastructures such as roads, electricity and telephone services. The availability of the infrastructure is very important to facilitate the exchange of rural and urban products and services among the rural and urban people.

For Ethiopia with about 84% of its population's livelihood is dependent on agriculture and where most of its towns are small towns, small town development and integrated rural-urban linkage strategy at lowest echelon has to be one of the priorities. For instance, except Mekelle the capital of the National Regional State of Tigray the populating of all towns in the region is less that 100,000. Unlike the time of the industrial revolution in Europe, the Sub-Saharan size of towns is growing without adequate industrialisation. For instance, in Europe, the economic transformation and expansion stimulated migration to cities since new industries created new massive jobs because the process of industrialisation and urbanisation were parallel, (Beall and Fox 2009). As a result, 95% of the workforce of the richest countries is engaged in industry and services while over 50% of the workforce of the Sub-Saharan Africa and South Asia is engaged in agriculture due to low industrial development in urban areas (Beall and Fox 2009). Therefore, Improvement and growth of the urban towns is important for the integrated rural-urban development and to contain migration. This in turn, requires formulating a policy that can guide responsible stakeholders to integrate their development plans at all levels so as to solve the problems of rural-urban linkages and thereby improves the livelihoods of both the rural and urban households.

#### ACKNOWLEDGEMENTS

The researchers would like to thank the Woredas where the urban towns and rural Tabias are found (Ahferom, Mereb-Leke and Werie-Leke), small town administrators, high school directors, each selected Tabia and village chair persons, agricultural development office supervisors and health center heads for their willingness and patience to participate in the in depth focus group discussion. Special thanks also go to the nine rural Tabia household heads (Adi-Zata, Tahtay-Daereka, Edaga-Hamus, Mihquan, Mayweini, Medhin, Werie, Selam and Felafil) that cooperated to give information. The researchers would also like to extend their thanks to the Mekelle University, College of Business and Economics and the Department of Management for their unreserved assistance.

#### REFERENCES

Bah M. Cissé S. Diyamett B. Diallo G. Lerise F. Okali D. Okpara E. lawoye J. and Tacoli C. 2003. Changing rural–urban linkages in Mali, Nigeria and Tanzania. Journal of Environment and Urbanization 15 (1) pp 13-24.

Beall J.and Fox S. 2009. Cities and Development. New York: Routledge.

Boli, R. 2005. Livelihood Assets of Rural Kenyans. Senior Seminar in International Development Studies (IDS) Final Paper. Canada: Menno Simons College.

Braun, J.V. 2007. Rural-Urban Linkages for Growth, Employment, and Poverty Reduction. Washington, D.C. International Food Policy Research Institute

Bryceson, D. F. 1999. African rural labour, income diversification and livelihood approaches: a long-term development perspective. The Review of African Political Economy 31(80), pp, 171-189.

Bryman, A. 20008. Social Research Methods (3<sup>rd</sup> edition). New York: Oxford University Press Inc.

CSA, 2007. Statistical services. State of the Federal Democratic Republic of Ethiopia. Basic information. Ethiopia: Addis Ababa.

Demese Chanyalew 2006. Rural-Urban Linkage and the Role of Small Urban Centers in *Enhancing Economic Development in Ethiopia in Fostering New Development Pathways: Harnessing Rural-Urban Linkages to Reduce Poverty and Improve Environment in the Highlands of Ethiopia*, edited by Gete Zeleke, Peter Trutmann, Aster Denekew. Addis Ababa: the Global Mountain Programme.

Dercon S. and Hoddinott J. 2005. *Livelihoods, Growth, and Links to Market Towns in 15 Ethiopian Villages.* Food Consumption and Nutrition Division 194. USA-Washington, DC: International Food Policy Research Institute.

Ethiopia, 2008. Urban Plans Proclamation no. 574/2008: Article 2/8. Addis Ababa: Government Printer.

Hansen N. 1990. Impacts of small and intermediate sized cities on population distribution: Issues and responses. Regional Development Dialogue, 11(1).

ILO, 2009. Decent Work Country Program Ethiopia (2009-2012). Ethiopia: Addis Ababa.

Kammeier, H.D. 2003. Regional: Rural Urban and Sub-regional Linkages in the Mekong Region: A Holistic Approach to Development and Poverty Reduction. Asian Development Bank.

Mendola, M. 2010. *Rural out-migration and economic development at origin*: A review of the evidence. *Journal of International Development. John & Sons Ltd.* Pedersen, P.O. 2000. *Busy work or real business: revaluing the role of non-agricultural activities in African rural development*, ASC working paper 46/2001. Copenhagen: Centre for Development Research.

National Regional State of Tigray, Amended proclamation on urban administration, Authority and responsibility No. 107/1998 EC

Satterthwaite D. and Tacoli C. 2003. The role of small and intermediate urban centres in regional an rural development. Londen (UK): International Institute for Environment and Development.

Satterthwaite D. & Tacoli C. 2003. The urban part of rural development: the role of small and intermediate urban towns in rural and regional development and poverty reduction. UK: International Institute for Environment and Development.

Scoones, I. 2009. Livelihoods perspectives and rural development. Journal of Peasant Studies 36(1), pp 1-26.

Tacoli, C. 1998. Rural-urban interactions: a guide to the literature. Journal of Environment and Urbanization 10(1), pp 147-166.

Tacoli, C. 2004. Rural-Urban Linkages and Pro-Poor Agricultural Growth: An Overview. UK: Department for International Development

Todaro M.P. 2000. *Economic Development* 7<sup>th</sup> ed.. England: Addison-Wesley Inc.

United Nations centre for Human settlements (2001), Cities in globalization world: A global report on human settlements. London: EARTHSCAN publications ltd.. United Nations 2005. *Rural-urban linkages for poverty reduction*: A review of selected approaches from Asia and the Pacific.

INTERNATIONAL JOURNAL OF RESEARCH IN COMMERCE, ECONOMICS & MANAGEMENT 15

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

### FACULTY DEVELOPMENT IN DEVELOPING COUNTRIES: A CASE STUDY OF PAKISTAN

### MUHAMMAD ZAHEER ASST. PROFESSOR VIRTUAL UNIVERSITY OF PAKISTAN LAHORE

#### ABSTRACT

Economic development is the way towards prosperity and growth for any nation and education is the right tool to achieve this goal. World has been transformed from industrial economy to knowledge economy; therefore, countries are introducing reforms in the education sector. The area of higher education is especially focused for investment to cater to the needs of knowledge economy. Government of Pakistan has taken similar initiative and introduced reforms in the area of higher education; as a result, Higher Education Commission (HEC) was established in 2002. To improve the quality of higher education, faculty development is mandatory; and HEC has launched a number of scholarship schemes for this purpose. These schemes are broadly classified in two categories; local scholarship schemes and foreign scholarships schemes. A number of teachers were selected under these schemes and awarded scholarships to pursue higher studies. Some teachers have completed their degrees (PhD & MS/M.Phil) and have re-joined their organizations. A sample of 26 scholars was used. Results of the study show that HEC has been successful in achieving its goal of faculty development by offering foreign and local scholarships.

#### **KEYWORDS**

Higher education, Faculty development, scholarship schemes.

#### INTRODUCTION

orld has become a global village and no country can isolate itself from the changes caused by globalization. The phenomenon of globalization has spawned the way to free trade and technological advancements by being more diverse and competitive in every field of life (Bloom, 2002). Economic development has always been the top priority of nations, and in today's advanced era, education is the tool to achieve this goal (Hussain, 2008). In today's modern age "knowledge" is the real power, it can enhance the capabilities and help exploit the opportunities available (Memon, 2007). Countries that have given importance to their education today top the list of developed countries and globalization has made it almost mandatory to invest in higher education (Bloom, 2002).

Though primary and secondary educations do play a vital role in the process of nation building, it is higher education (also called tertiary education) that enables a nation to safeguard its values, cultural boundaries and national philosophy (Memon, 2007).

"Higher education in Pakistan refers to all levels of education above grade 12, generally corresponding with the age bracket of 17 to 23 years." (Task Force on Higher Education [TFHE], 2002). Higher education has the power to produce leadership with a vision, reduce poverty, increase national income, and enhance skills ultimately paving the way towards development and prosperity (Hussain, 2008). In the post World War II era, science, technology and IT have emerged as strategic sources of national power and pride (McMahon, 1992). As argued by Gilpin (1987) there is a transition from energy intensive industry to knowledge intensive industry resulting in exchange of information economy rather than industrial exchange. According to McMahon, knowledge is the linchpin of acquiring national power, but acquisition of knowledge in itself is a difficult thing as countries differ in their resource capabilities and economic structures. Countries have adapted different ways and means to enhance their knowledge capabilities but higher education remains the fundamental source of doing so.

Highly educated people in any nation or society are better equipped to cope with the waves of change caused by globalization. Higher education enables them to indigenize the foreign ideas and use them accordingly (Bloom, 2002). If people lack higher education it results in blind follower-ship of advanced nations and they stand no where at the end (Hussain. 2008).

Universities play a key role in imparting higher education; but in the case of Pakistan, unluckily universities lack physical, financial and human resources to take up this task (Memon, 2007). Specially, the situation of human resources requires immediate attention. Pakistani universities and higher education institutions don't have sufficient number of qualified faculty which is vital to achieve the objectives of higher education based on research and development (Memon, 2007).

#### TABLE 1: FULL TIME FACULTY MEMBERS CLASSIFIED BY THEIR HIGHEST DEGREE 2003-04

Sector	M.Phil	PhD	Total			
Distance Learning	22	41	63			
Public Sector	1019	2549	3568			
Private Sector	284	540	824			
Total	1325	3130	4455			
Courses LIEC Statistics						

Source: HEC Statistics

As shown in table 1, till 2003-4 Pakistan had only 1325 M.Phil and 3130 PhDs in public and private sectors which was a very small number for a country like Pakistan with large population.

TABLE 2: NUMBER OF STUDENTS ENROLLED BY SECTOR AND LEVEL OF DEGREE OVER THE YEARS

EN OF STODENTS ENROLLED BY SECTOR AND LEVEL OF DEGREE C						
Sector	Year	Master	M.Phil	PhD	Total	
Public	2001-02	66675	3683	3061	73419	
	2002-03	78709	4462	4045	87216	
	2003-04	92613	6802	6277	105692	
Private	2001-02	11854	188	63	12105	
	2002-03	15815	380	93	16288	
	2003-04	16054	652	195	16901	
Total		281720	16167	13734	311621	
Sourco: HEC Statistics						

#### Source: HEC Statistics

If we compare the number of faculty members in table 1 with the enrolled students in table 2, it is quite clear that in the given years student/ teacher ratio is not satisfactory at all. During the years 2001-04 total students enrolled in masters, M.Phil and PhD schemes were **311621** and teachers with M.Phil /PhD qualification for the same period were **4455** this shows that there were nearly 70 students per qualified teacher and this student to teacher ratio is detrimental. To improve the performance of higher education institutions qualified faculty is the basic ingredient. It is, therefore, imperative that faculty development (FD) is placed at the heart of policies devised for the improvement of higher education. One of the major reasons of these deficiencies is the lack of funding to education sector in general and higher education in particular. It may thus be seen that budget allocation for education never exceeded 2.7% of the GDP for most of the time in Pakistan.

Government of Pakistan has taken many initiatives to reform the education sector. Currently Higher Education Commission (HEC) is a government institution involved in the matters pertaining to higher education in Pakistan.

#### LITERATURE REVIEW

Higher education (also termed as tertiary education) is considered a means of economic progress, preservation of culture and heritage (Johnstone, 1998). Era of 1990s witnessed a large number of structural and capacity building reforms in higher education (Johnstone, 1998). As stated by Johnstone, similar reforms in finance and management were incorporated in different parts of the world with different political, economic and social backgrounds.

Future economies are knowledge based and real strength of any nation lies in its institutions that produce knowledge by utilizing minimal resources (Yang, 2004). As noted by Yang higher education institutions have to produce skilled and knowledge equipped output (students) to meet the demand of the complex economies so the institutes will have to be run in corporate style governed by the principle of efficiency and effectiveness. This has been termed as "academic capitalism" (Slaughter and Leslie, 1997). Like other areas higher education has also been affected by the waves of globalization (Gibbons, 1998). This thrust of globalization has changed the very ideology of research and transformed it from pure research to market driven applied research (Slaughter and Leslie, 1997). Slaughter and Leslie add that the industry-university partnership has now shaped the research mechanism based on commercialism. Like other reform practices HEIs have benchmarked western institutes as it was done by South China University of Technology (SCUT) by idealizing Massachusetts Institute of Technology (MIT) (Yang, 2004). By doing applied research in collaboration with industry SCUT made good advancement in fund raising for university (Yang, 2004). Another reform mechanism adapted by the higher education institutes is sending their faculty abroad for higher education to uplift the standard of the research and development. SCUT sent many of its faculty members to USA, UK, Germany and the Netherlands for training and has benefited from this strategy (Yang, 2004). This ploy has enhanced the efficiency of the staff in the field of science and technology. HEIs have also initiated foreign faculty hiring programs, under these programs faculty from different countries are invited by the universities who bring new technologies and updated knowledge in their relevant areas and the activity proves very fruitful (Yang, 2004). Higher Education Commission of Pakistan has also employed this strategy and hired many foreign faculties to train the local faculty. SCUT also invited a number of foreign faculty who brought new technologies and knowledge that proved invaluable for the university (Yang, 2004). One of the very important areas of higher education reforms is faculty development; faculty development is referred here as the capacity building of faculty of higher education to impart research based education in the society. Faculty development is crucial for the success of any institution; higher education institutions need skilled and competent faculty for the advancement in research and development (Caffarella & Zinn, 1999). Faculty development consists of three major activities namely self directed learning, formal faculty development programs and organizational development strategies (Cranton, 1994).

Self directed activities comprise of personal initiatives taken by the incumbent for his or development, it may include thesis supervision, conducting research projects, teaching classes (Caffarella & Zinn, 1999). These are personal self motivated efforts of the faculty to improve at personal level (Cranton, 1994).

Formal programs include training and development provided by the professional organizations at specific occasions at regional, national and international levels and these programs constitute teaching skills, implementing technology in teaching (Elam, 1996).

Organizational development is a change brought in by the administrators as part of overall improvement in the system rather than at individual level (Lucas, 1990; Wheeler & Schuster, 1990). Caffarella (1994) has defined organizational development as "A systematically planned change effort for the purpose of developming and implementing action strategies for organizational improvement".

Faculty development programs offered by HEC fall both in formal programs and organizational development programs. Local scholarships offered to faculty members of different universities fall in the category of formal programs and faculty development scholarships offered to universities are part of organizational development programs. It should be noted that program for faculty development offered by HEC are mostly for higher education (MS and PhD), HEC also offers skill development training to faculty, members at NAHE (National Academy of Higher Education).

The term faculty development has been viewed as the training and development required for a teacher to impart quality education and indulge in quality research. Although literature review has revealed some of the factors responsible for the faculty development but these holds true for advanced countries whereas in a developing country like Pakistan faculty development has been viewed differently. Teachers at higher education institutes of Pakistan lack prerequisite qualification of PhD or MS degrees, so in Pakistani scenario faculty development has been linked with acquiring PhD or MS degrees. Faculty development programs as per HEC are scholarship schemes offered to various faculty members of public and private universities to acquire PhD and MS degrees.

For the provision of PhD degrees, HEC negotiated with foreign universities to get waiver in tuition fees and offered scholarships to teaching faculty and others. To achieve the goal of quality in higher education HEC has focused on faculty development, for this purpose HEC has introduced two types of scholarship schemes:

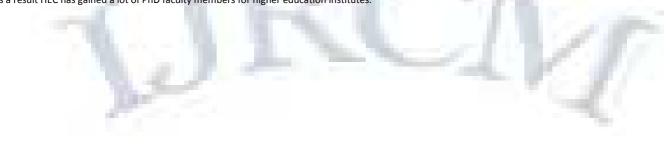
#### Local Scholarships

#### Foreign scholarships

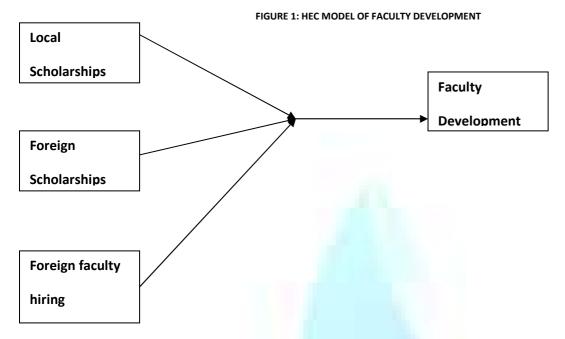
Local Scholarships schemes encouraged faculty members and other people to undertake a research degree in any Pakistani university.

Foreign scholarships are aimed at building a strong knowledge base for the country by sending the scholars abroad for higher education. In this regard many schemes have been launched; these schemes provide PhD scholarships at reputed universities of the world in countries like China, Austria, France, Germany, Netherlands, USA, UK, Canada and Australia.

Apart from sending people to foreign universities, HEC has also adopted a strategy of foreign faulty hiring. In this regard, a number of professors have been hired on long term and short term basis. These professors have contributed to the faculty development by providing their expertise in research. Figure 1 depicts the model adopted by HEC, HEC has two types of scholarship schemes local and foreign and Foreign Faculty Hiring Program (FFHP). As a result HEC has gained a lot of PhD faculty members for higher education institutes.



#### ISSN 2231-4245



#### **RESEARCH DESIGN**

For the purpose of this study research interview technique and archival study were used. Primary data were collected through semi structured interviews with scholars who availed or intended to avail the scholarships. Semi structured interviews were preferred in this study because semi structured interviews are more flexible and allow more freedom of expression to the interviewees (Bryman & Bell, 2003). As described by Flick (2006) in semi structured interviews subjects' view points are more openly expressed than in a standardized interview or a questionnaire. Apart from asking scheduled questions, semi structured interviews let interviewers probe further where felt necessary which is a real strength of semi structured interviews over unstructured interviews and questionnaires (Berg, 2007).

Secondary data included Policy related documents developed by HEC, implementation related documents developed by HEC, websites of HEC and Ministry of Education, HEC annual reports, and other published material. It was a cross-sectional study.

A sample of twenty six scholars was collected from different universities Scholars from different disciplines like Chemistry, Chemical engineering, Biotechnology, Zoology and Social Sciences were interviewed. Thirteen scholars were from local schemes and 13 were from foreign scholarship schemes. Some of the scholars had completed their degrees while some were in the process, some applied but could not get scholarship, one scholar returned from Austria as he could not complete his PhD.

#### DATA ANALYSIS

#### FOREIGN SCHOLARSHIPS

Higher Education Commission has been successful in negotiating with foreign universities in getting the waiver of tuition fee. Since the inception of these scholarships HEC has produced 842 PhD scholars from world's renowned universities. Table 03 shows the details of these PhDs produced.



#### TABLE 3: SCHOLARS RETURNED AFTER COMPLETION OF Ph. D.

	Country	Scholars
	Australia	9
	Austria	141
	Belarus	1
	Canada	5
	China	143
r.	Denmark	1
Ŀ	Finland	1
Ŀ	France	69
	Germany	96
	Iran	3
	Italy	2
	Japan	2
	Malaysia	9
	Netherlands	20
	<b>Russian Federation</b>	2
	South Korea	159
	Spain	1
	Sweden	15
	Thailand	25
	United Kingdom	112
	USA	26
	Total	842
	Source: HEC	C



It is remarkable that the scholars have been sent to 21 countries, which has not only enhanced the faculty's knowledge but also added to the diversity of experience which will be beneficial for Pakistan.

13 scholars who have availed the foreign scholarships have been interviewed. It is worth noting that these scholars have completed their PhDs in 3-5 years and have returned to Pakistan. Prompt financial assistance in the form of monthly stipend was available to them that ranged from 900-975 Euros.

INTERNATIONAL JOURNAL OF RESEARCH IN COMMERCE, ECONOMICS & MANAGEMENT A Monthly Double-Blind Peer Reviewed Refereed Open Access International e-Journal - Included in the International Serial Directories Faculty development was the ultimate goal of HEC by offering these scholarships, questions were asked about perceived faculty development, knowledge, research base, and value of degree earned.

Scholars were of the view that these scholarships have built a strong research base for them that can be used for the advancement of the country. They learned modern techniques and technology. As one scholar reported "though there was no training regarding teaching methodology, yet we learned it as a by product of our PhD". "It has just transformed my vision altogether" one scholar of chemical engineering reported. Scholars highly valued their PhD degrees earned, though one of them said "the field I did my PhD is too early for Pakistan and I don't find right place for research".

HEC also offers scholarships for Post Doc and 360 teachers have been provided this scholarship, see table 4 for details.

TABLE 4: SCHOLARS RETURNED AFTER COMPLETION OF POST DOC
---

RS RETURNED AFTER COMPLETIO						
Country	Scholars					
Australia	25					
Austria	4					
Brazil	2					
Canada	26					
China	9					
Germany	15					
Italy	2					
Japan	6					
Malaysia	10					
Netherlands	1					
South Korea	1					
Sweden	3					
Thailand	2					
United Kingdom	143					
USA	103					
Mexico	1					
Newzealand	1					
Singapore	1					
Syria	1					
Turkey	4					
Total	360					

#### **OVERALL EVALUATION**

These scholars were very satisfied and enthusiastic after the completion of their PhDs abroad, a strong recommendation for all was given by these scholars to pursue HEC scholarship, and this was termed as "golden opportunity". They thought themselves lucky.

#### LOCAL SCHOLARSHIPS

HEC also provided Pakistani students the opportunities to enroll in PhD programs offered by local universities of Pakistan. Though, Pakistani universities lack Human Resources and infra structure yet an effort was made to boost research culture and use whatever available resources. Till 2010 local universities had produced 510 PhDs. This number is very small but at least some thing positive has happened and a research culture has been introduced in local universities. In this study 13 scholars have been interviewed who availed HEC scholarships for PhD in local universities.

Local scholars have faced a lot of problems initially a monthly stipend of Rs. 8000 was given to PhD scholars and was revised in 2008 to Rs. 13000 per month for the scholars enrolled in indigenous 5000 scheme. While scholars availing other two schemes received a stipend of Rs. 5000 per month. Scholars were unhappy from the stipend provided by HEC for local scholarships; they compared their stipend to the foreign scholars whose scholarship was between 900-975 Euros. The amount of monthly stipend was subjected to the approval of supervisor's progress report to be sent to HEC; this was a lengthy procedure and took a lot of time. The amount was released infrequently and according to one scholar "can you survive for 03 months without salary?", "on one hand I had to be on leave(without pay) on other hand amount was released with a lot of delays" told other scholar. According to one scholar who availed university teacher scholarship "as soon as my leave ended, so was the scholarship". Provision of scholarship for government employees was conditioned with the proof of leave. So, responding to the specific question:

" Is financial support for the scholarship promptly available" answer was a blunt NO from almost all scholars.

One reason of irregular payment of stipend was lack of dealing staff for these scholars. For example in Punjab University no extra person was deputed for the handling of scholarship payments, same clerical staff was responsible for all the management of scholarships. It requires laborious work of keeping record of all the payments received from HEC and disbursed to scholars, maintaining the record of evaluation reports of supervisors etc. No extra money is paid to these staff, so they lack motivation as well as resources to make this work up to date and it results in bureaucratic hurdles and hence delayed payment to scholars.

One scholar suggested that either stipend should be Rs. 30000 per month or there should be no condition of leave for public servants.

Faculty development was the ultimate goal of HEC by offering these scholarships, questions were asked about perceived faculty development, knowledge, research base, and value of degree earned.

Scholars were of the view that these scholarships had built a strong research base for them that can be used for the advancement of the country. University teachers were of the view that their education in PhD has transformed their thinking from routine teaching to research based approach, as said by one scholar "there was an indirect effect of this PhD on our teaching skills and capabilities". Scholars also appreciated the role of HEC as positive and initiative for the introduction of such schemes. All the scholars associated great deal of value to the achievement of PhD and thought it to be the right step towards nation building.

#### FOREIGN FACULTY HIRING PROGRAM (FFHP)

According to HEC, 316 foreign professors joined Pakistani universities under this program in the last seven years. Currently 136 professors are working in Pakistan. These foreign faculty members have produced at least 200 research journal papers and about 1150 papers have been presented in international conferences.

Remarkable achievement of this program is that it has produced 141 MS, 243 M. Phil and 243 PhDs. Moreover, 218 MS, 233 M. Phil and 308 PhD students are currently enrolled with the foreign faculty members.

Worth of this program is priceless, as instead of sending students to foreign universities which costs app 10 million Pakistan rupees hiring foreign faculty is more viable. It is less costly and highly effective tool of faculty development.

#### CONCLUSION

Model adopted by HEC has yielded tremendous results; a large number of highly qualified teachers have been produced. Procedures in the local universities need to be refined so that local scholars do reasonable amount in the form of stipend and supervisory support to finish their degrees in time.

#### REFERENCES

Berg, Bruce.L. (2007). Qualitative Research methods for the Social Sciences. Pearson Education, Inc.

Bloom, David E. (2002), Mastering Globalization: From Ideas to Action on Higher Education Reform. Text of speech delivered at University of Laval conference "Globalisation: What Issues Are at Stake for Universities", September 18-21, 2002, Quebec, Canada.

Bryman, Alan., & Bell, Emma. (2003) Business Research Methods. Oxford University Press.

Caffarella ,Rosemary S; Zinn Lynn F (1999). Professional Development for Faculty:A Conceptual Framework of Barriers and Supports. Innovative Higher Education, Vol. 23, No. 4, Summer 1999.

Cranton, P. (1994). Self-directed and transformational instructional development source. Journal of Higher Education, 65, 724-726.

Elam, J. H. (1996). Development schemes for optometric educators. Optometric Education, 21, 114-116

Flick, Uwe. (2006). An Introduction To Qualitative Research. London: SAGE Publications.

Gibbons, M. (1998). Higher education relevance in the 21st century. Presented at the UNESCO World Conference on Higher Education, Paris, France, 5-9 October.

Gilpin, R.(1987). The Political Economy of International Relations. Princeton: Princeton University Press.

Higher Education Commission of Pakistan, Annual Report 2004-05

Higher Education Commission of Pakistan, Annual Report 2005-06

Higher Education Commission of Pakistan, Annual Report 2006-07

Hussain, Tanveer(2008). Dilemma of higher education in Pakistan and role of Wolrd Bank. Danish school of education, university of Arhus, Denmark. Reports, 2003-2007Higher Education Commission of Pakistan, annual Reports

Johnstone, D. Bruce (1998). The Financing and Management of Higher A Education: A Status Report on Worldwide Reforms. UNESCO World Conference on Higher Education, held in Paris, France on October 5-9, 1998.

Lucas, A. F. (1990). Redirecting faculty through organizational Development. 'Enhancing faculty careers. (pp. 230-253). San Francisco: Jossey-Bass.

McMahon, Mary E.(1992). Higher Education in a World Market: An Historical Look at the Global Context of International Study. *Higher Education*, Vol. 24, No. 4, http://www.jstor.org/stable/3447582 Accessed: 09/04/2008 14:47

Memon, Ghulam Rasool. (2007). Education in Pakistan: The Key issues, problems and The New Challenges. *Journal of Management and Social Sciences*. Vol. 3, No. 1, (Spring 2007) 47-55.

Schuster, J. H., Wheeler, D. W., & Associates (1990). Enhancing faculty careers. San Francisco: Jossey-Bass.

Slaughter, S. and Leslie, L.L. (1997). Academic Capitalism: Politics, Policies and the Entrepreneurial University. Baltimore: Johns Hopkins University Press. Wheeler, D. W., & Schuster, J. H. (1990). Building comprehensive schemes to enhance faculty development. In Schuster *Enhancing faculty careers* (pp. 275-297). San Francisco: Jossey-Bass.

Yang, Rui (2004). Openness and Reform as Dynamics for Development: A Case Study of Internationalisation at South China University of Technology' *Higher Education*, Vol. 47, No. 4, pp. 473-500 Published by: Springer

Zinn, L. F. (1997). 'Supports and barriers to teacher leadership: Reports of teacher leaders'Unpublished doctoral dissertation, University of Northern Colorado, Greeley, CO.



### HUMAN CAPITAL DEVELOPMENT IN INSTRUCTIONAL SUPERVISION: WINDOW OF HOPE OR WOE?

### MIGHT KOJO ABREH SENIOR RESEARCH ASSISTANT INSTITUTE OF EDUCATION UNIVERSITY OF CAPE COAST CAPE COAST

#### ABSTRACT

In a rapidly changing and increasingly globalized world, the success of nations, communities and individuals may be linked, now more than ever before, to how they adapt to change, learn and share knowledge. From a very broad perspective, one can look at why there is the need for development of instructional supervisors in assuring quality teaching and learning. This paper considers the human as an economic agent for society; it looks at the belief system that characterizes supervision in Ghana. After a careful review of some selected literature it concludes the study with a discussion of analysis of data gathered by means of survey instruments using structured interviews administered on some experienced persons in the field of education with emphasis on instructional supervision and leadership. The findings points to the fact that it is worthwhile to develop the human capital of instructional supervisors. The study consequently recommended that the state and the individual are the principal funders of such capacity building avenues and as such an agreed framework should be built for it.

#### KEYWORDS

Development, Economic growth, Human Capital & Instructional Supervision.

#### BACKGROUND

he relationship between human capital and economic growth is conditioned by the quality and the distribution of education in the labour force; and the economic structures of nations. Investing in more and better-distributed education in the labour force helps to create conditions that could lead to higher productivity and higher economic growth. This is however not sufficient. It is also necessary to adopt policies that lead to the creation of diversified, dynamic, and competitive sectors capable of absorbing the more educated labour force so as to translate the human capital (instructional supervisor who is trained to function as such) into higher economic growth (effective supervision). There is the view that countries that combine both functions do better on the average than those that do only one function (Psacharopoulos & Layard, 1979). Investment in the training of instructional supervisors has link to developing human capital in the field of instructional supervisory leadership.

Research studies have established that the relationship between higher education and training and performance (or returns to productivity) in developed and developing countries is high (Mincer, 1974; Becker, 1975 and Blaug, 1970). These studies confirm the assumption that training of instructional supervisors increase productivity of instructional supervisors. Theory has shown that either leaders (supervisors) are born or they are made; but the camps of orientation of the various researches differ (Glickman, Gordon & Rose-Gordon, 2007). Therefore, the implications for the two views are that; if supervisors are born then they should be given the appropriate platform to operate and if they are otherwise made, then much time should be devoted to developing them to become the best they can be in the field of instructional supervision. It is worth not to lose sight of the fact that if even leaders are born they can change their orientation (job affiliation) because of change in the environment, economic conditions, ill health and a host of other plausible factors. This is all possible because the labour market is not perfect so changes are always expected in the recruitment and retention of instructional supervisors (Woodhall, 2004).

Investments in education in general and development of instructional supervisors in particular come with three clear cut expectations. These are: super profit (benefit that education brings is higher than the cost of education), normal profit (break even point; when cost and benefit of education are the same) and loss (when the cost of education is higher than the benefit or returns to education) according to Woodhall (2004). The three expectations are influenced by input conditions and environmental factors. Therefore, investment in development of instructional supervisors by means of financing their training is assumed to assure supervision of instruction. The human capital is a powerful tool in the development of the educational system (Becker, Murphy and Tamura, 1990). Human capital formation has been observed to enhance productivity since the prospective instructional supervisor will be trained to have eyes to observe, ears to listen, emotions to feel and sense of touch to exhibit skills.

Another crucial factor in the decision making process is about how the funds to finance the education programme can be assessed. Generally, social amenities including schools are funded by the state. There are also other sources of finance for education and training which include the private investment, private participants, contributions by philanthropists in society and international cooperation agencies. The opportunity cost to the education and training of the instructional supervisors has been argued by some critics. Holding other essential factors constant, we can view the human capital and social capital component as factors which affect classroom supervision in a positive direction. Activities and processes involved in the instructional supervision process are collectively needed to project essential future outcome of the schooling system of which supervision is a part.

There is growing consensus among educational reformers that professional development of individuals within the retrainable age brackets to be trained to acquire the appropriate skills and competencies to enable them function in instructional supervision (Scheerens, 2000; Maglen, Hopkins & Burke, 2001). This is necessitated by sharp edges of educational reforms, new policies, restructuring of education after emergencies and chiefly as a result of instructional improvement.

After years of reforms, states and localities focus on:

- ✓ how to vary the guidance that schools receive on what students should be taught (content standards);
- altering the structures and processes by which schools are held accountable (student performance standards, assessments, rewards, and penalties); and

✓ change in the governance structures by which accountability is defined (site-based management).

In order to progress from reforms of this sort to changes in student performance, one has to assume that changes in policy and organization will result in a different kind of teaching, which will in turn result in a different kind of learning for students. One element that is missing in the above assumption is the *knowledge* required for teachers and administrators to engage in a different kind of teaching and learning. Policies, by themselves, don't impart new knowledge; they create the occasion for educators to seek new knowledge and turn that knowledge into new practice. Hence, professional development is the main link connecting policy to practice (Elmore and Burney, 1997). The message is again clear on this premise that there is the need for supervisors to make clear decisions and tailor them through appropriate strategy that meets the goal of the employer of the teacher. Such an assignment is meant for people appropriately developed to carry them out.

Successful professional development is characterised by the following:

- ✓ it focuses on concrete classroom applications of general ideas;
- it exposes benefactors to actual practice rather than to descriptions of practice;
- $\checkmark$  it involves opportunities for observation, critique, and reflection;
- it involves opportunities for group support and collaboration; and
- it involves deliberate evaluation and feedback by skilled practitioners with expertise on good teaching.

## INTERNATIONAL JOURNAL OF RESEARCH IN COMMERCE, ECONOMICS & MANAGEMENT 21

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

Having shared some amount of knowledge on the characteristics of good professional development, there is less discussion on how to organize successful professional development so as to influence practice in large numbers of schools and classrooms (Elmore and Burney, 1997). Of course, that does not form the basis of this paper but is worthwhile to note that there is the urgent need for requisite personnel to command sanity in classrooms with the view to improvement. This explains why there is the need for development of instructional supervisors to fill a goal oriented need in the teaching services by means of measurement, evaluation and monitoring of the efficiency of system through trained and qualified individuals in the field of.

#### THE BELIEF SYSTEM

The belief system about what should be considered as supervision will give room to people to see instructional supervision as a professional path or otherwise. Let's begin with the school where the headmaster or the principal has purely 'administrative' functions. This sets the limit as to what other duties that can be performed comprehensively by a professional trained individual; though, at the expense of an opportunity cost. Despite the opportunity cost element here, it is equally important to note the expected level of efficiency and job effectiveness that it brings to the school system. As the level of skills, aptitude and corresponding behavioural patterns change, there is expected positive change in productivity. This is further backed by the research and continuity as the trained professional reports on emerging trends and thereby opening doors for probity and accountability. So what are beliefs at all from literature?

Beliefs about supervision and educational philosophy can be thought of in terms of decision-making responsibilities that school administrators have to handle day-in-day-out. For instance, the idea that principals should serve as instructional leaders—not just as generic managers—in their schools is widely commented on among educators (Hargreaves, 1999). In practice, though, few principals act as genuine instructional leaders. Their days are filled with activities of management, scheduling, reporting, handling relations with parents and community, dealing with multiple crises and special situations that are inevitable in schools. Most principals spend relatively short time in classrooms and even less time analyzing instruction with teachers. They may arrange time for teachers' meetings and professional development, but they rarely provide `intellectual leadership for growth in teaching skills. It is apparently important to note that even head teachers after all their experience, if they can do the work of instructional supervision effectively then there is need to train them to better qualify.

#### DOES EMPLOYER-SPONSORED TRAINING AFFECT PROFITABILITY?

This question could be understood by considering the regression analysis computed between the profitability index and other characteristics of say, a firm (Blandy, Dockery, Hawke & Webster, 2000). All the major variables and indices including (quantity of training, quality of training, market uncertainty, market competition, market concentration, work process, external labour market, relative wage rates, union presence, internal labour market, voluntary labour turnover, involuntary labour turnover, company size, company size squared, other investments) were captured in the Australian CEP survey undertaken for a project at  $R^2 = 0.51$  that was studied by Blandy *et al* (2000). There is no a priori reason why some of these variables should be significant in explaining profitability. They found out that indices for training quality and training quality are two of the four main explanatory variables of firm profitability. Training quantity is significant at the 20% level and training quality is significant at the 5% level. Both displayed a positive relationship suggesting that higher levels of training are associated with higher firm profitability.

The conclusion drawn by Blandy *et al* (2000) was further confirmed by a t-test at 95% confidence level but the relationship was found to be strong. This implies that in the case where the tax payer's money is used for the purposes of enhancing or developing the instructional supervisors, it leads to good yield to the education sector. The challenge of measuring the benefits on the cost of financing the development of instructional supervisors lies in the inability of evaluators and other stakeholders to measure the net returns to the education system. This is because the best mode of such a measure is clinical than survey.

A relationship between training and productivity is fundamental to the existence of the vocational education and training system (Maglen, Hopkins & Burke, 2001). That study showed that it is feasible and profitable to enhance the productivity and working conditions of organisations through the ongoing learning of their personnel. Training and productivity are concepts which are closely related (Maglen, Hopkins & Burke, 2001). Increasing productivity implies working in a more intelligent manner, but not necessarily harder, then it is understood that it is not possible to increase productivity in enterprises unless training actions are developed for workers in the company. Considering that productivity result from working more intelligently rather than harder, it could be reasoned that the productivity of enterprises could not increase without concomitant training of the workers they employ (Mertens, 2004).

#### STATEMENT OF THE PROBLEM

Pre-service teachers are taught how to monitor and evaluate lessons; they are however not taught how to evaluate teaching. The colleges of education curriculum have a three credit hour course in assessment in schools. The fact that pre-service teacher who are taught a course on assessment in school and another in school administration is not replete enough for the school supervision function needs of the pre-service who eventually becomes an in-service teacher. More so, the fact that student teacher take courses in college does not make the content of the course a core mandate for their practice. The activities and processes that the teacher uses to achieve his/her goals are set apart from the role of instruction. The structure and models of supervision are many and varied and because of that they assume the role quite intricate and confusing and it takes only the trained persons to handle the issues and keep them in perspective. This makes the instructional supervisor's role a professional endeavour set apart from the role of head teachers and teachers. The reforms and new programmes that come require personnel with expertise to handle and guide classroom teachers. Consequently, this study investigated the economic usefulness of investing in the development of instructional supervisors.

#### METHOD

This aspect deals with the research questions, discusses the research design, population, sample and sample techniques. The process for data analysis and reporting strategies has also been captured under this subheading. The descriptive survey design was used for the study because it involved the collection of data to accurately and objectively describe the current status, assess current practices and conditions, the existing phenomenon and to make intelligent plans to improve upon them (Ekuri, 1997; Van Dalen, 1979).

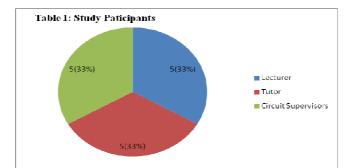
On the basis of the identified problem for study in this paper the following research questions were stated to guide the course of the study. They include:

- 1. What are the perceptions of respondent about instructional supervisors?
- 2. How worthwhile is it to train instructional supervisors?
- 3. Which possible routes can be used to develop instructional supervisors?

The research participants were drawn from Cape Coast metropolitan area. The sampled units were people who are associated with the teaching workforce. This include young and old; experienced and less experienced ones in the population. These include five (5) teaching staff of the University of Cape Coast and five from OLA Teachers Training College, Cape Coast and five (5) officers from the Metropolitan Education Office – Circuit Supervisors. Sampling was strictly by convenience. Information was sought from management of these institutions about officers who have stayed in the teaching and learning enterprise for a long time with least base year of five.

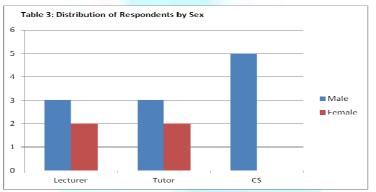
The Table 1 below shows the proportion of respondents who took part in responding to the interviews and their corresponding job titles.

Interview guide was designed and used by the researcher for the study. The items were pre-tested on some selected research and teaching staff of the Institute of Education, University of Cape Coast, mainly to elicit expert and peer review comments.



An even proportion of respondents were chosen from the University, College of Education and District Education offices. The Table 2 shows the age distributions of respondents as shown below:

of Respondent	Maximum Age of Respondent	<b>Mean Age</b> (N=5 each)	Standard Deviation
		(N=5 each)	
5	58	50.00	7.65
5	55	45.00	6.96
5	51	42.40	6.77
		55	55 45.00



The items had three major parts:

N=15

- the first part was on demographic characteristics of the respondents
- the second part was on the conceptual understanding and the belief system that respondents have about training and development of instructional supervisors.
- the final part of the instrument consisted of investment decisions regarding development of instructional supervisors.

An interview guide was structured and administered on the sample of educational workers. The researcher administered the instruments at face-to-face level and over telephone. This was done after the researcher agreed on telephone with the respondents on the study and schedule for the collection of the information. In all seven different respondents were informed about the study but five was actually used from each of the three categories of respondents identified (University teachers, Teacher Training College tutors and circuit supervisors).

The collected responses were sorted and classified according to themes and were subjected to a thick description of the variables and conclusions were drawn on them. In this direction, the researcher classified the responses by means of an excel spreadsheet and thus made it easy to isolate the main issues in the responses for the report.

#### **DISCUSSION OF FINDINGS**

The responses came from interviewees with different demographic orientations. The brackets of differences were age, status in the education sector, sex, experience and academic qualification. All the respondents from the metropolitan education office were assistant directors with varying degrees of experience circuit assignments. At least each of the circuit supervisors held a degree in education related field and whereas some respondents had obtained their masters degree others were either enrolled or about to enrol for further studies. Such varying characteristics related with the university and teacher training college teachers. Whereas there are mixed gender for the university and teacher training college tutors who responded to the items, all the circuit supervisors were males.

The second part, respondents were asked about the difference between the work of an instructional supervisor and that of the teacher? Varying comments were received from the respondents. In response to the question posed, one respondent indicated that, whereas the instructional supervisors guide and support the teacher, the teacher on the other hand helps the students to learn. One of the respondents however stated that the instructional supervisor's role includes supervising teachers in lesson preparation and delivery. One the responses that stood out related to the fact that, "instructional supervisors supervise and the teacher teaches". None of the respondents indicated that the work of the instructional supervisor is the same as the work of the teacher. The implication is that since there is difference in the individual job content, then there should be different training routes for the teacher and for the supervisor.

All the respondents indicated that it is worthwhile to develop instructional supervisors. Several reasons were assigned by the respondents as to why they agree with the fact that development of instructional supervisors is worthwhile. The human nature is complex and needs a level of moderation by means of a third person and instructional supervisors could fill that need. Training and development of instructional supervisors aid them to note what to look for in the teacher, establish appropriate commendation, help them to improve, and then diagnose the system. Professional guidance is offered by means of the activities carried out by instructional supervisors. A forty year teacher who has been teaching for 8years, indicated that "it is worthwhile because it would enable the supervisor to acquire the necessary knowledge and skills to effectively supervise the classroom teacher".

Among other reasons assigned the instructional supervisor will gain the experience, and turn to play his/her role more effectively. Since a well resourced instructional supervisor has the training he/she commands respect on the subject. The information provided by the respondents are quite explicit enough in the sense that they provide basis on which it can be argued that is worthwhile to train the instructional supervisor.

Another item on the list which was similar to whether development of instructional supervisors is worthwhile is the expected benefits from development of instructional supervisors. I noted that a few of the respondents during the pretesting gave responses which indicated that this item be deleted but still the

INTERNATIONAL JOURNAL OF RESEARCH IN COMMERCE, ECONOMICS & MANAGEMENT 23 A Monthly Double-Blind Peer Reviewed Refereed Open Access International e-Journal - Included in the International Serial Directories

reliability of the item was high so I proceeded to use and responses were rather fantastic. It provides the opportunity for teachers to use the appropriate instructional techniques and be abreast with currents trends in the curriculum and especially in the syllabuses of the land. Time as a resource in the classroom is made more practical to the teacher so that he can perform well on the delivery of instruction and use time more judiciously. The development of instructional supervisors enhances the effectiveness of the linkage between the instruction and curriculum.

There was an item which was soliciting comments on the statement that "every trained and experienced teacher can succeed as an instructional supervisor". This attracted a lot of comments from the respondents. On the whole, about 75% of the respondents stated that it might not be necessarily true. These were some reasons assigned for that stand: it depends of the training requisite of instructional supervisors; the routes of producing the two are not the same. An interviewee stated that 'teaching in itself is different from instructional supervision' and thus tried to differentiate the instructional supervisor from the teacher. Ironically the interviewees who indicated that the statement is true were not able to remember the earlier statement the work of instructional supervisors. They justified why that might be the case; by pointing out that the teacher builds experience and learn from other experienced instructional supervisors and through replete in-service organised regularly.

The question of which principal routes that interviewees will like to recommend to government to develop instructional supervisors was also popular among interviewees. Whereas some indicated that further training should be given to train teachers to become instructional supervisors others recommended special training by means of university or college designed curriculum. Government ensuring and assuring financial and motivational support was also recommended popularly. Mention was made of in-service as a viable option and was recommended by some interviewees to government.

Finally, interviewees were asked whether 'there is the need for development of instructional supervisors for our schools?' Except for one interviewee who indicated no all the other interviewees said yes. This item was further probed with whose responsibility it should be to train the instructional supervisors. Mainly, the responses centred on the government (Ministry of Education) and then the individual as principal financiers of such development efforts.

#### CONCLUSIONS

The Principal of schools cannot play the role of an instructional supervisor effectively as they are saddled with a plethora of managerial demands in their respective schools. They can only serve as facilitator of teacher professional development and rarely provide intellectual leadership for growth in teaching skills. Also, a classroom teacher cannot act as an instructional supervisor since there is tendency for biasness. Self evaluation and assessment cannot be trusted as it has the propensity to create room for intellectual dishonesty.

It is therefore necessary for an independent assessment and evaluation of classroom teaching and learning experiences so as to ensure transparency, accountability, and profitability. In this vein, instructional supervision should have a professional road map that must be supported by government. The instructional supervisor should serve as a liaison between the teacher and the principal, and should act as an agent of change by ensuring that teachers use appropriate instructional techniques that are congruous with curriculum.

Training of instructional supervisors centers principally on the government and the individual. The human is really an economic agent for society; changes in policy and organization will result in productive teaching and learning outcomes. The instructional supervisor therefore serves as that human capital that is translated into higher economic growth in a globalised and dynamic world.

#### REFERENCES

Becker, G.S.; Murphy K.M. and Tamura R. (1990). Human Capital, Fertility and Economic Growth. The Journal of Political Economy. 98(5), 37 - 7.

Becker, G. S. (1975). *Human Capital*, (2<sup>nd</sup> Ed). New York: Columbia University Press,

Blandy, R.; Dockery, M.; Hawke, A. & Webster, E. (2000). Does training pay? Evidence from Australian enterprises. Leabrook: NCVER

Blaug, M. (1970). An Introduction to the Economics of Education. Allen Lane: The Penguin Press.

Cote, S. (2001). The Contribution of Human and Social Capital *Spring Printemps* Elmore, R. F. and Burney, D. (1997). Investing in teacher learning: Staff Development and Instructional Improvement in Community School District #2, New York City. Retrieved on 20<sup>th</sup> October, 2008 from http://www.nctaf.org

Ekuri, E.E.A. (1997). Planning and conducting research. Lagos: Gbadero Ventures

Glickman, C. D., Gordon, S. P., & Ross-Gordon, J. M. (2007). Supervision and instructional leadership: A developmental approach (7<sup>th</sup> ed.). Boston: Pearson Education.

Maglen, L.; Hopkins, S. & Burke, G. (2001). Training for Productivity. Leabrook: NCVER

Mertens, L. (2004). *Training, productivity and labour competencies in organisations: concepts, methodologies and experiences*. Montevideo: Cinterfor,. Mincer, J. (1974). *Schooling, Experience and Earnings*. New York: Columbia University Press.

Psacharopoulos, G. and Layard, R. (1979). "Human capital and earnings: British evidence and a critique," The Review of Economic Studies, July

Scheerens, J. (2000). Improving school effectiveness. Paris: UNESCO/IIEP

Van Dalen, D.B. (1979). Understanding educational research: An introduction. New York: McGraw-Hill.

Woodhall, M. (2004). Cost-benefit analysis in educational planning. (4th ed). Paris: UNESCO



### THE SUSTAINABILITY OF ICT ECONOMY DEVELOPMENT

### KEVIN LOCK-TENG, LOW ASSOCIATE PROFESSOR FACULTY OF ACCOUNTANCY AND MANAGEMENT UTAR UNIVERSITY MALAYSIA

#### ABSTRACT

A green technoeconomic paradigm (green TEP), based on emerging information and communication technologies (ICT), has been proposed to address the sustainability issues in developing nations. An ICT driven green TEP would enable developing nations to conform to stricter environmental regulations while pursuing rapid economic development. However, cyber crime perpetrated by sophisticated cyber criminals, a potential pitfall in ICT based systems, has received little attention in these emerging global ICT networks. This paper addressed the potential danger in ICT driven growth models, in developing nations that have limited resources and knowledge to protect their interests. These findings also suggested that the benefits of "green ICTs" come at a potential security cost. ICT had been hailed as the system that could effectively improve the economic well-being of developing nations, improving productivity while reducing costs, wastes and environmental degradation. However, the sophistication of these systems had led to a new world of knowledge "haves" and "have-nots". This chasm enabled knowledgeable cyber criminals to tap into confidential databases and abuse the IT systems for personal gain while developing nations had little means to counter-act. Thus, the necessary knowledge base should be created by prioritising the development of a core human capital base. This core base would train a wider human capital base in implementing, maintaining, policing and protecting the networked electronic systems. The key objectives of such developmental initiatives should be able to prepare a pool of knowledge workers who are experts in critical ICT security and green ICT issues and solutions. The accounting profession's expertise in preventing and detecting corporate fraud can become the basis for developing cyber accountants - experts in establishing and monitoring cyber security in large, networked systems.

#### **KEYWORDS**

Sustainability, information and communications technology (ICT), green TEP, developing nations, free trade agreements (FTAs), regional trade agreements (RTAs), cyber crime

#### INTRODUCTION

conomic growth consumes natural resources and emanates wastes, contributing to resource scarcity and pollution. It is possible for excessive economic growth rates to generate wastes at levels that jeopardise nature's ability to sustain life on this planet (Gan, 2004; Gandhi et al. 2005). A focus on short-term profits causes businesses to regard environmental protection measures as impediments to firm performance (Rojšek, 2001). As such, developing nations may strategically employ looser environmental regulations to lure business investments from developing nations, pursuing foreign investments and quick economic growth at the expense of global environmental sustainability.

Pollution is considered an unavoidable by-product of economic growth (Roarty, 1997). If developing nations with growing populations follow the consumption driven growth models of Western countries in pursuing economic growth, there will be immense pressures on the environment. Even if the populations of developing nations stabilise in a few decades, these growth models would lead to consumption levels that surpass global sustainability levels by as much as fifty percent (Daniels, 2005).

However, rapidly developing internet and communication technologies (ICT) offer an alternate means to pursue economic growth. This alternate model offers environmentally sustainable growth prospects.

A key insight in addressing environmental issues related to economic growth in developing nations is that the environment is affected by pollution associated with escalating production processes (Valaskakis, 1979), rather than economic growth per se. Daniels (2005) contemplates a green technoeconomic paradigm (green TEP) that promotes economic growth while keeping the associated environmental problems in check. He considers "the successful adoption of materials and energy-saving technologies appropriate for the less-capital intensive, smaller-scale and more labour-intensive context of lower income nations" (Daniels, 2005, p. 458). Information and communication technology offers a means for poorer nations to improve their economic conditions (Gani and Clemes, 2006). The term "green ICT" looks into using information and communication technology in a manner that has minimal negative impact on the environment, where "green ICT" is defined as environmentally friendly internet and communication technologies.

Currently, ICT plays an important role in the development of regional and national economies. For instance, a number of free trade agreements that involve ASEAN nations promote the establishment of ICT systems, to improve productivity. However, this exuberance in regarding ICT as a solution for improving the economic welfare of poorer nations, and the emerging notion of a "green ICT" that offers a means to pursue environmental protection and economic development simultaneously, overlook a major flaw in ICT based systems: ICT based fraud and security of sensitive and confidential information.

In Malaysia, KPMG's 2008 survey on fraud indicated that seventy-seven percent of respondents felt that computer and information systems comprised a potential security risk (KPMG, 2008). This figure shot up to eighty-five percent in KPMG's 2009 survey (KPMG, 2009). The costs of fraud are substantial. Kranacher and Stern (2004) estimate that fraud costs every company in Asia around a tenth of sales.

This paper explored security issues that comprise a weakness in ICT based systems. Lax security in globally networked systems enables sophisticated cyber criminals to tap these systems for personal gain. Cyber crime includes unauthorised access, modification, use, copying and destruction of material stored and processed within the ICT systems; theft of identities, records, computer time and resources via the ICT infrastructure; conspiring to utilise available computer technology to commit criminal activities and illegally getting access to confidential, sensitive information via corporate and government based computer systems. For instance, important documents may be altered without the knowledge of the authorities, such as entry permits for contraband goods that may be otherwise denied.

This paper also examined a number of regional trade agreements (RTAs) and concluded that there was little formal consideration of ICT security issues in these agreements. It then explored measures to deal with ICT based fraud and unauthorised access to sensitive data and processes in publicly listed firms in Malaysia, by means of a survey of the experiences and perceptions of users of computer systems. The findings of this survey indicated that while fraud is not uncommon in ICT based systems and users were aware of this danger, surprisingly limited measures were in place to control computer based fraud. In essence, these findings suggested a need for strategic planning of the training and development of human capital, to effectively prevent and contain fraud in ICT driven environments. In particular, large-scale multi-national systems, such as those envisioned in multilateral FTAs to ease the flow of information and data across borders, as well as upcoming green ICT systems that intend to uplift developing economies while protecting the global environment, are vulnerable to criminal cyber attacks. These global ICT networks offer cyber criminals unprecedented opportunities for profit. In some cases, entire economies could be paralysed due to criminal cyber attacks.

#### SURVEY OF LITERATURE

ICT systems are poised to become the next technoeconomic paradigm (TEP) that drives economic growth. However, unlike preceding TEPs, ICT has the potential of protecting the environment while promoting economic growth. The weakness of ICT based TEP is poor security in protecting confidential information and processes. This section also discusses this security issue that can derail economic growth.

Technoeconomic paradigms (TEPs)

TEPs theorise that waves of technological innovations have enabled the production of new products and services that are in demand across large areas of the economy in the West. The resulting bursts in economic activity drove productivity, profit and broad economic growth in developed Western nations. Five main TEP waves have been identified, with the likelihood of an emerging sixth wave, called a "green TEP" (Freeman and Peréz, 1988; Berry, 1997; Freeman, 1992, 1997; Daniels, 2004). These waves are summarised in Table 1.

		TABLE 1: FIVE TEP WAVES WITH A POTENTIAL SIXTH TEP
Wave	Period	Driving technological innovations
TEP 1	1770s – 1840s	Cotton and iron
TEP 2	1840s - 1880s	Coal fuelled transport, factories,
TEP 3	1880s - 1940s	Steel, transportation based on railways, Electricity
TEP 4	1940s – 1990s	Oil fuelled energy, mass production
TEP 5	1990s – present	Micro-electronics, ICT, lean production and just-in-time systems
TEP 6	Potential wave	Green ICT, environmentally friendly economic growth

The first five waves of TEPS did not pay specific attention to environmental issues. Consequently, Western nations developed during these periods at the cost of environmental pollution and degradation. Today, ICT offers a means for lower income nations to improve their economic well-being (Gani and Clemes, 2006) while containing environmental pollution and degradation. A green TEP focusing on driving economic growth with carefully planned, environmentally friendly ICT would help low income nations to realise sustainable economic growth without damaging the environment (Daniels, 2005). Such green (environmentally friendly) ICT systems would be able to promote sustainable growth in developing nations while helping to protect the global environment.

#### Information and Communication Technologies (ICTs)

ICT is widely regarded as a tool for promoting socio-economic development in developing nations (Gani and Clemes, 2006; Mutula and Brakel, 2007). Advances in ICT, including the internet, hand phones, personal computers, broadband connections and wireless networks, allow information to be disseminated cheaply and swiftly across wide, geographically dispersed audiences. The easy access to pertinent information drives improvements in many areas, including healthcare, education, hygiene and sanitation, which in turn improve the quality of life (Gani and Clemes, 2006) and set the stage for improvement in social and economic conditions.

A number of RTAs<sup>1</sup> promote ICT, viewing this technology as a vehicle for automating certain tasks and creating paperless environments that help to facilitate trade. Trade facilitation is defined as "the simplification and harmonisation of international trade procedures including the activities, practices and formalities involved in collecting, presenting, communicating and processing data and other information required for the movement of information in international trade (OECD, 2005)".

A comparison of several regional trade agreements (Table 2) indicates the importance placed on ICT in trade facilitation.

TABLE 2: A COMPARISON OF SELECTED RTAS IN THE ASIA-PACIFIC REGION									
Trade Agreement	ASEAN/AFTA <sup>2</sup>	APEC <sup>3</sup>	SAARC/SAFTA <sup>4</sup>						
Members	Brunei, Cambodia, Indonesia, Laos, Malaysia, Myanmar, Phillipines, Singapore, Thailand, Vietnam	Australia, Brunei, Canada, Chile, China, Hong Kong, Indonesia, Japan, Malaysia, Mexico, New Zealand, Papua-New Guinea, Peru, Philippines, Russia, Singapore, South Korea, Taiwan, Thailand, USA, Vietnam	Bangladesh, Bhutan, India, Maldives, Nepal, Pakistan, Sri Lanka						
Integration	Goal: Integrated single market by 2020	Trade, investment liberalisation through high quality, multilateral regional and bilateral trade agreements. Goals: free, open trade and investments by 2010 in developed and by 2020 in developing economies	Goal: Free trade area by 2016. Non- developed nations (India, Pakistan, Sri Lanka) to phase out tariffs by 2009; least developed states given till 2016						
ICT initiatives	Use of ICT, ASEAN e-customs	Common data elements, paperless trading, electronic certificates	Automated customs clearance procedures and electronic data interchange						
Exchange and handling of information	Use state of the art technology compliant with UN/EDIFACT (Vision 2020)	Use ICT to facilitate movement of goods and people; remove barriers to and promote e-commerce	Implement automated customs clearance procedures and electronic data interchange						
Cooperation/assistance: Training and human resource development	Training to promote regional uniformity, coordinated action, equivalent treatment and homogeneity (Vision 2020)	Workshops on customs related issues	Identify national training institutions and training instructors to undertake training programs in customs administration						
Cooperation/assistance: Technical assistance (TA)	TA to promote equal levels of development amongst customs administration so as to enhance regional efficiency, effectiveness and uniformity (Vision 2020)	TA regarding evaluation and implementation of trade facilitation measures, assessment of trade facilitation costs, WTO customs valuation	TA regarding customs valuation, and tariff classification						
Cooperation/assistance: Capacity building (CB)	No specific details	CB regarding document examination, development, implementation of standards and legal infrastructure	CB regarding customs valuation, and tariff classification						
Cooperation/assistance: Cooperative measures	Mutual assistance to enhance the effectiveness of customs compliance and to control and reduce smuggling (Vision 2020)	Cooperative initiative on regulatory reform	Promotion of bilateral or multilateral agreements on customs cooperation to prevent and investigate customs offences						

(SOURCE: WILLE, 2006)

AFTA, APEC and SAFTA were chosen for this analysis, from the larger universe of regional trade agreements, RTAs, (that includes, for example, the Pacific Agreement on Closer Economic Relations, PACER and the Australia-Singapore Free Trade Agreement, AS-FTA) because they embrace nations that are widely dispersed across the globe, and hence illustrate the extensiveness of the impact of the ICT security risk. This security risk is accentuated by the fact that there is little formal consideration of this issue in the RTAs. Security risk associated with ICT systems that offer borderless flow of sensitive and confidential information,

<sup>2</sup> ASEAN (Association of Southeast Asian Nations) Free Trade Agreement – AFTA

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

These RTAs are part of the bilateral and multilateral FTAs that are being established all over the world to promote and facilitate global trade.

<sup>&</sup>lt;sup>3</sup> Asia-Pacific Economic Cooperation (APEC)

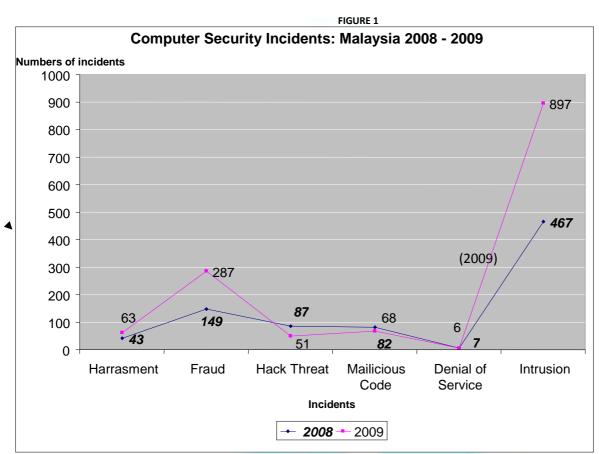
 $<sup>^{1}</sup>$  (South Asian Association for Regional Cooperation) Agreement on South Asian Free Trade Area -  $\,$  SAFTA

#### VOLUME NO. 1 (2011), ISSUE NO. 7 (NOVEMBER)

especially over widely dispersed areas, includes the potential to cripple economic activity over large portions of the globe. For instance, APEC's membership ranges from the US to Malaysia to New Zealand. A cyber attack that cripples the interconnected computer systems of APEC, or even one that surreptitiously harvests confidential information, would pose serious consequences for these nations that are spread all over the world, and potentially become a major global issue. For instance, an unanticipated denial of service (DOS) attack (Samudhram, 2000) could paralyse the computers, and halt all processes and trade between the nations for a sizeable length of time.

#### **EMPIRICAL STUDY**

Computer fraud in not uncommon in Malaysia. Figure 1 showed the statistics on computer fraud in Malaysia for the years 2008 and 2009.



Source: Malaysia Computer Emergency Response Team (2009)

The following empirical study was conducted with the objective of examining the preparedness of the Malaysian public listed companies in addressing computer fraud, where computer fraud is taken to include the following:

- a. Unauthorized use, access, modification, copying and destruction of software or data
- b. Theft of money by altering computer records or the theft of computer time.
- c. Destruction of computer hardware.
- d. Conspiracy to use computer resources to commit a felony.
- e. Intent to illegally obtain information or property via computers.

This study also explored the assessments of computer security risk, prioritised budgetary allocations to address computer fraud, frequency of checks on the security of computer systems, incidences of computer fraud, policies to manage risk, persons relied on to prevent computer fraud risk and follow-up actions taken following computer frauds.

The study was based on survey questionnaires. In January, 2010, anonymous questionnaires were sent, via post and email, to 200 companies that were randomly selected from the population of firms listed on Bursa Malaysia (formerly Kuala Lumpur Stock Exchange, KLSE). Of the returned questionnaires, sixty five (32.5%) were complete, and suitable for this study. Thus, the following analysis was based on these 65 questionnaires. *Overview* 

Overall, the sample of sixty five responses mainly represents firms that employ 100 to 200 workers. One firm reported employee numbers of 4000 to 5000 while two reported employing over 5000 people.

#### Risk assessment

#### TABLE 3: ASSESSMENT OF COMPUTER FRAUD RISK

		Yes		No		Don't know		Total	%
		Count	%	Count	%	Count	%		
1.	The company performs risk assessment on computer security	38	58.5	24	36.9	3	4.6	65	100
2.	The company has prioritized budget allocation for risk assessment on computer	23	35.4	11	16.9	31	47.7	65	100
	security								

The findings regarding the assessment of computer risks by the firms were presented in Table 3. Only slightly over half of the respondents (58.5%) had performed qualitative and/or quantitative risk assessments on the security of their corporate computer systems. Over 40% did not perform such assessments. Around 5% were not aware of whether their companies performed risk assessments on computer security. About a third of the respondents (23 firms, or 35.4%) indicated that their firms had prioritised budget allocations for assessment of computer security risk, while almost 17% indicated otherwise. Almost half of the

correspondents (47.7%) did not know whether their firms provided prioritised budget allocations for this purpose. Considering the serious implications of uncontained computer fraud for commercial firms, these findings indicate a somewhat lackadaisical attitude towards computer security. In addition to providing prioritised budgetary allocations, the depth of a firm's commitment to fight computer fraud is further indicated by the amounts allocated. Table 4 showed the findings regarding the allocated amounts.

#### Prioritised budgetary allocations

	TABLE 4: ANALYSIS OF PRIORITIZ	ED BUDG	ET ALLOCATION	
	Budget allocation	Count	%	
	Less than RM1,000	5	21.74	
	RM 1,001 - RM50,000	2	8.70	
	RM 50,001 – RM100,000	2	8.70	
	More than RM100,000	14	60.87	
	TOTAL	23	100.00	
indi	ested that when firms do provide hudgetery allocations for addressing	computer	froud the emount is often emple	Mithin this group

Table 4 indicated that when firms do provide budgetary allocations for addressing computer fraud, the amount is often ample. Within this group of 23 firms, around 60% allocate over RM100, 000. However, there are also a number of firms that allocate mere token amounts for assessing computer security risk. For instance, over a fifth of these firms (5 firms, or 21.74%) allocate less than RM1, 000. Discarding these 5 firms that allocate token amounts, which is indicative of a weak commitment towards addressing computer fraud, we find that in the total sample of 65 firms, only 18 (about 28%) appear to provide sizeable amounts for assessing computer fraud risk. These findings support the earlier conclusions from the analysis of RTAs that limited strategic attention is paid to computer security in organisational planning.

#### Table 5 provided further evidence in support of these conclusions

TABLE 5: FREQUENCY OF COMPUTER SECUR	RITY SYST	EM CHECKS
Frequency of Computer Security System Checks	Count	Percentage (%)
Very Frequent	8	12.3
Frequent	22	33.9
Seldom	25	38.5
Rarely	9	13.8
Never	1	1.5
TOTAL	65	100.0

Table 5 indicated that 53.8% of the companies surveyed conduct computer security system checks very infrequently (includes those who check their systems rarely, seldom and never). Furthermore, only about 46% of the respondents state that their computer security is checked frequently or very frequently. The firms' commitment to fighting computer fraud may be further explored by examining if they have special teams (e.g. internal divisions or internal audit departments) to detect or minimise computer fraud. Table 6 indicated the findings related to this area.

#### Computer fraud detection teams

Table 6: The presence of computer fraud detection teams

	Yes	Yes		C		Don't know		%
	Count	%	Count	%	Count	%		
1. The company has a special	18	27.7	47	72.3	0	0	65	100
division to detect or minimize fraud								
2. The company has internal audit	33	50.8	29	44.6	3	4.6	65	100
departments that play active roles								
in detecting computer fraud								

Table 6 indicated that only about a quarter of the respondents' (27.7 %) firms had special divisions to detect and minimise fraud. Internal audit departments played active roles in this area in about half (50.8%) of the companies. The findings appear to indicate an important role for internal audit<sup>5</sup> teams, particularly in comparison with IT teams, in containing computer fraud. The findings depicted in Table 7, which explored the persons most relied upon to detect computer fraud, provide further evidence in support of this conclusion.

Persons most relied upon for detecting computer fraud

#### TABLE 7: PERSONS RELIED MOST TO DETECT AND PREVENT COMPUTER FRAUD IN COMPANIES

Person Relied Most to Prevent and Detect Computer Fraud	Count	%
External Independent Auditors	4	6.2
Internal Auditors	31	47.7
Accounts	3	4.6
Board of Directors	1	1.5
MIS Team	9	13.8
IT Team	17	26.2
Others	0	0.0
TOTAL	65	100.0

Table 7 showed that in almost half of the firms (47.7%), the persons most relied upon for detecting and preventing computer fraud are the internal auditors. The external auditors take up this role in another 6.2 percent of firms. Taken together, these findings indicate that auditors are seen as very important persons in addressing computer fraud. In contrast, the IT and MIS teams appear to play very important roles in detecting and preventing fraud in only 26.2 and 13.8 percent of the firms, respectively. Considering that auditors are generally seen as providers of reliable information, the perception that they are generally the persons most relied upon to detect and prevent computer fraud is not surprising. These findings also indicated that the responsibility for prevention and detection of computer fraud should vest with the auditing and accounting departments, since ensuring the reliability of corporate information is part of their normal duties.

<sup>&</sup>lt;sup>5</sup> The internal audit teams are assumed to be part of the accounting/finance function, rather than an IT or MIS function. The data in Table 7, that shows Internal Audit and IT/MIS teams as separate categories, gives validity to this assumption.

It might be possible that the limited interest in computer security at the firm level could be perhaps due to low levels of computer security incidents in these organisations. However, the findings shown in Table 8 indicated that this explanation did not hold, because computer security incidences were not uncommon in these firms.

#### Incidences of computer fraud in the surveyed firms

TABLE 8: INCIDENTS OF COMPUTER FRAUD AND ASSOCIATED LOSSES

	Yes		No D		Don't ki	Don't know		%
	Count	%	Count	%	Count	%		
1. Company experienced computer fraud cases within the last 12 months	37	56.9	26	40	2	3.1	65	100
2. Number of separate computer fraud incidents that occurred within the last 12 months:								
1-10	21	56.8					37	100
11-20	11	29.7						
More than 20	5	13.5						
3. The company's direct and indirect loss amount due to computer fraud incidents								
Less than RM10,000	8	21.6						
RM10,000-RM50,000	16	43.2					37	100
RM50,000-RM100,000	7	19.0						
RM100,000-RM250,000	4	10.8						
More than RM250,000	2	5.4						

Over half of the respondents' firms (37 firms, or 56.9 %) experienced incidences of computer fraud within the previous 12 months. A majority of these 37 firms (about 57%) had experienced 1 to 10 incidences of computer fraud within the last year. About 30% had experienced 11 to 20 incidences. Almost 14% experienced over 20 incidences of computer fraud. Most of the firms (43.2 %) that had experienced computer fraud estimated their direct and indirect losses to amount to RM10, 000 to RM50, 000. About a fifth (21.6%) reported losses below RM10, 000. Only two firms (about 5 %) reported losses above RM250, 000. The data in Table 8 indicated that incidences of computer fraud do occur in firms. Almost 80 percent of the respondents who had experienced incidences of computer fraud estimated the associated direct and indirect losses to be above RM10, 000.

#### DISCUSSION OF RESULTS

Tables 3 to 8 presented the findings that the publicly listed companies in Malaysia did not place much emphasis on computer security, although they did experience computer security attacks and the direct and indirect losses from such attacks were not trivial. These conclusions were further supported by the findings that only about a third of the respondents (35.4 %) provided prioritized budget allocations for assessment of computer security risk (Table 3). Nevertheless, firms that did provide budgetary allocations often set aside generous sums (Table 4).

In essence, the findings of this empirical study concurred with the trends indicated by the examination of RTAs. In both cases limited attention appeared to be paid to computer security, which essentially involves ICT security. There was a lack of urgency in addressing this problem, which could potentially blow up into a major issue with global repercussions.

The following section discusses policy recommendations and strategic procedures to address computer security.

#### COMPUTER SECURITY ISSUES, IMPLICATIONS AND RECOMMENDATIONS

Many RTAs provide for the establishment and networking of ICT systems that enables data and information to flow seamlessly across borders while commercial firms adopt ICT to improve productivity and profitability. These developments naturally lead to greater and greater reliance on ICT systems at regional, bilateral and multilateral levels as well as within corporations. However, the issue of ICT security has attracted little attention, which is a flaw that could have major repercussions. Generally, top level strategists and executives appear to pay very limited attention to ICT security, leaving the task to technical teams rather than comprehensively addressing the issue in strategic planning. Bakari et al (2007) opines that most CEOs seem to view ICT security as "a new phenomena and managers perceive ICT security as a technical problem rather than a potential business issue". These perceptions of top level corporate managers and planners<sup>6</sup> regarding ICT systems helps to explain the lack of emphasis on ICT security revealed in the examination of RTAs (Table 2) and the empirical investigation (Tables 3 to 8). Nevertheless, a lack of attention to ICT security can potentially lead to major problems, leading to everything from debilitating denial of service attack to theft of proprietary information, sabotage and financial fraud (Richmond, 2003). As such, national and international level initiatives aimed at building an awareness of the dangers of lax ICT security, and efforts to build capacity to prevent, detect, contain and overcome computer fraud, are important for long-term global economic stability.

Moreover, insecure ICT systems allow knowledgeable cyber criminals to tap into confidential databases and abuse the IT systems for personal gain while developing nations, at both the firm and governmental levels, have little means to counter-act. This may lead to vast problems that would be difficult to contain, from the loss of valuable data to an ineffectiveness of control procedures. For instance, important documents may be altered without the knowledge of the authorities, such as entry permits for contraband goods that may be otherwise denied. However, the necessary knowledge base can be created by prioritising the development of a core human capital base. This core base will then train a wider human capital base in implementing, maintaining, policing and protecting the networked electronic systems.

The education of high level strategy planners (such as CEOs, CFOs and government based policy makers) regarding the importance of ICT security is important for addressing the underlying ICT security issue. This has to be followed through with the development of sufficient human capital, namely, trained manpower, to detect and prevent ICT fraud.

Both developed and developing countries are today plagued by a shortage of skilled manpower in ICT (Mutula and Brakel, 2007). A key strategy to overcome this shortage would be strategic plans for training human resources in ICT, with particular emphasis on ICT security. A well trained workforce would prove instrumental in maintaining the overall security in ICT driven economies, and adequately address this potentially critical drawback of the green ICT concept. Regional and national level policies should drive human capital development in this area, to prepare a pool of knowledge workers who can support the ICT systems of public and private organisations. Public and private organisations, including universities and multinational corporations (MNCs), should work together, pooling resources, to develop the necessary manpower.

<sup>6</sup> Assuming that these perceptions, of top level corporate managers, are also reflective of the outlook of the top level policy planners involved in drafting RTAs

INTERNATIONAL JOURNAL OF RESEARCH IN COMMERCE, ECONOMICS & MANAGEMENT A Monthly Double-Blind Peer Reviewed Refereed Open Access International e-Journal - Included in the International Serial Directories

#### FIGURE 2: HUMAN CAPITAL DEVELOPMENT COST-BENEFIT FRAMEWORK HUMAN RESOURCE DEVELOPMENT FOR ESTABLISHING ICT SECURITY AT REGIONAL AND NATIONAL LEVELS

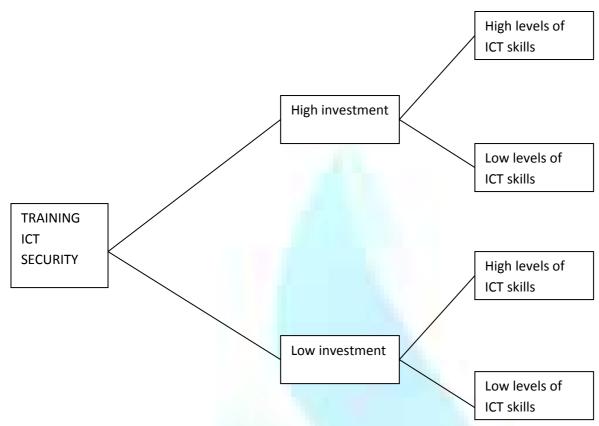


Figure 2 indicates that sometimes high levels of investment in ICT training may result in high levels of skills in containing ICT related fraud, while in other cases similar training results in limited development of ICT skills. On the other hand, it might also be possible to plan the human capital development programmes such that low investment levels in ICT training to provide high levels of skills in addressing ICT based issues. Finally, it is also likely for low levels of investment in human capital development to result in low levels of the anticipated ICT based skills.

Policies that aim to develop human capital will only be effective when the investment results in high levels of ICT skills. In particular, strategies that enable low levels of investmcfent to give rise to high levels of ICT skills are particularly important for developing nations with limited resources. This could be realised through cooperative, regional training arrangements. Developing nations may, for instance, identify expert trainers from abroad and bring them over to their own nations for limited periods to train local knowledge workers. Regional groups of developing nations could conduct such development programmes, with trainees travelling inexpensively within their regions to undertake the necessary training. This could further be supported with web based learning technologies that are able to train large numbers while controlling costs. The burden of funding could be reduced by sharing expenses amongst several nations, in addition to support from international bodies such as the United Nations Development Program. Once a nucleus of local talent has been trained, these groups could in turn train the others in the nation, with on-going web based support from abroad, to deepen the national skill base.

In the planning stage, each human resource development strategy for establishing nation and region wide ICT skills must compared with the Human Capital Development Cost- Benefit Framework. Programs that provide high levels of ICT skills should be pursued while those that do not offer such benefits should be reconsidered and re-engineered so they are able to provide meaningful results.

The training in ICT fraud prevention, detection and containment would include instruction in ensuring data integrity and reliability. Professional accountants, particularly auditors, are experts in detecting fraud and establishing and evaluating controls that ensure data integrity and reliability. Furthermore, forensic accountants are skilled in dealing with fraudulent activities. Indeed, the findings of our empirical research indicate that accountants appear to be the persons most relied upon to detect computer fraud in listed firms (Table 7). As such, the advent of the cyber age and the proliferation of ICT systems offer an opportunity for the accounting profession to develop cyber-auditors and the cyber-forensic accountants, with a speciality in computer fraud prevention, detection and containment. At the firm level, Bakari et al (2007) suggest teams that include three IT specialists (representing hardware, software and networking areas), a legal officer, an internal auditor and members of operational departments to address companywide IT security problems. Cyber auditors and forensic accountants will be well positioned to lead such teams, serving as a bridge between the technical ICT teams and the operational team members. Accountants will be able to establish, maintain and review measures and controls to contain ICT fraud at the level of detail that works effectively in major corporations. As such, they would be instrumental in setting up ICT fraud detection and prevention systems that are able to work effectively.

The manpower development initiatives should be followed through with additional initiatives to contain and mitigate ICT security risks, such as establishing an ICT security team composed of personnel from several functional areas. This team, which can be established at regional, national and firm levels, should then undertake the following tasks:

- i.) Report on ICT-based security risks and implications
- ii.) Document current ICT status and tasks required to address security risks
- iii.) Assess current risks levels, analyse the impact of suggested corrective or preventive measures in risk levels
- iv.) Work out contingency plans in case of security breaches
- v.) Establish policies, protocols and procedures to prevent security breaches.

This team would need to constantly communicate the importance of addressing ICT based risks to the top management and planners, to create an awareness of the importance of this issue and maintain the support of the top management.

#### SUMMARY AND CONCLUSIONS

The traditional TEPs that have driven economic growth and prosperity in Western nations are associated with environmental pollution and degradation. The emergence of green TEP paradigms, driven by the ideology of green ICT possibilities, offers the promise of environmentally friendly economic growth models for

INTERNATIONAL JOURNAL OF RESEARCH IN COMMERCE, ECONOMICS & MANAGEMENT A Monthly Double-Blind Peer Reviewed Refereed Open Access International e-Journal - Included in the International Serial Directories

developing nations. Today, ICT is embraced openly by major international agencies, including the United Nations, as a means to accelerate economic growth (Wood, 2003).

This paper brings attention to a potential pitfall of ICT systems that has gained little notice, despite the increasing reliance on ICT for economic development and improving profits. Developing nations may pursue a green TEP, based on the concept of an environmentally friendly ICT (green ICT), to improve their economic well-being without degrading the environment. However, they need to be cognizant of cyber crimes and ICT security issues that could pose a great danger, and potentially bring their economies to a standstill. An examination of RTAs as well as survey of listed firms in Malaysia indicates that very little attention in being paid to ICT security.

Developing nations should undertake human capital development policies in ICT based on the Human Capital Cost-Benefit Framework, to create a pool of trained knowledge workers who can help to maintain ICT security. The accounting profession is particularly well placed today to develop cyber-auditors and cyber-forensic accountants, who can serve as specialists in maintaining data integrity and reliability in ICT based systems.

Multifunctional ICT security teams should be set up at regional, national and firm levels to advice planners and policy makers on sound procedures and strategies to address the ICT security risk.

Proper attention to this ICT risk will enable developing economies to pursue environmentally friendly economic growth (green TEP based on green ICT) while containing the ICT security risks. This will enable the pursuit of sustainable, long-term economic growth that will benefit all nations.

#### REFERENCES

Bakari, J.K., et al. (2007). "Bridging the gap between general management and technicians – A case study on ICT security in a developing country", *Computers and Security*, Vol. 26, pp. 44 – 55.

Berry, B. (1997). "Long waves and geography in the 21<sup>st</sup> century", *Futures*, Vol. 29, No. 4, pp. 301 – 10.

Daniels, P.L. (2005). "Technology revolutions and social development: Prospects for a green technoeconomic paradigm in lower income countries", International Journal of Social Economics, Vol. 32, No. 5, pp. 454 – 482.

Freeman, C. (1992). The Economics of Hope, Pinter Publishers, New York.

Freeman, C. (1997). "The political economy of the long wave", in Tylecote, A. and van der Straaten, J. (Eds), *Environment, Technology and economic growth: The challenge to sustainable development*, Edward Elgar, Cheltenham.

Freeman, C. and Peréz, C. (1988). "Structural crises of adjustment, business cycles and investment behaviour", in Dosi, G. et al, *Technical change and economic theory*, Pinter Publishers, London.

Gandhi, N.M.D, et al. (2006). "Green productivity indexing: A practical step toward integrating environmental performance into corporate performance", *International Journal of Productivity and Performance Management*, Vol. 55, No. 7, pp. 594 – 606.

Gani, A. and Clemes, M.D. (2006). "Information and communications technology: a non-income influence on economic well being", International Journal of Social Economics, Vol. 33, No. 5, pp. 649 – 663.

Kranacher, M.J. and Stern, L. (2004). "Enhancing fraud detection through education", The CPA Journal, November, pp. 66-67.

KPMG (2008), Fraud Survey: 2008 Report, KPMG Forensic, Malaysia.

KPMG (2009), Fraud Survey: 2009 Report, KPMG Forensic, Malaysia.

Kranacher, M.J. and Stern, L. (2004). "Enhancing Fraud detection through education", The CPA Journal, November, pp. 66 – 67.

Low, L. T. K. and W.C., Poon (2008). The Utilisation of Fuzzy Logic in Corporate Governance Assessment in Business Economics. International of Corporate Governance, US. Vol. 1 No 2. Inderscience.

Low, L. T. K. and Samudhram, A. (2008). "Valuing Human Resources – from the costing perspective". Journal of Intellectual Capital, UK. Vol 9. No 4.

Malaysia Computer Emergency Response Bulletin (2009). www.jpm.gov.my

Mutula, S. M. and Brakel, P.V. (2007). "ICT skills readiness for the emerging digital economy among small businesses in emerging countries", *Library Hi Tech*, Vol. 25, No. 2, pp. 231 – 245.

OECD, (2005). "Policy brief: The costs and benefits of trade facilitation", The Organisation for Economic Cooperation and Development, October, Paris.

Richmond, R. (2003). "How to find your weak spots", The Wall Street Journal, September 29<sup>th</sup>, p. R3

Roarty, M. (1997), "Greening business in a market economy", European Business Review, Vol. 97, No. 5, p. 244.

Rojšek, I, (2001). "From red to green: towards the environmental management in the country in transition", *Journal of Business Ethics*, Vol. 33, No. 1, pp. 37 – 50. Samudhram, A. (2000). "Guarding vital data from security flaws", *Computimes*, New Straits Times, Malaysia, January, 13<sup>th</sup>, p. 22.

Valaskakis, K. (1979). The conserver society: A workable alternative for the future, Harper and Row, New York, NY.

Wille, P. (2006). "A comparative analysis of trade facilitation in selected regional and bilateral trade agreements", ARTNeT Working Paper Series No. 17, Institute for International Business, Economics and Law, University of Adelaide.

Wood, C.M., (2003). "Marketing and e-commerce as tools of development in the Asia-Pacific region: a dual path", International Marketing Review, Vol. 21, No. 3, pp. 310 – 320.



# EFFECT OF BOARD SIZE ON COMPANY PERFORMANCE IN THE LISTED FINANCIAL INSTITUTIONS IN SRI LANKA

# LINGESIYA YASOTHARALINGAM LECTURER DEPARTMENT OF FINANCIAL MANAGEMENT UNIVERSITY OF JAFFNA SRI LANKA

## ABSTRACT

Financial institutions are generating distinct corporate governance challenges. Good Corporate Governance is essential to the effective operation of a free market, which enables wealth creation and freedom from poverty. Therefore, corporate governance has engaged the attention of academics and practitioners alike for some time now. The Securities and Exchange Commission of Sri Lanka is committed to improving and promoting the use of international best practice which is essential for the development of the capital market, improvement of professionalism among market participants and raising the profile of the Sri Lankan capital market, in keeping with its objectives. The present paper examines the relationship between the most significant corporate governance factor –that is, the size of the board of directors and firm performance on a sample of 25 listed financial institutions in Sri Lanka over the period 2008-2010. The performance of the firms is measured by return on assets (ROA). Ordinary Least Squares is applied to test the significance of board and firm performance. Results of the study reveal that financial institutions profitability is negatively related to the size of the board of directors.

## **KEYWORDS**

Board Size, Corporate Governance, Firm Performance.

## **BACKROUND AND SIGNIFICANCE TO THE STUDY**

ood Corporate Governance is essential to the effective operation of a free market, which enables wealth creation and freedom from poverty" (Financial Reporting Council of the UK). The Central Bank of Sri Lanka reveals an economic growth of well above 6% for the third consecutive year in Sri Lanka, with a per-capita income of USD 1,617 in 2007 raising the current status of the Country from Low-income countries to Lower-middle income countries. The private sector of the economy is a large contributor to this growth. Good Corporate Governance would undoubtedly have played a leading role in achieving these impressive results.

The Institute of Chartered Accountants of Sri Lanka is indeed proud to be the pioneer in introducing good corporate governance principles to the Nation with the introduction of the 'Code of Best Practice on matters related to financial aspects of Corporate Governance' in 1997, which was later updated in 2003.

In addition to the traditional functions of the Central Bank of Sri Lanka, the Bank also performs many other regulatory functions. One such function is the Central Bank role to supervise Banks and other Financial Institutions and this function has assumed an extremely important level today. This function naturally extends to assisting Banks and Financial Institutions to improve their governance systems and their credit delivery systems, as well. In that context, the Central Bank by its supervisory function helps to improve the overall Corporate Governance procedures and practices in a key and important sector, which has a tremendous impact upon the economy of the nation. In the late 1990's, a spate of finance company failures led to adverse public reactions against the Central Bank, which culminated in several reforms being initiated. Some of these reforms were to tighten the doubtful debt provisioning methods and the more effective supervision and regulation of the conduct of Directors, especially in relation to related party transactions. The Central Bank also initiated the CRIB, i.e. the Credit Information Bureau, which today provides up-to-date information about customers who have defaulted to any one of the member banks. Through such pooling of vital credit information *via* the access to a centralized information network, the Banks in general have been able to improve their own credit delivery systems significantly.

Since of late, a few concerns have been expressed that the Central Bank has been somewhat lax in its supervision of the banking and finance company sectors, and this has resulted in some expressions of dissatisfaction within the corporate community. It is hoped that such situation would be temporary, and that the Central Bank would respond more positively towards enhancing the overall governance in the banking sector.

Banks and financial institutions have a special role in the economy of any nation. They play a critical function in mobilizing savings and allocating them to productive investment use. They also underpin the vital payments and liquidity systems on which the smooth operation of an economy is dependent.

It is a feature of banks that they are highly leveraged institutions. Shareholders typically have a small minority of total funds at stake in a bank, whereas depositors and lenders have a far greater share. The nature of banks and the pervasiveness of banking, results both in their inherent fragility, and their unique capacity for projecting the effects of their problems or collapse far beyond their corporate boundaries, often to those least able to bear the burden of distress.

The safety of the banking system is therefore, a public good. Regulators are responsible to ensure that policies are in place and are implemented, which protect the major stakeholders including depositors and shareholders, as well as the national interest. This is best achieved though a combination of effective supervision, high capital adequacy norms, healthy market competition, and good corporate governance.

Long-term relations with financial institutions can affect the performance of the corporate sector. Differences in corporate governance systems are thought to influence the cost of capital and the availability and type of financing available to firms. If the development of financial markets is linked with economic development then this can impinge upon economic growth. However, this may not matter if there are other sources of financing available to the corporate sector.

Corporate boards play a central role in the corporate governance of companies, understanding this relationship is crucial to our understanding of corporate governance (Guest, 2009). The two basic functions of the board of directors are advising and monitoring (Raheja, 2005). The advisory function involves the providing expert advice to the CEO (Fama and Jensen, 1983). Second function of the board of directors is to hire the CEO (Chief Executive Officer) and other top executives and evaluate their performance and to ensure that managers pursue the interest of shareholders (Hermalin and Weisbach, 1988). The executives are replaced incase if their performance is unsatisfactory. Performance, which shows if the resources of the firm are used efficiently to fulfill the goals of the firm (Daft, 1997), is crucial in evaluating the overall success of the firm (Parker, 2000). For performance, evaluation firms employ both financial and nonfinancial performance criteria. Financial performance measures are the starting point for most organizations' performance measures systems (Bloxham, 2002). Measures such as ROA (Return on Assets), ROE (Return on Equity) and EPS (Earnings Per Share) are financial performance measures that are most frequently used at academic research. ROA and ROE are better indicators of corporate performance because they include the balance sheet (Stern et al, 2004). In this study performance was measured by ROA

In Sri Lanka the stability and resilience of the financial system was maintained despite shocks caused by the global financial crisis and the failure of some unauthorized entities engaged in financial business. The global economic downturn and decline in world trade led to a slowdown in domestic economic growth and a significant contraction in credit expansion. Overall, the key financial institutions maintained their soundness with adequate capital levels, sustained earnings and improved risk management systems. The regulation and supervision of the banking, finance, insurance and securities sectors have been further strengthened to improve the resilience and soundness of the financial sector. This evidences prove the strength of corporate governance practices in Sri Lanka under guidance of Central Bank of Sri Lanka.

Previous empirical studies on corporate governance concerning the Sri Lankan financial sector are limited, with the emphasis being placed upon research conducted in the Sri Lankan banking sector. The present paper assesses the relationship between the board size with measures of firm performance (accounting-based profitability) and specific variable in the Sri Lankan financial sector over the period 2008-2010. The sample consists of 25 out of the 33 financial institutions operating in Sri Lanka. Therefore, the problem statement of this study is **to what extent the size of the board of directors affect the financial performance of financial institutions in Sri Lanka?** 

## **OBJECTIVE OF THE STUDY**

The purpose of this study is to examine the relationship between board size and financial performance of the financial services organizations in Sri Lanka.

## THE IMPORTANT ROLE OF THE BOARD OF DIRECTORS

According to the most recent description offered by the Organization for Economic Cooperation and Development (OECD), corporate governance "involves a set of relationships between a company's management, its Board, its shareholders and other stakeholders also provides the structure through which the objectives of the company are set, and the means of attaining those objectives and monitoring performance are determined (Adams and Mehran, 2005).

The board of directors plays an important role in the operation of a company. It oversees top management and is entrusted with the responsibility of monitoring and supervising the company's resources and operation. Therefore, the board is collectively seen as a team of individuals with fiduciary responsibilities of leading and directing a firm, with the primary objective of protecting the firm's shareholders' interests (Abdullah 2004). Therefore, this study is believed to contribute to the existing body of knowledge regarding the board composition and give timely signals to investors and depositors. There are three critical board roles that have been identified and studied by a variety of theoretical perspectives inclusive of service roles, control roles and strategic roles (Zahra and Parce 1989). This has been further elaborated in a different study that the board should alternatively fill an auditing, a supervisory, a coaching, and a steering role. However, the separation between ownership and control mechanism in today's modern organization has resulted in a potential conflict of interest situation (Berle and Means 1932). This is also a consequences of the agency theory in which the self-interest of the management is likely to lead them to involve in value decreasing activities (Jensen and Meckling, 1976). The predicted reduction in value of the firm as a result of the management opportunistic behavior is known as "agency costs" (Jensen and Meckling 1976).

Corporate Governance is aimed at ensuring that firms are operated efficiently and in the best interests of shareholders and other stakeholders such as employees, creditors, major suppliers and consumers and society at large. Corporate Governance yields considerable benefits to firms, shareholders, other stakeholders and society.

In contrast, the consequences of a poorly governed firm are often poor corporate performance, losses and collapse. The poor performance or collapse of a firm not only leads to losses, but it also has adverse impacts on society by undermining the stability of the financial system, efficient resource utilization and the competitiveness of the national economy. As such, Corporate Governance is a major issue of public policy of national importance and not limited to the narrow interests of shareholders with a direct financial stake in the firm.

Stakeholders who comprise the Government and other shareholders, customers, employees and the general public require the Board of Directors in its capacity as the agents of the owner, to safeguard the interests of the Bank by rebuilding its capital base, ensuring sustainable profitability and enhancing stakeholder value. These imperatives permeate all our activities.

The Central Bank of Sri Lanka in June 2002 issued a guideline titled "Code of Best Practice – Corporate Governance" For voluntary adoption by all Banks and Financial institutions. The Board Complies with the practices, principles and guidelines set out in the above document.

A code of Best Practice in Corporate Governance for Public Enterprises in Sri Lanka – by the Department of Public Enterprises Ministry of Finance was issued in January 2003 to serve as minimum requirements for all Government and Public Institutions in Sri Lanka.

Additionally the Institute of Chartered Accountants of Sri Lanka (ICASL) and the BASEL Committee on Banking Supervision have published Documents and guidelines on Corporate Governance.

## **BOARD OF DIRECTORS**

The Board of Directors ensures and remains continuously committed to the establishment and implementation of the sound principles of Corporate Governance in order to safeguard the Bank, its depositors and other stakeholders, reviewing and updating the structures in line with the changing internal and external environments and best market practices prevailing in Sri Lanka.

The Board currently comprises independent, eminent leaders with distinguished backgrounds in Law Industry, Finance, the Cooperative movement and relevant professions who provide a wealth of practical experience and commercial orientation, committed to drive through the much-needed changes for the creation of a truly sustainable and independent bank.

The Board is primarily responsible for setting the strategic focus of the Bank, while facilitating and implementing the language of responsible management by overseeing the business and related areas in particular ensuring:

## **BOARD SIZE**

The Board size (*BS*) variable is described by the number of directors on the board at the end of each examined financial year. Research on the relation between performance and effectiveness of board of directors can be examined from three perspectives. These are board composition, insiders' ownership and board size. Papers that addressed the relation between board composition and performance (Hermalin and Weisbach, 1991; Klein, 1998; Bhagat and Black, 2000) reached the conclusion that there is insignificant relationship between accounting performance measures and percentage of outside directors on the board.

There are various arguments regarding board sizes. Jensen (1993) argues that "Keeping boards small can improve their performance. It is widely believed that companies with small board of directors are more effective and profitable since they have a better monitoring role (Jensen and Meckling (1976). Indeed, Jensen (1993) concludes that the effectiveness of a Board may decline as Board size increases above a moderate number. When boards get beyond seven or eight people they are less likely to function effectively and easier for CEO to control." Similarly Lipton and Lorsch (1992) states "when a board has more than ten members it becomes more difficult for them all to express their ideas and opinions." and add that the U.S. corporate boards are overcrowded which causes shareholders to lose money, employees to lose their jobs and the corporation to lose its competitive market position. Yermack (1996) examines the relationship between firm performance and Board size on a sample of large U.S. corporations and finds a significant negative relationship. The result is robust to numerous controls for firm size, industry membership, inside stock ownership, growth opportunities and alternative corporate governance structures. Lipton and Lorsch (1992) argue for smaller boards and recommend that board size should be limited to seven or eight members. The disadvantages of large boards lean on the idea that tasks like communication, coordination and decision making is much harder and costlier among large group of people than in smaller groups. Eisenberg et al (1998) conclude similarly for a sample of small and midsize Finnish firms.

There are also numerous studies that find a positive relationship between board size and firm performance. Bhagat and Black (2002) find that the negative relationship between board size and performance is not robust to the change of the performance measure. Adams and Mehran (2005) studied the relation between board size and firm performance by a sample of 35 publiclytraded US bank holding companies during 1959-1999. They concluded that board size does not have a negative effect on performance. Tanna, Pasiouras and Nnadi (2008) underscore the positive relation between board size and performance for English banks. Belkhir (2008) finds that increasing board sizes do not undermine the firm performance and there is a positive relationship between board size and firm

performance. Similar results are also reached by Dalton et al (1999), Kyereboah-Coleman and Biepke (2006), Larmou and Vafeas (2009). Haleblian and Finkelstein (1993) argues that the major advantage of large boards is the collective information that the board possesses about factors that affect the value of firms, such as product markets, technology, regulation, mergers and acquisitions. Zahra and Pearce (1989) argue that larger boards are tougher to manipulate compare to boards with fewer seats. Anderson et al (2004) argue that investors of firms with larger boards believe that the financial accounting structures of those firms are monitored better, enabling those firms to decrease the cost of borrowing.

Board size as a variable that can influence corporate governance practices and firm performance in this study. It is acknowledge that the board size and firm size are correlated (Dalton et al. 1999; Yarmack 1996) and board size is related to firm performance (Kiel and Nicholson 2003). From an agency perspective, larger companies require bigger boards to monitor and control the managements actions. As suggested by agency theorist (Jensen 1993), an optimal limit should be around eight directors and Lipton and Lorsch (1992) suggested the maximum size of the board should be ten members, as greater numbers will interfere with the group dynamics and hinder board performance. An alternative view is that it is not the size that is important, rather it is the number of outside directors (Dalton et al. 1999). Therefore in the academic literature, this variable is measured using total number of directors (Abdullah 2004).

Moreover, many studies have examined the effect Board composition may have on firm performance, obtaining mixed conclusions. Fama (1980) and Fama and Jensen (1983) argue that non-executive directors add value to firms by providing expert knowledge and monitoring services. Outside directors are supposed to be guardians of the shareholders' interests through monitoring, or, in some cases, substitutes for other types of monitoring mechanisms.

Researchers have studied the most appropriate absolute number of directors that should be present in a board to obtain better performance and has been regarded as one of the important corporate governance variable (Bonn et al., 2004; Dalton et al., 1999; Pearce, Zahra, 1992). Hermalin and Weisbach (1988) examine board composition and firm performance in a chief executive officer (CEO) turnover equation. The results indicate that when boards are dominated by outside directors, the CEO turnover is more sensitive to firm performance than it is in firms with insider-dominated boards. Zahra and Pearce (1989) find a positive relationship between the percentage of non-executive directors on the board of directors and firm performance.

On the other hand, Vance (1968) realises that boards dominated by insiders exemplify higher financial performance. Agrawal and Knoeber (1996) estimate a simultaneous system of firm performance, board composition and other control variables. They observe that outside representation on the Board is negatively related with firm performance. Yermack (1996) also finds a negative relationship between performance and the proportion of outside directors. Moreover, Bhagat and Black (2001) observe a negative correlation between board independence and various measures of firm performance.

According to Bonn et al., 2004, the effectiveness of the board of directors is depended upon the consensus that the board can achieve based on the level of expertise and knowledge. It has been argued by the scholars that neither too much nor too small, the members of the board derive better performance. Larger boards though can build up better environmental links find it difficult to coordinate . Lack of cohesiveness and coordination of larger boards is outweighed by the external links, more knowledge and expertise. Hence it is the opinion of most of the researchers that larger boards will gain better performance. In contrast, smaller boards can agree on a particular outcome and engage in genuine interactions than the larger boards . Fernando in 2007 has found a negative relationship between the firm performance and board size in larger companies in Sri Lanka. Despite the previous findings, it is still debatable whether the effectiveness can be achieved from a smaller board or a larger board, different conclusions were given by different researchers in various contexts. According to Fernando, 2007, the average number of board members in Sri Lankan companies is 7.56 per board. For the purpose of the present study, the number of members in the board (SIZE) was taken from the annual reports. And the following hypothesis was developed to be tested.

#### Hypothesis: Board size is negatively associated with firm performance.

## FIRM PERFORMANCE

To achieve long-term sustained value, companies should raise their performance from year to year. There is no unique definition of firm performance (Pattanayak, 2008 cited in Pavithra 2009). However, Investordwords (2009) define performance as 'the results of activities of an organization or investments over a given period of time'. Most of researchers classified firm performance into accounting and market performance to assess the performance of the firms. The accounting performance measures take account to the current status of the firm as the result of past performance, such as, return on asset (ROA).

Hermalin and Weisbach (1991) do not observe any relationship between firm performance and the fraction of outside directors. Bhagat and Black (1999) conclude similarly. Adams and Mehran (2003) support the view that a lack of correlation between the Board size and performance is consistent with the theory; directors, as a result of regulatory requirements, do not emphasize in value maximization over the safety and of the institution.

#### **RETURN ON ASSETS (ROA)**

Return on assets shows the profitability of the company's assets in generating profits. It indicates the effectiveness of the companies assets in increasing shareholders economic interests (Haniffa and Hudaib 2006). It also shows the efficiency of management in using its asset to generate earnings. ROA is calculated as follows:

ROA = <u>Profit after tax</u> Total assets

## METHODOLOGY

#### SAMPLE

The concern of this study is to assess the impact of corporate governance characteristics on firm performance of listed banks financial institutions of Sri Lanka. These organizations are categorized by the Colombo Stock Exchange (CSE) as bank, finance and insurance under industry sector classification. Public Companies incorporated under the Companies Act No.7 of 2007 or any other statutory corporation, incorporated or established under the laws of Sri Lanka.

This study considered corporate governance practices from 2008 to 2010. For this analysis cluster sampling method was used. Here all listed financial institutions (33 companies in Sri Lanka) are divided in to four clusters such as banking, financing, leasing and insurance industries. Then 10 companies from banking and 5 companies from financing, leasing and insurance industry was randomly selected as sample (25 companies out of 33 companies) due to the difficulty in accessibility of data

#### DATA COLLECTION

Variables selected to represent the board size and the firm performance data could be collected from the annual reports. Therefore all the data was collected from the published annual reports.

#### **RELIABILITY AND VALIDITY OF THE DATA**

Secondary data for the study is drawn from financial statements (i.e., income statement and balance sheet) of the concerned companies as fairly accurate and reliable. Therefore, these data might be considered reliable for the study. Necessary checking and cross checking were done while scanning information and data from the secondary sources. Sample of this study extracted from listed companies in Sri Lanka. Also Sri Lankan Colombo Stock Exchange is functioning under the government rules and regulations and adopting the international and Sri Lankan Accounting Standards. All these efforts are made in order to generate validity data for the present study. Hence, researchers satisfy content validity.

#### DATA ANALYSIS

The data were analyzed with SPSS to obtain quantitative measures of descriptive statistics, Pearson's correlation and analysis of regression.

## www.ijrcm.org.in

## **RESULTS AND DISCUSSION**

TABLE	1:	DESCRIPTIVE	STATISTICS

	Mean	Maximum	Minimum	Std. Dev
Board Size	9	16	4	2.4632
Return on Total Assets	0.0205	1.1559	-0.3874	0.1566
	Source: 9	Survey data		

The above table shows the number of directors in the board (BS) have a wide range from 4 to 16. The mean of the size of the board (BS) is 9, with a standard deviation of 2.4632. This is in par with many studies undertaken previously. Based on the study of Pavithra (2009) in Sri Lanka the number of directors in the board (BS) have a wide range from 4 to 15. The mean of the size of the board (BS) was 8.16, with a standard deviation of 2.The Cadbury Committee report (1992) also recommends the size of the board to be between 8 and 10 members. Kathuria and Dash (1999) in their study have found that the size of the board as 9.83. Mak and Li (2001) in their research on determinants of corporate ownership and board structure: evidence from Singapore found the mean of the board size to be 8.04 and the board size ranges from 4 to 14. Carter et *a*l (2003) in their research on board diversity and firm value (sample is drawn from Fortune 1000) found a mean of 10.986 on number of directors with a standard deviation of 3.105. An empirical study on corporate governance and firm performance carried out in Russia by Judge et *a*l (2003) got a 9.6 mean on size of the board with a standard deviation 4.2 while range being 5 to 17.

Mean value of the ROA (0.0205) indicated that 2.05 % of return had been earning by the companies on the value of total assets.

TABLE 2: REGRESSION ANALYSIS BETWEEN BOARD SIZE AND FIRM PERFORMANCE
--

Variable	Coefficient	Std. Error	t-Statistic	Prob.
Model				
С	0.212	0.088	2.425	0.024
Board Size	-0.020	0.010	-2.090	0.048
R-squared	0.160	F-statistic		4.366
Adjusted R-squared	0.123	Prob(F-statistic)		0.048
S.E. of regression	0.111			

Source: Survey data

The results of the regression indicated that coefficient of board size was negatively related to profitability and significant  $\alpha$  = 5% level. It implied that the increase of board size will significantly affect the ROTA of the firms. The adjusted R<sup>2</sup> also called as the coefficient of multiple determinations, is the percent of the variance in the dependent. It explained uniquely or jointly by the independent variables was 0.123. The F statistics was used to test the significance of R.The model represented by regression F value and significant (F = 4.366, p = 0.048). The results indicated that hypothesis was accepted and there was a negative relationship between board size and Return on Total Assets. From the results presented above, it can be concluded that, board size is negatively and significantly related to bank profitability. This is in line with the findings reported in the literature review for other industries (Eisenberg, Sundgren and Wells (1998), Yermack (1996).

#### CONCLUSION

The study set out to provide empirical evidence about the effects of board size on profitability for a panel made up of a sample of 25 listed financial institutions for the period 2008-2010. Analyzing previous studies indicated that there are mixed findings in different contextual frameworks. Furthermore, the theories that have been developed also reveal different opinions with respect to the structure of the boards. This paper adds to existing literature such as Fernando (2007) who found a strong negative relationship between the board size and corporate profitability.

So far, it was observed a negative relationship between profitability (measured through ROTA) and the board size, which was used as a measure of corporate governance practices. A primary contribution of this paper is to produce estimates of the effect of board size on performance that can be given a causal interpretation. Moreover, it was found that standard OLS results provide valid and precisely estimated small negative board size effects. Hence this study uniquely contribute to the existing knowledge regarding the importance of assessing board size with respect to nonfinancial performance rather than restricting to financial accounting measures of performance. It is highly recommended that future research should be focused on non-financial aspects of performance in terms of non-financial aspects such as customer satisfaction, employee satisfaction, investor confidence, etc.,

#### REFERENCES

Abdullah, S.N.( 2004). Board Composition, CEO Duality and Performance among Malaysian Listed Companies, Corporate Governance, vol. 4(4), pp. 47-61. Adams, R.B., and Mehran, H.(2005). Corporate Performance, Board Structure and its Determinants in the Banking Industry, *Working Paper*, EFA 2005 Moscow Meetings.

Agrawal, A., and Knoeber, C.R. (1996). Firm Performance and Mechanisms to Control Agency Problems Between Managers and Shareholders, Journal of Financial and Quantitative Analysis, vol. 31(3), pp. 377-97.

Belkhir, M. (2008). Board of Director's Size and Performance in Banking, International Journal of Managerial Finance 5, pp. 201-221.

Berle, A., and Means, G. (1932). The Modern Corporation and private property, MacMillan, New York.

Bhagat, S., and Black, B.S. (2000). Board Independence and Long-Term Firm Performance, Working Paper, University of Colorado.

Bloxham, E.(2002). Economic Value Management: Applications and Techniques, New Jersey, John Wiley & Sons.

Bhagat, S. and Black, B.S. (2002). The Non-Correlation Between Board Independence and Long Term Firm Performance, *Journal of Corporation Law* 27, pp.231-274.

Bonn, I., Yoshikawa, T., and Phan, P.H. (2004). Effects of Board Structure on Firm Performance: A Comparison between Japan and Australia, Asian Business & Management 3, pp.105-125.

Cadbury Committee 1992. Report on the financial aspects of corporate Governance

Daft, R.L.(1997). Management, 4th ed., Florida, The Dryden Press.

Dalton, D.R., Daily, C.M., Johnson, J.L., and Ellstrand, A.E., (1999). Number of Directors and Financial Performance: A Meta-Analysis, Academy of Management Journal 42, pp.674-686.

Eisenberg, T., Sundgren, S., and Wells, M.T. (1998). Larger Board Size and Decreasing Firm Value in Small Firms, *Journal of Financial Economics* 48, pp.35-54. Middle Eastern Finance and Economics - Issue 14 (2011) 126

Fama, E.F., and Jensen, M.C. (1983). Separation of Ownership and Control, Journal of Law and Economics 26, pp.301-325.

Fernando, M.(2007). Corporate Social Responsibility in the Awake of the Asian Tsunami: A Comparative Case Study of Two Sri Lankan Companies, European Management Journal, vol. 25(1), pp. 1-10.

Guest, P.M.(2009). The Impact of Board Size on Firm Performance: Evidence from the UK, *The European Journal of Finance* 15(4), pp.385-404.

Haleblian, J., and, Finkelstein, S. (1993). Top Management Team Size, CEO Dominance and Firm Performance: The Moderating Roles of Environmental Turbulence and Discretion, Academy of Management Journal 36(4), pp.844-863.

Haniffa, R., and Hudaib, M. (2006). Corporate Governance Structure and Performance of Malaysian Listed Companies, Journal of Business Finance and Accounting 33(7-8), pp.1034-1062.

Hermalin, B.E., and Weisbach, M.S. (1991). The Effects of Board Composition and Direct Incentives on Firm Performance, *Financial Management* 20(4), pp.101-112.

Hermalin, B.E. and Weisbach, M.S. (1988). The Determinants of Board Composition, *Rand Journal of Economics* 19(4), pp.589-606.

Jensen, M.(1993). The Modern Industrial Revolution, Exit and the Failure of Internal Control Systems, Journal of Finance 48(3), pp.831-880.

Jensen, M. C. and Meckling, W. H. (1976) Theory of the Firm: Managerial Behavior, Agency Costs and Ownership Structure, Journal of Financial Economics, 3, 305-360

Judge, W.Q., Naoumova, I., and Koutzevol, N. (2003). Corporate Governance and firm performance in Russia: an empirical study, *Journal of World Business*, Vol 38, pp 385-396

Kathuria, V. and Dash S. (1999). Board Size and Corporate Financial Performance; An Investigation, Vikalpa, Vol 24(3), pp11-17

Klein, A.(1998). Firm Performance and Board Committee Structure, *Journal of Law and Economics* 41, pp.275-299. Kyereboah-Coleman, A., and Biepke, N.(2006). The Link between Corporate Governance and Performance of the Non-Traditional Export Sector: Evidence from Ghana, *Corporate Governance: International Journal of Business in Society* 6(5), pp.609-623.

Larmou, S., and Vafeas, N. (2009). The Relation Between Board Size and Firm Performance in Firms with a History of Poor Operating Performance, Journal of Management Governance 14(1), pp.61-85.

Lipton, M., and Lorsch, J.W. (1992). A Modest Proposal for Improved Corporate Governance, Business Lawyer 48, pp.59-77.

Mak, Y.T., and Li, Y. (2001). Determinants of corporate ownership and board structure: evidence from Singapore, *Journal of Corporate Finance*, Vol 7 pp235-256 Parker, C.(2000). Performance Measurement, *Work Study* 49(2), pp.63-66.

Pavithra, S.(2009). Broadening the board room: Corporate governance and company performance in Sri Lanka

Pratt, S.P., and Grabowski, R.J. (2008). Cost of Capital: Applications and Examples, 3rd edition, New Jersey, John Wiley& Sons.

Raheja, C.G.(2005). Determinants of Board Size and Composition: A Theory of Corporate Boards, Journal of Financial and Quantitative Analysis 40, pp.283-306.

Stern, J.M., Shiely, J.S., and Ross, I. (2004). The EVA Challenge: Implementing Value-Added Change in an Organization, USA, John Wiley&Sons.

Tanna, S., Pasiouras, F., and Nnadi, M. (2008). The Effect of Board Size and Composition on the Efficiency of UK Banks, *Economics, Finance and Accounting Applied Research Working Paper*, Coventry University.

The Institute of Chartered Accountants of Sri Lanka. 2003, Code of Best Practice on Corporate Governance, the Institute of Chartered Accountants of Sri Lanka. The Institute of Chartered Secretaries and Administrators in Sri Lanka 1999, Hand Book on Corporate Governance, The Institute of Chartered Secretaries and Administrators in Sri Lanka 1999, Hand Book on Corporate Governance, The Institute of Chartered Secretaries and Administrators in Sri Lanka 1999, Hand Book on Corporate Governance, The Institute of Chartered Secretaries and Administrators in Sri Lanka 1999, Hand Book on Corporate Governance, The Institute of Chartered Secretaries and Administrators in Sri Lanka 1999, Hand Book on Corporate Governance, The Institute of Chartered Secretaries and Administrators in Sri Lanka 1999, Hand Book on Corporate Governance, The Institute of Chartered Secretaries and Administrators in Sri Lanka

Yermack, D.(1996). Higher Market Valuation of Companies with a Small Board of Directors, Journal of Financial Economics 40(1), pp.185-211.

Zahra, S.A. and Pearce, J.A. (1989). Boards of Directors and Corporate Financial Performance: A Review and Integrative Model, *Journal of Management* 15(2), pp.291-334



## ISSN 2231-4245

# FUNDAMENTALS OF ENTREPRENEURIAL COMPETENCY: TIME ELEMENT AND DISCIPLINE IN SHG MODEL -AN EMPIRICAL ANALYSIS

# NIRANJAN SHETTY FACULTY & RESEARCH SCHOLAR DEPARTMENT OF PROFESSIONAL STUDIES COLLEGE OF BANKING AND FINANCIAL STUDIES MUSCAT SULTANATE OF OMAN

## ABSTRACT

Entrepreneurship is the outcome of several heterogeneous factors. While factors like family background, financial potency, technical expertise, own ability to deal etc. lie within the entrepreneur; government policy, technology, competition, nature of the product etc. emerge from outside. Micro-finance through SHG model is one of the most high-flying models of entrepreneurial development world over. The study has identified a set of four factors that are fundamental to build entrepreneurial competency among the group members in the SHG model. This set of four factors denoted as the sub-indicators of entrepreneurial competency. As the sub-indicators are discipline oriented factors for building entrepreneurial competency, it is termed as **'Entrepreneurial Discipline'**. The experience of the members in the SHGs will have a role in building entrepreneurial discipline. Experience is connoted as **'Time Element'**. The study is focused to establish a correlation with in the factors of four sub-indicators of entrepreneurial discipline and between the time element and entrepreneurial discipline. Correlation within the factors of entrepreneurial discipline and entrepreneurial discipline, association between factors of entrepreneurial discipline and the performance of SHGs, and the impact of the entrepreneurial discipline on the SHGs performance are the major contributions of this study. Research confined to a sample size of 217 SHG members of a renowned Non Government Organisation of D.K. District in Karnataka State.

#### **KEYWORDS**

Entrepreneurial Discipline, Self Help Groups, Time Element.

#### INTRODUCTION

inancial strength of an individual is not the sole cause of entrepreneurship. The required set of skills and the entrepreneurial discipline are of prime importance in building entrepreneurship. While the skills of the members help them to run their business more effectively at the front end, entrepreneurial discipline brings transparency in their venture at the back end. The set of skills can be acquired at regular intervals through formal training and educational qualification. Entrepreneurial discipline can be inculcated by way of self imposed principles of the members. The popular SHG model has become the breeding ground of entrepreneurial discipline. Individuals cultivate the habit of attending the meetings regularly, taking active participation in the meeting, sharing the knowledge and maintaining proper books of accounts. Such compliances become inevitable, when members turn out to be the fullfledged entrepreneurs in the days to come. Moreover, as the members go on gaining the experience, they tend to be more disciplined entrepreneurs. Therefore, the study unfolds the degree of correlation among the factors of entrepreneurial discipline entrepreneurial discipline. However, the fundamental factors of entrepreneurial discipline should result in augmenting the SHGs performance and hence due importance need to be given for analysing the relationship between the factors of entrepreneurial discipline and the performance of the SHGs.

#### **RESEARCH FOCUS**

The study is carried out to test, whether the ratings given for the factors of 'entrepreneurial discipline' are consistent to each other. Once, the degree of internal consistency in the ratings of the factors of entrepreneurial discipline is found, the next phase finds the consistency between the time element and the entrepreneurial discipline. Correlation co-efficient is ascertained for six sets of factors within the element of entrepreneurial discipline and between the time element and the entrepreneurial discipline. The study answers, what is the degree of correlation among the sub-indicators (Expressed as Attendance, Participation, Knowledge and Documentation) and the two master variables? (Expressed as Time Element and Entrepreneurial Discipline) Is the correlation positive or negative? Further, the study answers, whether the correlation is strong, moderate or weak. Questions raised in the research answers the basic building blocks required for entrepreneurial competence among the members and the relevance of time factor in bringing out the entrepreneurial competence with the help of a mathematical co-efficient. The study also finds, whether the factors of entrepreneurial discipline have any impact on the performance of the SHG by testing a hypothesis. Finally, the study brings out the results of the impact of entrepreneurial discipline factors on the performance of the SHGs. In brief the objectives can be summarized as below:

(1) What is the degree of correlation for ratings given by the members of SHGs for various factors of entrepreneurial discipline?

- (2) What is the correlation between entrepreneurial discipline and the time element of the members in the SHGs?
- (3) Are the factors of entrepreneurial discipline and the performance of the SHGs linked?

(4) What are the outcomes (impact) of the factors of entrepreneurial discipline?

## PAST EMPIRICAL ANALYSIS/RESULTS

There is no dearth of past empirical studies in the field of factors contributing for successful entrepreneurship. However, there is no specific empirical study on finding the correlation between the time element and entrepreneurial discipline and within the factors of entrepreneurial discipline independently.

Researchers opine either individual factors or contextual factors as basic variables for individuals to become entrepreneurs. But, simultaneously considering individual and contextual factors to determine individual's decision to be the entrepreneur are meager. (McCllend, 1961; Hornaday and Aboud, 1971; Kihlstrom and Laffront, 1979; Dunkelberg and Cooper, 1982; and Carland and Hoy (1988) and (Aldrich, 1989; Carsrud and Johnson, 1989; and Hornaday, 1990). Kajendra and Verma (2003) found weak, but positive correlation of environmental factors such as, competitive intensity, market turbulence and technological turbulence with customer orientation.

Venkata Ramana C, Ramachandra Aryasri A & Nagayya D (2008) found that, in case of overall successful entrepreneurs, 'Industrial Knowledge' (IK) affects entrepreneurial success in the opposite direction. Entrepreneurial success does not require too much of IK or not even helpful. 'Tolerance for Ambiguity' (TFA) and 'Impact of Personal Selling on Start-up Success' (IPSS) affects entrepreneurial success in case of moderately successful entrepreneurs. Both the variables affect entrepreneurial success in the positive trend, i.e. higher the score on TFA and IPSS, higher the entrepreneurial success. Finally, in case of marginally successful and highly successful entrepreneurs, no domains are correlated with entrepreneurial success.

Candida and Bird (1996) through an exploratory study found, that the winning women entrepreneurs hold traits such as innovative realism, flexibility, action orientation, changing and inspirational. Huntley (1985) made a case study to investigate the life events and experiences that had influenced women to opt entrepreneurship as career alternative. They were found determined, hard working and self-confident. Xiaoping Tian and Barbara (1989) enquired the impact of

taking a venture on the women entrepreneurs' life at work and outside the work place. The outcome is that, operating a business may drain their time and energy if their life is not encouraging and the satisfaction with work may decrease.

The risk propensity is affected by the macroeconomic variables and personal traits. The commitment of the entrepreneurs depends on macro environmental variables such as, personal characters, cultural idiosyncrasies and entrepreneurial motives, P.E. Petrakis (2006). The risk behaviour of an entrepreneur is significantly affected by his conception of the flow of time in the future. An entrepreneurial decision with connotation involves two temporal attributes. First being the risk horizon and second is concerned with future orientation of the entrepreneur, T.K. Das & Bing-Sheng Teng (1997).

## CONCEPTUAL UNDERSTANDING

Entrepreneurial discipline is the prime factor that influences quality of an entrepreneur. It means that, if the members are keen in attending the SHG meetings regularly (Attendance), participating in the meeting proceedings actively (Participation), knowing the rules and regulations of the SHG thoroughly (Knowledge) and maintaining the books relating to the SHG operations systematically (Documentation), they are said to be highly disciplined in financial language (similar to financial discipline). These factors are not considered in the literature review, not for the reason that these factors are less likely to contribute to the entrepreneurial success. But for the reason that, these factors are assumed to be compulsorily embedded in the SHG model. These factors are no doubt major variables for entrepreneurial success, however, by default these factors are presumed to be exists in the members. But it may not be practically possible. Hence, the researcher has selected these variables as building blocks of entrepreneurial discipline which in turn is the base for entrepreneurial success. In the literature review discussed above, manifold variables such as individual or contextual and micro or macro variables influences the entrepreneur to start an entrepreneurship. However, they are not structured within a model. But the variables identified by the researcher are the basic variables found in SHG model itself. It is not borrowed from the outside. It pre-exists in SHG model. Researcher made an attempt to link the relationship among these factors have a major role to play in entrepreneurial success.

During the field work it is found that the members are very keen in all the four factors mentioned above and accordingly books are systematically maintained for the same including the minutes of the meeting. In the interview, it is found that these practices are strictly adhered and at any cost no lapse is excused. Researcher perceived this practice as fundamental for entrepreneurial success and denoted it as *'entrepreneurial discipline'*. Since members are keen in basic entrepreneurial requirements such as attending regularly the meeting, participating in the meeting, acquainting SHG rules and maintaining books of accounts, it is indicative that these are successful factors for the members when they become entrepreneurs. That is how, these four factors of entrepreneurial discipline contributes to the members to be an effective or successful entrepreneur in the days to come. Some of the members have already become small entrepreneurs in tiny businesses in the SHGs attached to the NGO under study. Hence, SHG is providing an environment conducive for the emergence of potential entrepreneurs who are very strong in their basic requirements of entrepreneurial discipline. This will increase the yield of entrepreneurial success rate.

Researcher also intended to find the relationship between the entrepreneurial discipline and 'time element' (experience). The bases of the research are the ratings given by the members for different variables of entrepreneurial discipline and the experience of the members in the SHGs. The ratings may be affected by the experience of the SHGs. For example an experienced member may rate well the entrepreneurial discipline factors than the one who joined new to the SHG or vice versa. Correlation is found to ascertain, what extent these two factors are correlated. This is to ensure that the ratings are independent of the experience of the members. However, how the experience of the SHG members contributes to the success of entrepreneurs is not answered by the researcher. But, study reveals that experience of the SHG members and their ratings for entrepreneurial discipline is weakly correlated.

## SAMPLE SIZE AND TECHNIQUE

The total number of SHGs is 107 scattered all over D. K. District of Karnataka State. It consists of 1368 members spread over 16 centers. The average number of members works out to be 12.76 per SHG, which is considered to be ideal number of members for a group. The minimum and maximum number of members range between 6 and 21. These extreme numbers are found only in two SHGs. They are less likely to affect the sampling process as the structured sampling method is used in the study. A sample of 15% has been drawn from the population, which turns out to be 217 members out of 1368. While selection of members is done structurally at 15% from all the 107 SHGs, the members are selected randomly from each group. Therefore, the sampling technique used in the research is Proportionate Stratified Random Sampling. Hence, the equal or proportionate representation is given to both the big sized and small sized SHGs in the random selection of the members in the sample.

## **SCOPE & LIMITATIONS OF THE STUDY**

Research has been undertaken on Prajna Counseling Center, a popular NGO in Dakshina Kannada District of Karnataka State. Hence, the analysis and inferences drawn from this research cannot be generalized except for the members of Prajna Counseling Center and its linked bank branches. Further, the study assumes that, the members within the SHGs are homogenous. Therefore, result may turn out to be different, if the randomly selected members within the SHGs are different. The study is also time bound. Same respondents may give different opinion at a later date due to multiplicity of factors and situation. Therefore, the present findings and the subsequent findings may differ. Two terms are used in the research, namely the **'Time Element'** and the **'Entrepreneurial Discipline'**. While time element connotes the experience of members in the SHG in terms of number of years, entrepreneurial discipline, indicate the four important factors considered fundamental for entrepreneurial success. The four factors are the regularity of member's attendance, their participation level in the meeting, knowledge of rules and regulations of the SHGs and the documentation process of the SHG operations.

#### **HYPOTHESIS**

To substantiate the research objective three laid in the preceding paragraph, the following hypothesis is tested. The hypothesis verifies the association between the factors of entrepreneurial discipline and their impact on SHG performance.

H<sub>0</sub> - There is no relationship between variables of entrepreneurial discipline (attendance, participation, knowledge and documentation) and the performance of the SHGs

H<sub>1</sub> - There is a relationship between variables of entrepreneurial discipline (attendance, participation, knowledge and documentation) and the performance of the SHGs

## EMPIRICAL RESULTS AND DISCUSSION

#### THE TIME ELEMENT

Experience of the members in the SHGs contributes for entrepreneurial success. The habit of being regular, participative, knowledgeable and procedural will increase competency as members gain experience. The break-up of members experience in SHGs is given in Table-A. The sample consists of potential women entrepreneurs only. Based on this experience factor, study analyzes as to how the members rate the SHGs operation as they gain more experience. Members with less than 1 year of experience are zero and those who have more than 6 years of experience are 42. Majority of the members have experience ranging from 4-5 years. Table-A is the base for analyzing the time element in assessing the entrepreneurial discipline of the members. This is established by calculating correlation co-efficient for discrete series of Table-A and the factors of entrepreneurial discipline.

T	ABLE-A:	BREAK-U	JP OF ME	MBERS' I	EXPERIEN	ICE IN SH	lGs	
Months	0-12	12-24	24-36	36-48	48-60	60-72	72-84	Total
Respondents	0	18	36	32	51	38	42	217

Source: Compiled by the author

However, as an independent measure to indicate the time element, arithmetic mean (X) is ascertained in Table-B. This mean value represents the average experience of 217 members in the SHGs. Mean experience will be useful for determining the entrepreneurial success.

TABLE-B: I	TABLE-B: MEAN EXPERIENCE OF MEMBERS IN SHGs					
CI	MP (X)	f	fX	d=X-42/12	fd	
Less than 12	6	0	0	-3	0	
12 to 24	18	18	324	-2	-36	
24 to 36	30	36	1080	-1	-36	
36 to 48	42	32	1344	0	0	
48 to 60	54	51	2754	1	51	
60 to 72	66	38	2508	2	76	
72& Above	78	42	3276	3	126	
		217	11286		181	

Source: Compiled by the author

Mean experience of the Respondents  $(\overline{X}) = A + h\Sigma fd/N$ 

Where,

A= Assumed Value (Selected from the center of mid values)

h= Class Width

f= Frequency

d= X-A/12 =42+ 12(181)/217

= 42+2172/217

=52.01 months or 4.33 years

#### IMPLICATION

The mean experience of the members in the SHGs found to be 52.01 months or 4.33 Years. It means that, the members who form the sample in the study have on an average 52.01 months or 4.33 years of experience in the SHG. Higher the average experiences of the members, greater the reliability and vice versa.

## CORRELATION CO-EFFICIENT WITHIN THE FACTORS OF ENTREPRENEURIAL DISCIPLINE

The rating given by the members for various factors of entrepreneurial discipline is given in Table-C. Correlation of ratings given by the members for four variables is ascertained in two sets. They are attendance, participation, knowledge and documentation. This test statistic finds, whether there is any correlation in the ratings given by the members for four sets of variables. Or are these variables independent of each other? The research will answer the following specific questions.

(1) Whether the attendance increases the participation level of the members in the meeting and if so, to what extent?

(2) Whether participation level of the members in the meeting increases the knowledge level of the members and if so, to what extent?

(3) Whether the attendance increases the knowledge level of the members and if so, to what extent?

(4) Whether the knowledge increases the documentation process and if so, to what extent?

These questions are being posed in six combinations within the four variables. Four variables are categorized in to six sets of two each as given in Table - D for the purpose of calculating correlation. This analysis assumes importance in the context of exercising control over the conduct and quality of SHGs. NGOs and Banks can take appropriate steps to impose discipline on the members. The monitoring of the SHGs will be easier and smooth functioning of financial aspects will be ensured due to the inter-relationship of four variables.

	TABLE-C: RATING	S GIVEN FOR THE F	ACTORS OF ENTREPRENE	JRIAL DISCIPLINE BY	THE MEMBERS
		Ratings			
rial		0%-25% (Poor)	25%-50% (Satisfactory)	50%-75% (Good)	75%-100% (Excellent)
nəı	Attendance	5	4	32	176
ine	Participation	4	7	83	123
:rep cipl	Knowledge	3	4	63	147
Ent Dis	Documentation	3	7	59	148

Source: Compiled by the author

Table-C exhibits the ratings given by the members in qualitative and quantitative parameters. This is to avoid or minimize the subjective element in rating the entrepreneurial discipline. A general observation or glance of the data given in the Table-C reveals a strong degree of correlation among the ratings given by the members for all the factors. The paired unit of four variables in six sets gives the correlation coefficient. The six sets of four variables in pairs are given in Table-D.

r <sub>12</sub>				
	Poor	Satisfactory	Good	Excellent
Attendance Level <sup>1</sup>	5	4	32	176
Participation Level <sup>2</sup>	4	7	83	123
r <sub>13</sub>	-			
Attendance Level <sup>1</sup>	5	4	32	176
Knowledge Level <sup>3</sup>	3	4	63	147
r <sub>14</sub>				
Attendance Level <sup>1</sup>	5	4	32	176
Documentation <sup>4</sup>	3	7	59	148
r <sub>23</sub>				
Participation Level <sup>2</sup>	4	7	83	123
Knowledge Level <sup>3</sup>	3	4	63	147
r <sub>24</sub>				
Participation Level <sup>2</sup>	4	7	83	123
Documentation <sup>4</sup>	3	7	59	148
r <sub>34</sub>				
Knowledge Level <sup>3</sup>	3	4	63	147
Documentation <sup>4</sup>	3	7	59	148

There are six coefficients indicating the degree of consistency in awarding the rating by the members for four variables. The numbers in the Table-D represents the number of respondents opted for each factor. The summary of the correlation co-efficients for all six combinations is presented in table E:

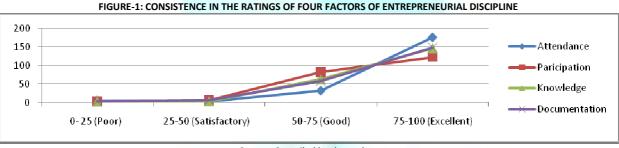
TABLE-E: S	UMMARY OF K	ARL PEARSON	'S CORRELATIO	N CO-EFFICIENT	FOR SIX SETS
r <sub>12</sub>	r <sub>13</sub>	r <sub>14</sub>	r <sub>23</sub>	r <sub>24</sub>	r <sub>34</sub>
0.87	0.96	0.97	0.97	0.96	1

Source: Compiled by the author

#### IMPLICATION

All the four variables are positively or directly correlated. And the degree of correlation is strong, as the co-efficients are around one. In other words, ranks given by the members for four different variables are consistent to each other. Good attendance results in good participation ( $r_{12}$ ), good knowledge ( $r_{13}$ ) and good documentation ( $r_{14}$ ). Similarly, Good participation results in good knowledge ( $r_{23}$ ) and good documentation ( $r_{24}$ ). Finally, Good knowledge increases the documentation ( $r_{34}$ ) and vice versa in all the cases. Coefficients between the variables are very close to 1 and hence there exists, perfect positive or direct correlation. Not only that, the correlation found to be very strong.

The pictorial representation of the correlation is shown in Figure-I. It clearly states that the consistency of the data in the lower segment (i.e. 0-25 and 25-50) are very strong. At the upper end, (i.e. 75-100) it is moderate and in the middle (50-75) it is low. The gaps among four lines in the figure depict the degree of cohesiveness of data. Members are very consistent in rating the poor and satisfactory status than good and excellent.



Source: Compiled by the author

## CORRELATION CO-EFFICIENT BETWEEN TIME ELEMENT AND THE ENTREPRENEURIAL DISCIPLINE

The correlation co-efficient between time element and entrepreneurial discipline is depicted in Table-F. This table is derived from Table-A and Table-C. This test statistic measures the degree of relationship as to how the experience of the SHG members helped them to rate well the SHG operations in four important parameters, such as attendance, participation, knowledge and documentation. Did their experience help them to rate the SHG operations well or otherwise? If so, to what extent?

			0-25	25-50	50-75	75-100	f	fv	Fv <sup>2</sup>	fuv
			12.5	37.5	62.5	87.5				
			-1	0	1	2				
0-12	6	-3	0	0	0	0	0	0	0	0
12-24	18	-2	1	1	0	0	2	-4	8	2
24-36	30	-1	2	1	0	0	3	-3	3	2
36-48	42	0	0	1	0	0	1	0	0	0
48-60	54	1	1	3	0	23	27	27	27	45
60-72	66	2	0	2	9	61	72	144	288	262
72-84	78	3	0	7	52	53	112	336	1008	474
		f	4	15	61	137	217	500	1334	781
		Fu	-4	0	61	274	331			
		Fu <sup>2</sup>	4	0	61	548	613			
		fuv	3	0	174	608	785			

Source: Compiled by the author

## www.ijrcm.org.in

$$\begin{split} r_{uv} &= N \sum fuv - (\sum fu) (\sum fv) / V N \sum fu^2 - (\sum fu)^2 * (N \sum fv^2 - (\sum fv)^2 \\ &= 217(785) - (331)(500) / V(217(613) - (331)^2 * (217(1334) - (500)^2 \\ &= 170345 - 165500 / V(133021 - 109561) * (289478 - 250000) \\ &= 17034 - 165500 / V(23460 * 39478 \\ &= 4845 / V926153880 \\ &= 4845 / 30432.78 \\ &= 0.16 \end{split}$$

#### IMPLICATION

The Karl Pearson's correlation co-efficient found to be 0.16 as per Table-F. This implies that, there is a weak positive correlation between the experience of the members in the SHGs and their ratings for the factors of entrepreneurial discipline. That means, the experienced members rate the operations of the SHGs high and inexperienced members rate at low. In other words, the degree of ratings as represented poor, satisfactory, good and excellent is proportionate to the experience gained by the members in the SHGs. However, there is a weak positive correlation, implying that the ratings may go up at a very less rate as the experience increases and vice versa. As the co-efficient is very small, experience may not affect the ratings heavily. Experienced members tend to maintain high level of standards in the operation of SHGs. But this has happened to small extent in this case. Data reveals that, experience result in good operational improvements or standards to some extent.

## HYPOTHESIS TESTING

The hypothesis indicated above is tested in the table-G. The table shows the number of respondents who indicated the performance of SHGs for different variables of entrepreneurial discipline. Table-H shows the calculation  $\chi^2$  value for the field data.

TABLE-G: HYPO	THESIS TESTIN	G	
Variables of entrepreneurial discipline	Performan	ce of the SHGs	
	Increased	Not increased	Total
Attendance	43	5	48
Participation	48	6	54
Knowledge	49	5	54
Documentation	54	7	61
Total	201	16	217

Source: Compiled by the author

TABLE-H: X <sup>2</sup> VALUE						
0	E	(O-E) <sup>2</sup>	(O-E) <sup>2</sup> /E			
43	44.48	2.19	0.05			
48	50.02	4.08	0.08			
49	50.02	1.02	0.02			
54	56.50	2.5	0.04			
5	3.54	1.46	0.41			
6	3.98	2.02	0.51			
5	3.98	1.02	0.26			
7	4.50	2.5	0.56			
X <sup>2</sup> Value 1.93						
Sou	rce: Com	piled by t	he author			

#### IMPLICATION

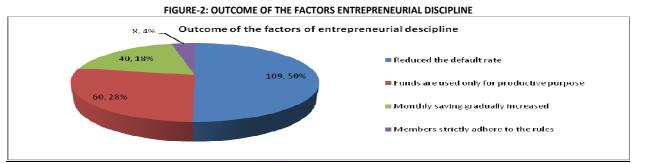
The computed value 1.93 is less than the table value 7.81 at 5% ( $\alpha$ ) level of significance at 3 D.F.(v). Accordingly, the null hypothesis is accepted. This means that, the four factors of entrepreneurial discipline has no association with the performance of the SHGs. In other words, the SHGs performance is independent of the four factors of entrepreneurial discipline. All of the four factors of entrepreneurial disciple or any one of these factors may not contribute to the performance of the SHGs. Alternatively, the H<sub>1</sub> (alternative hypothesis) is rejected.

#### **OUTCOME OF THE FACTORS OF ENTREPRENEURIAL DISCIPLINE**

The outcome of the entrepreneurial discipline factors are summarized in table-I and figure-2. This is the major outcome of the study and very important indication of the smooth functioning of the SHG operations.

 Outcomes	No of respondents
Reduced the default rate	109
Funds are used only for productive purpose	60
Monthly saving gradually increased	40
Members strictly adhere to the rules	8
Total	217





#### Source: Compiled by the author

Figure above indicates that 50% of the respondents have agreed that the default rates have substantially reduced and 28% of the respondents have agreed that the funds are used only for productive purposes. This could happen in the SHG model due to the strong suasion by the NGOs and the bank. Members are strictly adhering to the core principles of credit discipline. Peer level pressure and fear of credit denial for the second time compels the members to be very punctual in repayment and monthly saving.

## CONCLUSION

Firstly, in the SHG model of micro finance, operations of SHGs play a major role in building entrepreneurial discipline. There are manifold variables involved in the operational process. But, the study identified four major variables and tagged it as entrepreneurial discipline. Study found a very strong positive correlation among all the four factors. It implies that the regular attendance of the members ensures good participation. In turn, good participation ensures good knowledge. Likewise, good knowledge ensures good documentation. Similarly, any other two combinations of these four variables will have a high degree of positive correlation. One variable will have a direct positive impact on the other variable. Secondly, when experience mounts, the operational efficiency of the members in the SHG will also improve. However, the rate of improvement may be very slow. This phenomenon proved to be correct as there is weak positive correlation between experience and the ratings given by the members for various factors of entrepreneurial discipline. Thirdly, it is found that there is no association between the factors of entrepreneurial discipline and the performance of the SHGs. It means that, to augment the performance of the SHGs one need not entrepreneurially disciplined. Performance of the SHGs is independent of the factors of entrepreneurial discipline. Fourthly, entrepreneurial discipline impacted positively the performance of SHGs. Entrepreneurial discipline resulted in low default rate, productive usage of the borrowed funds, gradual increase in the monthly savings of the members and adherence to the bylaws of the SHGs.

## REFERENCES

(1) Bhargava Harsh., and Rajeev Sharma., (ed.) 2006, Managing Microfinance - A Corporate Approach, The ICFAI University Press, Hyderabad.

(2) Bosco, S.S., and Kiran Hande (1998), "Business Statistics and Business Mathematic." 1<sup>st</sup> edn, United Publishers, Mangalore.

(3) Cooper, Donald R., and Pamela S. Schindler (2006), "Business Research Methods." 9<sup>th</sup> edn, Tata McGraw-Hill Publishing Company Limited, New Delhi.

(4) Das, T. K., and Bing-Sheng Teng (1997), "Entrepreneurship: Theory and Practice", Vol. 22.

(5) Ghosh, Rajaneesh., (ed.) 2005, Microcredit in Asia - Concepts and Cases, IUP, Hyderabad.

(6) Gregory Dees J (2006), The Meaning of Social Entrepreneurship.

(7) Gupta, S. P., and M.P. Gupta (2008), "Business Statistics." 15<sup>th</sup> edn, Sultan Chand & Sons, Delhi.

(8) Gupta, S.C., (2004), "Fundamentals of Statistics." 6<sup>th</sup> edn, Himalaya Publishing House, Mumbai.

(9) Kothari, C. R., (1990), "Research Methodology - Methods & Techniques ." 2<sup>nd</sup> edn, New Age International (P) Limited, New Delhi.

(10) Krishna, Sridhar., (ed.) 2006, Self-Help Groups - In the Context of Microfinance, The IUP, Hyderabad.

(11) Monika Praksh and Nimit Chowdhary (2007), *Study of Entrepreneurial Motivations in India*, The Icfai University Journal of Entrepreneurship Development, Vol. IV. No.3, p.74.

(12) Mrudula, E., and V. R. P. Kashyap., (ed.) 2005, Microfinance Institutions - Concepts and Experiences, IUP, Hyderabad.

(13) Neetu Andotra and Pooja (2008), An Empirical Investigation of the Customer Orientation Construct for Entrepreneurial Strategy Making, The Icfai University Journal of Entrepreneurship Development, Vol. IV. No.1, p.32.

(14) Petrakis, P.E., Athens National and Kapodistrian University, Greece Journal of Business & Economics Research June 2006, volume 4, number 6.

(15) Rajagopalan, S., and Nirali Parikh., (ed.) 2007, Microfinance - Impacts and Insights, The IUP, Hyderabad.

(16) Rajagopalan, S., (ed.) 2005, Microfinance - Challenges and Opportunities. The IUP, Hyderabad.

(17) Rural Banking & Microfinance, (ed.), 1990, The IUP, Hyderabad

(18) Shanthi Nachiappan and Santhi N (2007), Women Micro Technopreneurs of WWF, Chennai, Tamilnadu, The Icfai University Journal of Entrepreneurship Development, Vol. IV. No.1, pp. 22-23.

(19) Trochin, William M.K., (2004) "Research Methods." 2<sup>nd</sup> edn. Biztantra, New Delhi.

(20) Venkata Ramana, C., Ramachandra Aryasri, A., and Nagayya, D. (2008), "Entrepreneurial Success in SMEs Based on Financial and Non-Financial Parameters," The Icfai University Journal of Entrepreneurship Development, Vol. No.2, p.46.

# BASKET PEG OR FLEX: A TEMPLATE FOR ASSESSING THE COMPETITIVENESS OF PAKISTAN'S TRADE SECTOR

# SEEMAB RANA STUDENT BAHAUDDIN ZAKARYA UNIVERSITY MULTAN, PAKISTAN

## ABSTRACT

This paper has been divided into two parts. The first part explores the appropriate exchange rate system for improved competitiveness of Pakistan's trade sector. The second part finds out the solution of question that how to determine the optimal baskets and how heavily the euro and US\$ ought to be weighed in any such currency baskets. It has been argued that at least two important targets, viz. Appropriate exchange rate regime and trade competitiveness need to be taken into account when determining an optimal basket. Drawing on a simple game, regression models are developed based on empirical evidences provided by Abed, Erbas and Guerami (2003). This paper has developed a simple framework within which the optimal exchange rate response to a change in weights of two currencies in the dollar-euro basket pegs. The results propose that Pakistan's external sector competitiveness ought to be insensitive to euro & dollar exchange rate changes. In other words, Pakistan should continue its prevailing floating exchange rate regime. Using the consumer price-based indices, the appreciation, or depreciation of Real Effective Exchange Rates (REER) applies to euro and dollar has been analyzed for Pakistan from 1982 to 2005.

## **KEYWORDS**

Basket peg, competitiveness, depreciation, exchange rate, floating.

## INTRODUCTION

xchange rate economics was revitalized in the early 1970s. The catalyzing event was the crumbling of the postwar monetary system, under which countries had for the previous quarter century kept their exchange rates fixed within narrow ranges, with only occasional adjustments. Subsequently, except within Europe, the major industrial countries have maintained flexible exchange rate arrangements, and market pressures have been allowed to generate large fluctuations in currency values. Since the collapse of the Bretton Woods exchange rate system, a vast literature has developed on the virtues and pitfalls of fixed versus flexible arrangements. While a variety of theoretical criteria for choosing the right regime have been proposed, there is still no consensus on how precisely these should be quantified and, to the extent they bear conflicting implications, how they should be prioritized. Following the disorderly exits from pegged regimes by a number of emerging market economies over the past decade, regime choice has drawn increased attention and a more systematic approach to assessing the implications of the various criteria appears warranted.

This paper proposes a broad set of quantitative indicators based on analytical factors that have been identified in the literature as having important effects on the competitiveness—and hence the choice—of exchange rate regimes. The selection of the key factors—external sector components (exports & imports); real effective exchange rates; consumer price indices; gross domestic product—is guided by quantifiability and cross-country comparability, and techniques to measure each factor empirically are specified in the form of a template for the time period 1982-2005. Comparisons with other countries are used to assess whether Pakistan's competitiveness for its trade nominates it as a "natural" candidate for a basket peg regime based on a particular criterion or not? For example, countries that have a high degree of trade orientation will benefit from a regime that pegs the currency to that of its major trading partner. Since it is unclear a priori what constitutes "high" trade orientation, the analysis envisage trade component's competitiveness because of two-currency basket peg rule. The sample comprises 11 economies<sup>2</sup>of various sizes and levels of development, spanning major regions as European Union Asia and US. This study highlights the two-currency basket peg and its implication on the external sector competitiveness of Pakistan. In economy like Pakistan, the consideration of choosing the components. If no substantial gain is to be achieved by switching from flexible exchange rate to basket-peg, such considerations might well dominate to ensure the competitiveness of non-oil exports & heavy imports and favor the decision to continue with flexible exchange rate regime. In dollar-euro basket peg, one peg dominates the other depends critically on the elasticities of exports and imports to and from the major trading partners. Depending upon the components of the trade account (imports & exports, and non-oil exports), the stability gains from switching to the basket peg is measured. More flexible exchange rate ma

Since 1982, a managed float has characterized the Pak rupee; the rupee was pegged to a basket of currencies with the US dollar being the main anchor currency. Pakistan has also maintained a de facto peg for much of the time since the early 1990s. In 17 July 2000, a free float replaced this system. However, current scenario witnesses that in practice regular state bank of Pakistan (SBP) intervention continues, and therefore the issues of real depreciation to correct the trade balance still remain relevant. Changes in exchange rates have pervasive effects, with consequences for prices, wages, interest rates, productions levels, and employment opportunities, trade and thus with direct or indirect implications of virtually all economics participants. Accordingly, large and unpredictable changes in exchange rates present a major concern for macroeconomic stabilization policy (Kemal, 2005).

The European Union (EU) is an intergovernmental and supranational union of 25 democratic countries known as member states<sup>3</sup>. The European Union was established under that name in 1992 by the Treaty on European Union (the Maastricht Treaty), and having an area of 3,892,685 km and approximately 460 million EU citizens as of December 2004. The Union has today a common single market, consisting of a customs union; a single currency (the euro) managed by the ECB (adopted by 12 of the 25 member states), a Common Agricultural Policy (CAP), a Common Trade policy (CTP), a Common Fisheries Policy (CFP), and a Common Foreign and Security Policy. In Europe, under the European Exchange Rate Mechanism (ERM), a group of countries did give up some domestic policy options for the sake of maintaining exchange rate relationships, but their example does not apply to the major industrial countries as a group.

This study look at the matter of alternative exchange rate regimes and trade competitiveness in the perspective of both the advanced countries, who generally have a choice and the emerges who have less of one and who often emulate what the advanced countries have done. Following the introductory part, paper is intended as follows. Section 1 surveys some of the concise literature involved theoretical aspects of exchange rate arrangements, empirical evidences with analytical considerations related to regime choices from developing, developed, emerging & transition countries as well as Pakistan, and for and against views on exchange rate systems. Third section highlights the methodology part, statistical estimation, and results interpretation. Section 4 presents conclusion with some policy issues. Finally, bibliographical framework is listed.

 $<sup>^{2}\,</sup>$  core members of international monetary system and are major trading partners of Pakistan

<sup>&</sup>lt;sup>3</sup> 25 countries: Austria, Belgium, Cyprus, Czech Republic, Denmark, Estonia, Finland, France, Germany, Greece, Hungary, Ireland, Italy, Latvia, Lithuania, Luxembourg, Malta, Netherlands, Poland, Portugal, Slovakia, Slovenia, Spain, Sweden, UK;

note - Canary Islands (Spain), Azores and Madeira (Portugal), and French Guyana, Guadeloupe, Martinique, and Reunion (France) are sometimes listed separately even though they are legally a part of Spain, Portugal, and France; candidate countries: Bulgaria, Croatia, Romania, Turkey; note - the EC has recommended that Macedonia become a candidate country.

## MOTIVATION

The East Asian crisis of 1980s and 1990s has raised a number of theoretical issues and puzzles, many of which have important implications for macroeconomic policy. Among the most important, is the question of what the appropriate exchange rate regime for small and open emerging economies like Pakistan is?

## OBJECTIVES

The paper is conducted for the following purposes

- To assess the trade regime gains can be achieved by switching from floating exchange rate regime to basket peg regime.
- To hit upon the dominant currency peg from dollar-euro basket peg in order to improve competitiveness of external sector of Pakistan.
- To guesstimate the exchange rate regime that endow with liberal transitional strategy for the transitional economy like Pakistan.

## LITERATURE REVIEW

This is a substantial theoretical and empirical literature on the alternative exchange regimes and external sector competitiveness of Pakistan's economy. In Pakistan, considerations in choosing a currency peg include credibility of exchange rate regimes and monetary policy stance, the effects of exchange rate volatility on financial markets and financial wealth, the transactions costs arising from exchange rate volatility. If no substantial gain is to be achieved by switching from flexible exchange rate to basket-peg, such considerations might well dominate to ensure the competitiveness of external sector and favor the decision to continue with flexible exchange rate regime. Following this introduction, the theoretical framework is explained in section 2 of this part. Empirical evidences related to paper are discussed in section 3.

## THEORETICAL FRAMEWORK

Economic theory provides a relatively little guidance on the relationship between exchange rate and trade policies. Trade and exchange rate policies have a common denominator in that they provide a certain degree of protection or support to domestic industries. There will always be a change in the level of the exchange rate that will, increase the return to certain exporting or import-competing activities. At first glance, one is tempted to argue that stable exchange rates are a precondition for stable trade policies. However, this need not be the case. One can view the impact of exchange rate regimes on the stability of trade policy in four ways. The first link concerns the taxonomy of exchange rate regimes following with sub sections like, currency basket peg, OCA, and target zone framework. The second link, competitiveness of exchange rate regimes, has its origin in the direct impact of exchange rate policy on the external sector, BOP, national price level, and monetary policies more generally. The third link comes from the relationship of real effective exchange rates and external sector. The study shall turn to each of these aspects in turn. The fourth link examines the different sides of exchange rate regimes i.e., determination of exchange rate regimes and new orthodoxy. From the view point of theoretical aspects of exchange rate regime, First of all theoretical framework takes up a set of other issues briefly in subsequent sub-sections: the fear of floating argument, Keynesian analysis of flex, and on the argument the no" size fits for all" exchange rate regime.

The modern "fear of floating" problem<sup>4</sup> was due to pervasive problems of currency mismatch. Many countries that claim to have floating exchange rates, do not allow the exchange rate to float freely. Countries, not yet open to international capital flows, are likely to be concerned about the behavior of the exchange rate; it also makes room for the fear of floating argument. UnCalvo and Reinhart (2000) expressed fear that large fluctuation in exchange rates, perhaps exaggerated by speculative capital movements, would involve damaging uncertainties for international trade. The fear-of-floating literature points to a number of additional factors that may explain why some countries are reluctant to allow exchange rate flexibility. Rogoff and others (2004) come across with the same findings that countries with limited access to external private capital have tended to experience lower inflation under rigid exchange rate regimes than under more flexible regimes.

#### **KEYNESIAN ANALYSIS OF FLEX**

Work on flexible rate in macroeconomic perspective goes back to Polka and Leursen and Metzler, as well as James Meade. Keynes model identifies the terms of trade with the exchange rate; it essentially assumes that prices and costs are fixed in terms of supplies currency and that fore exchange rate raises import prices relative to export prices.

The analysis drew flexible rates into a macro economic framework by identify the exchange rate with the terms of trade. Which in turn effect the composition of domestic appending and are a determinant of exports? In the absence of capital flows, the exchange rate will adjust to maintain the trade balance in equilibrium. An expansionary domestic policy, e.g., would raise income and import spending. The resulting trade would cause depreciation and switch demand toward domestic goods until the deficit was eliminated (Drnbusch and Krugnan, 1976).

#### NO "ONE-SIZE-FITS-ALL" SOLUTION

An important decision for the Central and Eastern European countries seeking membership in the European Union is choosing the most appropriate exchange rate regime. Experience has shown that many considerations are involved in this decision and that there is no "one-size-fits-all" solution. Because accession countries maintain a wide diversity of exchange rate regimes, from a currency board arrangement (Estonia) to floating regimes (Poland since April 2000 and the Czech Republic). A common goal of the countries is to move toward meeting the Maastricht criteria as they complete their transitions, but there seems to be no direct link between the exchange rate regime they have in place and their progress in meeting that goal.

## TAXONOMY OF EXCHANGE RATE ARRANGEMENTS

Every country that has its own currency must decide what type of exchange rate arrangement to maintain. In reality, however, there are different varieties of exchange rate regimes (see in table), providing a range of alternatives. An exchange rate is simply a price: the price in domestic currency of a unit of foreign currency. Unlike most prices, the exchange rate has normally been fixed in some manner. To put the point graphically, if exchange rate arrangements lie along a line connecting free floating on the left with currency boards, dollarization, or currency union on the right, the intent was not to remove everything but the corners, but rather to pronounce as unsustainable a segment of that line representing a variety of soft pegging exchange rate arrangements. For the same reason, countries rarely allow their exchange rates to float freely. In most countries with floating currencies, the national authorities follow exchange market developments closely throughout every trading day, sometimes intervening to purchase or sell currencies, on their own account for limiting the extent to which the excess demands of supplies of market participants cause exchange rate to fluctuate. Hybrid exchange rate system combines some of the attributes and characteristics of both pegged and flexible exchange rate system.

#### PEGGING: A SINGLE CURRENCY OR BASKET?

If a country traded heavily with countries that were already on gold, then it could have an incentive to adopt the same monetary regime as its main trading partners. For those that do adopt an exchange rate anchor, a further choice is whether to peg to a single currency or to a basket of currencies. The choice hinges on both the degree of concentration of a country's trade with particular trading partners and the currencies in which its external debt is denominated. When the peg is to a single currency, fluctuations in the anchor currency against other currencies imply fluctuations in the exchange rate of the economy in question against those currencies. By pegging to a currency basket instead, a country can reduce the vulnerability of its economy to fluctuations in the values of the individual currencies in the basket.

<sup>&</sup>lt;sup>4</sup> Whereby countries that say they float do not, seem to have been prevalent pre 1914. If fixing was quite painful under the gold standard for many of the peripheral countries, floating could be just as problematic for them as is the case today

#### **OPTIMUM CURRENCY AREAS**

The theory of optimal currency areas suggests that countries benefit from adopting the same anchor as trade partners, since this reduces their bilateral exchange rate variability. They find that, after controlling for other factors, the probability of choosing a particular anchor currency increases with the amount of trade with other countries that use this same anchor. During recent years, the theory of optimum currency areas has been resuscitated, greatly benefiting from, and contributing to, the consideration of various practical issues.

#### COMPETITIVENESS OF EXCHANGE RATE REGIMES

A fixed nominal rate proved to be useful in the early stage of the stabilization program, but the insistence on a pegged exchange rate eventually became counterproductive. A system of FIX can only be reconciled with the insistence on national economic independence or economic growth by some kind of compromise with the principle of flexible rates: wider bands, gliding parties, or both. Similarly, many other exchange rate arrangements have been brought different levels of growth and being helper in smoothing out international adjustments. FLEX provides a simple, automates, and efficient mechanism of adjustment, and by eliminating balance of payments difficulties-a major source of protectionist devices. One of the great advantages of a system of floating rates is that it would render obsolete and irrelevant all the grandiose plans to shore up world liquidity through an increasingly cumbersome international payments apparatus. Movements in exchange rates can wipe out – or double - profit margin. Consistently, large and persistent changes in exchange rates often catalyze strong political pressures for import protection in countries that have had their international competitiveness eroded.

#### EXCHANGE RATE REGIMES AND EXTERNAL SECTOR

By its very failure in this respect, a fixed exchange rate system promotes the introduction of controls over international trade and investment, whereas, FLEX promotes freedom of trade and investment. In particular, empirical studies have failed to uncover statistical evidence that exchange rate variability has had much of a depressing effect on international trade volumes. Dellas & Zilberfarb (1993) also argue that higher volatility of exchange rate witnessed since the adoption of the floating regime in 1973 has led to a decline in international trade transactions. Looking at the volume of trade is not the place where one would expect to find the costs of fluctuating exchange rates.

#### **EXCHANGE RATES VS BALANCE OF PAYMENTS**

In addition to recognizing the close links b/w the behavior of exchange rates and the behavior of national price levels and interest rates, economist have long emphasized the interdependence b/w exchange rates adjust to international payments imbalances can be traced back at least as far as the fourteenth century. Since the middle of the twentieth century, major developments in both macroeconomic analysis and the evolution of the world economy – most notably, the Keynesian revolution and the rapid expansion of international capital transactions relative to the growth of international trade have altered perceptions of the behavioral linkages b/w exchange rates and the balance of payments. In its pure form, a system of fixed exchange rates must be rejected on the ground that the "balance of payments discipline." Under flexible rates, however, if market forces are allowed to work unimpeded, so that no actual or export payments deficit are surplus can appear. In sum, the highly competitive foreign exchange market is the most efficient means for bringing international payments and receipts into balance (Caves, 1963).

#### **EXCHANGE RATES VS NATIONAL PRICES LEVEL**

The perception of exchange rates are related to national price levels has been traced back to the sixteenth century. The general inflation that has taken place during the war has lowered this purchasing power in all countries, though in a very different degree, and the rates of exchanges should accordingly be expected to deviate from their old parity in proposition to the inflation of each country. Countries with inflation rates higher than their main trading partners often depreciated their currencies to prevent a severe loss of competitiveness. The actual rate of exchange cannot deviate very much from this purchasing power parity. A system of flexible exchange rates, on the other hand, achieves adjustment entirely through relative price changes (David, 1976).

Notwithstanding the exchange regime choice, five (Egypt, Jordan, Lebanon, and Morocco, Tunisia) of the six countries (Iran is the exception) registered low inflation rates, while real growth averaged about 3–5 percent during 1991–2001. Moreover, as many as 19 developing countries floated their exchange rates in 2002 and announced their inflation targets without a formal inflation-targeting framework. Lebanon also has a small open economy with a fixed peg to the dollar; its economy is highly dollarized.

#### EXCHANGE RATE REGIMES VS INTERNATIONAL MONETARY REGIMES

".... The choice of appropriate exchange rate regime, which, for economies with access to international capital markets, increasingly means a move away from the middle ground of pegged but adjustable fixed exchange rates towards the two corner regimes of either flexible exchange rates or a fixed exchange rate supported, if necessary, by a commitment to give up altogether an independent monetary policy." Lawrence H. Summers (2000).

A short theory of the international monetary regimes that have transpired over the past century, elucidate that monetary policy in countries with floating exchange rate systems is likely to respond to movements of the exchange rate. In Canada, the use of a monetary conditions index to guide monetary policy, based on movements in both the exchange rate and the interest rate, formalized the impact of exchange rate movements on monetary policy (Flemine, 1962). In fixed regimes, monetary policy must be subordinated to the requirements of maintaining the peg. A system of FIX is inconsistent with the degree of monetary and fiscal independence required in today's world. FLEX allows old maximum independence with regard to monetary and fiscal policy (Emminger, 1976).

#### **RELATION SHIP BETWEEN REER & TRADE COMPETITIVENESS**

The link between changes in REER and trade competitiveness is very tight in some countries including the Czech Republic and Slovakia; in others, the relationship is more tenuous. Because the impact of exchange rate changes on trade flows is felt with a time lag, the imprecise nature of the relationship is not surprising. Moreover, the relationship was probably also influenced by the speed with which competitiveness was lost in individual countries, and this, in turn, was also a function of productivity improvements, which depended crucially on the success of industrial restructuring. This point is particularly evident in the competitiveness of Hungary. The relatively stable REER in Hungary has been associated with a constant level of trade balance and, most recently, with some improvement in the trade balance. The case of Poland is somewhat puzzling; the deterioration in the trade balance has been associated with a constant level of the REER measured by producer prices.

#### DETERMINANTS OF CHOICE OF EXCHANGE RATE REGIME

Exchange rate regime choice has evolved considerably in the past 100 years. At the beginning of the twentieth century, the choice is also becoming more obvious - - go to floating exchange rates, all the advanced countries have done it. There has been keen interest in empirical and theoretical studies on the choice of exchange rate regimes in developing countries in the aftermath of the currency crises in Mexico (1994), Southeast Asia (1997), Russia (1998), and Brazil (1999). The debate has focused mainly on the sustainability of conventional fixed pegs—so-called soft pegs—in the face of capital mobility and other shocks.

The theoretical literature provides broad guidance on exchange rate regime choice. The main criterion for regime choice is to reduce the output cost of an adjustment to exogenous shocks. The early literature on the choice of exchange rate regime took the view that the smaller and more "open" an economy (that is, the more dependent on exports and imports), the better it is served by a fixed exchange rate. In this framework, the best regime is the one that stabilizes macroeconomic competitiveness, that is, minimizes fluctuations in output, consumption, the domestic price level, or some other macroeconomic variable. The ranking of fixed and flexible exchange rate regimes depends on the nature and source of the shocks to the economy, policymakers' preferences, and the structural characteristics of the economy.

#### THE NEW ORTHODOXY

The claim of the new orthodoxy is that the choice of exchange rate regime has been hollowed out to one of two "corner solutions." One is a firmly fixed exchange rate, with an institutional guarantee that it will stay fixed, in the form of at least a currency board, or else "dollarization or monetary union. The other is a floating exchange rate that is almost "lightly managed."

## METHODOLOGY

In estimating trade Elasticities for Pakistan, most previous researchers have employed non-stationary data. Aftab, and Aurangzeb (2002) co integration, Marshall Lerner Kamal (2005) simultaneous equations model, Afzal (2005) techniques and specified models i.e., target zone model, elasticity approach, etc. has been used. In this study, OLS technique has used. Using annually data, the trade competitiveness with Pakistan's major trading partners is empirically tested. Moreover, two-currency basket rule has also been investigated for euro and dollar peg arrangements.

The period from the mid-1970s to the early 1980s has been characterized as "a heroic age" of exchange rate theory. During that time, international economists focused attention on three major structural approaches to modeling the empirical behavior of exchange rates and engaged in continuing efforts at theoretical extension in a spirited competition to explain the observed evidence. The three structural approaches have become known as flexible-price monetary models, sticky-price monetary models, and portfolio-balance models. For the most part, the various specification hypotheses that were entered in the empirical horse race were single-equation reduced-form models. The heroic ended when statistical tests revealed the sobering fact that none of the specification hypotheses could significantly outperform a naïve random walk model in predicting the out-of-sample behavior of the exchange rate. DATA SOURCES

- International financial statistics (IFS) yearbooks (various years)
- Statistical supplement of Pakistan 2004-05
- Economic survey of Pakistan 2004-05

## DATA DESCRIPTION

To derive optimal trade baskets (i.e. nominal effective exchange rate or NEER) appropriate consumer price indices are used to deflate the NEER (i.e. real effective exchange rate or REER), also to deflate the GDPs of all included countries. Aggregate of GDP of EU countries is calculated by summing up real GDPs of nine countries (Belgium, France, and Nether land, Luxemburg, Italy, Ireland, Denmark, UK and Greece). Aggregate CPI has also been calculated by taking total of CPIs of given nine countries. GDP deflators, CPIs and other given variables are converted into the base year 2000. Imports and exports are also made real by using GDP deflator and then completely was converted in to \$mln. Along with this, variables of Pakistan and US have also taken into account like US GDP, Pakistan's GDP, and bilateral exchange rate i.e., dollar-rupee & euro-rupee.

#### SAMPLING TECHNIQUE

Purposive sampling has been used to drawn a sample of 11 countries (trading partners of Pakistan, including Pakistan also). Secondary Data of all variables have been taken to perform assigned analysis of selecting the appropriate regime for external stability.

#### VARIABLE DESCRIPTION

#### DEPENDENT VARIABLES

Exports (x) of Pakistan to US, Exports (x) of Pakistan to EU, Imports (m) of Pakistan form US & EU

#### **EXPLANATORY VARIABLES**

Real GDP (y) of Pakistan, Real GDP of US, Real GDP of EU, Real effective exchange rate applies to \$-R exchange rate (v)<sup>5</sup>, REER applies to euro-R exchange rate (e)<sup>6</sup>

## MODEL LAYOUT

**TWO-CURRENCY BASKET PEG RULE**  $\delta(r) = \Omega(\$) + 1 - \Omega(\$)$   $0 \le \Omega \le 1$ 

Where.

R = currency of Pakistan, rupee

- \$ = Currency of US, dollar
- € = Currency of EU, euro

 $\delta$ ,  $\Omega$  = constants to determine the nominal exchange rate b/w rupee and basket

#### REGRESSION SPECIFICATION

Following literature (Afzal (2005), Abed, Erbas and Guerami (2003),) export and import equations are:

- $ln M t = \alpha 0 + \alpha 1 ln et + \alpha 2 ln v t + \alpha 3 ln Y 1 t + t$
- $\ln Xt = \beta 0 + \beta 1 \ln et + \beta 2 \ln vt + \beta 3 \ln Y2t + Vt$ ln X t = 0 + 1 ln et + 2 ln v t + 3 ln Y3 t + t

- Where,
- Mt = Imports of Pakistan in t time period
- X t = Exports of Pakistan in t time period
- $\alpha$ s = Elasticities of imports<sup>7</sup> w.r.t e, v, & y1 ßs = Elasticities of exports w.r.t e, v, & y2
- s = Elasticities of exports w.r.t e, v, & v3
- et = REER apply to euro-R exchange rate vt = REER apply to \$-R exchange rate
- Y1 t = Real GDP of Pakistan in t time period
- Y2 t = Real GDP of US in t time period
- Y3 t = Real GDP of EU in t time period t, V t, t = stochastic error term

#### VALUE OF OMEGA

To get the suitable peg for the better competitiveness of external sector (imports from US & EU)  $\Omega = \alpha 2 / \alpha 2 + \alpha 1$ 

To get the suitable peg for the better competitiveness of external sector (exports to US)  $\Omega = \beta 2 / \beta 2 + \beta 1$ 

To get the suitable peg for the better competitiveness of external sector (exports to EU)  $\Omega = 2/2 + 1$ 

<sup>7</sup> α1= [dM/M]/[de/e]

α3= [dM/M]/[dy1/y1]

<sup>&</sup>lt;sup>5</sup> v = V\* [ p/ps] where, V= bilateral exchange rate b/w rupee & dollar, p= CPI of Pakistan, Ps= CPI of US

e= E\* [p/pe] where, E= bilatetral exchange rate b/w rupee & Euro, Pe= CPI of EU

 $<sup>\</sup>alpha 2= [dM/M]/[dv/v]$ 

#### ESTIMATION TECHNIQUE

- 1. Autocorrelation is checked by D.W test, in case of existent of serial correlation double log regressions equation will be transformed into first difference regression equations. Moreover, AR (1) technique is applied on the model to fix the problem of auto correlation.
- 2. Non-stationarity has been check in series by applying ADF test.
- 3. Ordinary-Least-Square method is used to estimate the regression equations.

#### SUMMARY STATISTICS

#### TABLE 1: ESTIMATES OF IMPORTS OF PAKISTAN FROM US & EU

Dependant Variab	le: Pak Imports	Obs = 20		
Variable	Coefficient	t-Statistic		
C	-6.958515 <sup>®</sup>	-1.171385		
LOG(EEE)	0.083718 <sup>®</sup>	0.486751		
LOG(VVV)	-0.559521 <sup>®</sup>	-1.009115		
LOG(PAKGDP)	1.510538 <sup>©</sup>	2.712539		
AR(1)	0.491323	1.933528		
R <sup>2</sup> = 0.990552	D.W = 1.979050			
Adj R <sup>2</sup> = 0.988452				
Basket peg rule	(R )=Ω(\$) + 1-Ω( €			
$\Omega = C3/(C3+C2)$	1.083718	Peg to \$ <sup>©</sup>		
1-Ω	-0.08371			

③ Significant at 1%
🙁 Insignificant
Inconclusive result

#### TABLE 2: ESTIMATES OF EXPORTS OF PAKISTAN TO EU

Dependant Variable: Pak Exports Obs =								
Variable	Coefficient	t-Statistic						
С	8.280701 <sup>©</sup>	14.86264						
LOG(EEE)	-0.364013 <sup>©©</sup>	-1.878792						
LOG(VVV)	1.062821 <sup>©</sup>	7.803024						
LOG(EUGDP)	0.005393 <sup>®</sup>	1.034842						
AR(1)	0.650626	4.311244						
$R^2 = 0.992862$	D	.W= 2.433804						
Adj R <sup>2</sup> = 0.9908	23							
Basket peg ru	le (R):	=Ω(\$) + 1-Ω( € )						
$\Omega = C3/C3 + C2$	0.635987	Peg to \$						
1-Ω	0.364013							

TABLE 3: ESTIMATES OF EXPORTS OF PAKISTAN TO US

Coefficient

-0.558988<sup>©</sup> -2.891067

1.317171<sup>©</sup> 4.310857

-0.188957<sup>®</sup> -0.182278

9.113468<sup>®</sup>

0.506351

0.441012

0.558988

Obs = 20

t-Statistic

1.086643

2.786763

D.W= 1.805068

(R)=Ω(\$) + 1-Ω(€)

Peg to basket

Dependant Variable: Pak Imports

Variable

LOG(EEE)

LOG(VVV)

AR(1)

1-Ω

LOG( USGDP )

 $R^2 = 0.990043$ 

 $Adi R^2 = 0.987831$ 

Basket peg rule  $\Omega = C3/(C3+C2)$ 

С

# Significant at 1% Significant at 10% Insignificant

Significant at 1%
Insignificant at 1%

## **ELUCIDATION OF RESULTS**

First, let interpret Pakistan's imports regression line. As expected there is a positive relationship between volume of imports and REER apply to  $\pounds$ -R. which means 1% change in REER resulted in a significant +8% change in imports quantity. While REER apply to  $\pounds$ -R shows negative impact on volume of imports depicting that, 1% change in REER brings 55% significant decline in imports quantity. So the influence of  $\pounds$ -R REER is dominant on Pakistan's import strategy. With the exclusion of effects of all independent variables, the import volume of Pakistan is estimated which is screening again a negative impact but a significant effect. The GDP of Pakistan also affects the import level and according to theoretical background of import theory, the resulted insignificant estimated value of coefficient of PAKGDP shows positive relationship between GDP & imports. The R<sup>2</sup> value of about 0.99 means that 99% of the variation in imports quantities is explained by the explanatory variables i.e. both REERs and domestic GDP. Adjusted R<sup>2</sup> states that all regressors i.e., both types of REERs & GDP volume, are 98% relevant with the imports of Pakistan. As for as serial correlation is concerned, Durban-Watson statistics previously shows positive auto-correlation in time series data but to fix the problem AR(1) technique has been applied and now there exist ignorable autocorrelation. Goodness of fit is indicated by the value of F-statistics which is quite high i.e., 471.7665. Average annual imports of Pakistan for the time period 1982-2005 is \$12.041mln. The purpose of conducting all these estimations is to solve the basket-peg rule for Pakistan's trade sector. For this reason, coefficient estimates are taken to find out the values of constant ( $\Omega$ ) for imports & exports

## www.ijrcm.org.in

volumes. Form the coefficients of REERs of import regression equation, it is concluded that Pakistan should peg rupee with \$ and it is an appropriate exchange rate regime for economy like Pakistan in order to improve external sector competitiveness. However, this result is Inconclusive.

From the table 2, the results of exports of Pakistan to EU, the elasticities of exports w.r.t. REER apply to euro-R is -0.364, suggesting that if REER appreciates by 1%, on average, the exports go down by about 36%. In addition, the exports of Pakistan are very positively responsive to REER apply to \$-R. Meaning, the strength of REER, to effecting the export quantity is 106%. The value of constant shows the quantity of exports will be \$8.28 mln if value of all stimulus variables is zero. The effect of EU GDP is positive but insignificant. If the estimates for export from US are considered then the average value of exports will be \$9.113mln by considering all predictors as zero. Nevertheless, the impact of EU GDP on exports is negative and again is insignificant. Autocorrelation in both export equations is removed by applying AR(1) technique. In both export cases, the variation explained by predictors is same i.e., 99%. Moreover, relevancies of all explanatory variables are almost 99% with the exports of Pakistan from US suggests that appropriate currency to peg from Pakistan's rupee is basket peg. Nevertheless, exports from EU suggesting opposite and favors dollar. Outcome of export from US equation are more acceptable because elasticity coefficients derived from this equation for REERs are highly significant as compare to the elasticity coefficients derived from second equation of exports from EU (table 2). But because of three different solution of basket peg rule, Pakistan' external sector is indifferent between such regimes. So the decisive way is to reject null hypopaper meaning, acception of alternative hypopaper i.e., Pakistan should continue prevailing floating regime.

## CONCLUSION AND RECOMMENDATIONS

Choice of exchange rate regime for the Pakistan's economy is perhaps the most fundamental component of trade policy. The scorecard based on outcomes derived from historical data (1982-2005), points to a strong case for an appropriate FLEX regime. Because, out of three equation's output, equation formulated for imports of Pakistan gives inconclusive result and from other two equations for exports, basket peg rule suggests dollar, to which Pakistani rupee should be pegged, but other supports euro-dollar basket for the Pakistan's exports. Taken together, the measures capturing the various regime choice considerations and outcomes of basket-peg rule do not indicate a strong case for pegging regimes for the rupee, meaning null hypopaper has been reject at standard level of significant. Under the stability criterion, estimates indicate that the prevailing floating exchange rate dominates the dollar-euro basket pegs. This conclusion reflects the fact that, for external sector of Pakistan, some of the elasticity estimates for the dollar-rupee REER & euro-rupee REER are significant and some are insignificant. Nevertheless, all three equations give different outputs.

However, it is noteworthy that the present Pakistan's situation is in contrast of basket peg or single currency peg. A basket peg with different weights may not establish a strong correlation between the Pakistan's currency and two basket currencies. While taken into account the flexible regime system, the following features stand out: Pakistan's relatively high degree of integration in global financial markets subjects it to the volatility of private capital flows and raises risks associated with operating a peg. Its relatively high dependence on cotton, which implies that Pakistan has a greater need for adjustment to commodity price shocks than more diversified economies. Moreover, real shocks have been far more important in Pakistan than nominal shocks, implying that a pegged regime would not be advantageous from a macroeconomic stabilization perspective.

Since Pakistan's external trade orientation remains relatively low by international standards, the trade gains that could be achieved via a peg are also low. Hence, economic integration factors also weigh against a peg. By contrast, evidence of concretionary effects of rupee depreciation may be a good reason to "fear floating" and adopt a peg. However, factors specific to Pakistan weaken, if not reverse, this argument. Since dollar, borrowing by the corporate sector in Pakistan remains very limited, balance-sheet effects normally associated with "Concretionary devaluation" is not likely to be present. Rather, causality more likely has been in the reverse direction—the de facto peg of the rupee was likely adjusted in response to the emergence of balance of payments pressures (reserves depletion), which often were the result of adverse supply shocks (e.g., weaker exports).

A "fear of floating" appears to have characterized Pakistan's exchange rate regime over the past 15 years. This fear was reflected in the maintenance of a de facto peg of the rupee against the dollar. The scorecard suggests, however, that this fear may have been misplaced and that a peg is not advantageous for an economy with Pakistan's features. Thus, increased exchange rate flexibility is likely to improve Pakistan's economic competitiveness.

#### POLICY RECOMMENDATIONS

A few qualifications to the analysis should be noted. First, the literature generally considers the relative advantages of fixed and flexible regimes without explicitly dealing with "nearly fixed" regimes. Some of the conclusions about fixed regimes may or may not be valid for nearly fixed regimes and should therefore be interpreted with caution. Second, the analysis for the most part takes as given that macroeconomic policies needed to support the chosen regime are in place, and methods to assess the sustainability of a particular regime are not covered. Regime choice would clearly be of limited importance in improving economic competitiveness if policies are not sustainable. Third, the assessment of the efficacy of a fixed or flexible regime under a particular criterion may well depend on the sample period over which the relevant indicator is measured. Fourth, different analytical considerations could well point in different directions in terms of whether or not a given country should peg. Weighing the importance of each consideration will depend on country-specific circumstances, which invariably introduces some subjectivity to the analysis.

In many respects, similar policies are needed to sustain any regime, especially if freely falling currencies are regarded as a non-regime. The fact that some factors may suggest that a fixed exchange rate regime is advantageous in a particular country, while other factors may suggest that a fixed regime is inappropriate, is in line with the empirical finding that no single factor consistently explains actual regime choice across a wide group of countries. With respect to the effectiveness of traditional exchange rate policies and intervention strategies, "the effectiveness of peg regime and suggestions to peg the rupee with dollar or euro depends crucially on the circumstances in which they are employed." Factors that are cited included the exchange rates, the role of REERs, and coordination and cooperation on GDPs. Furthermore, the effectiveness of exchange market intervention "under any type of exchange rate arrangement" depends on "whether market participants perceive that existing exchange rates are reasonably consistent with macroeconomic fundamentals external sector considerations, and whether the commitment of policy authorities to fix exchange rate is credible." Moreover, for a pegged exchange rate system involving strong commitments to avoiding realignments, "Convergent trade policies and competitiveness are necessary to avoid exchange rate adjustments on a more durable basis. . . . Timely adjustment [of parities] may involve lower economic costs and a smaller erosion of political credibility than attempting to resist adjustment for as long as possible. . . . The policy implication, accordingly, is that the degree of resistance to exchange rate adjustment should be kept consistent with the degree of convergence in external sector competitiveness."

#### REFERENCES

Abed G. T., S. N. Erbas, and Guerami (2003), "The GCC Monetary Union: Some Considerations for the Exchange Rate Regime," IMF Working paper, No. 03/66 (Washington: International Monetary Fund)

Aftab Z. and Aurangzeb (2002), "The Long-run and Short-run Impact of Exchange Rate Devaluation on Pakistan's Trade Competitiveness", The Pakistan Development Review, Vol. 41, No. 3

Afzal M. (2005), "Estimating Long Run Trade Elasticities in Pakistan-Cointegration Approach", The Pakistan Development Review, D. I. Khan: Gomal University

Ahmed M. (1992), "Pakistan's Exchange Rate Policy: An Econometric Investigation", The Pakistan Development Review, Vol. 31, No. 1

Ahmed, Eatzaz, and S. A. Ahmed (1999), "Exchange Rate and Inflation Dynamics", The Pakistan Development Review, 38:3 235-251

Akhtar S. M. (1978), Modern Economics, Publishers United Limited, vol. 2, PP. 257-291

*Alam*, Shaista, M. S. Butt, and A. Iqbal (2001), "The Long-Run Relationship Between real exchange Rate and Real Interest in Asian Countries: An Application of Panal Co-integration", *The Pakistan Development Review*, 31:1

INTERNATIONAL JOURNAL OF RESEARCH IN COMMERCE, ECONOMICS & MANAGEMENT A Monthly Double-Blind Peer Reviewed Refereed Open Access International e-Journal - Included in the International Serial Directories WWW.ijrcm.org.in Arize A. C. (1997), "Conditional exchange rate Volatility and the Volume of International Trade: Evidence from seven Industrial Countries", Southern Economic Journal, Vol. 64, No. 1

Asteriou D. (1973), Applied econometrics: a Modern approach Using Eviews and microfit, library of Congress Cataloging-in-Publication Data, British

Bhattacharya R. (2003), "Exchange Rate Regime Considerations for Jordan and Lebanon", IMF Working Paper, No. 03/137 (Washington: International Monetary Fund)

Bordo M. D. et. al (2004), "Exchange Rate Regimes, Past, Present, and Future", IMF Working Paper, (Washington: International Monetary Fund)

Boughton, "Exchange Rate Movements and Adjustment in Financial Markets: Quarterly Estimates for Major Currencies", staff papers, International Monetary Fund (Washington), Vol.31 (September 1984)

Broda C. (2001), "Coping with Terms of trade Shocks; Pegs VS Floats", The American Economic Review, Vol. 191, No. 2, PP. 376-380

Broll U. and B. Eckwert (1999), "Exchange Rate Volatility and International Trade", Southern Economic Journal, Vol. 66, No. 1, PP. 178-185

Bubula A. and Otker-Robe (2003), "Are Pegged and Intermediate Exchange Rate Regimes More Crisis Prone?" IMF Working Paper, No. 03/ 223 (Washington: International Monetary Fund)

Calvo et. al, (2000), "Fear of Floating", University of Maryiend

*Catao* L. and S. Solomou (2002), "Exchange rates in the Periphery and International Adjustment under The Gold Standard", IMF Working Paper, No. 03/ 41 (Washington: International Monetary Fund)

Caves R. E (1963), "Flexible Exchange Rates", The American Economic Review, Vol. 53, No.2, PP. 120-129

Corder W. M. (1993), "Excahnge Rate Policies for Developing Countries", The Economic Journal, Vol. 103, No. 416, PP. 198-207

Dellas H. and B. Zillberfarb (1993), "real exchange Rate Volatility and International Trade: A Reexamination of the Theory", Southern Economic Journal, Vol. 59, No. 4, PP. 641-647

Drabek Z. and J. C Brada., "Exchange Rate Regime and the Stability of Trade Policy in Transition Economies", Arizona State University, AZ 85287-3806

*Edwards* M. and M. A. Savasteno (1999), "Exchange Rates in Emerging Economies: What Do we Know? What Do we Need To Know?" NBER Working Paper, No. 7228, Jel No. F31, F33, F41

Edwin M. Trumen (2002), "Economic Policy and Exchange Rates Regimes: What have we learned in the Ten Years Since black Wednesday?" Institute for International Economics, (England: London)

Flanders M. J. and E. Helpman (1978), "Exchange Rate Policies for a Small Country":, The Economic Journal

*Flood*, Bhandari, and Jocelyn P. Home, "Evolution of Exchange Rate Regimes", *staff papers*, International Monetary Fund (Washington), Vol.36 (September 1984) *Genberg* H. and A. K. Swoboda. (2005), "Exchange Rate Regimes: Does What Countries Say Matter?" *staff papers*, International Monetary Fund (Washington), Vol.52

Ghosh A. and A. M. gulde (2002), Exchange Rate Regimes: Classifications and Consequences, BMW Centre for German and European Studies

Gujrati D. N. (2003), Basic Econometrics, McGraw-Hill Companies, New York, U.S.A

Helpman E. and A. Razin (1779), "Towards a Consistent Comparison of Alternative Exchange Rate Systems", The Canadian Journal of Economics, Vol. 12, No. 3, PP. 394-409

Hussain A. M (2005), "Choosing Right Exchange Rate Regime", The Pakistan Development Review

Hussain A. M (2006), "To Peg or Not To Peg: A Template for Assessing the Nobler", IMF Working Papers, (IMF: Middle East and Central Asia Department)

International Monetary Fund, Direction of Trade Statistics, International Monetary Fund, Washington D. C International Monetary Fund, International Financial Statistics, International Monetary Fund, Washington D. C

International Monetary Fund, Morld Bank Outlook Database, International Monetary Fund, Washington D. C, April 2004

Jbili A. and V Kramarenko (2003), "Choosing the Exchange Rate in the Middle East and North Africa", IMF Working Papers, (Washington: International Monetary Fund)

Jbili A. and V. K. Renko (2003), "Should MENA Countries Float or Peg?" IMF Magazine, Vol. 40, No.1

Kemal M. A. (2005), Exchange Rate Instability and Trade: The Case of Pakistan, Pakistan Institute of development Economics, Islamabad, Pakistan

Khan M. S. (1986), "Exchange Rate policies of Developing Countries in the Context of External Shocks", The Pakistan Development Review 25:3

Laider D. P. (1988), "What Remains of the Case for Flexible Exchange Rates?" The Pakistan Development Review 27:4

Levy-YeYati E. and F. Sturzenegger (2001), "Exchange Rate Regimes and Economic Competitiveness", staff papers, International Monetary Fund (Washington), Vol.47

Lopez-Cordova J. E. and C. M. Meissner (2003), "Exchange Rate Regime and International Trade: Evidence from Classical Gold Standard Era", The American Economic review, Vol. 93, No. 1

*Macdonald* M. R. (1954), "Multiple Exchange Rates; An Instrument for Improving Foreign Trade Balances", The Journal of Finance, Vol. 9, No. 3, pp. 310-311 *Montiel*, and J. D. Ostry (1991), "Macroeconomic Implications of real exchange Rate Targeting in Developing Countries", *staff papers*, International Monetary Fund (Washington), Vol. 38

*Mustafa* K. and M. Nishat (2005), "Volatility of Exchange Rate and Export Growth in Pakistan: The Structure and Interdependence in Regional Markets", paper presented at the 20<sup>th</sup> Annual General Meeting and Conference of Pakistan Society of Development Economics, 10<sup>th</sup> - 12<sup>th</sup> January, Islamabad, Pakistan

Rajan R. S (2000), "Examining the Case for currency Basket Regimes for Stoutest Asia", ISEAS Visiting Research Series, No.1, ISSN 0219-3582

Rasheed F. and J. A. Ansari (2005),"A Search for an Optimum Currency Area Partners for Pakistan", The Pakistan Development Review. Karachi: PAF-Karachi Institute of Economics and Technology

Rogoff K. S. et. al (2003), "Evolution and Competitiveness of Exchange Rate Regimes", IMF Working Paper, No. 03/ 243 (Research Department)

Siddiqui R. and N. Akhtar (1999), "The Impact of Changes in Exchange Rate on Prices: A Case Study of Pakistan", The Pakistan Development Review 38:4 1059-1066

Sun Y. (2002), " A Political-Economic model of the Choice of Exchange Rate Regime", IMF Working Papers, No. 02/212, (Washington: International Monetary Fund)

Tuesta P. R. V (2005), "Euro-Dollar Real Exchange Rate Dynamics in an Estimated Two-Currency Model: What is Important and What is not?" IMF Banco Central De Reserva Del Peru

Wang K. L. and C. B. Barrett (2002), A New Look at the Trade Volume Effects of Real Exchange Rate, unpublished paper, Department of Applied Economics and Management, Cornell University, New York, U.S.A

Wickham (1985), "The Choice of Exchange rate Regime in Developing Countries", staff papers, International Monetary Fund (Washington), Vol. 32

*Wickham* (2002), "Do Flexible exchange Rates of Developing Countries Behave Like the floating exchange Rates of Industrialized Countries?" IMF Working Papers, No. 02/82(Washington: International Monetary Fund)

Williamson J. (2000), "Designing a Middle Way between Fixed & Flexible exchange Rates", Institute for International Economies, No. 19-20

Wolf T. (1985), "Exchange Rate Systems and adjustment in Planned Economies", staff papers, International Monetary Fund (Washington), Vol. 32

## WOMEN ENTREPRENEURS IN INDIA: OPPORTUNITIES AND CHALLENGES

ANIL KUMAR .S. HAGARGI FACULTY MEMBER & RESEARCH SCHOLAR DEPARTMENT OF MANAGEMENT STUDIES & RESEARCH GULBARGA UNIVERSITY GULBARGA

## DR. RAJNALKAR LAXMAN HEAD, DEPARTMENT OF COMMERCE DEAN, SCHOOL OF BUSINESS STUDIES CENTRAL UNIVERSITY OF KARNATAKA GULBARGA

## ABSTRACT

India is land of more than 100crores population it is considered as nation with rich human resource. The core strength of India is its man power, which is inbound strength. Out of 1 billion population, the strength of women is almost half of it. If India wants to achieve the Vision 2020 given by Dr. A.P.J. Abdul Kalam, former President of India, if India wants to be a super power & a nation to reckon with on the global map it needs to create equal opportunities to its largest strength-Human resource. No country can dream of becoming developed nation where half of its population is deprived of opportunity. No country can think of becoming an economic super power, where half of its population is idle and not contributing anything to the growth of a country. As a country we have to offer equal opportunity for overall development & growth. It should be an inclusive growth rather than a growth subjected to one gender, one race or sect. If growth of a nation has to be sustainable, than it should be inclusive growth otherwise it would not be possible to sustain growth for a long period.

#### **KEYWORDS**

Women Entrepreneur, Economic power.

## INTRODUCTION

n entrepreneur is an important input of economic development. He is catalyst of development: with him we prosper, without him we are poor. The entrepreneurs the world's wisest minds who leave an indelible mark in the history of mankind. They make it possible through their action, and not through words. They do things in a completely new way. They think beyond obvious. They go deeper. They think from different perspective and angels. The characteristics of entrepreneurs are his hunger to learn, to work and to succeed. They have always some thing to learn. They keep learning because they enjoy the challenges.

The word entrepreneur is derived from French word "Entreprendre" which means to "Undertake"- i.e. the person who undertakes the risk of new enterprise. In many countries the entrepreneurs is often associated with the person who starts his own, new and small business. Business encompasses manufacturing, transport, trade and other self employed vocations in the service sector.

Women entrepreneurs have been making a significant impact in all segments of the economy in India, The areas chosen by women are retail trade, restaurants, hotels, education, cultural, cleaning, insurance and manufacturing.

Women Entrepreneurs may be defined as the women or a group of women who initiate, organize and operate a business enterprise. Government of India has defined women entrepreneurs as an enterprise owned and controlled by a women having a minimum financial interest of 51% of the capital and giving at least 51% of employment generated in the enterprise to women. Unlike his male counterpart women entrepreneur has to encounter many problems. 'Women Entrepreneur' is a person who accepts challenging role to meet her personal needs and become economically independent. A strong desire to do something positive is an inbuilt quality of entrepreneurial women, who is capable of contributing values in both family and social life. With the advent of media, women are aware of their own traits, rights and also the work situation. She has to overcome economic, financial, socio-psychological, marketing challenges and lastly family responsibilities. To prove her self and to achieve her goal in life, she has to cross many barriers. The paper throws some light on women entrepreneurship in India, what are challenges they face and some suggestions to overcome those challenges.

## SEGMENTS OF WOMEN ENTREPRENEURS

Four segments of women entrepreneurs exist:

- 1. Self- help groups: Those who are well served and mentored by microfinance institutions. Women making use of funds issued by microfinance corporation for starting up of their business. It is a village-based financial intermediary usually composed of between 10-20 local women. Most self-help groups are located in India.
- 2. Grass root entrepreneurs: Those who are driven by a need to augment the family's finances especially to secure their children's future- tailors, flower sellers, STD booth owners etc. With turnover aspirations of 5laksh a year, they are very work focused as they can see any increase in their earning as directly impacting their children's lives. They are hungry for formal skill and training and can clearly articulate what they want to learn that will help them to ear more. Domestic family support, financial support and better infrastructure and mechanization is what they ask for.
- 3. Mid-rug entrepreneurs: They are driven by the need to build reputation, become known, improve quality and satisfy creative instincts. Mostly graduates they typically have garment shops, poultry farms, export business etc. With the turnover aspirations of Rs.50L to1cr. Fairly well supported by the family, their biggest challenge is how to take their business to next level.
- 4. Upper Crest: Drawn from the top most social class, very well educate with their business like export houses, travel agencies, traders in pharmaceuticals, often adjuncts to their husbands business. They aspire a turnover of more than 5crs.

#### **QUALITIES OF AN ENTREPRENEUR (IRRESPECTIVE OF GENDER)**

According to a recent study, it was found that possession of certain competencies or abilities result in superior performance. An entrepreneur may possess certain competencies and at the same time it is possible to develop these through training, experience and guidance. The competencies required for superior performances are:

1. Initiative: It is an inner urge in an individual to do or initiate something. There is popular saying "well begun is half done". Entrepreneur is basically an innovator who carries out new combinations to initiate and accelerate the process of economic development.

## www.ijrcm.org.in

#### VOLUME NO. 1 (2011), ISSUE NO. 7 (NOVEMBER)

- 2. **Proper Planning:** Successful people make effective forecasting and proper planning by taking in to priorities to be achieved at an earliest. They believe in developing relevant and realistic plans for the attainment of their goals.
- 3. Looking for Opportunity: An entrepreneur is always on the look out or searching for opportunity and is ready of exploit it in the best interest of the organization.
- 4. **Problem Solver:** Successful entrepreneurs take problems as challenges and put in their best for finding out the most appropriate solution for the same. They first try to understand the problem and than design a strategy to overcome the problem.
- 5. Persistence: An entrepreneur is never disheartened by failures. He or she is the person who has got the attitude of "never die"
- 6. **Commitment to work and Efficiency**: Successful entrepreneurs are prepared to make all sacrifices for honoring the commitments they have made. What ever they commit they take it as moral binding for honoring their commitments. They are keen to devise new methods aims at improving efficiency.
- 7. Self Confident: Top performers are not deterred by difficulties as they believe in their own abilities and strengths. They have full faith on their knowledge, skill and competence and ware not worried about future uncertainties.
- 8. Assertive: An assertive person knows what to say, when to say, how to say and whom to say. He believes in his abilities and ensures that others fall in line with his thinking aimed at promoting the interests of the organization.
- 9. **Persuasive:** A successful entrepreneur through his sound arguments and logical reasoning is in a position to convince other to do the work the way he wants them to do. It is not physical but intellectual force he will use to convince others.
- 10. Effective Strategist: A successful entrepreneur possesses the ability to evolve relevant strategy aimed at safeguarding or promoting organizations interest. Strategy may be with respect to facing future uncertainties or challenges posed by competitors.

#### WOMEN ENTREPRENEURSHIP IN INDIA

State wise number of companies registered and next column show, the companies headed by women entrepreneurs.

States		No. of Women Entrepreneurs	Percentage
Tamil Nadu	9618	2930	30.36
Uttar Pradesh	7980	3180	39.84
Kerala	5487	2135	38.91
Punjab	4791	1618	3 <mark>3.77</mark>
Maharastra	4339	1394	32 <mark>.1</mark> 2
Gujrat	3872	1538	39.72
Karnatka	3822	1026	26.84
Madhya Pradesh	2967	842	28.38
Other States & UT	S 14576	4185	28.71
Total	57,452	18,848	32.82

(Source: Business line)

Analysis: The above table shows state wise Data of units registered & No of Women entrepreneurs in a particular state in India

## WOMEN WORK PARTICIPATION: COUNTRY WISE WOMEN WORK PARTICIPATION

Country		Per	centage
India (1970	-1971)	14.2	2
India (1980	-1981)	19.7	7
India (1990	-1991)	22.3	3
India (2000	-2001)	31.6	5
USA		45	
UK		43	
Indonesia		40	
<mark>Sri</mark> Lanka		35	
Brazil		35	
1-			

(Source: Business line)

Analysis: It is found from the above atble that 31.6% of Indian women are taking part in the work from the data recorded as per the year 2000-2001.

## **PROBLEMS FACED BY WOMEN ENTREPRENEURS**

Life for a woman entrepreneur is not a bed of roses. The individual woman entrepreneur single-handedly faces a plethora of seemingly endless problems. **1** Problems of socio-personal

Women, especially in our country, face certain problem, which are different from their male counterparts, in the course of starting and managing their own businesses. The management of domestic commitments and child care support are the two issues where women have to play a greater role.

#### 2. Problems of Marketing

Marketing is another area, which very often proves to be the graveyard of many small-scale women entrepreneurs. It has been found that the small-scale entrepreneurs, owing to their high achievement of market orientation, generally set higher goals in terms of marketing of their products/ services but later on find them difficult to achieve because of stiff competition, incurring huge advertisement cost and many other extraneous factors.

#### 3. Problems of Occupational Mobility

Occupational mobility, such as shifting from one product line to another is an area where women entrepreneurs are generally found to be more at a disadvantageous position than their male counterparts. This is found as weakness of women enteprenuers.

#### 4. Problems of Government Assistance

The women entrepreneurs were exasperated by the indifferent attitude of government officials of all the small industry related departments like taxation, labour, power, etc. i.e. when the authorities come to know that the unit is being run by a woman, they discourage allotting sales tax number and giving electricity connection. Above all they have ignorance about various procedures, laws, and complicated bureaucratic set-up while dealing with entrepreneurial support organizations.

#### 5. Problems of Finance

Typically women entrepreneurs of small scale enterprises start well but some where in the middle of their day-to-day operations they miss or deviate from the route to success. More than half of the cases were identified as mismanagement of finance led to closure of the venture. Financial support as well as financial viability, therefore, is the most important considerations of any business proposition.

#### 6. Problems of Production

Production in a manufacturing enterprise involves coordination of a number of activities. While some of these activities are in the control of entrepreneur there are others over which she has little control. Improper coordination or unintended delay in execution of any activity is going to cause production problems in the industry.

## 7. HR related Problems

Growth & prosper of any business depends on efficient management of people is an important factor. This is particularly true in case of small industry where the owners have to forge a close and more personal association with their employees. The women entrepreneurs also expressed their inability to change the negative attitude of labour force while some of them complained of unionism amongst them. Moreover the women entrepreneurs admitted the lack of experience and self-confidence on their part to deal with personnel working in their organizations.

## SOME OF OUTSTANDING QUALITIES OF WOMEN ENTREPRENUERS

Women entreprenuers possess some of the qualities such as they are very good at accepting challenges & achieving it, they are more ambitious and forward looking & self driven force to reckon. They are enthusiastic, hard working and work as motivator for others & help others to take initiative & lead by an example. Compared to earlier days the literacy rate among the women is increasing, they are more optimistic & skillful to tackle situation & solve the problems of entreprise. They are very keen to laern new ides & try to innovate in the entreprise vto survive in highly dominated competation. They are more consious that what they are doing & why? They are highly determined to excel & achieve the goal which is set for the entreprise.

## RANKS OF BUSINESS OPPORTUNITIES FOR WOMEN ENTREPRENEURS

Area	Rank	
Cosmetics and Beauty Parlors	01	
Garments and Textile Items	02	
Education and Training	03	
Interior Decoration	04	
Nursery and Creches	05	
Handicrafts	06	
3P's (Pickles, Powder [spices] and Papad)	07	
Consultancy Services	08	
Medicare (Medical and Paramedical)	09	
Engineering Goods	10	

## MEASURES TAKE TO ENCOURAGE WOMEN ENTREPRENEURSHIP

- a. Direct & indirect financial support
- b. Yojnas and programmes
- c. Technological training and awards
- d. Federations and associations
- a. Direct & Indirect Financial SupportNationalized banks
- State finance corporation
- State industrial development corporation
- District industries centers
- Differential rate schemes
- Mahila Udyug Needhi scheme
- Small Industries Development Bank of India (SIDBI)
- State Small Industrial Development Corporations (SSIDCs)
- b. Yojna Schemes and Programme
- Nehru Rojgar Yojna
- Jacamar Rojgar Yojna
- TRYSEM
- DWACRA
- c. Technological Training and Awards
- Stree Shakti Package by SBI
- Entrepreneurship Development Institute of India
- Trade Related Entrepreneurship Assistance and Development (TREAD)
- National Institute of Small Business Extension Training (NSIBET)
- d. Federations and Associations
- National Alliance of Young Entrepreneurs (NAYE)
- India Council of Women Entrepreneurs, New Delhi
- Self Employed Women's Association (SEWA)
- Association of Women Entrepreneurs of Karnataka (AWEK)
- World Association of Women Entrepreneurs (WAWE)
- Associated Country Women of the World (ACWW)

## SUGGESTIONS FOR DEVELOPMENT OF WOMEN ENTREPRENEURS

\* Right efforts on from all areas are required in the development in the development of women entrepreneurs and the participation in the entrepreneurial activities. Following efforts can be taken in to account for effective development of women Entrepreneurs.

- \* Govt. should provide separate financial fund of women's entrepreneur.
- \* We should provide her special infrastructure facilities what ever she deeds.
- \* Govt. should arrange special training programmes of women entrepreneurship
- \* Govt. should felicitated top ranker women's entrepreneur.
- \* Women entrepreneur should more competitive and efficient in the local & international market.
- \* Use should invite successful women entrepreneurs from foreign countriesrn resulting in the economic development of the country.
- \* Consider women as specific target group for all the developmental activities.
- \* Better educational facilities and schemes should be extended to women folk from government.

## INTERNATIONAL JOURNAL OF RESEARCH IN COMMERCE, ECONOMICS & MANAGEMENT A Monthly Double-Blind Peer Reviewed Refereed Open Access International e-Journal - Included in the International Serial Directories

## www.ijrcm.org.in

- \* Adequate training programme on management skills to be provided to women community.
- \* Encourage women participation in the decision making.
- \* Vocational training to be extended to women community that enables them to understand the production process and production Management.
- \* Skill development to be done in women polytechnics and ITI's.
- \* Training on professional competence and leadership skills to be extended to women Entrepreneurs.
- \* Training and counseling on a large scale of existing women Entrepreneurs to remove psychological causes like lack of self confidence and fear of success.
- \* Continuous monitoring and improvement of training programmes.
- \* Industrial Estates could also provide marketing outlets for the display and sale of products made by women Entrepreneur.
- \* Repeated gender sensitization programmes should be held to train financiers to treat women dignity and respect as persons in their own Right.
- \* Training in entrepreneurial attitudes should start at the high school level through well design courses, which build confidence through behavioral games.
- \* More governmental schemes to motivate women entrepreneurs to engage in small scale and small scale business ventures.
- \* District Industries Centers and single window agencies should make use of assisting women trade and business guidance. \* Involvement of Non governmental Organization in women entrepreneurial Training Programmes and counseling.

\* Empowering women entrepreneurs is essential for achieving the goals of sustainable development and the bottlenecks hindering their growth must be eradicated to entitle full participation in the business.

#### SUCCESSFUL WOMEN ENTREPRENEURS OF INDIA

7 ladies started in 1959: Mahila Grih Udyog – Lizzat Pappad Simon Tata - Lakme Mrs. Sumati Morarji - Shipping corporation Ms. Nina Mehrotra - Exports Ms. Shahnaz Hussain - Herbal Heritage Kiran Mazumdar - Bio-technology Priya Paul - Apeejay Surrendra Group Mrs. Vidhya manohar Chabria - Jumbo Group Sulajja Firodia Motwani - Kinetic Motor

## CONCLUSION

Liberty of India has brought promise of equal opportunity in all spheres to the Indian women and law guaranteeing for their equal rights of participation in political process and equal opportunities and rights in education and employment were enacted. But unfortunately, the government sponsored development activities have benefited only a small section of women. The large majority of them are still unaffected by change and development activities have benefited only a small section of women. The large majority of them are still unaffected by change and development. We hope that the suggestions forwarded in the article will help the entrepreneurs in particular and policy-planners in general to look into this problem and develop better schemes, development programmes and opportunities to the women folk to enter into more entrepreneurial ventures. The overall development of the nation depends on the contribution of women at large; any nation cannot develop without women.

## REFERENCES

- 1. Mahanty Sangram Keshari Fundamentals of Entrepreneurship Prentice Hall of India
- 2. Desai Vasant- Dynamics of Entrepreneurial development and Management-Himalaya publishing house.
- 3. Udyogini www.udyogini.org
- 4. Dhameja S K (2002), Women Entrepreneurs : Opportunities, performance, problems, Deep publications (p) Ltd, New Delhi, p 11
- 5. The Hindu: Business line



## ENTREPRENEURSHIP DEVELOPMENT – A CASE STUDY OF A VILLAGE IN YSR DISTRICT

DR. G. VIJAYA BHARATHI ASST. PROFESSOR **DEPARTMENT OF COMMERCE Y.V.UNIVERSITY** KADAPA

> C. SIVARAMI REDDY REGISTRAR **Y.V.UNIVERSITY** KADAPA

DR. P. MOHAN REDDY PROFESSOR **DEPARTMENT OF COMMERCE** S.V.UNIVERSITY TIRUPATI

P. HARINATHA REDDY ACADEMIC CONSULTANT DEPARTMENT OF COMMERCE Y.V.UNIVERSITY KADAPA

#### ABSTRACT

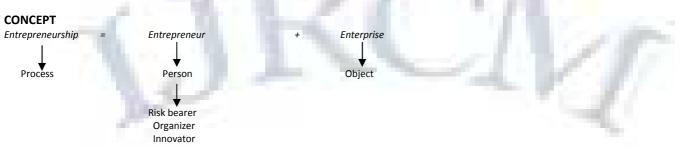
Every country tries to achieve maximum economic development. The economic development of a country to a large extent depends on human resources. But human resources alone will not produce economic development — there must be dynamic entrepreneurs. Entrepreneurs perform vital functions in economic development. Entrepreneurship plays a premium mobile role in industrial development. Industrial development through the medium of small scale units is initiated and nurtured by entrepreneurship. Entrepreneurship influences the process of industrialization. Government therefore is providing much thrust to entrepreneurship to generate employment. Hence, the present study is an attempt to know the socio economic conditions, factors influencing entrepreneurship, and the problems faced by the entrepreneurs in developing their enterprises particularly in Krishnapuram Village, Kadapa, YSR district.

## **KEYWORDS**

Entrepreneurship Development, Economic Development, YSR District.

## INTRODUCATION

evelopment of entrepreneurship is a crucial factor for the development of a nation. In our country, entrepreneurship movement is gathering momentum, now-a-days and a plethora of support agencies are coming forward to drive the movement a long way for success. A high sense of responsibility is an essential ingredient for development of entrepreneurship in India. Every country tries to achieve maximum economic development. The economic development of a country to a large extend depends on human resources. But human resources alone will not produce economic development, there must be dynamic entrepreneurs. Entrepreneurs perform vital functions in economic development. They have been referred to as the human agents needed to mobilize capital, to exploit natural resources, to create markets and to carry on trade. They have been referred to as the human agents needed to mobilize capital, to exploit natural resources, to create markets and to carry on trade.



Entrepreneurship is an economic activity that emerges and functions in socio- economic and cultural settings. Entrepreneurship is the process of identifying opportunities in the market place, marshalling the resources required to pursue these opportunities and investing the resources to exploit the opportunities for long term gains. It involves creating wealth by bringing together the resources in new ways to start and operate an enterprise.

An Entrepreneur is very often considered as a person, who sets up his own business or Industry. Entrepreneurship is the purposeful activity of an individual or a group of associated individuals undertaken to initiate, maintain or aggrandize profit by production or distribution of economic goods and services. It is a mental attitude to take calculated risks with a view to attaining certain objectives. It also means doing something in a new and better manner.

Entrepreneurship plays a premium mobile role in industrial development. Hence, the Government is giving so much thrust to entrepreneurship than in the place of employment. India is a country of young people. Neither government nor the existing industries can create jobs to accommodate all the young people. Entrepreneurship generates many job opportunities. The entrepreneurship does not require job specific education. Entrepreneurship has now emerged as a

INTERNATIONAL JOURNAL OF RESEARCH IN COMMERCE, ECONOMICS & MANAGEMENT 54 A Monthly Double-Blind Peer Reviewed Refereed Open Access International e-Journal - Included in the International Serial Directories

## www.ijrcm.org.in

profession and by heritage and culture also. For example, kirana shops by settiyars, pot makers by kummari, barbar shops by mangali, cloth making or weaving by weavers and gold shops by gold smiths in padmsali etc..

## FACTORS INFLUENCING ENTREPRENEURSHIP DEVELOPMENT

Entrepreneurship *does not emerge and develop automatically and spontaneously.* Its emergence and development depends upon the supporting conditions. They are economic and non-economic and also government actions. The following are the factors influencing entrepreneurship development:

#### IN GENERAL Economic

- Capital, labour, raw-material and market.
- Non-economic Cultural, social and psychological factors.
  - Industrial policy, infrastructure facilities, financial support, entrepreneurship development programmes and the like.

# Government

Various factors like one's education and experience, availability of facilities, family conditions, environmental conditions, political conditions, financial conditions etc., influences the entrepreneurs to move from one occupation to another, from one location to another, from local to regional, and from national to international arena. The factors that contributed for the growth of entrepreneurship are as follows:

- Through inheritance from their fore fathers of the family
- Through encouragement from their family and friends
- Insufficient annual income of earlier occupation
- The nature and size of the family
- Observation of profitability of other entrepreneurs
- Joint family system is supportive than individual system to start an enterprise.
- Compulsion in family situations
- Creating of awareness through EDPs
- Accessibility of various government policies and infrastructure facilities related to encourage entrepreneurship
- Favourable Institutional support provided by the financial institutions
- Professional and technical skills through their higher education.
- Own interest and specialization in a particular field.

## FINANCIAL & INSTITUTIONAL SUPPORT TO DEVELOP ENTREPRENEURSHIP

Entrepreneurship emerges through financial assistance also. Finance is compared as the life blood and is very important but not a magic wand to run as an enterprise. Government has set up a number of *financial institutions- both at Central and State level* – to provide variety of financial assistance such as term finance, refinance, working capital finance, under writing , equipment leasing ,venture capital, asset credit, merchant banking, export finance etc,. required by the Entrepreneurs to run and boost us their units through commercial banks, IDBI, IFCI, ICICI, IRBI, LIC, UTI, SFC's, SIDD's, SIDBI, EXIM Bank, and the like.

"Developing a small enterprise is like rearing up a small baby". Hence, small enterprises need protection, development and promotion for their growth. The development of small scale industries contributes to the increase in per capita income i.e., economic development in various ways. It generates immediate employment opportunities with relatively low capital, promotes more equitable distribution of national income makes effective mobilization of untapped capital and human skills, leading to growth of villages, small towns, and economically lagging regions. This promotes to balanced regional development.

The Government of India has given small enterprise an important place in the framework of Indian economic planning for ideological as well as economic reasons. In common sense, increase in number of small enterprises means increase in the number of persons assuming the entrepreneurial career. In pursuance of the Government of India's new small scale enterprise policy titled "policy measures for promoting and strengthening small, tiny and village enterprises. Thus, small scale enterprises serve as seed-bed for the emergence of entrepreneurship in the country. Hence, more the small enterprise development, greater the opportunities for entrepreneurial career and vice-versa.

Industrialization has become an important part in the development of developing countries. Industrial development through the medium of small scale units is initiated and nurtured by entrepreneurship. Entrepreneurship influences the process of industrialization. Hence the present study is an attempt to study the factors influencing Entrepreneurship in Krishnapuram Village in YSR district.

#### OBJECTIVES

- 1. To study the socio economic conditions of Entrepreneurs.
- 2. To study the problems faced by Entrepreneurs.
- 3. To study the factors influencing Entrepreneurship.
- 4. To suggest suitable measures for Entrepreneurship development.

#### **RESEARCH METHODOLOGY**

The study is confined to the entrepreneurs in Krishnapuram village, Kadapa Y.S.R. District under the concept of Entrepreneurship development. The study is an attempt relating to the entrepreneurs of this village in view of the opportunities to the people to start enterprises and to gain employment because of the rich educational institutional and industrial support. Hence, this village is set up for the study. In order to study the impact of entrepreneurship development the primary data was collected through interview method from the entrepreneurs available in the village. Totally 40 respondents have been selected in study area out of 2000 population.

Before taking up entrepreneurship, some of them were worked as labour in the near by industries and the remaining were involved in agriculture. But now with the extensive support of the government in providing and designing proper financial assistance, programmes and schemes, profitable economic policies and these villages leaned towards entrepreneurship. Now they create and provide employment to others also which in turn increases the standard of living of the people in the village.

#### DATA ANALYSIS

In order to understand the socio-economic status of the members, the data regarding age, education, occupation, economic activities, annual income etc. were collected and analyzed in table - & table-2.

## SOCIO-ECONOMIC PROFILE OF THE RESPONDENTS

Table-1 indicates that majority of the respondent's belonged to backward community (53 per cent) and 27 per cent from open category. The respondents from Muslim, SC & ST, and OBC constituted 20 per cent of the aggregate 40 respondents. Of 40 respondents, 70 per cent of the respondents are in the age group of 21-40 years and 25 per cent of the respondents in the age group of 41-60 years and the rest of 5 per cent in the age group of 0-20 years. With

## TABLE 1: CASTE, AGE GROUP AND LITERACY LEVEL OF THE RESPONDENTS

1) Caste/ Commun	ityNumber of Responde	ntsPercentage to Tota
Open category	11	27
Muslim	04	10
ОВС	01	03
SC & ST	03	07
BC	21	53
Total	40	100
2) Age Group		
0-20	02	05
21-40	28	70
41-60	10	25
61 and above	-	-
Total	40	100
3) Literacy Level		
Below Primary	11	27
Secondary	14	35
Under graduate	06	15
Graduate	07	18
Post graduate	02	05
Total	40	100

regard to the literacy level of the respondents, more than 77 per cent completed their education up to 12th standard and 23 per cent had higher qualifications. This indicates that education of entrepreneurs is not a priority in the development of entrepreneurship. Majority of sample entrepreneurs have entered into business due to responsibility of running their families at early stages of education and unemployment. It is noted that entrepreneurs from all strata of the society, irrespective of caste, age and literacy are attracted towards entrepreneurship.

#### TABLE 2: OCCUPATION AND INCOME-WISE DISTRIBUTION OF THE RESPONDENTS

A) Occupation	No. of the Respondent	sPercentage to total 40
Weaving	06	15
Hotels & Tiffen centers	08	20
Tailoring	02	05
Cool drink shop	03	07
Transport	09	23
Small Kirana Shop	04	10
Others	08	20
Total	40	100
B) Scale of Income (in Re	)	
0-25000	-	
25000-50000	08	20
50000-75000	20	50
75000-100000	02	05
More than 100000	10	25
Total	40	100
Source:- Field survev	·	•

Table-2 is given to show the income levels of respondents. It is observed that majority of the respondents i.e., 50 per cent had earnings up to Rs.75000, 25 per cent had more than Rs.100000, 20 per cent up to Rs.50000 and 5 per cent had up to Rs.100000. Hence it is identified the income levels of select respondents by and large is sizeable and satisfactory. It permits to the sound entrepreneurship development environment in the Krishnapuram village.

#### **PROBLEMS FACED BY THE ENTREPRENEURS**

The entrepreneurs have been facing a number of problems. The responses regarding the problems faced by the entrepreneurs have been given below:

- Higher rate of interest charged on the financial support
- Pressing family conditions
- Lack of awareness about the financial sources
- Unavailability of raw material causes higher prices
- Increased the cost of production
- Lack of awareness about entrepreneurship programmes
- Poor Marketing opportunities
- Unskilled labour
- Poor educational levels
- Unhealthy competition
- Lack of proper entrepreneurial training
- Lack of proper managerial skills
- Indifferent attitude of banks
- Misuses of government schemes

## **RECOMMENDATIONS FOR ENTREPRENEURSHIP DEVELOPMENT**

The following recommendations are suggested for new entrepreneurs to work with patience, perseverance, self confidence and courage, and to overcome all the hurdles and also to come up in their life:

- People should come forward to do self-employment irrespective of their caste, age and education.
- Entrepreneurs should make use of the incentives and schemes offered by the government.
- The entrepreneurs should possess complete knowledge about their product and their ability.

## INTERNATIONAL JOURNAL OF RESEARCH IN COMMERCE, ECONOMICS & MANAGEMENT A Monthly Double-Blind Peer Reviewed Refereed Open Access International e-Journal - Included in the International Serial Directories

## www.ijrcm.org.in

- Government should create awareness regarding the schemes and programmes available for entrepreneurial development by organizing awareness camps and EDPs through various media.
- Government should encourage *private training institutions* involved in entrepreneurship.
- Government should try to reduce the procedural difficulties at the time of starting an enterprise.
- The women entrepreneurs should also be encouraged and must have enough knowledge to avail the concessions offered by the nationalized banks, state financing corporations and other state agencies.
- Government banks and financial institutions should come forward to offer loan to entrepreneurship with attractive low interest rates and simplified procedures.
- Market support and preferential treatment may be given to entrepreneurs in the society.

## CONCLUSION

Considering the vast number of government programmes, schemes and financial services, entrepreneurship development awareness and training camps, there is tremendous scope to start enterprises in all areas. Banks, Government and NGOs are supposed to play a crucial role in developing the entrepreneurship. In order to achieve the broad aim of encouraging the entrepreneurs to become financially independent and self reliant every poor person should have an easy access to credit for starting small economic activities with the available local resources. The above village is treated as a model to promote entrepreneurship. So, conducive environment is needed and be created in the country to give boost in entrepreneurial arena, in turn to increase the contribution towards GDP resulting in developing the national economy. Poverty reduction is also possible by providing easy access to credit to small entrepreneurial activities.

## REFERENCES

Dr. A.V. Ramana, Entrepreneurship and Economic Development, Kurukshetra, Vol 48, No.2; November 1999.

- Dr.A.Bheemappa, Entrepreneurship Development in Agriculture, Yojana vol 42, No.12; December 2003.
- Abhijit Bhattacharya, Economic&Political Weekly, vol XLIII, No 39, September, 2008.
- Entrepreneuship Development, Himalaya Publishing House, New Delhi.

Dr.Gangadhara Rao, Entrepreneurship and Growth of Enterprise in Industrial Estates, Deep and Deep publications, New Delhi 1986.

www.entrepreneurshipinindia.com

www.developmentofentrepreneursinap.com



## LEADERSHIP AND ORGANISATIONAL EFFECTIVENESS - A CONCEPTUAL FRAMEWORK

DR. ASHOK AIMA DEAN THE BUSINESS SCHOOL UNIVERSITY OF JAMMU JAMMU

NAVEEDA SEHER RESEARCH SCHOLAR THE BUSINESS SCHOOL UNIVERSITY OF JAMMU JAMMU

## ABSTRACT

Contemporary business world has undergone drastic changes in all aspects of business affairs. Corporates have transformed their resources to attain sustainable competitive advantage in highly saturated and technically compact markets. To get success in such an endeavor presence of effective leadership in the organization is compulsory. The concept of leadership has gained a large amount of attention in recent years due to the realization by stakeholders that behind every achievement there is always a visionary leader who intercepts the future and lays down creative plans to make competition irrelevant. The study aims at investigating the relationship between various leadership approaches to the phenomenon of Organizational Effectiveness. The study design included examining the contribution of these factors to Organizational Effectiveness. The proposed study has the following objectives: To judge the influence of Leadership styles of higher and middle level managers on Organizational Effectiveness. This study tries to find out the reason that leads to build trust among individuals and groups throughout the Organization, up- and- down hierarchy, to create an open problem solving climate throughout the Organization – where problems are confronted and differences clarified, both within groups and between groups.

#### **KEYWORDS**

Leadership, Organisational Effectiveness.

## INTRODUCTION

In prevailing highly complex business scenario organizations have create multiplier effect through effective utilization of resources. One of the most sustainable resource of competitive advantage. Visionary leaders are part of human resource. Suitable and competent leaders are one of the biggest boon to the organization. Top performance increasingly demands excellence in all areas, including leadership, productivity, and adaptation to change, process improvement, and capability enhancement (knowledge, skills, abilities, and competencies). Most organizational theorists agree that effective leadership is one of the most important contributors to overall organizational success. What leadership is and what leaders do to ensure team and organizational success is less well understood. A common definition of leadership is "a process of social influence by which an individual enlists the aid and support of others in the accomplishment of a task or mission" (Chemers, 1997). Some key points inherent in this definition is that the task or mission cannot be accomplished by a single person acting alone. Second, that leadership is a social and interpersonal process. Finally, that leadership acts in the service of some task or mission that is external to the group. All in all, this definition doesn't tell us much more than that leadership is about leading people. A useful metaphor for understanding organizational and leadership effectiveness flows from the construct of intelligence. Psychologists regard intelligence as the ability to function effectively in the world. Intelligent people are those who have a store of knowledge and skills gained from experience that allow them to manage efficiently the tasks of daily life. Leadership is the "executive" of organizational intelligence. Leaders must establish and encourage norms, roles, and rules for efficient application to known tasks, but must also be sensitive and responsive to change by employing sensitivity, problem solving, and decision making strategies that allow for ada

According to research, there are some directions to improve organizational effectiveness. Typical organizational effectiveness projects include: Process mapping and measurement; Process improvement; Expert facilitation of internal interventions; Productivity improvement; Monitoring and evaluation; Measuring and assessing climate and culture; Improving communication processes; Team building and team effectiveness improvement; Cohering management teams and Rationalizing the complexities of organizational structure these all are one way or another way dependent the style leader adopts in pursuing these goals. As Leaders, we know that we have responsibilities to balance: the achieving of set tasks, the development of a group of people, the meeting of the needs of individuals.

That is what a leader has to do. Exactly how a Leader goes about these responsibilities is often called the leadership style. There is not one standard, correct style for all leaders in all circumstances at all times. Any group or individual behaves differently. Tasks are different. Each leader has to recognise those differences and adapt according to the situation. Working in this way is sometimes called situational leadership. This means using the most appropriate style to suit the people and circumstances at particular time. People's behaviour depends a great deal on their knowledge, experience and how they see themselves, both generally and in relation to a task. There are four standard possibilities which can be identified: 1 people who are *unable* to do a task and who are *unwilling* to have a go 2 people who are *unable* to do a task, but are *willing to* have a go 3 people who are *able* to do a task, but who are *unwilling* g to do so, either through lack of confidence or lack of motivation 4 people who are *able* to do a task, and who are *willing* to get on with it. It is necessary for the leader to prepare for any particular task that's about to be introduced or undertaken, by knowing exactly what the situation is likely to be. The task might be something as simple as introducing a new game or practical skill, or as complex as planning an expedition or major project. We should note that: ability can be improved by giving encouragement and motivation. If we can describe the situation property, then we can work out the most appropriate style of leadership:

1 Telling (directive) - the leader gives specific step-by step instructions, and keeps close supervision while those instructions are followed out .

2 Selling (persuading) - the leader continues to give specific instructions and to keep supervision, but also explains reasons, invites suggestions, and supports progress.

3 Sharing (consulting) - the leader actively encourages members to give suggestions and try them out, and shares many responsibilities with them.

4 **Delegating** - the leader passes responsibility for problem-solving and decision-making to members, even if keeping a monitoring watching brief. As a group or individual grows in knowledge, experience, and confidence, they adapt their own behaviour. The leader must recognize this, and adapt the leadership style. Alternatively, sometimes a group or individual may appear to go backwards, perhaps as a result of stress or a change of task or environment. Again, the leader should always be sensitive, and adapt to the new situation. The same principles apply whether we are leading a group of young people or a team of other adults.

There is no single style which is consistently ideal. Of course, if everything else remained static we should always be trying to share and delegate as much as possible. However situations do change and the leadership style must be adapted to be appropriate.

## LEADERSHIP APPROACHES- A HISTORICAL PERSPECTIVE

According to Morley (1990), he has developed some principles of organization in doing total development work: Select cohesive teams, based on sentiments of mutual liking and respect for each other's expertise. Organize controlled convergence to solutions that everyone understands and everyone accepts. Organize vigilant information processing and encourage actively open-minded thinking. Avoid the facile, premature consensus. Maintain the best balance between individual and group work. Let individuals do the things that individuals do best-for example, the initial generation of new concepts. The organization and leadership on the multifunctional product development team help to develop the successful practice of Morley's 10 principles. If these and the principles are practiced, then any of the three product-focused modes can be successful-heavyweight product manager or project execution team. Organized Effectiveness and Leadership Enterprises are a maze of explicit and implicit structures that make up organization culture. Good performance and organizational effectiveness can only occur when employees know the culture of t heir workplace. Both organizational effectiveness and leadership skills are required. Organizational effectiveness skills include the behaviors, attitudes, and knowledge an employee needs to achieve success on the job both as an individual and as a member of an enterprise. Each employee uses these skills to adapt to organizational expectations, rules and regulations including expected job performance levels. They provide guidelines for establishing appropriate and effective interrelationships. Organizational effectiveness skills are the building blocks for leadership. Without them, leadership can be misplaced or even be counterproductive. At its most elementary level, leadership means that a person can influence others to act in a certain way. The employee may need at times to influence his work group and to provide a vision of what the organization as a whole or the specific task at hand requires. Leadership skills are necessary at every level of the enterprise from chief executive to the line worker. Organization and other education and training institutions will need to incorporate the teaching of these basic workplace skills in their curriculum to ensure that future labor market entrants are properly equipped for the world of work. Likewise enterprises need to teach these skills to their existing employees. Enterprises in the industrialized countries, particularly the larger ones, are undertaking such training. This research study of ten mangers and twenty workers showed that they have expanded the scope and mission of training from merely upgrading the technical skills of their professional managers to ensuring that all their employees as well as key customers and suppliers understand the company's quality vision and develop the skills and competencies needed for success appropriate.

Transactional leadership theory views the leader-subordinate relationship as a series of transactions or exchanges through the leader's use of Contingent Rewards by exchanging punishment and rewards for follower compliance and effort in order to achieve overall organizational performance (Burns, 1978). Bass (1985, Bass and Avolio, 1995) extended Burn's definition of transactional leadership to describe the supervisory-subordinate relationship through the use of Contingent Rewards, Management-by-Exception, or laissez-faire leadership. Bass (1991) characterizes transactional leadership as the use of Contingent Rewards, Passive Management-by-Exception, and Active Management-by-Exception. Contingent Rewards involves "leaders [who] engage in a constructive path-goal transaction of reward for performance. They clarify expectations, exchange promises and resources, arrange mutually satisfactory agreements, negotiate for resources, exchange assistance for effort, and provide commendations for successful follower performance" (Bass and Avolio, 1995, p. 3). Active Managementby-Exception involves "leaders [who] monitor followers' performance and take corrective action if deviations from standards occur.

The Leadership Challenge Model: Effective leadership helps our nation through times of peril. It makes a business organization successful. It enables a not-forprofit organization to fulfill its mission. The effective leadership of parents enables children to grow strong and healthy and become productive adults. Modern business leadership has tough and compelling situation around due to the advent of converging globalized revolutionary phenomenon. Leaders have to proactive in all respects to withstand the demands of the business environment. The absence of leadership is equally dramatic in its effects. Without leadership, organizations move too slowly, stagnate, and lose their way. Much of the literature about organizations stresses decision-making and implies that if decisionmaking is timely, complete, and correct, then things will go well. Yet a decision by itself changes nothing. After a decision is made, an organization faces the problem of implementation—how to get things done in a timely and effective way. Following model gives the brief description of the challenges which leader has to accomplish to attain sustainability:

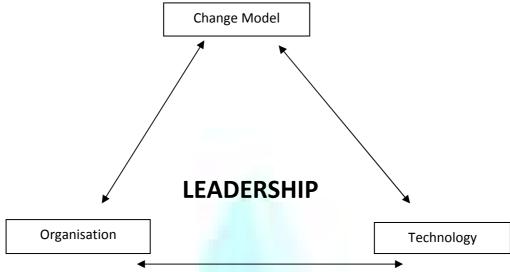
#### The Leadership Challenge Model

The Five Practices of Exemplary	Ten Commitments
Leadership	
	Clarify values by finding your voice and affirming shared ideals.
Model the Way	Set the example by aligning actions with shared values.
Inspire a Shared Vision	Clarify values by finding your voice and affirming shared ideals.
	<ul> <li>Set the example by aligning actions with share values.</li> </ul>
Challenge the Process	<ul> <li>Search for opportunities by seizing the initiative and by looking outward for innovative ways to improve.</li> </ul>
	<ul> <li>Experiment and take risks by constantly generating small wins and learning from experience.</li> </ul>
Enable Others to Act	<ul> <li>Foster collaboration by building trust and facilitating relationships.</li> </ul>
	<ul> <li>Strengthen others by increasing self-determination and developing competence.</li> </ul>
Encourage the Heart	<ul> <li>Recognize contributions by showing appreciation for individual excellence.</li> </ul>
	<ul> <li>Celebrate the values and victories by creating a spirit of community.</li> </ul>

Source: Best selling book, The Leadership Challenge, by James M. Kouzes and Barry Z. Posner.

## UTILITY OF LEADERSHIP APPROACHES IN ORGANISATIONAL TRANSFORMATION

"Change or die" is the mantra of modern world business organisations. To survive and be competitive in the market, organizations have to critically analyze the resources and other relevant aspects. The change related to work, process, structure etc. often faces resistance in the organization. Employees need to be prepared for any sort of critical change but, the question is who could be the most suitable and effective change agent in such complex and compelling scenario. Success secrets of organizations reveal that the effective transformation or change is always guided and backed by visionary and potent leaders. Leadership occupies central position in any sort of change induced or intended to induce in the organisation. The change triangle has been modified in light of the literature so that the position and importance of leadership becomes vivid.



Source: Aligning the Key Change Dimensions by Orlikowski and Hofman 1997: 18

Whether it is change, technology or other aspects of organisation all are directed and guided by the potent leaders. These are the persons who know the latent demands of the market and they undertake the privilege to synchronize the organisational resources to achieve long lasting transformative growth. Transformative leader knows his and his subordinates distinctive competencies which make them fit for a particular cause in the organisation.

#### CONCLUSION

The study achieved its objectives by establishing the relationship between Leadership styles and organizational effectiveness. The focus of this study may be limited but it has shed new light on the concept of organizational related context. As India has emerged from an agrarian society to a technological oriented country. On the basis of the results, it is evident that higher-level managers are more effective than middle-level managers. Higher-level managers are authoritarian and task-oriented as compared to middle-level managers, who are democratic, i.e., they have participative, task-oriented and nurturant contingent and task-performance. It was found that only the age has a highly significant inter-correlation with the efficiency of the subordinates. As the age increase, the middle-level leaders become more mature and assume a father like approach. They become more patient as compared to younger managers. In statistical terms, the education and the experience have no significant correlation with the measures of organizational effectiveness. On an analysis of the views of the lower and middle level managers, it was found that "lack of recognition", "nature of the job" and "lack of adequate rewards" were the major causes for the dissatisfaction. In respect of the intrinsic factors, the satisfied and the dissatisfied managers observed a similar trend in terms of the nature of their jobs, the freedom to do things in their own ways, the feeling of having accomplished something worthwhile in their jobs, etc. But there seems to be some variation in respect of the perceptions of the satisfied managers and the dissatisfied managers on the freedom in choosing the mode of carrying out their jobs. Managers at the middle-level are found to be of the nurturant type, i.e., they feel more concerned about their subordinates and treat them like their younger brother but the task gets the top priority. Moreover, they are nurturant provided the subordinates work hard. Therefore, nurturant contingent on task-performance style of leadership is dominant at this level. The job provides them satisfaction in esteem and autonomy needs. Nurturant contingent on task-performance style and esteem need satisfaction are found to be the significant predictor of organizational effectiveness. The individual-centered variables, including the age, education and the length of experience, did not correlate with one's leadership style and with organizational effectiveness

#### REFERENCES

Aldrich, H. E. (1979). Organizations and environments. Englewood Cliffs, NJ: Prentice-Hall.

Bass, B. M. (1985). Leadership and performance beyond expectations. New York: Free Press.

Bass BM, Avolio BJ (1994). Transformational Leadership and Organizational Culture International. J. Pub. Admin., 17: 541-554

Fiedler, F. E. (1964). A contingency model of leadership effectiveness. In L. Berkowitz (Ed.). Advance in experimental social psychology. New York: Academic Press, 1964.

Gardner, J. (1989). On Leadership, New York: Free Press

Lord, R., & Maher, K. J. (1991). Leadership and information processing: Linking perceptions and performance. Boston: Unwin-Everyman.

House, R. J. (1971). A path-goal theory of leader effectiveness. Administrative science quarterly,

16. 321-338.

McFarland, L. J., Senen, S., & Childress, J. R. (1993). Twenty-first-century leadership. New York: Leadership Press.

Nyengane MH (2007). The relationship between leadership style and employee commitment: an exploratory study in an electricity utility of South Africa. Masters thesis, Rhodes University.

Triandis, H. C. (1993). The contingency model in cross-cultural perspective. In M. M. Chemers

& R. Ayman (Eds.), Leadership theory and research: Perspectives and directions (pp. 167-188). San Diego: Academic Press.

Van Seters DA, Field RHG (1989). The Evolution Of Leadership Theory. J. OCM., 3(3):29–45.

Yukl, G. A. (1994). Leadership in organizations (3rd ed.). Englewood Cliffs, NJ: Prentice-Hall.

## SHAREHOLDER WEALTH EFFECTS TO MERGER ANNOUNCEMENTS IN INDIAN IT INDUSTRY

DR. MALABIKA DEO PROFESSOR & HEAD DEPARTMENT OF COMMERCE SCHOOL OF MANAGEMENT PONDICHERRY CENTRAL UNIVERSITY PONDICHERRY

MOHAMMAD AASIF SHAH RESEARCH SCHOLAR DEPARTMENT OF COMMERCE SCHOOL OF MANAGEMENT PONDICHERRY CENTRAL UNIVERSITY PONDICHERRY

## ABSTRACT

The study is addressed to financial implications of mergers to the acquirer and target shareholders in the Indian Information Technology Industry occurred from Jan. 2000 through June 2010. Constant Market Model was applied to study a sample of (28) merger announcements both by Independent and Controlling bidder firms. The overall results suggested that merger announcements in IT sector has no significant impact on bidder portfolio. While it creates significant positive abnormal returns for target shareholders. When evaluating the announcement impact separately for independent and controlling bidders as well as for independent and controlled targets, it was found that although independent bidder and target portfolio view the mergers equally, there is a different perception between controlling bidders and controlled target shareholders. The controlling bidders show incredulity to merger deals whereas controlled targets stand optimistic about the consequences of these arrangements.

#### KEYWORDS

CMM, Abnormal Return, Independent Bidders, and Controlling Bidders.

## PRELUDE

he practice of mergers and acquisitions has attained considerable significance in the contemporary corporate scenario which is broadly used for reorganizing the business entities. Indian industries were exposed to plethora of challenges both nationally and internationally, since the introduction of Indian economic reforms in 1991. The cut-throat competition in international market compelled the Indian firms to go for merger and acquisition strategies, making it a vital premeditated option. The factors responsible for making the merger and acquisition deals favorable in India are: dynamic government policies, corporate investments in industry, economic stability, "ready to experiment" attitude of Indian industrialists. Among the different sectors that have subscribed to mergers and acquisitions in recent times in India, Information Technology is worth mentioning. This particular sector has played a major role in placing India on the international map. "The revenue of the Information Technology Sector rose from 1.2 percent of the gross domestic product (GDP) in the year 1997 to an estimated 5.8 per cent in 2008". Moreover, the industry accounts for a 5.19% of the country's GDP and export earnings as of 2009. According to a study by Springboard Research, the Indian IT services market is estimated to remain the fastest growing in the Asia-Pacific region with a Compound Annual Growth Rate (CAGR) of 18.6 percent. However, with the growth of many countries in the field of software outsourcing, competition in the global market is increasing. For e.g. China has now emerged as the second most preferred destination for overseas IT services, though it is still far behind from India in the field of software and services. However it is believed that Indian firms have to face stiff competition from other emerging outsourcing sectors, in the near future. M&A as a strategic plan have emerged as key growth drivers in the Indian software services landscape. Giant companies like Tata Consultancy Services, Wipro and Infosys though targeting companies at the international level, yet there is an increase in domestic deals by other small and mid capitalization firms. These companies look at M&A mostly due to the size factor or for expanding their market reach or as an entry strategy in the foreign country or business segment. Apart from this, pricing pressures and global companies consolidating and building offshore capabilities have made M&A relevant for these companies. In recent times, many IT firms operating in India restructured themselves through M&A to reach new markets and to meet global competitions. Although, this sector witnessed some important research studies concerning M&A impacts but these were not only restricted to accounting findings but also the research studies were generally carried out for high capitalized firms engaged in international deals and no attention was paid to M&A deals by small and mid-capitalized firms that assume an important role in the building sensation or breakdown of an industry. Therefore to fill this gap, the present study is an attempt to seek evidence of shareholder wealth effects to announcement of domestic merger deals by Indian IT firms irrespective of their capitalization dimensions.

## **REVIEW OF THEORITICAL AND EMPIRICAL STUDIES**

Empirical research on background, conduct, and outcome of M&A transactions emerged in the late 1970's and early 1980s. An influential research using event study methodology includes the work of Dodd and Ruback (1977), Dodd (1980), and Asquith (1983), who analyze abnormal stock returns of targets and bidders on takeover announcement and deal closing or Cancellation. Bradley et al. (1983) while focused on abnormal returns of targets and bidders of unsuccessful tender offers, Davidson et al. (1989) and Croci (2006) investigated for stock returns of firms involved in cancelled M&A. All researchers by and large conclude that a takeover bid results in positive abnormal returns for targets and slightly negative abnormal returns for bidders.

## **RELEVANCE OF THE STUDY**

This study determines whether there is an 'abnormal' stock price effect associated with an unanticipated event so that the various stakeholders like investors, fund managers, analysts, planners, and policy makers, market regulators, accounting standard setters, researchers, the government, and the public can infer the significance of the event. It can reveal important information how a security is likely to react to a given event, and can help predict how other securities are likely to react to different events. Thus the implications are enormous for foreign as well as local investors who make their decision based on current market values and expected risk-return tradeoffs that are associated with their investments.

## SAMPLE

The sample to be included for the study: the stock prices of both acquiring and acquired firms had to be publicly traded for at least 30 days before and 30 days after the merger announcement dates. Since Beta Model would be used for measuring abnormal returns, there is no question of regressing the stock returns to market returns over the clean estimation period. Therefore the stock of bidder and target firms publicly traded at least one month before the merger announcement would be enough to gauge the abnormal returns. In addition, merger deals must involve internal merger deals and there must not appear other corporate actions during the time of merger declarations. The sample selection by considering such criteria leaves out final sample of 35 out of 43 merger announcements. Nevertheless due to unavailability of data and exact event date information, the sample was further reduced to 28 announcements comprising 28 bidder firms but only 15 target companies. Further it is worth to mention here that, bidding and target firms have been classified separately into independent and controlling bidders and independent and controlled targets so as to have a detailed investigation of event impact. We define independent bidders, as those bidders which announced the merger of those target firms that are not controlled by them either directly or indirectly. While as, controlling firms refer to bidders which announced the merger of those firms that are already their subsidiary companies either directly or indirectly.

## DATA AND METHODOLOGY

The daily closing prices of sample IT firms that were involved in the merger deals during the period 2000-2010, had been collected from Centre for Monitoring Indian Economy (CMIE) Prowess and BSE website. Announcement dates had been verified by comparing them with data available on Money Control (A Financial Information Source). So called, standard event study methodology has been employed to measure the effect of an event in relation to stock prices of the firms. The event study methodology calls for examining the returns on a firms stock around the event date and separating out the portion of the total returns that is reaction to the event. Since our purpose is to check for relationship between public arrival of information and excess returns and to observe short term and immediate effects of information, daily stock price data has been considered. Sometimes information affects the stock on same day. But if the market is not informationally efficient then it may affect after one day, two days, and three days. The daily actual rate of return is calculated as: Rit = [(Pit-Pit-1+Dit (if any)/Pit-1] (Eq-1)

#### Where;

Rit= The rate of return on security i on day t

Pit= The Closing price on security i on day t

Pit-1= The closing price on security i on day t-1 and

Dit= The cash dividend (if any) on security i on the ex-dividend date

Similarly, the daily closing rates of market indices are calculated by (Eq-2)

*Rmt* = [(*Pmt-Pmt-1*) / *Pmt-1*]

Where;

Rmt = The rate of return on the market index on day t

Pmt = The closing market index (BSE-500<sup>7</sup>) on day t

In order to carry out an event study, one need to define an 'event window'. The placement of the event window is of critical importance to measure the market reaction correctly. A window that is too narrow could miss the impact of the event, while a window that is too wide will introduce noise and likely to misguide the analysis towards finding no statistically significant abnormal return. This study examines three symmetric event windows: a three day (-1, +1), five-day (-2, +2) and eleven days (-5, +5) event window. These window lengths are appropriate to capture any news that might have leaked shortly before the official announcement was made and also considers any short-term stock price reactions linked to the event after the announcement. An examination of 500 published event studies in academic press revealed that short-term event studies deliver quite reliable results while long-term event studies underlie some serious limitations. According to Brown and Warner (1985), in case of short term analysis, the Constant-Mean Return Model and the Market Model give similar results. Concentrating on short term impact, the method of calculation of abnormal return does not impact its robustness. The only difference between these two methodologies is the coefficients of alpha and beta which are assumed 0 and 1 under Constant Market Model but are computed under Sharpe Market Model. The abnormal returns under Constant Market Model is given by

 $AR_{it} = R_{it} - (E(R_{mt}))$ (Eq-3)

Where:  $AR_{it}$  = Abnormal returns on security i on day t

The abnormal returns of individual security are averaged for each day surrounding the event day i.e., 5 days before and 5 days after the event day. The average abnormal return (AAR) is the average deviation of actual returns of a security from the expected returns. The following model is used for computing the Average Abnormal Return.

$$AARit = \sum_{I=1}^{N} ARit / N$$
 (Eq-4)

Where:

AAR<sub>it</sub> = Average abnormal returns on day t and N= No. of firms in the bidder/target blocks.

Since the security's overall reaction to the merger announcements or the event will not be captured instantaneously in the behavior of average abnormal return for one specific day, it is necessary to accumulate the abnormal returns over a long period. It gives an idea about average stock price behavior over time. Generally, if market is efficient, the CAAR should be close to zero. The model used to ascertain CAAR is:

> $\sum$  AARit CAARt (Ea-5)

Where t= -5. +5

## PARAMETRIC SIGNIFICANCE TEST

The cumulative average abnormal return provides information about the average price behavior of securities during the event window. If markets are efficient, the AARs and CAARs should be close to zero. Parametric test' is used to assess significance of AARs and CAARs. The 1%, 5% and 10% level of significance with appropriate degree of freedom has been used to test the null hypothesis of no significant abnormal returns after the event day. The conclusions has been based on the results of t values on AARs and CAARs for the during pre and post merger announcement days. The 't' test statistics for AAR for each day during the event window is calculated as:

 $T_{stat} = AAR/\sigma$  (AAR) (Eq-6) Where;

<sup>&</sup>lt;sup>7</sup> The BSE-500 Index represents nearly 93% of the total market capitalization on BSE and covers all 20 major industries of the economy. Moreover, it represents 70% of the total turnover on the BSE.

AAR = Average abnormal return

 $\sigma$  (AAR) = Standard error of average abnormal return

The t statistics for CAAR for each day during the event window is calculated by using following formula: (Eq-7)

 $T = CAAR/\sigma$  (CAAR)

Where,

 $\sigma$  (CAAR) = Standard error of cumulative average abnormal return.

## HYPOTHESIS TESTING

Based on the past empirical studies concerning event study analysis of merger and acquisition announcements, the following hypothesis has been developed to test the same in the Indian context.

Ho1: There would be no significant impact of merger announcements on the shareholders wealth of (Bidder) IT firms

H<sub>02</sub>: The standardized abnormal returns to the acquired institutions (Targets) in the respective industry would be positives.

## **RESULTS AND DISCUSSIONS**

Table 5.10 summarizes the daily average abnormal return (AAR) and cumulative average abnormal return (CAAR) for independent and controlling bidder shareholders of the Indian IT industry. Out of 11 days event window, the positive average abnormal return for independent bidder firms is observed for eight days amounting to 74% while being significant at the announcement day indicates shareholders belief that the merger can go through. The abnormal returns immediately vanished after the announcement indicates the market is efficient in absorbing quickly the information into market prices. On the merger announcement day, the abnormal return is traced about 1.8%. Similarly the daily cumulative abnormal return (CAAR) appeared positive throughout the 11 days with statistical significance at announcement day and immediately for the following day. However, statistical significant returns were observed also on day +3 and +5.

TABLE 5.10: AAR AND CAAR OF INDEPENDENT AND CONTROLLING BIDDER FIRMS

EW	Independent Bidders			Controlling Bidders				
	(No. of observ.19)			(No. of observ.9)				
	AAR	t-stat	CAAR	t-stat	AAR	t-stat	CAAR	t-stat
-5	0.010	0.701	0.010	0.701	-0.005	-0.788	-0.005	-0.788
-4	0.010	1.259	0.020	1.127	-0.005	-1.164	-0.010	-1.175
-3	-0.011	-0.766	0.009	0.569	-0.002	-0.130	-0.012	-0.539
-2	0.004	0.400	0.013	0.709	-0.001	-0.193	-0.013	-0.567
-1	0.019	1.377	0.033	1.262	0.003	0.287	-0.010	-0.568
0	0.018	1.912**	0.050	1.639*	0.003	0.324	-0.006	-0.291
1	-0.001	-0.062	0.050	1.635*	-0.030	-2.275**	-0.036	-1.762**
2	-0.004	-0.433	0.046	1.343	-0.012	-0.704	-0.049	-2.158**
3	0.005	0.485	0.051	1.394*	-0.007	-1.531*	-0.056	-2.161**
4	0.002	0.185	0.053	1.281	-0.007	-1.205	-0.063	-2.121**
5	0.002	0.280	0.055	1.393*	-0.002	-0.328	-0.065	-2.053**

\* Significant at 10% Level, \*\* Significant at 5% Level, \*\*\* significant at 1% level

Figure 5.10 (a) which demonstrates a graphical representation of daily cumulative average abnormal return (CAAR) of independent and controlling bidders, reveals how independent bidder portfolio experienced a continuous increase in positive earnings throughout the event window except on day -2 and -3 where it has been dropped slightly.

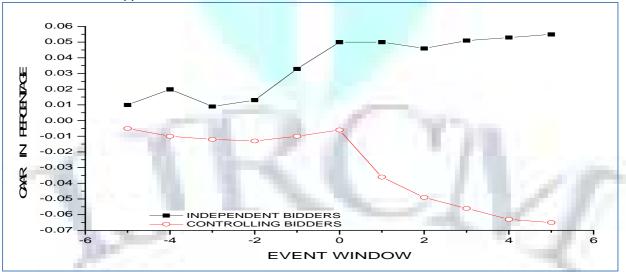


FIGURE 5.10 (a): GRAPHICAL REPRESENTATION OF DAILY CAAR OF INDEPENDENT AND CONTROLLING BIDDERS

Similarly, the positive average abnormal return (AAR) for controlling bidder shareholders appeared positive for only two days amounting to 18% while being insignificant. On the other hand, the statistically significant among negative abnormal returns were observed on the following day of an event and also for the third day implies merger deals spur the company shareholders to sell their shares collectively. On the event day, AAR is traced about 3%. Contrary to this, the daily CAAR appeared negative through the event window while also being significant for all post announcement days.

Figure 5.10 (a), which also describes a graphical depiction concerning daily CAAR of controlling bidders, reveals how cumulative returns are growing slightly in the pre-announcement days but turn down as soon as the event occurred indicates the disbelief of shareholders that the merger could provide the synergical antidotes. This acuity has a direct contrast with buying practice of stock by independent bidder shareholders on similar dates.

Moreover Table 5.10(b), which highlights average CAR of independent and controlling bidder firms, reveals significant positive returns appeared also in three days run-up window for independent bidders. While as, the significant negative CAR is observed in eleven days of time interval for controlling bidder shareholders indicates by and large that merger ruin the affluence of shareholders belonging to firms which blend their own subsidiaries. However, It is

INTERNATIONAL JOURNAL OF RESEARCH IN COMMERCE, ECONOMICS & MANAGEMENT 63

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

important to mention here that no abnormal returns appeared in the pre-announcement days under both cases of bidders (Independent & Controlling), indicates by and large information was neither leaked and nor anticipated by market participants.

Event Window	ndow Independent Bidders		Controlling Bidders		
	CAR	t-stat	CAR	t-stat	
(-1,+1)	0.036	2.097**	-0.023	-1.185	
(-2,+2)	0.037	1.331	-0.037	-1.163	
(-5,+5)	0.055	1.393	-0.065	-2.053**	

TABLE 5.10 (b): AVERAGE CAR OF INDEPENDENT AND CONTROLLING BIDDER FIRMS

\* Significant at 10% Level, \*\* Significant at 5% Level, \*\*\* Significant at 1% level

From the above results it seems obvious that the acquirer firm should have a very robust communications plan at hand. Not every contingency will be anticipated, but many can be. Most important is to have teams in place to be able to respond quickly to any false rumours and to replace immediately any such gossip with fact. The company needs to stay in control as best it can during the entire deal process. The most effective way to do this is to have a continuous stream of positive stories about the feat of the company. The belief that the value of the firm could decrease due to dilution of capital has to be removed from the minds of public, shareholders and other stakeholders by way of educating them through workshops, seminars, that can go a long way towards allaying anxiety, uneasiness and even panic.

TA	ABLE 5.1	1: AAR AN	ID CAAR C	OF INDEF	PENDENT A	ND CONTRO	OLLED TA	RGET FIF	RMS

	Indepen	dent Targets	bserv. 11)	Controlled Targets (No of observ. 4)				
EW	AAR	t-stat	CAAR	t-stat	AAR	t-stat	CAAR	t-stat
-5	0.030	0.879	0.030	0.879	0.010	1.128	0.010	1.128
-4	-0.015	-0.889	0.015	0.496	0.012	1.303	0.021	1.412
-3	0.016	1.222	0.031	0.778	-0.004	-0.207	0.018	0.562
-2	0.006	0.559	0.037	0.994	0.033	1.231	0.051	1.530
-1	-0.002	-0.230	0.035	0.791	0.025	0.903	0.075	1.472
0	0.063	3.852**	0.098	1.811*	0.047	2.509**	0.122	2.422**
1	-0.023	-1.672*	0.075	1.207	0.015	0.843	0.137	2.305**
2	-0.005	-0.386	0.070	1.096	0.010	0.428	0.147	1.826*
3	-0.007	-0.421	0.063	0.826	0.012	0.481	0.159	1.544
4	-0.005	-0.358	0.057	0.673	0.011	1.072	0.169	1.523
5	-0.019	-1.359	0.038	0.434	0.003	0.220	0.173	1.372

\*Significant at 10% Level, \*\* Significant at 5% Level, \*\*\* significant at 1% level

Table 5.11 highlights the daily average abnormal return (AAR) and cumulative abnormal return (CAAR) for independent and controlled target firms. Out of the eleven days event window, the positive average abnormal return (AAR) is observed for only four days amounting to 36% while being significant at announcement day. However, on the very next day, significant negative returns appeared indicates by and large the market overreaction phenomenon by shareholders. On the event day, the average abnormal return (AAR) is traced about more than 6% followed by the negative abnormal returns on the very next day. On the other hand, the cumulative abnormal returns appeared positive for entire eleven days while also significant on the event day.

Figure 5.11 (a), which demonstrates a graphical representation of daily cumulative average abnormal return (CAAR) of independent and controlled target firms, reveals wide fluctuations in growing scenario of cumulative returns for independent target shareholders particularly after the announcement period where it has witnessed a continuous decline. The abnormal returns to this particular group of IT industry is in direct contrast with the findings of Wall and Gup (1989), Madura and Wiant (1994), and Hudgins and Seifert (1996)) which indicated that a majority of merger-related wealth generation is received by shareholders of target firms. The reason might could be explained by the nature of the bid deal.

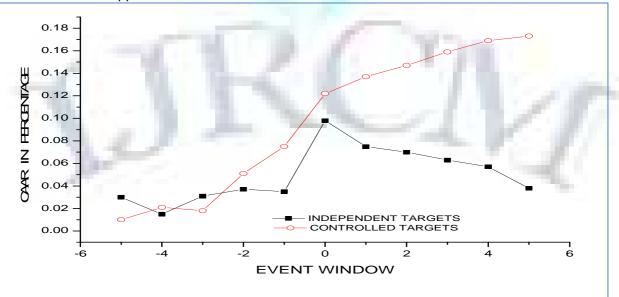


FIGURE 5.11 (a): GRAPHICAL REPRESENTATION OF DAILY CAAR OF INDEPENDENT AND CONTROLLED TARGETS

INTERNATIONAL JOURNAL OF RESEARCH IN COMMERCE, ECONOMICS & MANAGEMENT A Monthly Double-Blind Peer Reviewed Refereed Open Access International e-Journal - Included in the International Serial Directories www.ijrcm.org.in

## VOLUME NO. 1 (2011), ISSUE NO. 7 (NOVEMBER)

Similarly, the positive average abnormal return (AAR) for controlled target firms comprises ten days positive amounting to 91% while being significant at the merger announcement day. On the event day, average abnormal return is traced about more than 4% and on the other hand, the daily cumulative average abnormal return is observed positive for entire eleven days of event window while significant at the event announcement day and also for the consecutively two days following the event.

Figure 5.11 (a) which also gives a graphical representation of daily (CAAR) regarding controlled targets, reveals an increasing trend in total cumulative returns for entire eleven days except for day -3 which witnessed a slight drop. These results are in line with findings of Hawawini and Swary (1990), Houston and Ryngaert (1994), Madura and Wiant (1994).

Moreover, Table 5.11(b), which demonstrates an average CAR for independent and controlled target firms reveals none of the cumulative abnormal returns appeared statistically significant in given time intervals for independent target shareholders. While as, the controlling target shareholders experienced the positive and statistical significant returns for three and five days of run-up window implies that merger deals have favorable implication for shareholders subscribed to these firms. It is worth to mention here that both controlling bidder firms and controlled targets stand winners during the merger deals. On the other hand, it also creates a wealth for independent bidder shareholders but have a breakeven point implication for independent target shareholders.

	Independent Targets		Controlled Targets		
Event Window	CAR	t-stat	CAR	t-stat	
(-1,+1)	0.038	0.456	0.086	2.718**	
(-2,+2)	0.039	0.729	0.129	2.508**	
(-5,+5)	0.038	0.434	0.173	1.372	

TABLE 5.11 (b): AVERAGE CAR FOR INDEPENDENT AND CONTROLLED TARGET FIRMS

\* Significant at 10% Level, \*\* Significant at 5% Level, \*\*\* significant at 1% level

## **OVERALL RESULTS**

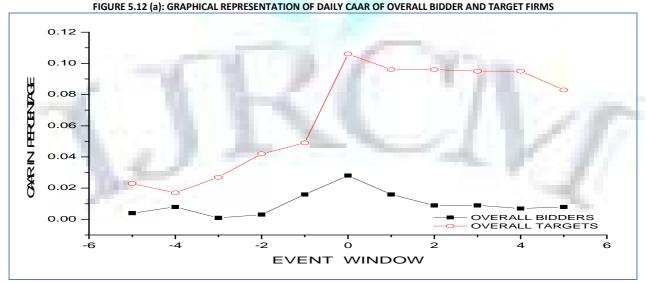
Table: 5.12 recapitulate the overall average abnormal returns (AARs) and cumulative average abnormal return (CAARs) for both bidder as well as target firms in IT sector. The positive abnormal returns (AARs) for bidder shareholders is observed for seven days amounting to 63% while being significant at the merger announcement day implies positive perception of shareholders to merger proceedings.

Contrary to this, the CAAR appeared positive throughout the event window although statistically insignificant.

Similarly, the positive average abnormal return (AAR) for overall target shareholders is observed for seven days amounting to 63% while being statistically significant on event day, where it materialize about 5.8%. On the other hand, the CAAR is traced positive for entire eleven days while being significant on event day and for consecutively three days following the merger event. The positive statistical significant returns however emerged also for day -2.

EW	Diddore	(No of Ob	com 201		Targete	No of Oh	on (15)	
EVV			,		Targets (No of Observ.15)			
	AAR	t-stat	CAAR	t-stat	AAR	t-stat	CAAR	t-stat
-5	0.004	0.440	0.004	0.440	0.023	1.036	0.023	1.036
-4	0.004	0.813	0.008	0.715	-0.006	-0.514	0.017	0.854
-3	-0.007	-0.698	0.001	0.057	0.010	0.931	0.027	0.969
-2	0.002	0.329	0.003	0.198	0.015	1.326	0.042	1.599*
-1	0.013	1.365	0.016	0.916	0.007	0.638	0.049	1.472
0	0.012	1.727*	0.028	1.336	0.058	1.976*	0.106	2.787**
1	-0.012	-1.280	0.016	0.738	-0.010	-0.869	0.096	2.132**
2	-0.007	-0.840	0.009	0.365	0.000	-0.025	0.096	1.951**
3	0.000	0.035	0.009	0.345	-0.001	-0.075	0.095	1.592*
4	-0.002	-0.299	0.007	0.247	0.000	-0.004	0.095	1.427
5	0.001	0.144	0.008	0.278	-0.012	-1.611	0.083	1.167

\*Significant at 10% Level, \*\* Significant at 5% Level, \*\*\* Significant at 1% level Figure 5.12(a) reveals and demonstrates how target CAAR is increasing in the pre-announcement days except for day -4 and declining during the post announcement days.



Moreover, Table 5.12(b) which highlights average CAR for overall bidder and target firms reveals that none of cumulative abnormal returns appeared significant for bidder portfolio. Nonetheless, positive and significant cumulative abnormal returns are observed in three and five days of run-up window for shareholders subscribed to target firms indicates by and large target shareholders enjoy higher returns as and when merger announcements take place.

TABLE 5.12	(b): AVERAGE (	BIDDER AND TARG	ET FIRMS

	Bidder		Targets	5
Event Window	CAR	t-stat	CAR	t-stat
(-1,+1)	0.013	0.923	0.054	1.661**
(-2,+2)	0.008	0.370	0.069	1.711**
(-5,+5)	0.008	0.278	0.083	1.167

\*Significant at 10% Level, \*\* Significant at 5% Level, \*\*\* Significant at 1% level

#### **CONCLUDING REMARKS**

This study has attempted to quantify the initial short-term capital market response to merger announcements that have occurred within the Indian Information Technology industry during 2000 through June 2010 by using an event study methodology. The results suggest that the target shareholders by and large enjoy higher returns to merger related deals. While as, it has breakeven point inference for bidder shareholders. The Hubris theory which suggests that shareholders of bidding firms will suffer after the announcement of a merger proposal. But the finding of this study, demonstrates a contrary result. In fact, the shareholders of bidding firms obtain a small gain or this position become steady after the announcement of merger outcomes. The bidding firms at least do not suffer any loss from the merger. The implication of this result is that mergers and acquisitions are not a risky investment for the shareholders of bidding firms. On the other hand, Shareholders of target firms enjoy a significant abnormal return during the announcement of a merger proposal. In this period, the shareholders of target firms should maximize their wealth effect during the announcement of merger proposals. In this period, the shareholders of target firms should maximize their firms is very high (Hubris theory), and hence, they can enjoy greater gains as a result of the merger proposal. The future research may be directed to examine the acquisition and takeover deals in the same and other industries for a detailed stock price reaction. One can broaden the scope of the study by examining other corporate actions like stock splits, bonus issue, dividend announcement so as to have adequate evidence of stock price reaction and also market efficiency concerning Indian capital markets.

#### REFERENCES

- Asquith P, (1983) "Merger Bids, Uncertainty, and Stockholder Returns," Journal of Financial Economics (April), 51-83.
- Bradley M, A. Desai, and E.H. Kim, (1983) "The Rationale Behind Inter Firm Tender Offers," Journal of Financial Economics (April), 183-206.
- Brown S.J. and J.B Warner (1980) Measuring Security Price Performance" Journal of Financial Economics, 8(3), 205-258.
- Brown, S.J., and J.B. Warner, (1985) "Using Daily Stock Returns: The Case of Event Studies," Journal of Financial Economics 14, March, pp. 3-31.
- Croci E. (2006): Stock Price Performance of Target Firms in Unsuccessful Mergers and Acquisitions, SSRN working paper.
- Davidson, W.N., III, D. Dutia, and L. Cheng, (1989) "A Re-Examination of The Market Reaction To Failed Mergers," Journal Of Finance (September), 1077-1084.
- Dodd P., (1980) Merger Proposals Management Discretion and Stockholder Wealth, Journal of Financial Economics 8, No.2, 105-138.
- Dodd, P. And Ruback, R. (1977): "Tender offers and Stockholder Returns: An Empirical Analysis" Journal of Financial Economics, 5(3), pp. 351-373.
- Fama F Eugene, Fisher Lawrence, Jensen C. Michael (1969) "The Adjustment of Stock Prices To New Information" International Economic Review, Vol. 10, No. 1. Pp. 1-21.
- Fishman, M.J., 1989, "Preemptive Bidding and The Role of The Medium Of Exchange In Acquisitions," Journal of Finance (March), 41-57.
- Hansen R.G., (1987) "A Theory for the Choice of Exchange Medium in Mergers and Acquisitions," Journal of Business (April), 75-95.
- Khilliji N (1993), "The Behavior of Stock Returns in The Emerging Market" A Case Study Of Pakistan" The Pakistan Development Review, 32:34,593-604.
- Kothari S.P and J Warner (2004) "Econometrics of Event Studies" A Working Paper.
- Panayides P. M., & Gong, X. (2002), The Stock Market Reaction To Merger And Acquisition Announcements In Liner Shipping. International Journal of Maritime Economics, 4: 55-80.
- Paul Asquith, "Merger Bids and Stock Returns" Journal of Economics, 11, April 1983, 51-83.
- Wansley W James, Lane R. William & Et. Al, (1983) "Abnormal Returns to Acquired Firms by Type of Acquisition and Method of Payment" Financial Management, Vol.12, No.3, pp 16-22.



## ANALYZING BANK COMPETITIVENESS USING CUSTOMER VALUE: AN EMPIRICAL ANALYSIS

# PRIYA PONRAJ ASST. PROFESSOR DEPARTMENT OF MBA ST. JOSEPH'S COLLEGE OF ENGINEERING CHENNAI

# DR. G. RAJENDRAN PROFESSOR DEPARTMENT OF MANAGEMENT STUDIES ANNA UNIVERSITY CHENNAI

## ABSTRACT

Customer value, financial strength, technology and skill, and shareholder value play a significant role in determining the competitiveness of banks. Customer value has been recognized as an important variable in maximizing the market share and profitability. Customer value can be defined as the benefits received by the customer from various attributes of the product or service provided by a firm. The motive of this paper is to analyze bank-wise competitiveness, using customer value as an indicator. Bank competitiveness is measured by applying the factor analysis with the principal component method and varimax rotation. The customer value components were identified as the relational value, operational value, product value, tangibility and price value. The paper has also proposed a methodology to evaluate bank competitiveness. It is found that the SBI is the most competitive bank in the Indian banking industry, in terms of customer value.

#### **KEYWORDS**

Competitiveness, Comprehensive Z-score, Customer value, Factor analysis, Indian banking Inustry, Principal component method.

#### INTRODUCTION

The Indian banking Industry has seen a lot of changes after the liberalization policy. There has been a transformation in the structure of the banking sector (entry of private and foreign banks), changes in the technological application, changes in consumers' needs and demand for services (Gardener *et al.*, 1999). A successful bank typically starts with a deep understanding of the customer needs in a segment and translates these needs to a value proposition. It is understood that to gain a competitive advantage, value is a key element (Woodruff, 1997; Day, 1999; Payne and Holt, 2001; Gallarza and Saura, 2006). It is also observed that understanding customer value would maximize the benefit and minimize the cost (Tosti, 2009). And there is a relationship between customer value, customer satisfaction, customer retention and customer loyalty. If the customer receives greater value than the other service providers, he would stay loyal to a particular bank (Zeithaml, Berry and Parasuraman, 1996; Sirdeshmukh, Singh and Sabol, 2002). Therefore, the service provider should think of strategies to maximize the customer values. According to Tosti (2009), there is a need for an in-depth understanding of what influences customer behavior and attitude towards the functional capabilities and offerings of the product or services. Banking in India is now seen as a commercial business, where in customers are given the opportunities to choose a particular bank to satisfy their needs. Each bank is striving hard to attract the customers in its side. This is now a matter of competitive necessity, as banks which offer common products and services attract the customers, by reducing the procedural formalities, promising speedy delivery, customization in service delivery, opening more branches, providing core banking facilities and e-transferring. The competitive scenario in Indian banking has become very dynamic, where public sector banks are facing stiff competition from the private and foreign banks. These developments in the financ

The role of customer value has been largely recognized by the financial institutions as an instrument towards accelerating the market share and profit optimization (Ness, et al., 2001; Rajagopal, 2006). Customer value can be created by good quality and reasonable price (Ulaga and Chacour, 2001). There has to be a balance between these two. The quality of service is the totality of features offered by the service provider, and the customers' perceptions about the quality are based on the long-term cognitive evaluations of a firm's service delivery. The best price can be offered to customers by reducing operating costs without affecting the appeal of a service, and identifying what customers expect in return for their money, time, and effort. Maintaining a sustainable balance between the quality and price would help financial institutions to gain customer value, and thereby build the customer loyalty in the long run.

#### LITERATURE SURVEY

Not much research has been carried out on the interaction between customer value and business competitiveness. Banks must gain more value than their competitors to gain a competitive advantage. To achieve this, banks should explore the positive drivers of customer value creation that will lead to increments in competitiveness. The available literature throws light on the variables for customer value and the technique for measuring competitiveness.

Joo (2007) proposed seven customer value factors for e-business, namely, economy, convenience, speed, personalization, community, emotion and trust. Eggert and Ulaga (2002) examined the relationship between customer-perceived value, customer satisfaction and behavioral outcomes. The factors considered for measuring the customer value were reasonable quality, price, and superior net-value. Sweeney and Soutar (2001) examined the customer value considering value dimensions such as emotional, social, functional values. Ulaga and Chacour (2001) measured customer perceived value as a function of the quality and price, in which quality consists of product, service and promotion-related components. Draganska and Jain (2005) developed an econometric model derived from a game-theoretic perspective and considered the firms' use of the product-line length as a competitive tool. Rajagopal (2006) measured the gaps in customer value, considering the economic and relational variables. The economic variables consisted of product based, application oriented, price and non-price factors. The relational variables were technology-related, retailer-based and brand-based. The study revealed, that the perceived values acquired by the customers and corporate value associated with product offer match closely. The relational variables are close to the economic variables, which enhance the aggregate customer value for the product offered.

Lapierre (1997) categorized the value criteria at two levels: the exchange level and the use level. The exchange level refers to the actual service process conducted between the counterparts and the value-in-use level, which refers to the customer's actual outcomes from the service. The elements at the value-exchange level include technical quality, function quality, relational variables and image. The elements at the value-in-use level include financial quality, and operational and strategic value. Huber *et al.* (2007) considered four value dimensions: emotional, practical, logical and risk-laden aspects, to prove that customer value was an important driver of customer service satisfaction. Ulaga (2003) proposed eight different dimensions of value in business relationships: product, quality, delivery, time to market, direct product costs, process costs, personal interaction, supplier know-how, and service support.

Hoolbrook (2005) measured the customer value in relation to the intrinsic and extrinsic motivational factors, and discussed the relationship between the orientation and nature of the value assessment. He identified eight different kinds of customer value, namely, efficiency, excellence, status, esteem, play, aesthetics, ethics, and spirituality. Smith and Colgate (2007) came out with a customer value creation framework, and identified four dimensions of value, namely, functional, experiential, symbolic and cost value, which would be influenced by major sources of value, such as information, products, interaction, environment and ownership.

Maas and Graf (2008) proposed a model for analyzing customer value in financial institutions. They derived five dimensions of customer value, namely, company value (company's brand, image, and reputation), product value (product quality, performance, customization, and range), service/employee value (ability and know-how of employees), relationship value (trust, sympathy, friendship, trustworthiness, honesty, and openness), and social value (demographic, socio-economic and cultural-ethnic groups or communities).

Roig et al. (2006) identified six dimensions of customer value: the functional value of the establishment, the functional value of the contact personnel, the functional value of the service purchased, the functional value of the price, emotional value and social value. The functional value of the establishment refers to installation facilities; whether it is well-organized, accessible, spacious, modern, and clean. The functional value of the contact personnel deals with the bank staff's professionalism, knowledge, duty, and responsibility. The functional values of the service purchased include the quality aspect whether the service conforms to the promised level. The functional value of the price considers the interest rate and cost factor of the service delivery. The emotional value refers to the feelings of the customer in the process of service delivery such as happiness, ease, comfort, and a positive feeling. The social value considers the atmosphere along with the people and comfort with the group of customers.

Feuss (2009) proposed a framework for measuring the customer value and applied this to find out the competitive position. The customer value is measured with the help of Alcatel-Lucent's value model. The model considers quality and price as the dimensions to measure the customer value. The quality is measured in terms of the product features, product quality, service, pre-delivery support, delivery, and responsiveness. The price dimension considers the real price and other factors influencing the price. Then, the customer value map is drawn to measure the company's competitive position accurately (Cleland and Bruno 1997; D'Aveni, Richard A, 2007). The customer value analysis is completed with the framing of the competitive-comparison table, to understand clearly the differences among the competitors. Yunjie and Shun (2004) analyzed the customer value in e-commerce. They proposed an online customer value model with three key value dimensions: the outcome value, process value and the shopping enjoyment value. The outcome value refers to the value derived by the customers from the product provided by the service organization to meet the customer's needs and wants. The product value refers to the quality, and consumption value determined by the nature of the product offered. The shopping enjoyment is the happiness and excitement derived while purchasing on-line.

Ding (2009) evaluated the customer value for liner shipping companies in Taiwan, by developing a fuzzy MCDM model, in which a hierarchical structure was formulated with four criteria, twenty-three sub criteria and three alternatives. The study observed that the top three sub criteria are customer satisfaction, safety, and accuracy. The competitive position on the basis of the fuzzy MCDM algorithm was further analyzed. Nasution and Mavondo (2005) examined the relationship between customer value and service quality in the hotel industry. The customer-value dimensions for the study were: the reputation for quality, value for money and prestige, and the service quality components were atompherics, accommodation, convenience, responsiveness, and professionalism. It was observed that the quality of service had a positive relationship with all the components of customer value. Chang *et al.* (2009) examined the influence of the service quality and perceived risk on customer value in the Taiwan banking industry. The customer value dimensions for the study were: functional, social, emotional, epistemic, and conditional values. After studying these reviews, the paper considered five dimensions of customer value: relational value, product value, operational value, tangibility and price value. The next set of reviews looks into the techniques for measuring competitiveness.

Schumuck (2008) developed an index to measure the competitiveness of the companies in the South-Transdanubian Region. The values of the variables considered for the study were standardized, and their weightage was calculated and substituted in the regression equation, in order to get the competitive index. The companies were classified into, falling behind, average and leading categories. Discriminant analysis is used to justify the grouping, and multivariable logistic regression is used to examine the different competitive groups.

Gunalp and Celik (2006) examined the degree of competition in the Turkish banking sector. The study uses the Panzar and Rosse (P-R) model to determine the degree of competition in the Turkish banking sector over the period 1999-2000. The results indicate that for the period under consideration, Turkish commercial banks earned revenues under conditions of monopolistic competition, and there was high profitability in the Turkish banking sector despite declining concentration ratios, and new entries do not seem to be an indication of an increase in mononpolistic tendencies. The study also observed that the liberalization process and deregulation measures initiated in the early 1980s have fostered competition and resulted in important structural benefits. Bhatnagar et al. (2009) measured the competitiveness of Indian pharmaceutical firms using a 3-D vector system with the help of MATLAB. Each company's competitiveness is evaluated by applying the Asset, Process and Performance (APP) framework. The variables under this framework include: the number of employees, investment in R&D, and total assets under the Asset category; R&D as a percentage of sales, productivity, and growth rate under the Process category; and the net sales, P/E ratio and return on assets under the performance cateogry. Gabon (2009) formulated a technoiue to measure the firm level competitiveness considering the Porter's Diamond model. The study identified eight components from the model and with the help of the factor analysis reconstitued them into four edges. The factor scores were obtained as a normally distributed competitiveness index and split into five equal parts to categorize and to differentiate the competitiveness groups. Li and Lin (2005) analyzed the competitiveness in the Chinese Air transport, industry by applying the factor analysis, using the principal component method and varimax rotation. The study estimated the comprehensive score after obtaining the factor scores. The variables considered for the study were: scale, financial benefit, internalization, productive efficiency, personnel capability, and development potentiality. The same technique was later applied by Man and Qian (2007). They measured the competitiveness in the equipment manufacturing industry, from financial data, by applying the factor analysis and obtained the comprehensive score of the enterprise competitivenes. This technique forms the basis for the paper to evaluate the competitiveness among the Indian commercial banks.

After understanding the literature on customer value and competitiveness evaluation tools, the paper has developed a measurement tool that provides an insight into the competitiveness technique, with customer value as the key indicator.

## **RESEARCH METHODOLOGY**

After the financial liberalization, the Indian banking industry's structure transformed itself into three basic sectors. They are the Public sector, the Private sector, and the Foreign banks. The study has selected four banks in each sector of the Indian banking industry; in total, twelve banks have been considered and they were put a statistical test for measuring the competitiveness. Table 1 shows the sector-wise list of banks chosen for the study.

	TABLE 1: SECTOR-WISE BANKS LIST								
Sector	Public sector	Private sector	Foreign sector						
1	State Bank of India (SBI)	Industrial Credit and Investment Corporation of India (ICICI)	CITIBANK						
2	Punjab National Bank (PNB)	Housing Development and Financial Corporation (HDFC)	Royal Bank of Scotland (RBS)						
3	Central Bank of India (CBI)	AXIS Bank	Standard Chartered Bank (STD CHARTD)						
4	Bank of Baroda (BOB)	Federal Bank	Hongkong and Shanghai Bank Corporation (HSBC)						

The competitiveness among these banks are measured in relation to the customer value components. The study proposes five customer value components after an intensive literature review. The components are: operational, product, price, relational, and tangibility values. The operational value refers to the benefits derived from core banking facilities, operating hours, and process time. The product value indicates the range of credit and investment opportunities offered to the customer. The price value is the value derived from the interest rate and service charges of the banks. The relational value refers to the empathy and care shown to the customer by the bank staff. The tangibility value is the benefit due to the physical evidence and ambiance created by the bank. These components were influenced by the service quality dimensions, proposed by Zeithaml and Parasuraman (1996) and Roig et al. (2006). It is proved that customer value can be measured with the help of servicequality dimensions (Lam et al., 2002). A sample size of 900 bank customers was collected by the drop-and-pick method. Out of the 900, the public sector bank respondents were 450, the private sector bank customers were 325, and the foreign bank customers were 125. The study conducted a survey on the above mentioned respondents with the help of thirty five item statements. These statements were measured using the likert-scale, with the values ranging from 1 to 7, indicating 'strongly disagree' to 'strongly agree'. The statements were subjected to the factor analysis for deduction and structuring the customer value components.

# METHODOLOGY OF EVALUATING BANKS' COMPETITIVENESS

The paper has analysed the competitiveness among selected commercial banks in India with the help of the factor analysis. The evaluation procedure of measuring the competitiveness is as follows: (1) the original data is standardized: (2) the standardized data is applied to the factor analysis; (3) Eigen values were obtained from the total variance explained table, and the percentage of the rotation sums of squared loadings were noted; (4) the rotated component matrix and factor scores were obtained; and (5) The comprehensive Z score is evaluated.

Comprehensive Z score calculation:

 $Z = W_1F_1 + W_2F_2 + \dots + W_nF_n / X$ 

Where W<sub>1</sub>(i=1,2,.....n) is the percentage of variance from the rotation sums of squared loadings table or contribution ratio of each principal component  $F_i$  ( i = 1, 2, ...., n) is the factor score of the obtained component for each bank

X is the total cumulative score in percentage from the rotation sum squared loadings. (Man and Qian, 2007).

### RESULTS

The factor analysis is used to deduct and structure the customer value components from the thirty-five item statements. The components were identified from the total variance explained which is shown in Table-2.

Component	Initial Eig	gen values		Extractio	on sums of squared	Loadings	Rotatio	n sums of square l	oadings
	Total	% of variance	Cumulative %	Total	% of variance	Cumulative %	Total	% of variance	Cumulative %
1	12.112	34.604	34.604	12.112	34.604	34.604	4.223	12.065	12.065
2	1.688	4.822	39.427	1.688	4.822	39.427	3.797	10.848	22.913
3	1.385	3.956	43.383	1.385	3.956	43.383	3.730	10.657	33.571
4	1.269	3.625	47.008	1.269	3.625	47.008	3.035	8.671	42.241
5	1.169	3.339	50.347	1.169	3.339	50.347	2.837	8.105	50.347
6	.990	2.828	53.175						
7	.941	2.690	55.864						
8	.857	2.448	58.313						
9	.834	2.384	60.697						
10	.786	2.245	62.941						
11	.768	2.195	65.137						
12	.755	2.158	67.294						
13	.742	2.119	69.414						
14	.677	1.934	71.347						
15	.663	1.894	73.241						
16	.641	1.833	75.074						
17	.625	1.785	76.859						
18	.608	1.738	78.597						
19	.580	1.657	80.254						
20	.573	1.636	81.890						
21	.543	1.550	83.441						
22	.507	1.450	84.890						
23	.503	1.436	86.327						
24	.494	1.411	87.738						
25	.489	1.396	8 <mark>9.13</mark> 4						
26	.457	1.306	90.439						
27	.431	1.232	91.671						
28	.423	1.210	92.881						
29	.401	1.146	94.027						
30	.393	1.123	95.150						
31	.382	1.093	9 <mark>6.24</mark> 3						
32	.355	1.014	97.256						
33	.349	.996	9 <mark>8.25</mark> 3						
34	.317	.907	99.160						
35	.294	.840	100.000						

**TABLE 2: TOTAL VARIANCE EXPLAINED** 

Table 2 makes it clear that five components were identified, as their initial eigen values were above one, and their cumulative variance equals to 50.347. The Kaiser-Mayer-Olkin value (0.957) and the Bartlett test of sphercity (.000) value indicate that the samples are suitable for structural detection. The component matrix is shown in Table 3.

TABLE 3: COMPONENT MATRIX					
Statements	Comp	onents			
	1	2	3	4	5
The bank offers me a range of credit facilities that meet my requirements (housing loan, personal loan, car loan, deposits, etc.).	.638	.428	078	268	175
The bank offers me useful online products and services.	.650	.299	136	185	231
The bank offers me a comprehensive range of Investment products (mutual fund, ULIP, etc).	.647	.149	082	227	026
The bank offers competitive interest rate.	.579	.026	.027	433	.119
The hidden cost charges of the bank are reasonable.	.576	173	.143	317	.306
All my transactions in the bank are profitable.	.555	105	.077	294	.367
Interest rate changes are properly and promptly communicated.	.511	227	.112	340	.273
The bank provides information if any new banking services products are being introduced.	.666	.230	.041	138	269
The bank provides services as promised.	.670	.115	.186	123	057
The bank has sufficient number of open tellers.	.596	.234	.016	201	.000
The bank has technological capability to serve customers (computerization, networking, etc.).	.562	.181	010	.171	.021
The bank ATM centre is accessible wherever I go.	.523	.364	.045	.267	.171
The bank has core banking facilities.	.485	.417	.013	.272	.128
The bank's electronic services are error-free (credit cards, debit card swaps, electronic cash/cheque transfer,	.518	.237	.236	.327	.101
etc.).					
The bank provides convenient operating hours & days (working on Saturdays and Sundays, extended service	.551	.167	.245	.270	.059
hours during weekdays, evenings, etc.).					
The bank delivers its promises on time.	.564	058	.166	.132	.180
The bank sends statements regularly.	.574	014	.203	.066	.063
The bank maintains the fastest processing time.	.567	081	.162	.164	.074
The bank maintains account and transaction accuracy.	.581	.124	.172	.033	.104
The bank practices efficient queuing/waiting management.	.590	113	028	.161	.103
The bank provides safety for my funds.	.580	.129	.042	028	.103
The bank's electronic banking facilities are secure.	.577	.098	080	.043	.130
The bank's staffs pay attention to the individual needs of customers.	.607	262	.166	.146	.086
The bank's staffs answer the telephone calls promptly and politely.	.584	354	.101	.124	207
The bank's staffs have clear and precise answers for an inquiry.	.603	330	.121	.103	080
The bank's staffs give me valuable suggestion voluntarily when approached.	.603	367	.155	.063	184
The bank's staffs instill confidence during processing.	.635	282	.064	.005	217
The bank's staffs show willingness to help and are ready to respond to our requests.	.597	354	.002	.046	084
The bank's staffs keep in touch with me regularly.	.606	.001	.065	029	440
The bank's staffs make me feel safe and secure during my transactions.	.655	038	015	076	353
The bank has a good ambience for transaction: good temperature, good ventilation, & good odor prevail in the	.618	046	266	.059	092
banks premises.					
The bank's staffs have a neat and professional appearance.	.584	017	363	.182	081
The bank has visually appealing materials associated with products/services offered (pamphlets, leaflets,	.563	073	492	.058	.124
brochures, etc.).					
The bank has visually appealing signs, symbols, advertisement boards, and other artifacts.	.561	109	512	.106	.169
The bank's physical layout of equipment and other furnishing make me feel comfortable and relaxed.	.559	167	483	.052	.138

The component matrix table displays the component loadings for all the given multiple nominal scaling levels. From the table, it is observed that the differences among the components are not obvious. Therefore, the items are run with the varimax rotation to obtain the rotated component matrix, in order to determine the representation of the components. The factor score with less than 0.40 is ignored for structuring the customer value components. The rotated component matrix is shown in Table 4.



Statements	Compo	Components			
	1	2	3	4	5
1. The bank offers me a range of credit facilities that meet my requirements (housing loan, personal loan, car loan, deposits, etc).	.025	.279	.740	.177	.199
2. The bank offers me useful online products and services.	.141	.231	.680	.255	.131
3. The bank offers me a comprehensive range of Investment products (mutual fund, ULIP, etc).	.164	.216	.504	.259	.324
4. The bank offers competitive interest rate.	.139	.089	.415	.145	.564
5.The hidden cost charges of the bank are reasonable.	.254	.153	.147	.127	.671
6.All my transactions in the bank are profitable.	.159	.187	.132	.182	.659
7. Interest rate changes are properly and promptly communicated.	.257	.061	.121	.125	.644
8. The bank provides information if there are any new banking services products introduced.	.273	.277	.638	.118	.136
9. The bank provides services as promised.	.312	.346	.444	.052	.313
10.The bank has sufficient number of open tellers.	.105	.289	.400	.152	.309
11. The bank has technological capability to serve customers (computerization, networking etc.)	.190	.456	.265	.240	.083
12.The bank ATM centre is accessible wherever I go.	.025	.648	.205	.199	.077
13. The bank has core banking facilities.	020	.636	.238	.196	.015
14.The banks electronic services are error free (credit cards, debit card swaps, electronic cash/cheque transfer, etc.).	.205	.657	.134	.045	.060
15. The bank provides convenient operating Hours and day( working on Saturdays and sundays, extended service hours during week days, evenings etc.).	.275	.595	.163	.041	.098
16.The bank delivers its promises on time.	.329	.425	.060	.144	.293
17.The bank sends the statement regularly.	.348	.388	.179	.075	.263
18. The bank maintains the fastest processing time.	.395	.397	.096	.137	.212
19. The bank maintains account and transaction accuracy.	.226	.445	.247	.087	.278
20.The bank practices efficient queuing /waiting management.	.360	.338	.091	.320	.207
21.The bank provides safety of my funds.	.172	.369	.289	.188	.286
22.The banks electronic banking facilities are secure.	.161	.362	.234	.316	.238
23.The Bank staffs pay attention to the individual needs of customers.	.529	.322	.025	.173	.282
24.The bank staffs answer the telephone calls promptly and politely.	.673	.137	.146	.173	.110
25.The bank staffs have clear and precise answers for an inquiry.	.616	.194	.104	.180	.209
26.The bank staffs give me valuable suggestion voluntarily when approached.	.684	.131	.160	.129	.184
27.The bank staffs instill confidence during processing.	.617	.114	.270	.191	.175
28. The bank staffs show willingness to help and readiness to respond to our requests.	.583	.107	.129	.273	.219
29.The bank staffs keep in touch with me regularly.	.496	.150	.537	.092	010
30. The bank staffs make me feel safe and secure during my transactions.	.477	.129	.521	.194	.082
31. The bank has a good ambience for transaction such as temperature, ventilation, odor prevailing in the	.316	.187	.315	.474	.095
banks premises.					
32The bank staffs have a neat and professional appearance.	.274	.226	.258	.565	013
33.The bank has visually appealing materials associated with the product/service offered (pamphlets, leaflets, brochures etc.).	.153	.143	.175	.693	.167
34.The bank has visually appealing signs, symbols, advertisement boards, and other artifacts.	.163	.159	.110	.733	.167
35.The bank's physical layout of equipment and other furnishing make me comfortable and ease.	.210	.098	.119	.699	.198

Table 4 shows that the differences among the component are distinct and proper. The first component is highly correlated with the statement twenty three to twenty eight; thus, it can be termed as relational value. The second component can be named as operational value as it is highly correlated with the statement eleven to sixteen. The third component is highly correlated with the statement one to three, eight and nine; hence it can be termed as product value. The fourth component can be termed as the tangibility value as it is highly correlated with statement thirty one to thirty five. And finally, the fifth component is found to be highly correlated with statement four to seven, as these are related to interest rate and service charges, thus, it can be named as price value. After determining the components, the next objective is to measure the competitiveness among the selected commercial banks in India. The five components' regression weights are obtained, and the comprehensive Z-score is calculated. The results are shown in Table 5.

TADLE F.C	CANDDELIENC	VE 7 CODE	OF CELECT	INIDIAN	COMMERCIAL	DANIKC
I ADLE DI U	.ΟΙνίρκεπείνοι	VE Z-SLUKE	UF SELEUT	INDIAN	CONNINERCIAL	DAINING

S.No	BANK	RELATIONAL	OPERATION	PRODUCT	TANGIBILITY	PRICE VALUE	SCORE	RANKING			
		VALUE	AL VALUE	VALUE	VALUE						
1	SBI	0.094083	-0.02816	0.18334	0.062722	0.207932	0.099561	1			
2	ICICI	-0.00559	0.143422	0.141886	0.237122	-0.03833	0.094263	2			
3	HDFC	0.238095	0.327415	0.095864	-0.11927	-0.37197	0.067471	3			
4	CITIBANK	-0.04566	-0.03222	0.103121	0.105019	-0.28106	0.032399	4			
5	PNB	0.061327	0.166342	-0.09309	-0.24342	0.17891	0.01771	5			
6	FEDERAL	-0.15036	0.090833	0.090688	-0.40286	-0.09698	-0.08226	6			
7	BOB	0.017704	-0.28715	-0.08857	-0.10313	0.003369	-0.0936	7			
8	AXIS	0.177891	-0.1331	-0.51771	0.037076	-0.10552	-0.10623	8			
9	RBS	-0.33393	-0.402432	-0.2486	-0.45531	-0.55622	-0.21389	9			
10	CBI	-0.47765	-0.47253	-0.11446	-0.01629	0.138281	-0.22105	10			
11	HSBC	-0.12483	-0.3155	-0.53123	0.082787	-0.45832	-0.26986	11			
12	STDCHARTD	-0.55504	0.115704	-0.54978	-0.54956	-0.29358	-0.36636	12			

Table 5 makes it clear that the SBI is the most competitive bank with regard to customer value, with an Z-score of 0.0996, as it has gained a high product value and price value compared to the other banks. The second position is obtained by the ICICI with the score of 0.0943 followed by the HDFC with a score of 0.0675. The fourth and fifth positions have been obtained by Citibank and PNB with the scores of 0.0324 and 0.0177. The scores with negative values are considered to be noncompetitive . The Component wise analysis states that the HDFC bank is the most effective bank in gaining the relational and operational values. ICICI is the most effective bank in gaining the tangibility value.

## SUGGESTIONS

The results reveal that the SBI under the public sector and the ICICI and HDFC under the private sector have been gaining a competitive advantage in customer value. Even though the foreign sector banks such as Citibank, RBS, HSBC and Standard Chartered are financially stronger, they are not able to gain customer satisfaction and value due to their selective customer profile and high hidden cost, interest rates and service charges. This is due to the attitude of the Indians, who want their banks to be friendly, faithful, reliable and secure. The banks have to define their service role effectively, set their service standards for the staff and operations, to gain customer value. Banks have to improve their customer value score to increase customer satisfaction, by focusing on customer satisfaction, continuous improvement and effective communication.

# CONCLUSION AND MANAGERIAL IMPLICATION

This paper has analyzed the customer value as a measure of competitiveness in the Indian banking industry. Based on the factor analysis, the study constructed the Comprehensive Z-score in order to rationalize the ranking. The components of customer value were determined as the relational, operational, product, tangibility and price values. It has been found, that customers have rated the SBI, a Public sector bank, as the most competitive bank in the Indian banking industry. Followed by two Private sector banks, namely, the ICICI and HDFC. The fourth place has been obtained by the Citibank, a foreign bank, due to its high profile customers. The SBI, ICICI, HDFC and Citibank are found to be highly competitive. Overall, Public sector banks possess a better customer value than Private and foreign sector banks. This is because customers feel safe and secure with nationalized banks, due to their service orientation, than with the private and foreign banks who function on the principle of profit maximization.

A bank's ultimate success lies in the amount of benefit received by the customer. Therefore, the banks' efforts to deliver high quality service to the customers should be the most important factor in gaining customer value. Banks have to enhance all their customer value components in today's increasingly competitive environment. Banks have to determine the customers' "zone of tolerance" to know at what point customers cease to be satisfied with the core service they are receiving (Joseph et al., 1999). Further research on a broader range of variables, such as financial performance, shareholder value, and technological and managerial skill efficiency, would be useful to gain a more comprehensive picture to measure competitiveness among the Indian commercial banks.

#### REFERENCES

Bhatnagar, Nikhil, Garg, Ankit and Rana, Anshul (2009), "Measuring and predicting competitiveness of Indian firms in pharmaceutical industry", Proceeding -Conference On Global Competition And Competitiveness Of Indian Corporate, pp.261-270.

Chang Hong-Sheng, Chen Tser-Yieth and Tseng Chien-Ming (2009), "How cause related marketing influence customer value in banking industry?", Contemporary Management Research, Vol.5, No.4, pp. 343-368.

Cleland, Alan and Bruno, A. V. (1997)," Building customer and shareholder value, Strategy and Leadership", Vol. 25, No.3, pp. 22-28.

Daganska, M. and Jain, D. (2005), "Product line length as a competitive tool", Journal of Economics and Management Strategy, Vol. 14, pp. 1-28.

D'Aveni, Richard, A. (2007), "Mapping your competitive position", Harvard Business Review, 112.

Day, G.S. (1999), "Market driven strategy, Processes for creating value", (2<sup>nd</sup> Ed), The Free Press, New York.

Ding, Ji-Feng (2009), "Evaluating customer value for liner shipping companies in Taiwan: An empirical study", International Journal of Innovative Computing, Information and Control, Vol.5, No.7, pp. 2031-2042.

Eggert, A. and Ulaga (2002), "Customer perceived value: A substitute for satisfaction in business markets?", Journal of Business & Industrial Marketing, Vol.17, No. 2/3, pp. 107-118.

Feuss William, J. (2009), "Customer value and competitive position, Current Issues in Technology Management Howe School Alliance for Technology Management", Spring 2009, Vol.13, Issue. 1.

Gabon, Markus (2008), "Measuring Company Level Competitiveness in Porter's Diamond model framework", Proceedings papers of Business Science: Symposium for Young Researchers (FIKUSZ, 2008), pp. 149-158.

Gallarza, G., Martina and Saura, Irene, Gil (2006), "Value dimensions, perceived value, satisfaction and loyalty an investigation of university students' travel behavior", Tourism Management, Vol.27, pp. 437-452.

Gardener, E., Howcroft, J. and Williams, J (1999) The new retail banking revolution, The Service Industries Journal, Vol. 19, No. 2, pp. 83-100.

Holbrook, Morris, B. (2005), "Customer Value and Autoethnography: Subjective Personal Introspection and the Meanings of a Photograph Collection", Journal of Business Research, Vol.58, No.1, pp. 45–61.

Huber Frank, Herrmann, Andreas and Henneberg, C. Stephan (2007), "Measuring customer value and satisfaction in services transactions, scale development, validation and cross-cultural comparison", International Journal of Consumer Studies, Vol. 31, pp. 554-564.

Joo, Jaehun (2007), "An empirical study on the relationship between customer value and repurchase intention in Korean internet shopping malls", The Journal of Computer Information Systems, Vol. 48, No.1, pp. 53-62.

Joseph Mathew, McClure Cindy, Joseph Beatriz (1999), "Service quality in the banking service: the impact of technology on service delivery", International Journal of Bank Marketing, Vol.17, No.4, pp. 182-191.

Lapierre, Jozee (1997), "What does value man in business-to-business professional services?", International Journal of Service Industry Management, Vol.8, No.5, pp. 377-397.

Li, Xin and Lin, Xiaoyan (2005), "Factor analysis on industrial international competitiveness: an empirical study on China air transport industry", Chinese Business Review, Vol. 4, No.4, serial No.22: pp. 8-15.

Lopez, Eduardo Parra, Navarro, Mercedes, Melchior and Dominguez, Angel, Ramos (2004), "A competitive study of two tourism destinations through the application of conjoint analysis techniques: the case of the Canary Islands", Revista de Turismoy Patrimonio Cultural, Vol. 2, No.2, pp. 163-177.

Maas, Peter and Graf, Albert (2008), "Customer value analysis in financial services", Journal of Financial Services Marketing, Vol. 13, No.2, pp. 107-120.

Man, Wang and Qian, Li (2007), "Empirical analysis on company's competitiveness from financial index", Chinese Business Review, Vol.6, No.2, serial No. 44: pp. 54-59.

Nasution, Hanny, N. and Mavondo, Felix, T. (2005), "The impact of service quality on customer value in the hotel industry", ANZMAC 2005, Conference Proceedings, pp. 72-79.

Ness, A. Joseph, Schrobeck, J. Michael, Letendre, A. Rick, Douglas, J. Willmar (2001), "The role of ABM in measuring customer value", Strategic Finance, Vol.82, No.9, pp. 32-37.

Payne, Adrian and Holt, Sue (2001), "Diagnosing customer value: Integrating the Value Process and relationship marketing", British Journal of Management, Vol.12, pp. 159-182.

Rajagopal (2006), "Interplay of technology and customer value dynamics in banking industry: Analytical construct for measuring growth and performance", Department of Marketing, Business Division, ITESM, Mexico, Working paper 007/2006.

Rajagopal (2006), "Measuring customer value gaps: an empirical study in the Mexican retail market", Economic Issues, Vol.11, No.1, pp. 19-40.

Schmuck, Roland (2008), "Measuring company competitiveness", Proceedings papers of business science: Symposium for Young Researchers (FIKUSZ, 2008), pp. 199-208.

Sirdeshmukh, Deepak, Singh, Jagdip and Sabot, Barry (2002), "Consumer Trust, value and loyalty in relational exchanges", Journal of Marketing, Vol.66, No.1, pp. 15-37.

Smith, J. Brock and Colgate, Mark (2007), "Customer value creation: A practical framework", Journal of Marketing Theory and Practice, Vol.15, No.1, pp. 7-23. Sweeney, J. C. and Soutar, G.N., (2001), "Consumer perceived value: The development of a multiple item scale", Journal of Retailing, Vol.77: pp. 203-220.

INTERNATIONAL JOURNAL OF RESEARCH IN COMMERCE, ECONOMICS & MANAGEMENT 72

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

Tosti, T. Donald, (2009), "Customer experience and value: A performance view, Performance Improvement", Vol. 48, No.1, pp. 37-44. Ulaga, W. and Chacour, S. (2001), "Measuring customer –perceived value in business markets", Industrial Marketing Management, Vol.30: pp. 525-540. Woodruff, B.R (1997), "Customer Value: the next source for competitive advantage", Journal of the Academy of Marketing Science, Vol. 25, No.2, pp. 139-153. Yunjie, Xu and Shun, Cai, (2004), "A conceptual model of customer value in e-commerce", Proceedings of the 13<sup>th</sup> European Conference on Information Systems,

ECIS, 2004. Zeithaml, Valarie A. Leonard, L. Berry and Parasuraman, A (1996), "The behavioral consequences of service quality", Journal of Marketing, Vol.60: pp. 31-46.



# MERGER AND ACQUISITION ACTIVITY IN THE INDIAN MANUFACTURING SECTOR AND SHAREHOLDER VALUE ADDITION IN THE MERGED ENTITIES

# DR. V. K. SHOBHANA ASSOCIATE PROFESSOR & HEAD P. G. & RESEARCH DEPARTMENT OF COMMERCE VELLALAR COLLEGE FOR WOMEN (AUTONOMOUS) ERODE

# DR. K. MANJULA HEAD DEPARTMENT OF COMMERCE KONGU NADU ARTS & SCIENCE COLLEGE COIMBATORE

# ABSTRACT

The forces of liberalization, privatization and globalization that swept the Indian economy in the post-reforms era, compelled the corporate to restructure their businesses by adopting various strategies like mergers, amalgamations and takeovers. The present study makes a probe into the shareholder value addition of the 46 select merged entities in the manufacturing sector during the five post merger periods. The intra-firm analysis with EVA and MVA carried out in the study revealed that majority (80%) of the merged companies had no definite trend in value addition during the post merger periods.

### **KEYWORDS**

Economic Value Added (EVA), Market Value Added (MVA).

### INTRODUCTION

orporate restructuring has gained considerable importance all over the world because of intense competition, globalization and technological changes. The process got accelerated with the opening of the economy to attract foreign investment. The forces of liberalization, privatization and globalization (LPG) that swept the Indian economy in the post-reforms era compelled the corporates to restructure their businesses by adopting various strategies like mergers, amalgamations and takeovers.

In corporate literature, the motives for mergers are manifold in the light of the fact that different acquiring firms may have different motives. The different schools of thought on merger theories can be broadly classified as those based on capital market valuation of firms and actions of managers primarily based on the empire building motives of corporate managers. Some merger theories incorporate a blend of managerial and capital market elements which state that in a scenario where the mangers deviate from the shareholders best interests, firms that behave inefficiently are likely target for takeover because of capital gains that could be realized by a successful raider.

# THE NEED AND OBJECTIVES OF THE STUDY

The operating and financial economies of scale and scope are certainly the major determinants of merger activity. The literature discussing the motivation for mergers may be broadly classified into the neoclassical shareholder wealth maximizing approach and new managerial theories. The former theory hypothesizes that managers will pursue M & As when such investments appear to offer a positive net present value based upon the discounted value of their estimated cash flows. The new managerial theories argue that with evidencing share ownership and consequential divorce between ownership and control, managers may seek to maximize their own self-interest. Shareholder value addition and survival of the fittest have become the buzz words with the transition of Indian economy to a market driven environment.

This paper focuses on evaluating the post-merger performance of the merged companies by way of intra-firm comparisons using Value Added metrics of corporate performance such as Economic Value Added and Market Value Added and to identify the specific gainers or losers after merger.

# METHODOLOGY

#### PERIOD OF THE STUDY

The empirical study of all sample merged companies has been conducted for five post-merger years. The year of merger has been excluded from the analysis, to have consistency in evaluating post-merger performance of these companies.

#### SELECTION OF SAMPLE

The sample of the study is selected from the universe of M & As in the manufacturing sector in India. Then, by scrutinizing the Bombay stock Exchange official Directory, all companies which had merged before 1st April 2000 has been eliminated so as to have a sample consisting of companies which have undergone mergers in the second decade of economic reforms i.e. from the period 1st April 2000 to April 2004.

Further, those companies which had undergone series of mergers during the period have also been excluded because post-merger performance in such cases could not be related to single merger event.

Finally, those companies whose financial data were not available for the time period chosen for the study viz. five years before and after merger were excluded from the sample.

Accordingly in all, 46 merged companies in the manufacturing sector comprising of different industries have been included in the sample. The list of the sampled companies is given in Table 1

	Acquirer Company	TABLE 1: LIST OF SELECTED MERGED COMPANIES S. No. Acquirer Company S. No Acquirer Company							
1		5. NO	Acquirer Company						
1	Aarti Industries Ltd	24	Lloyds Steel Industry. Ltd						
2	Abhishek Industries Ltd	25	Lloyds Metals and Engineers Ltd						
3	ACC Ltd	26	Matrix Laboratories Ltd						
4	Andhra Pradesh Paper Mills Ltd	27	Nagarjuna Fertilizer & Chem. Ltd						
5	Aurobindo Pharam Ltd	28	North Tukvar Tea Co Ltd						
6	Aventis Pharma Ltd	29	Novartis India Ltd						
7	Basf India Ltd	30	Organan (India) Ltd						
8	Cadila Healthcare Ltd	31	Pfizer Ltd						
9	Choksi Imaging Ltd	32	Philips Electronics Ltd						
10	Deepak Nitrite Ltd	33	Piramal Healthcare Ltd						
11	ECO Auto Components Ltd	34	Polar Industries Ltd						
12	Eveready Indistries India Ltd	35	Sagar Cements Ltd						
13	Federal-Mogul Goetz (India) Ltd	36	Sandvik Asia Ltd						
14	Gabriel India Ltd	37	Siemens Ltd						
15	Gillanders Arbuthnot & Co Ltd	38	Sun Pharma Inds.Ltd						
16	Glaxo Smithline Pharmaceuticals	39	Sundram Fastners						
17	Granules India Ltd	40	Tata Steel Limited						
18	Grasim Industires	41	Tube Investment Of India Ltd						
19	Indian Aluminium Company	42	TVS Electronic Ltd						
20	Interfit India	43	TVS Motor Co Ltd						
21	Joonktollee & Inds. Ltd	44	Usha International Ltd						
22	KSB Pumps Ltd	45	Wanbury Ltd						
23	Lakshmi Machine Works Ltd	46	Wyeth Ltd						

#### TABLE 1-LIST OF SELECTED MERGED COMPANIES

### DATA SOURCE AND TOOLS OF ANALYSIS

The present study is based on secondary data. The secondary data were collected for five years after merger. The required data for the study were obtained from the Prowess, the corporate database software of CMIE and CAPITALINE, the data base software developed by Capital Market Publishers Private India Limited. The various websites have also been the sources of the required data.

Cluster analysis has been employed to classify the firms into groups so that items within the groups are fairly and sufficiently more homogenous than across different groups.

#### **RESULTS AND DISCUSSION**

The post merger performance of the sample merged companies has been carried out using value added metrics namely:

- Economic Value Added (EVA) and
- Market Value Added (MVA)

### **ECONOMIC VALUE ADDED (EVA)**

EVA is the difference between Net Operating Profit after Tax (NOPAT) and the capital charge for both the debt and equity (overall cost of capital).If NOPAT exceeds the capital charge EVA is positive and if reverse is the case it is negative. It shows whether a company is creating real value for its share holders in terms of its economic performance.

# MARKET VALUE ADDED (MVA)

MVA measures market's assessment of firm's value, which is the value, added by the management over and above the capital invested in the company by investors.

MVA	=	Market Value of the firm – Book Value of the firm
		Profit before interest and taxes
Market Value of the firm	า =	
		Weighted average cost of capital

Book Value of the firm = (Equity Capital + Reserves and surplus) - (Revaluation Reserve + Miscellaneous Expenses)

In order to find out whether share holder value has improved over five post merger years, absolute EVA and MVA figures have been converted into relative figures by applying the following formula.

Economic Value Added as a percentage of Capital Employed (EVACE)

Economic Value Added

- X 100

Capital Employed

Market Value Added as a percentage of Capital Employed (MVACE)

Market Value Added --- X 100

Capital Employed

#### INTRA - FIRM COMPARISON WITH EVA AND MVA

The performance of the forty six select merged firms in terms of EVA and MVA are exhibited in Tables 2 and 3. Cluster analysis has been made to understand the variations across five post - merger years in terms of EVA and MVA. Accordingly, the firms which presented the trend of increasing value addition across post merger years have been brought under Group I and those with decreasing trend were brought under Group II and those which showed fluctuating trend were brought under Group III.

#### **EVA AND INTRA FIRM COMPARISON**

EVA has been calculated for all the sample 46 companies for the five post - merger years to ascertain whether shareholder value has improved in post- merger period. The results of the analysis are presented in Table 2.

INTERNATIONAL JOURNAL OF RESEARCH IN COMMERCE, ECONOMICS & MANAGEMENT A Monthly Double-Blind Peer Reviewed Refereed Open Access International e-Journal - Included in the International Serial Directories

S. No         Name of Merged Companies         EVACE (in %) - Post Merger Years           Year 1         Year 2         Year 3         Year 4           1         Aarti Industries Ltd         5.74         5.42         6.87         8.20           2         Abhishek Industries Ltd         -4.50         -2.06         4.29         3.42           3         ACC Ltd         9.15         11.79         22.40         9.73           4         Andhra Pradesh Paper Mills Ltd         -1.98         -0.39         1.48         2.32           5         Aurobindo Pharma Ltd         6.20         3.97         4.96         4.92           6         Aventis Pharma Ltd         0.27         2.26         1.17         -19.73           8         Cadila Healthcare Ltd         10.50         9.13         9.71         9.57           9         Choksi Imaging Ltd         -4.97         2.60         8.06         6.64           10         Deepak Nitrite Ltd         2.40         3.50         4.64         7.08           11         ECO Auto Components Ltd         -7.18         -1.56         -43.68         30.10           12         Eveready Industries India Ltd         0.76         -11.18         -2.60<	<b>Year 5</b> 6.46	
1         Aarti Industries Ltd         5.74         5.42         6.87         8.20           2         Abhishek Industries Ltd         -4.50         -2.06         4.29         3.42           3         ACC Ltd         9.15         11.79         22.40         9.73           4         Andhra Pradesh Paper Mills Ltd         -1.98         -0.39         1.48         2.32           5         Aurobindo Pharma Ltd         6.20         3.97         4.96         4.92           6         Aventis Pharma Ltd         29.52         21.60         20.52         12.57           7         BASF India Ltd         -0.27         2.26         1.17         -19.73           8         Cadila Healthcare Ltd         10.50         9.13         9.71         9.57           9         Choksi Imaging Ltd         -4.97         2.60         8.06         6.64           10         Deepak Nitrite Ltd         2.40         3.50         4.64         7.08           11         ECO Auto Components Ltd         -7.18         -15.6         -43.68         30.10           12         Everaady Industries India Ltd         0.05         0.06         -0.09         -0.01           14         Gabriel I	6.46	-
2         Abhishek Industries Ltd         -4.50         -2.06         4.29         3.42           3         ACC Ltd         9.15         11.79         22.40         9.73           4         Andhra Pradesh Paper Mills Ltd         -1.98         -0.39         1.48         2.32           5         Aurobindo Pharma Ltd         6.20         3.97         4.96         4.92           6         Aventis Pharma Ltd         29.52         21.60         20.52         12.57           7         BASF India Ltd         10.50         9.31         9.71         9.57           9         Choksi Imaging Ltd         -4.97         2.60         8.06         6.64           10         Deepak Nitrite Ltd         2.40         3.50         4.64         7.08           11         ECO Auto Components Ltd         -7.18         -1.56         -43.68         30.10           12         Eveready Industries India Ltd         0.05         0.06         6.47         1.48           15         Gillanders Arbuthnot & Co Ltd         -2.32         -3.03         -2.19         1.47           16         Glaxo Smithline Pharmaceuticals         5.93         29.54         32.42         26.07           17		Group
3         ACC Ltd         9.15         11.79         22.40         9.73           4         Andhra Pradesh Paper Mills Ltd         -1.98         -0.39         1.48         2.32           5         Aurobindo Pharma Ltd         6.20         3.97         4.96         4.92           6         Aventis Pharma Ltd         29.52         21.60         20.52         12.57           7         BASF India Ltd         -0.27         2.26         1.17         -19.73           8         Cadila Healthcare Ltd         10.50         9.13         9.71         9.57           9         Choksi Imaging Ltd         -4.97         2.60         8.06         6.64           10         Deepak Nitrite Ltd         2.40         3.50         4.64         7.08           11         ECO Auto Components Ltd         -7.18         -1.56         -43.68         30.10           12         Eveready Industries India Ltd         0.076         -11.18         -2.66         -3.53           13         Federal-Mogul Goetz (India) Ltd         0.05         0.06         6.47         1.48           15         Gillanders Arbuthnot & Co Ltd         -2.303         -2.19         1.47           16         Gaxo Smi		III
4         Andhra Pradesh Paper Mills Ltd         -1.98         -0.39         1.48         2.32           5         Aurobindo Pharma Ltd         6.20         3.97         4.96         4.92           6         Aventis Pharma Ltd         29.52         21.60         20.52         12.57           7         BASF India Ltd         -0.27         2.26         1.17         -19.73           8         Cadila Healthcare Ltd         10.50         9.13         9.71         9.57           9         Choksi Imaging Ltd         -4.97         2.60         8.06         6.64           10         Deepak Nitrite Ltd         2.40         3.50         4.64         7.08           11         ECO Auto Components Ltd         -7.18         -1.56         -43.68         30.10           12         Eveready Industries India Ltd         0.05         0.06         -0.09         -0.01           14         Gabriel India Ltd         3.92         6.06         6.47         1.48           15         Gillanders Arbuthnot & Co Ltd         -2.32         -3.03         -2.19         1.47           16         Glaxo Smithline Pharmaceuticals         5.93         29.54         32.42         26.07           <	4.01	III
5         Aurobindo Pharma Ltd         6.20         3.97         4.96         4.92           6         Aventis Pharma Ltd         29.52         21.60         20.52         12.57           7         BASF India Ltd         -0.27         2.26         1.17         -19.73           8         Cadila Healthcare Ltd         10.50         9.13         9.71         9.57           9         Choksi Imaging Ltd         -4.97         2.60         8.06         6.64           10         Deepak Nitrite Ltd         2.40         3.50         4.64         7.08           11         ECO Auto Components Ltd         -7.18         -1.56         -43.68         30.10           12         Eveready Industries India Ltd         0.05         0.06         -0.09         -0.01           14         Gabriel India Ltd         3.92         6.06         6.47         1.48           15         Gillanders Arbuthnot & Co Ltd         -2.32         -3.03         -2.19         1.47           16         Glaxo Smithline Pharmaceuticals         5.93         29.54         32.42         26.07           17         Granules India Ltd         -2.10         1.61         2.99         5.47           18	7.89	
6         Aventis Pharma Ltd         29.52         21.60         20.52         12.57           7         BASF India Ltd         -0.27         2.26         1.17         -19.73           8         Cadila Healthcare Ltd         10.50         9.13         9.71         9.57           9         Choksi Imaging Ltd         -4.97         2.60         8.06         6.64           10         Deepak Nitrite Ltd         2.40         3.50         4.64         7.08           11         ECO Auto Components Ltd         -7.18         -1.56         -43.68         30.10           12         Eveready Industries India Ltd         -0.76         -11.18         -2.66         -3.53           13         Federal-Mogul Goetz (India) Ltd         0.05         0.06         6.47         1.48           15         Gillanders Arbuthnot & Co Ltd         -2.32         -3.03         -2.19         1.47           16         Glaxo Smithline Pharmaceuticals         5.93         29.54         32.42         26.07           17         Granules India Ltd         -2.10         1.61         2.29         5.47           18         Grasim Industries         -1.22         -0.51         0.99         8.05	1.79	III
7         BASF India Ltd         -0.27         2.26         1.17         -19.73           8         Cadila Healthcare Ltd         10.50         9.13         9.71         9.57           9         Choksi Imaging Ltd         -4.97         2.60         8.06         6.64           10         Deepak Nitrite Ltd         2.40         3.50         4.64         7.08           11         ECO Auto Components Ltd         -7.18         -1.56         -43.68         30.10           12         Eveready Industries India Ltd         -0.76         -11.18         -2.66         -3.53           13         Federal-Mogul Goetz (India) Ltd         0.05         0.06         -0.09         -0.01           14         Gabriel India Ltd         3.92         6.06         6.47         1.48           15         Gillanders Arbuthnot & Co Ltd         -2.32         -3.03         -2.19         1.47           16         Glaxo Smithline Pharmaceuticals         5.93         29.54         32.42         26.07           17         Granules India Ltd         -2.10         1.61         3.01         -14.70         -15.23           20         Interfit India         -19.56         -6.46         -4.50         -9.11	-0.51	
8         Cadila Healthcare Ltd         10.50         9.13         9.71         9.57           9         Choksi Imaging Ltd         -4.97         2.60         8.06         6.64           10         Deepak Nitrite Ltd         2.40         3.50         4.64         7.08           11         ECO Auto Components Ltd         -7.18         -1.56         -43.68         30.10           12         Eveready Industries India Ltd         -0.76         -11.18         -2.66         -3.53           13         Federal-Mogul Goetz (India) Ltd         0.05         0.06         -0.09         -0.01           14         Gabriel India Ltd         3.92         6.06         6.47         1.48           15         Gillanders Arbuthnot & Co Ltd         -2.32         -3.03         -2.19         1.47           16         Glaxo Smithline Pharmaceuticals         5.93         29.54         32.42         26.07           17         Granules India Ltd         -2.10         1.61         2.09         5.47           18         Grasim Industries         -1.22         -0.51         0.99         8.05           19         Indian Aluminium Company         1.61         3.01         -14.00         -15.23	11.97	11
9         Choksi Imaging Ltd         -4.97         2.60         8.06         6.64           10         Deepak Nitrite Ltd         2.40         3.50         4.64         7.08           11         ECO Auto Components Ltd         -7.18         -1.56         -43.68         30.10           12         Eveready Industries India Ltd         -0.76         -11.18         -2.66         -3.53           13         Federal-Mogul Goetz (India) Ltd         0.05         0.06         -0.09         -0.01           14         Gabriel India Ltd         3.92         6.06         6.47         1.48           15         Gillanders Arbuthnot & Co Ltd         -2.32         -3.03         -2.19         1.47           16         Glaxo Smithline Pharmaceuticals         5.93         29.54         32.42         26.07           17         Granules India Ltd         -2.10         1.61         2.29         5.47           18         Grasim Industries         -1.22         -0.51         0.99         8.05           19         Indian Aluminium Company         1.61         3.01         -14.00         -15.23           20         Interfit India         -19.56         -6.46         -4.50         -9.11      <	-81.07	
10         Deepak Nitrite Ltd         2.40         3.50         4.64         7.08           11         ECO Auto Components Ltd         -7.18         -1.56         -43.68         30.10           12         Eveready Industries India Ltd         -0.76         -11.18         -2.66         -3.53           13         Federal-Mogul Goetz (India) Ltd         0.05         0.06         -0.09         -0.01           14         Gabriel India Ltd         3.92         6.06         6.47         1.48           15         Gillanders Arbuthnot & Co Ltd         -2.32         -3.03         -2.19         1.47           16         Glaxo Smithline Pharmaceuticals         5.93         29.54         32.42         26.07           17         Granules India Ltd         -2.10         1.61         2.29         5.47           18         Grasim Industries         -1.22         -0.51         0.99         8.05           19         Indian Aluminium Company         1.61         3.01         -14.00         -15.23           20         Interfit India         -19.56         -6.46         -4.50         -9.11           21         Joonktollee & Inds. Ltd         -12.70         -10.03         -8.26         0.81     <	8.07	
11         ECO Auto Components Ltd         -7.18         -1.56         -43.68         30.10           12         Eveready Industries India Ltd         -0.76         -11.18         -2.66         -3.53           13         Federal-Mogul Goetz (India) Ltd         0.05         0.06         -0.09         -0.01           14         Gabriel India Ltd         3.92         6.06         6.47         1.48           15         Gillanders Arbuthnot & Co Ltd         -2.32         -3.03         -2.19         1.47           16         Glaxo Smithline Pharmaceuticals         5.93         29.54         32.42         26.07           17         Granules India Ltd         -2.10         1.61         2.29         5.47           18         Grasim Industries         -1.22         -0.51         0.99         8.05           19         Indian Aluminium Company         1.61         3.01         -14.00         -15.23           20         Interfit India         -12.70         -10.03         -8.26         0.81           21         Joonktollee & Inds. Ltd         -12.70         -10.03         -8.26         0.81           22         KSB Pumps Ltd         -3.86         0.50         3.51         11.93 <td>7.22</td> <td>111</td>	7.22	111
11         ECO Auto Components Ltd         -7.18         -1.56         -43.68         30.10           12         Eveready Industries India Ltd         -0.76         -11.18         -2.66         -3.53           13         Federal-Mogul Goetz (India) Ltd         0.05         0.06         -0.09         -0.01           14         Gabriel India Ltd         3.92         6.06         6.47         1.48           15         Gillanders Arbuthnot & Co Ltd         -2.32         -3.03         -2.19         1.47           16         Glaxo Smithline Pharmaceuticals         5.93         29.54         32.42         26.07           17         Granules India Ltd         -2.10         1.61         2.29         5.47           18         Grasim Industries         -1.22         -0.51         0.99         8.05           19         Indian Aluminium Company         1.61         3.01         -14.00         -15.23           20         Interfit India         -12.70         -10.03         -8.26         0.81           21         Joonktollee & Inds. Ltd         -12.70         -10.03         -8.26         0.81           22         KSB Pumps Ltd         -3.86         0.50         3.51         11.93 <td>-2.66</td> <td>111</td>	-2.66	111
12         Eveready Industries India Ltd         -0.76         -11.18         -2.66         -3.53           13         Federal-Mogul Goetz (India) Ltd         0.05         0.06         -0.09         -0.01           14         Gabriel India Ltd         3.92         6.06         6.47         1.48           15         Gillanders Arbuthnot & Co Ltd         -2.32         -3.03         -2.19         1.47           16         Glaxo Smithline Pharmaceuticals         5.93         29.54         32.42         26.07           17         Granules India Ltd         -2.10         1.61         2.29         5.47           18         Grasim Industries         -1.22         -0.51         0.99         8.05           19         Indian Aluminium Company         1.61         3.01         -14.00         -15.23           20         Interfit India         -19.56         -6.46         -4.50         -9.11           21         Joonktollee & Inds. Ltd         -12.70         -10.03         -8.26         0.81           22         KSB Pumps Ltd         -3.86         0.50         3.51         11.93           23         Lakshmi Machine Works Ltd         3.19         -0.51         26.90         28.19 <td>4.64</td> <td>111</td>	4.64	111
13         Federal-Mogul Goetz (India) Ltd         0.05         0.06         -0.09         -0.01           14         Gabriel India Ltd         3.92         6.06         6.47         1.48           15         Gillanders Arbuthnot & Co Ltd         -2.32         -3.03         -2.19         1.47           16         Glaxo Smithline Pharmaceuticals         5.93         29.54         32.42         26.07           17         Granules India Ltd         -2.10         1.61         2.29         5.47           18         Grasim Industries         -1.22         -0.51         0.99         8.05           19         Indian Aluminium Company         1.61         3.01         -14.00         -15.23           20         Interfit India         -19.56         -6.46         -4.50         -9.11           21         Joonktollee & Inds. Ltd         -12.70         -10.03         -8.26         0.81           22         KSB Pumps Ltd         -3.86         0.50         3.51         11.93           23         Lakshmi Machine Works Ltd         3.19         -0.51         26.90         28.19           24         Lloyds Metals and Engineers Ltd         -14.28         -13.45         -3.29         4.24 </td <td>2.46</td> <td>111</td>	2.46	111
14       Gabriel India Ltd       3.92       6.06       6.47       1.48         15       Gillanders Arbuthnot & Co Ltd       -2.32       -3.03       -2.19       1.47         16       Glaxo Smithline Pharmaceuticals       5.93       29.54       32.42       26.07         17       Granules India Ltd       -2.10       1.61       2.29       5.47         18       Grasim Industries       -1.22       -0.51       0.99       8.05         19       Indian Aluminium Company       1.61       3.01       -14.00       -15.23         20       Interfit India       -19.56       -6.46       -4.50       -9.11         21       Joonktollee & Inds. Ltd       -12.70       -10.03       -8.26       0.81         22       KSB Pumps Ltd       -3.86       0.50       3.51       11.93         23       Lakshmi Machine Works Ltd       3.19       -0.51       26.90       28.19         24       Lloyds Metals and Engineers Ltd       -14.28       -13.45       -3.29       4.24         26       Matrix Laboratories Ltd       8.24       10.79       0.19       -31.86         27       Nagarjuna Fertilizer & Chem. Ltd       -0.60       -5.09       0.64	-0.02	111
15       Gillanders Arbuthnot & Co Ltd       -2.32       -3.03       -2.19       1.47         16       Glaxo Smithline Pharmaceuticals       5.93       29.54       32.42       26.07         17       Granules India Ltd       -2.10       1.61       2.29       5.47         18       Grasim Industries       -1.22       -0.51       0.99       8.05         19       Indian Aluminium Company       1.61       3.01       -14.00       -15.23         20       Interfit India       -19.56       -6.46       -4.50       -9.11         21       Joonktollee & Inds. Ltd       -12.70       -10.03       -8.26       0.81         22       KSB Pumps Ltd       -3.86       0.50       3.51       11.93         23       Lakshmi Machine Works Ltd       3.19       -0.51       26.90       28.19         24       Lloyds steel inds. Ltd       -15.78       -10.29       -7.98       4.73         25       Lloyds Metals and Engineers Ltd       -14.28       -13.45       -3.29       4.24         26       Matrix Laboratories Ltd       8.24       10.79       0.19       -31.86         27       Nagarjuna Fertilizer & Chem. Ltd       -0.60       -5.09	29.83	111
16         Glaxo Smithline Pharmaceuticals         5.93         29.54         32.42         26.07           17         Granules India Ltd         -2.10         1.61         2.29         5.47           18         Grasim Industries         -1.22         -0.51         0.99         8.05           19         Indian Aluminium Company         1.61         3.01         -14.00         -15.23           20         Interfit India         -19.56         -6.46         -4.50         -9.11           21         Joonktollee & Inds. Ltd         -12.70         -10.03         -8.26         0.81           22         KSB Pumps Ltd         -3.86         0.50         3.51         11.93           23         Lakshmi Machine Works Ltd         3.19         -0.51         26.90         28.19           24         Lloyds steel inds. Ltd         -15.78         -10.29         -7.98         4.73           25         Lloyds Metals and Engineers Ltd         -14.28         -13.45         -3.29         4.24           26         Matrix Laboratories Ltd         8.24         10.79         0.19         -31.86           27         Nagarjuna Fertilizer & Chem. Ltd         -0.60         -5.09         0.64         -2.83	2.00	1
17       Granules India Ltd       -2.10       1.61       2.29       5.47         18       Grasim Industries       -1.22       -0.51       0.99       8.05         19       Indian Aluminium Company       1.61       3.01       -14.00       -15.23         20       Interfit India       -19.56       -6.46       -4.50       -9.11         21       Joonktollee & Inds. Ltd       -12.70       -10.03       -8.26       0.81         22       KSB Pumps Ltd       -3.86       0.50       3.51       11.93         23       Lakshmi Machine Works Ltd       3.19       -0.51       26.90       28.19         24       Lloyds steel inds. Ltd       -15.78       -10.29       -7.98       4.73         25       Lloyds Metals and Engineers Ltd       -14.28       -13.45       -3.29       4.24         26       Matrix Laboratories Ltd       8.24       10.79       0.19       -31.86         27       Nagarjuna Fertilizer & Chem. Ltd       -0.60       -5.09       0.64       -2.83         28       North Tukvar Tea Co Ltd       -12.88       -5.90       6.69       3.86         29       Novartis India Ltd       5.62       10.66       29.04 <td< td=""><td>24.53</td><td>111</td></td<>	24.53	111
18         Grasim Industries         -1.22         -0.51         0.99         8.05           19         Indian Aluminium Company         1.61         3.01         -14.00         -15.23           20         Interfit India         -19.56         -6.46         -4.50         -9.11           21         Joonktollee & Inds. Ltd         -12.70         -10.03         -8.26         0.81           22         KSB Pumps Ltd         -3.86         0.50         3.51         11.93           23         Lakshmi Machine Works Ltd         3.19         -0.51         26.90         28.19           24         Lloyds steel inds. Ltd         -15.78         -10.29         -7.98         4.73           25         Lloyds Metals and Engineers Ltd         -14.28         -13.45         -3.29         4.24           26         Matrix Laboratories Ltd         8.24         10.79         0.19         -31.86           27         Nagarjuna Fertilizer & Chem. Ltd         -0.60         -5.09         0.64         -2.83           28         North Tukvar Tea Co Ltd         -12.88         -5.90         6.69         3.86           29         Novartis India Ltd         -9.26         3.14         5.94         -5.64 <td>1.88</td> <td>111</td>	1.88	111
19         Indian Aluminium Company         1.61         3.01         -14.00         -15.23           20         Interfit India         -19.56         -6.46         -4.50         -9.11           21         Joonktollee & Inds. Ltd         -12.70         -10.03         -8.26         0.81           22         KSB Pumps Ltd         -3.86         0.50         3.51         11.93           23         Lakshmi Machine Works Ltd         3.19         -0.51         26.90         28.19           24         Lloyds steel inds. Ltd         -15.78         -10.29         -7.98         4.73           25         Lloyds Metals and Engineers Ltd         -14.28         -13.45         -3.29         4.24           26         Matrix Laboratories Ltd         8.24         10.79         0.19         -31.86           27         Nagarjuna Fertilizer & Chem. Ltd         -0.60         -5.09         0.64         -2.83           28         North Tukvar Tea Co Ltd         -12.88         -5.90         6.69         3.86           29         Novartis India Ltd         -9.26         3.14         5.94         -5.64           31         Pfizer Ltd         0.81         4.17         11.95         18.74	8.81	1
20         Interfit India         -19.56         -6.46         -4.50         -9.11           21         Joonktollee & Inds. Ltd         -12.70         -10.03         -8.26         0.81           22         KSB Pumps Ltd         -3.86         0.50         3.51         11.93           23         Lakshmi Machine Works Ltd         3.19         -0.51         26.90         28.19           24         Lloyds steel inds. Ltd         -15.78         -10.29         -7.98         4.73           25         Lloyds Metals and Engineers Ltd         -14.28         -13.45         -3.29         4.24           26         Matrix Laboratories Ltd         8.24         10.79         0.19         -31.86           27         Nagarjuna Fertilizer & Chem. Ltd         -0.60         -5.09         0.64         -2.83           28         North Tukvar Tea Co Ltd         -12.88         -5.90         6.69         3.86           29         Novartis India Ltd         5.62         10.66         29.04         4.84           30         Organan (India) Ltd         -9.26         3.14         5.94         -5.64           31         Pfizer Ltd         0.81         4.17         11.95         18.74	-20.02	
21         Joonktollee & Inds. Ltd         -12.70         -10.03         -8.26         0.81           22         KSB Pumps Ltd         -3.86         0.50         3.51         11.93           23         Lakshmi Machine Works Ltd         3.19         -0.51         26.90         28.19           24         Lloyds steel inds. Ltd         -15.78         -10.29         -7.98         4.73           25         Lloyds Metals and Engineers Ltd         -14.28         -13.45         -3.29         4.24           26         Matrix Laboratories Ltd         8.24         10.79         0.19         -31.86           27         Nagarjuna Fertilizer & Chem. Ltd         -0.60         -5.09         0.64         -2.83           28         North Tukvar Tea Co Ltd         -12.88         -5.90         6.69         3.86           29         Novartis India Ltd         5.62         10.66         29.04         4.84           30         Organan (India) Ltd         -9.26         3.14         5.94         -5.64           31         Pfizer Ltd         0.81         4.17         11.95         18.74           32         Philips Electronics Ltd         12.15         -6.46         -5.64         -3.83	-7.04	111
22         KSB Pumps Ltd         -3.86         0.50         3.51         11.93           23         Lakshmi Machine Works Ltd         3.19         -0.51         26.90         28.19           24         Lloyds steel inds. Ltd         -15.78         -10.29         -7.98         4.73           25         Lloyds Metals and Engineers Ltd         -14.28         -13.45         -3.29         4.24           26         Matrix Laboratories Ltd         8.24         10.79         0.19         -31.86           27         Nagarjuna Fertilizer & Chem. Ltd         -0.60         -5.09         0.64         -2.83           28         North Tukvar Tea Co Ltd         -12.88         -5.90         6.69         3.86           29         Novartis India Ltd         5.62         10.66         29.04         4.84           30         Organan (India) Ltd         -9.26         3.14         5.94         -5.64           31         Pfizer Ltd         0.81         4.17         11.95         18.74           32         Philips Electronics Ltd         12.15         -6.46         -5.64         -3.83           33         Piramal Healthcare Ltd         11.41         19.11         14.62         5.03 <t< td=""><td>-1.94</td><td></td></t<>	-1.94	
23         Lakshmi Machine Works Ltd         3.19         -0.51         26.90         28.19           24         Lloyds steel inds. Ltd         -15.78         -10.29         -7.98         4.73           25         Lloyds Metals and Engineers Ltd         -14.28         -13.45         -3.29         4.24           26         Matrix Laboratories Ltd         8.24         10.79         0.19         -31.86           27         Nagarjuna Fertilizer & Chem. Ltd         -0.60         -5.09         0.64         -2.83           28         North Tukvar Tea Co Ltd         -12.88         -5.90         6.69         3.86           29         Novartis India Ltd         5.62         10.66         29.04         4.84           30         Organan (India) Ltd         -9.26         3.14         5.94         -5.64           31         Pfizer Ltd         0.81         4.17         11.95         18.74           32         Philips Electronics Ltd         12.15         -6.46         -5.64         -3.83           33         Piramal Healthcare Ltd         11.41         19.11         14.62         5.03           34         Polar Industries Ltd         -19.14         2.07         -0.84         -10.15 </td <td>13.94</td> <td>1</td>	13.94	1
24         Lloyds steel inds. Ltd         -15.78         -10.29         -7.98         4.73           25         Lloyds Metals and Engineers Ltd         -14.28         -13.45         -3.29         4.24           26         Matrix Laboratories Ltd         8.24         10.79         0.19         -31.86           27         Nagarjuna Fertilizer & Chem. Ltd         -0.60         -5.09         0.64         -2.83           28         North Tukvar Tea Co Ltd         -12.88         -5.90         6.69         3.86           29         Novartis India Ltd         5.62         10.66         29.04         4.84           30         Organan (India) Ltd         -9.26         3.14         5.94         -5.64           31         Pfizer Ltd         0.81         4.17         11.95         18.74           32         Philips Electronics Ltd         12.15         -6.46         -5.64         -3.83           33         Piramal Healthcare Ltd         11.41         19.11         14.62         5.03           34         Polar Industries Ltd         -19.14         2.07         -0.84         -10.15           35         Sagar Cements Ltd         1.83         2.47         21.61         7.53 <t< td=""><td>24.10</td><td></td></t<>	24.10	
25         Lloyds Metals and Engineers Ltd         -14.28         -13.45         -3.29         4.24           26         Matrix Laboratories Ltd         8.24         10.79         0.19         -31.86           27         Nagarjuna Fertilizer & Chem. Ltd         -0.60         -5.09         0.64         -2.83           28         North Tukvar Tea Co Ltd         -12.88         -5.90         6.69         3.86           29         Novartis India Ltd         5.62         10.66         29.04         4.84           30         Organan (India) Ltd         -9.26         3.14         5.94         -5.64           31         Pfizer Ltd         0.81         4.17         11.95         18.74           32         Philips Electronics Ltd         12.15         -6.46         -5.64         -3.83           33         Piramal Healthcare Ltd         11.41         19.11         14.62         5.03           34         Polar Industries Ltd         -19.14         2.07         -0.84         -10.15           35         Sagar Cements Ltd         1.83         2.47         21.61         7.53           36         Sandvik Asia Ltd         -3.99         2.32         2.92         -93.63	13.89	111
26         Matrix Laboratories Ltd         8.24         10.79         0.19         -31.86           27         Nagarjuna Fertilizer & Chem. Ltd         -0.60         -5.09         0.64         -2.83           28         North Tukvar Tea Co Ltd         -12.88         -5.90         6.69         3.86           29         Novartis India Ltd         5.62         10.66         29.04         4.84           30         Organan (India) Ltd         -9.26         3.14         5.94         -5.64           31         Pfizer Ltd         0.81         4.17         11.95         18.74           32         Philips Electronics Ltd         12.15         -6.46         -5.64         -3.83           33         Piramal Healthcare Ltd         11.41         19.11         14.62         5.03           34         Polar Industries Ltd         -19.14         2.07         -0.84         -10.15           35         Sagar Cements Ltd         1.83         2.47         21.61         7.53           36         Sandvik Asia Ltd         -3.99         2.32         2.92         -93.63           37         Siemens Ltd         16.52         26.25         25.22         23.28	19.82	111
27         Nagarjuna Fertilizer & Chem. Ltd         -0.60         -5.09         0.64         -2.83           28         North Tukvar Tea Co Ltd         -12.88         -5.90         6.69         3.86           29         Novartis India Ltd         5.62         10.66         29.04         4.84           30         Organan (India) Ltd         -9.26         3.14         5.94         -5.64           31         Pfizer Ltd         0.81         4.17         11.95         18.74           32         Philips Electronics Ltd         12.15         -6.46         -5.64         -3.83           33         Piramal Healthcare Ltd         11.41         19.11         14.62         5.03           34         Polar Industries Ltd         -19.14         2.07         -0.84         -10.15           35         Sagar Cements Ltd         1.83         2.47         21.61         7.53           36         Sandvik Asia Ltd         -3.99         2.32         2.92         -93.63           37         Siemens Ltd         16.52         26.25         25.22         23.28	7.05	111
28         North Tukvar Tea Co Ltd         -12.88         -5.90         6.69         3.86           29         Novartis India Ltd         5.62         10.66         29.04         4.84           30         Organan (India) Ltd         -9.26         3.14         5.94         -5.64           31         Pfizer Ltd         0.81         4.17         11.95         18.74           32         Philips Electronics Ltd         12.15         -6.46         -5.64         -3.83           33         Piramal Healthcare Ltd         11.41         19.11         14.62         5.03           34         Polar Industries Ltd         -19.14         2.07         -0.84         -10.15           35         Sagar Cements Ltd         1.83         2.47         21.61         7.53           36         Sandvik Asia Ltd         -3.99         2.32         2.92         -93.63           37         Siemens Ltd         16.52         26.25         25.22         23.28	-1.95	111
29Novartis India Ltd5.6210.6629.044.8430Organan (India) Ltd-9.263.145.94-5.6431Pfizer Ltd0.814.1711.9518.7432Philips Electronics Ltd12.15-6.46-5.64-3.8333Piramal Healthcare Ltd11.4119.1114.625.0334Polar Industries Ltd-19.142.07-0.84-10.1535Sagar Cements Ltd1.832.4721.617.5336Sandvik Asia Ltd-3.992.322.92-93.6337Siemens Ltd16.5226.2525.2223.28	-1.07	111
30         Organan (India) Ltd         -9.26         3.14         5.94         -5.64           31         Pfizer Ltd         0.81         4.17         11.95         18.74           32         Philips Electronics Ltd         12.15         -6.46         -5.64         -3.83           33         Piramal Healthcare Ltd         11.41         19.11         14.62         5.03           34         Polar Industries Ltd         -19.14         2.07         -0.84         -10.15           35         Sagar Cements Ltd         1.83         2.47         21.61         7.53           36         Sandvik Asia Ltd         -3.99         2.32         2.92         -93.63           37         Siemens Ltd         16.52         26.25         25.22         23.28	5.15	111
31         Pfizer Ltd         0.81         4.17         11.95         18.74           32         Philips Electronics Ltd         12.15         -6.46         -5.64         -3.83           33         Piramal Healthcare Ltd         11.41         19.11         14.62         5.03           34         Polar Industries Ltd         -19.14         2.07         -0.84         -10.15           35         Sagar Cements Ltd         1.83         2.47         21.61         7.53           36         Sandvik Asia Ltd         -3.99         2.32         2.92         -93.63           37         Siemens Ltd         16.52         26.25         25.22         23.28	-4.32	
32         Philips Electronics Ltd         12.15         -6.46         -5.64         -3.83           33         Piramal Healthcare Ltd         11.41         19.11         14.62         5.03           34         Polar Industries Ltd         -19.14         2.07         -0.84         -10.15           35         Sagar Cements Ltd         1.83         2.47         21.61         7.53           36         Sandvik Asia Ltd         -3.99         2.32         2.92         -93.63           37         Siemens Ltd         16.52         26.25         25.22         23.28	44.36	1
33         Piramal Healthcare Ltd         11.41         19.11         14.62         5.03           34         Polar Industries Ltd         -19.14         2.07         -0.84         -10.15           35         Sagar Cements Ltd         1.83         2.47         21.61         7.53           36         Sandvik Asia Ltd         -3.99         2.32         2.92         -93.63           37         Siemens Ltd         16.52         26.25         25.22         23.28	-3.71	
34         Polar Industries Ltd         -19.14         2.07         -0.84         -10.15           35         Sagar Cements Ltd         1.83         2.47         21.61         7.53           36         Sandvik Asia Ltd         -3.99         2.32         2.92         -93.63           37         Siemens Ltd         16.52         26.25         25.22         23.28	5.32	
35         Sagar Cements Ltd         1.83         2.47         21.61         7.53           36         Sandvik Asia Ltd         -3.99         2.32         2.92         -93.63           37         Siemens Ltd         16.52         26.25         25.22         23.28	-331.89	III
36         Sandvik Asia Ltd         -3.99         2.32         2.92         -93.63           37         Siemens Ltd         16.52         26.25         25.22         23.28	0.53	111
37         Siemens Ltd         16.52         26.25         25.22         23.28	-36.50	111
	-170.07	 III
	11.61	III
39 Sundram Fastners 9.02 8.93 5.87 5.68	4.07	II
40         Tata Steel Limited         10.19         17.39         29.73         21.63	13.25	
40         10.19         17.39         29.73         21.03           41         Tube Investment Of India Ltd         9.75         18.40         10.95         -1.25	-0.02	 
41         Tube investment of india Ltu         5.75         18.40         10.95         -1.25           42         TVS Electronic Ltd         12.13         -2.26         2.59         3.28	1.99	 
42         TVS Electronic Ltd         12.13         -2.20         2.39         5.28           43         TVS Motor Co Ltd         10.93         10.31         5.67         0.09	-2.36	
43         10.31         5.67         0.09           44         Usha International Ltd         -2.89         -0.78         1.77         3.12	6.21	1
44         Osna international Ltd         -2.89         -0.78         1.77         3.12           45         Wanbury Ltd         -2.96         3.26         2.13         4.36	-8.98	111
45         Wandury Ltd         -2.96         3.26         2.13         4.36           46         Wyeth Ltd         -2.99         10.29         2.60         15.78	-8.98	1
46 Wyeth Ltd -2.99 10.29 2.60 15.78 Source: Results computed	21.30	

#### TABLE 2: INTRA-FIRM ANALYSIS WITH EVA

Source: Results computed

It is observed from Table 2 that ,out of the 46 companies , 6 companies (13%) showed an increasing trend of share holder value addition (group I) in the postmerger years i.e., the performance of such companies indicate improvement from the first post-merger year to the fifth post-merger year. These companies include Grasim Industries, Gillanders Arbuthnot & Co Ltd, KSB Pumps Ltd, Pfizer Ltd, Usha International Ltd and Wyeth Ltd. However only one company, i.e., Pfizer Ltd., could record positive upward value addition to the shareholders in all the post-merger years. A marked increase in share holder value addition was revealed by KSB Pumps Ltd from low value erosion in the first post merger period to the subsequent periods.

Out of the 46 sample companies, 3 companies (7%) revealed decreasing trend in value addition. Two companies such as Sundram Fastners Ltd and Aventis Pharma Ltd. belonging to this group showed decreasing value addition. TVS Motor Co Ltd. showed positive shareholder value addition from the first to fourth post-merger years and it got reduced and showed value erosion in the fifth year.

The remaining 37 companies (80%) which indicated no influence of merger on shareholder value addition falls under Group III.

Table 3 presents the analysis related to value addition in terms of MVA.

S No	Name of Merged Companies	MVACE (in %) Post Merger Years					
		Year 1	Year 2	Year 3	Year 4	Year 5	Group
1	Aarti Industries Ltd	121.93	158.45	238.20	262.31	238.38	I
2	Abhishek Industries Ltd	31.61	52.14	98.81	177.21	203.62	I
3	ACC Ltd	231.21	254.72	309.13	97.10	121.73	Ш
4	Andhra Pradesh Paper Mills Ltd	44.16	52.74	70.31	106.26	116.05	I
5	Aurobindo Pharma Ltd	105.20	106.49	151.30	183.14	52.17	Ш
6	Aventis Pharma Ltd	849.36	612.83	467.87	305.92	290.87	П
7	BASF India Ltd	76.36	104.07	84.68	-21.08	-61.18	Ш
8	Cadila Healthcare Ltd	230.72	228.09	242.81	195.72	193.88	Ш
9	Choksi Imaging Ltd	-25.81	94.30	211.10	209.99	177.65	Ш
10	Deepak Nitrite Ltd	99.79	171.97	182.13	169.45	24.58	111
11	ECO Auto Components Ltd	-6.04	46.06	-254.26	497.58	159.03	Ш
12	Eveready Indistries India Ltd	65.82	-12.70	55.28	42.86	111.58	Ш
13	Federal-Mogul Goetz (India) Ltd	116.05	163.78	-84.22	73.43	12.26	111
14	Gabriel India Ltd	147.39	203.40	215.91	121.27	496.16	111
15	Gillanders Arbuthnot & Co Ltd	12.02	8.11	30.63	90.15	90.58	Ш
16	Glaxo Smithline Pharmaceuticals	79.24	209.11	376.46	315.13	312.09	111
17	Granules India Ltd	41.84	84.55	110.54	180.70	97.03	111
18	Grasim Industries	37.83	60.93	92.45	196.01	242.63	I
19	Indian Aluminium Company	72.05	124.67	-198.78	-162.70	-227.53	111
20	Interfit India	-81.00	13.47	26.16	-18.23	-6.22	111
21	Joonktollee & Inds. Ltd	-46.31	-42.77	-39.43	12.04	20.02	111
22	KSB Pumps Ltd	26.92	89.99	115.19	251.16	339.89	I
23	Lakshmi Machine Works Ltd	43.10	190.46	592.01	621.18	523.43	111
24	Lloyds steel inds. Ltd	-173.34	900.20	573.51	9.11	-612.99	111
25	Lloyds Metals and Engineers Ltd	-40.42	-46.72	470.71	27.59	-799.50	111
26	Matrix Laboratories Ltd	116.25	193.98	38.09	-313.18	182.95	111
27	Nagarjuna Fertilizer & Chem. Ltd	63.47	22.32	75.65	50.23	43.97	111
28	North Tukvar Tea Co Ltd	-1.56	14.34	168.85	133.93	47.93	111
29	Novartis India Ltd	86.39	166.49	281.03	102.38	71.73	111
30	Organan (India) Ltd	12.92	92.59	112.84	14.74	19.04	111
31	Pfizer Ltd	104.69	153.40	382.58	451.76	787.63	1
32	Philips Electronics Ltd	123.55	24.38	27.75	9.38	34.55	111
33	Piramal Healthcare Ltd	157.16	268.26	319.65	92.12	120.57	111
34	Polar Industries Ltd	-214.85	112.33	102.92	-70.98	2920.92	111
35	Sagar Cements Ltd	101.14	78.13	454.14	476.36	105.15	111
36	Sandvik Asia Ltd	29.18	117.37	152.40	-14.82	14.52	111
37	Siemens Ltd	331.33	642.24	494.41	292.25	-74.28	111
38	Sun Pharma Inds.Ltd	40.24	156.12	329.97	429.58	459.11	I
39	Sundram Fastners	362.61	425.08	284.73	222.65	183.77	
40	Tata Steel Limited	228.44	419.64	662.00	452.28	435.18	
41	Tube Investment Of India Ltd	236.76	416.89	210.53	49.01	53.00	
42	TVS Electronic Ltd	232.49	12.27	124.61	137.41	104.69	111
43	TVS Motor Co Ltd	239.20	290.46	187.95	73.03	15.42	III
44	Usha International Ltd	47.12	79.25	118.87	154.16	234.44	1
45	Wanbury Ltd	60.83	141.12	135.31	111.91	-139.85	
46	Wyeth Ltd	40.51	130.19	27.19	190.65	203.91	

## **GROUP I**

As per Table 3, eight companies (17%) indicated an increase in value addition to shareholders in terms of their market's assessment. Companies like Aarti Industries Ltd., Pfizer Ltd., Sun Pharma Industry Ltd., Usha International Ltd., KSB Pumps Ltd., Grasim Industries, Abhishek Industries Ltd., Andrapradesh Paper Mills Ltd., have shown positive value to shareholders which has increased significantly from the first post-merger period to the fifth post merger period. **GROUP II** 

Aventies pharma Ltd has revealed positive MVA in the first post merger year which reduced subsequently.

#### **GROUP III**

This group consists of thirty seven companies (80%) with no effect on market's assessment of company's value thus showing fluctuating trend in the post merger years.

The summary of the results of the intra-firm comparisons carried out with value added metrics is given in Table 4.

#### TABLE 4: INTRA-FIRM ANALYSIS WITH VALUE ADDED METRICS: SUMMARY RESULTS

Groups	EVA		MVA	
	No. of Co.	%	No. of Co.	%
Group I	6	13.04	8	17.39
Group II	3	6.53	1	2.17
Group III	37	80.43	37	80.44
TOTAL	46	100	46	100

The summary results exhibited in Table 4 indicate that mergers had no effect on shareholder wealth of majority of the selected merged companies, over the five post merger periods.

#### CONCLUSIONS

The analysis pertaining to value addition carried out in this paper revealed that, as regards intra-firm analysis with EVA and MVA majority of the merged companies (80%) had no definite trend in value addition in terms of EVA and MVA during the post-merger periods. The gainers in value addition in terms of EVA and MVA accounted for 13 and 17 percentage respectively, of the merged companies. Of the gainers, Pfizer Ltd. a pharmaceutical company was the major gainer by way of positive value addition in all the post merger years. TVS Motor Company was the loser by way of value erosion in terms of EVA and substantial fall in MVA in the fifth post merger period.

#### REFERENCES

#### BOOKS

Dev Raj, (2002) Mergers and Amalgamations in Banking Industry, Rajat Publications, New Delhi.

Gurminder Kaur, (2005) Corporate Mergers and Acquisitions, Deep and Deep Publications Pvt Ltd, New Delhi.

ICFAI, (2003) Mergers and Acquisition, ICFAI University press, Hyderabad.

ICFAI, (2008) Case Studies on M & A in Manufacturing Sector, ICFAI University Press, Hyderabad.

JOURNALS / ARTICLES / MAGAZINES

Rajesh Kumar B, and Prabina Rajib, "Merger and Corporate performance in India: An Empirical study", Decision, Vol 34, No.1, Jan-June 2007, PP. 42-51.

Beena P.L, "An analysis of mergers in the Private corporate sector in India", working paper 301, (August-September), National Institute of Science and Communication (NISCOM) New Delhi, India.

Beena P.L, "Towards understanding the merger-wave in the Indian Corporate sector: A comparative perspective, "Working Paper 355, Jan-2004, Center for Development studies (CDS), Trivandrum, India.

Raghunatha Reddy D and S. Padma, "Pre and Post merger financial performance of selected companies", Indian Journal of Accounting, Vol 35, No.2, June 2005, PP. 29-38.

Pawaskar, Vardhana, "Effect of mergers on corporate performance in India", Vikalpa, Vol 26, No.1, Jan-March 2001, PP. 19-31.



# FACTOR INFLUENCES AND INDIVIDUAL INVESTOR BEHAVIOUR: THE STUDY OF INDIAN STOCK MARKET

# B. G. SRINIVASA RESEARCH SCHOLAR DEPARTMENT OF ECONOMICS GULBARGA UNIVERSITY GULBARGA

# DR. K. A. RASURE ASSOCIATE PROFESSOR

SETH SRI TULSIRAM GILDA NRUPATHUNGA FIRST GRADE COLLEGE OF ARTS, COMMERCE, MGT. & SCIENCE SEDAM

# ABSTRACT

This study undertakes an empirical survey of the factors, which mostly influence individual investor behaviour in the Indian stock market. The results revealed by our sample of 200 respondents confirm that there seems to be a certain degree of correlation between the factors that behavioural finance theory and previous empirical evidence identify as the influencing factors for the average equity investor, and the individual behaviour of active investors in the Indian Stock Market influenced by the overall trends prevailing at the time of the survey in the BSE.

#### **KEYWORDS**

Individual investor, Behavioral Finance, Decision Making, Indian Stock Market.

### INTRODUCTION

conomic theory on investment decisions treats the investment decision of the individual as a macroeconomic aggregate and the microeconomic foundations of it are drawn from intertemporal utility theory. Individuals maximize their utility based on classic wealth criteria making a choice between consumption and investment through time.

However, some empirical studies that first appeared in the 1970s focused on the individuals rather than aggregate investor profiles. At about the same time, the sub-discipline of behavioral finance evolved investigating investment choices under conditions of uncertainty. Research in Behavioral finance produced six foremost theoretical streams, i.e. Prospect Theory, Regret Aversion, Self Control, Emotions, Social Interaction and Overconfidence. Each of these research streams captured and analyzed behavioral attributes of individual investors. A Wharton appraisal contributed empirical data for the study of these research streams by examining how demographic variables influence the investment selection and portfolio composition process, and Blume and Friend (1978) provided a comprehensive study and overview of the Wharton survey results and its implications for behavioral finance. Furthermore, Cohn et al. (1975) provided tentative evidence that risk aversion decreases as the investor's wealth increases, while Riley and Chow showed that risk aversion decreases not only as wealth increases, but also as age, income and education increase. LeBaron, Farrelly and Gula (1992) added to the debate, by advocating that individuals' risk aversion is largely a function of visceral rather than rational considerations. On the other hand, Baker and Haslem (1974) contended that dividends, expected returns and the firm's financial stability are critical investment considerations for individual investors, and Baker, Haargrove and Haslem (1977) went a step further by proposing that investors behave rationally, taking into account the investment's risk/return tradeoff.

According to Kent, et al. (2001), The most common behavior that most investors do when making investment decision are (1)Investors often do not participate in all asset and security categories, (2)Individual investors exhibit loss-averse behavior, (3) Investors use past performance as an indicator of future performance in stock purchase decisions, (4)Investors trade too aggressively, (5) Investors behave on status quo, (6) Investors do not always form efficient portfolios, (7) Investors behave parallel to each other, and (8) Investors are influenced by historical high or low trading stocks.

This study examined the factors that appear to exercise the greatest influence on the individual stock investor, and included not only the factors investigated by previous studies and derived from prevailing behavioral finance theories, but also introduced additional factors generated through personal interviews that have been found to influence the stockholders' investment decisions in India. To that effect, this paper will address two questions: First, what relative importance do decision variables and especially economic decision variables have for individual

Investors making stock purchase decisions? Secondly, are there homogeneous clusters or groups of variables that form identifiable decision determinants that investors rely upon when making stock investment decisions?

# JUSTIFICATION OF THE STUDY

We have selected in the year 2010, because this period is very crucial and Indian stock market investment condition is robust growth, because countries political turmoil condition viz, 2G spectrum scams, Delhi common wealth scam, etc. these political condition is merely affected stock market equity investment activities. The equity markets have gained substantially since January 2010. Since the beginning of the calendar year 2010, the Sensex gained 2,473.61 points or 14.09 per cent and Nifty 785.5 points or 15.01 per cent as on 29 October 2010, the last trading day in the month of October. Market capitalization is around 1.5 times the GDP of 2009-10 (at market prices, revised estimate [RE], and 2004-05 series) as on 29 October 2010 as against1.3 times as on 31 March 2010. Compared to major world indices, Indian stock exchanges witnessed remarkable growth in this financial year. The rise in average daily turnover in cash as well as derivative segments also indicates improvement in sentiments..Index heavyweight Reliance Industries (RIL) rose 0.7%, with the stock gaining for the third straight day. RIL's advance tax payment reportedly surged 42.8% to Rs 1191 core in Q3 December 2010 over Q3 December 2009.

The private sector bank's advance tax payment reportedly surged 49.5% to Rs 450 crore in Q3 December 2010 over Q3 December 2009. India's gross domestic product (GDP) growth is expected to accelerate to around 9% during 2011, an increase from 7.5% in fiscal year 2009–2010, driven by vigorous domestic demand with strong consumption and investment spending. Equity flows are likely to remain strong during 2011 after a record FII inflow of USD 39 billion years-to-date in December 2010, which is around 34% of the cumulative flows for the 17-year period between 1992 and 2009.

India's high inflation refuses to go away; food inflation hit a historic high of 18.3% by December 25, 2010. In efforts to tame this inflation, the Reserve Bank of India hiked interest rates six times during 2010. The repo rate was raised from 4.8% in early 2010 to 6.3% by the end of 2010.the number of trader in stock market amount is 11,802 lakhs in the preceding year. So we will choose this year.

# DATA AND METHODOLOGY

The study mainly deals with the factor influences of individual investors towards Indian stock market. The names and addresses of 200 novice shareholders were identified with the help of two major brokerage houses in India. The views are conducted in the month of January to December 2010. The analysis of the overall

# VOLUME NO. 1 (2011), ISSUE NO. 7 (NOVEMBER)

status of the investors and their behavior in Indian Stock Market is based on the primary data. Questionnaires were mailed to those individual investors and 200 full responses were received, for a 36.7 percent response rate. Participants were asked to evaluate the importance of 25 variables, identified from the literature and personal interviews as potentially influencing stock investment decisions, by marking only one of three choices for every one of the 25 variables: "Act On" for the variables which were important in making their investment decisions, "Some Influence" for the variables of secondary importance in their decision making, and "No Influence" for the variables that were not at all significant in their investment decision process. The variables were ranked according to how frequently they were placed in each response category and factor analysis was used to examine how they interacted with each other. In particular, factor analysis was used to identify the similarities among the variables and moreover, group them into identifiable categories.

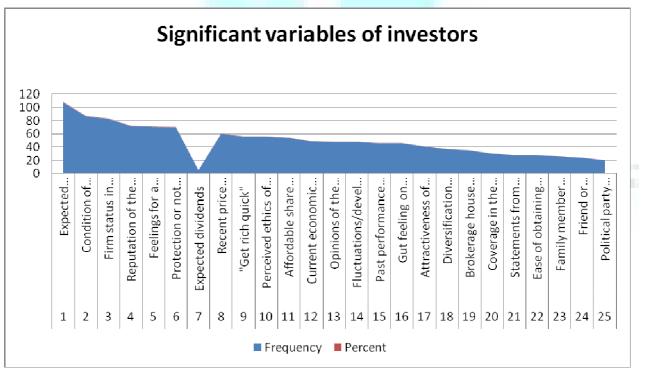
## **RESULTS AND DISCUSSION**

This study focused exclusively on the variables that were identified by the Indian investors to significantly affect their individual investor behavior, namely the *"Act on"* variables. The results and frequencies of the *"Act on"* variables are presented in Table 1. A more complete picture however, is shown in Table 2, which presents the same data sorted according to those factors that have the least impact and influence on investor behavior (*"no influence"*).

Rank	Item	Frequency	Percent
1	Expected corporate earnings	108	72.0%
2	Condition of financial statements	87	58.0%
3	Firm status in industry	83	55.3%
4	Reputation of the firm	72	48.0%
5	Feelings for a firm's products & services	71	47.3%
6	Protection or not of the investor	70	46.7%
7	Expected dividends	5	3.3%
8	Recent price movements in a firm's stock	60	40.0%
9	"Get rich quick"	56	37.3%
10	Perceived ethics of firm	56	37.3%
11	Affordable share price	54	36.0%
12	Current economic indicators	49	32.7%
13	Opinions of the firm's majority stockholders	48	32.0%
14	Fluctuations/developments in the indices of the major markets	48	32.0%
15	Past performance of the firm's stock	46	30.7%
16	Gut feeling on economy	46	30.7%
17	Attractiveness of non-stock investments	41	27.3%
18	Diversification needs	37	24.7%
19	Brokerage house recommendation	35	23.3%
20	Coverage in the press	30	20.0%
21	Statements from politicians & governmental officials	28	18.7%
22	Ease of obtaining borrowed funds	28	18.7%
23	Family member opinions	26	17.3%
24	Friend or coworkers recommendations	24	16.0%
25	Political party affiliation	20	13.3%

#### TABLE 1: FREQUENCY DISTRIBUTION OF VARIABLES THAT SIGNIFICANTLY INFLUENCE INVESTOR DECISIONS

Sources: Analysis



The first Table and graph is that most of the variables that were rated important are classic wealth maximization criteria such as "expected corporate earnings", "condition of financial statements", or "firm status in the industry". It was generally expected that these factors would be high on the list of criteria considered in choosing stock investments, especially given the fact that the survey was completed by experienced investors who survived even though they have been hit hard

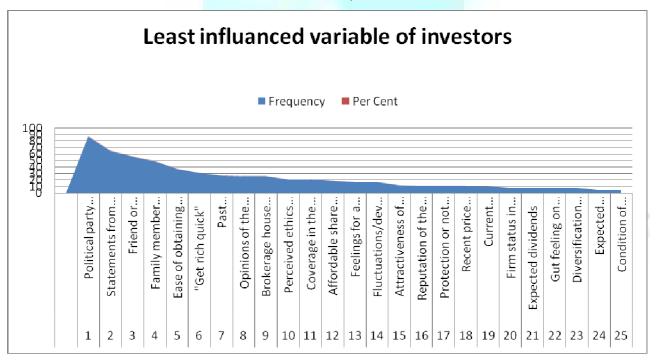
INTERNATIONAL JOURNAL OF RESEARCH IN COMMERCE, ECONOMICS & MANAGEMENT A Monthly Double-Blind Peer Reviewed Refereed Open Access International e-Journal - Included in the International Serial Directories

# VOLUME NO. 1 (2011), ISSUE NO. 7 (NOVEMBER)

by the "bubble burst" of the Indian stock exchange that was initialized at the end of 2010. Secondly, apart from the wealth criteria, surprisingly more than half of the respondents considered no other factor important indicating that investors truly employ diverse decision criteria when choosing stocks. Third, it appears that despite the big blow to investors from the 2010 in the month of June Indian stock market breadth was very low, speculative factors like "get rich quick", "recent price movements in the firm's stocks", and "affordable share price" influenced significantly only 1/3 of the respondents. Finally, "statements from politicians and government officials", "ease of obtaining borrowed funds" and "political party affiliation" on which the pre-2010 with reference to countries political chaos, bubble thrived on, were either totally unimportant to most experienced stock investors and only a very small percentage of them considers them significant investment decision criteria. Table 2 ranks the variables by the frequency with which respondents ignore them when making stock purchases. As mentioned earlier, experienced investors rely mostly on wealth maximization criteria and they are self-reliant ignoring inputs of family members, politicians, and coworkers when purchasing stocks.

Rank	Item	Frequency	Per Cent
1	Political party affiliation	87	58.0%
2	Statements from politicians & governmental officials	65	43.3%
3	Friend or coworkers recommendations	56	37.3%
4	Family member opinions	49	32.7%
5	Ease of obtaining borrowed funds	37	24.7%
6	"Get rich quick"	31	20.7%
7	Past performance of the firm's stock	27	18.0%
8	Opinions of the firm's majority stockholders	26	17.3%
9	Brokerage house recommendation	26	17.3%
10	Perceived ethics of firm	21	14.0%
11	Coverage in the press	21	14.0%
12	Affordable share price	19	12.7%
13	Feelings for a firm's products & services	17	11.3%
14	Fluctuations/developments in the indices of the major markets	17	11.3%
15	Attractiveness of non-stock investments	12	8.0%
16	Reputation of the firm	11	7.3%
17	Protection or not of the investor	11	7.3%
18	Recent price movements in firm's stock	11	7.3%
19	Current economic indicators	10	6.7%
20	Firm status in industry	8	5.3%
21	Expected dividends	8	5.3%
22	Gut feeling on economy	8	5.3%
23	Diversification needs	8	5.3%
24	Expected corporate earnings	5	3.3%
25	Condition of financial statements	5	3.3%

Sources: Analysis



Next, we analyzed the 25 variables using the *varimax* algorithm of orthogonal rotation, which is a very commonly used method of factor analysis. Evaluation of the resulting categories and rankings is highly subjective since factor analysis identifies only the homogeneous cluster groups. The "factor" categories displayed in Table 3 were found to be heavily loaded by a specific subset of the 25 variables in each particular case. The assignment of the factors was undertaken by the factor analysis. However, considerable subjective judgment and common sense was also employed to clarify discrepancies. Finally, the percentage frequencies of each set of variables were added together, and the resulting sum serves as a "weight of significance" attributed to each of the identified categories

TABLE 3: FACTORS INFLUENCING THE EQUITY SELECTION PROCESS OF INDIVIDUAL INVESTORS						
LABEL	VARIABLES	Percentage				
Accounting Information	Condition of financial statements	58.0%				
2.55	Expected corporate earnings	72.0%				
	Expected dividends	3.3%				
	Firm and Industry	55.53				
	Affordable Share Price	36.00				
	Past performance of stock	30.7%				
Subjective/Personal	Get rich quick	37.3%				
2.13	Feelings for a firm's products & services	47.3%				
	Protection or not of the investor	46.7%				
	Gut feeling on the economy	30.7%				
	Perceived ethics of firm	37.3%				
	Political party affiliation	13.3%				
Neutral Information	Coverage in the press	20.0%				
2.10	Recent price movements in a firm's stock	40.0%				
	Statements from politicians & governmental officials	18.7%				
	Fluctuations/developments in the indices of the major markets	32.0%				
	Current economic indicators	32.7%				
	Reputation of the firm	48.0%				
Advocate Recommendation	Brokerage house recommendation	23.3%				
0.89	Family member opinions	17.3%				
	Friends or coworkers recommendations	16.0%				
	Opinions of the firm's majority stockholders	32.0%				
Personal Financial Needs	Diversification needs	24.7%				
0.71	Attractiveness of non-stock investments	27.3%				
	Ease of obtaining borrowed funds	18.7%				

Sources: Analysis

Formerly, it is safe to assume that the data obtained are indeed closely correlated with the individual behavior of active investors in the Bombay Stock Exchange (BSE). The factor category displaying the highest significance is "Accounting Information" with a weight of 2.55. This was expected since, as mentioned earlier, the vast majority of the study's respondents were experienced stockholders. This result also indicates that skilled investors rely and emphasize rational decision making criteria, assigning a high value to this particular set of variables.

The next factor category with the highest loading was surprisingly, the criteria category of "Subjective/Personal" with a weight of 2.13. One can see clearly that the participant's responses reflect the overall elation that prevails in the investor community in India, more than ever during the bull market period of pre-2009-2010. Particularly not worth mentioning and telling is the fact that 36.37 percent of the respondents considered their desire to "get rich quick" as an "Act on" influence factor. The factor category of "Neutral Information" received a weight of 2.10. Rationally speaking, the set of variables contained in this category are thought to constitute valuable information for a prospective investor. It is noteworthy that this category is ranked below the "Subjective/Personal" one, and this may be due to the lack of widespread knowledgeable information about a particular investment alternative, along with the resulting herd-behavior during the bull pre-2009 years, that contributed to the relative neglect of consideration of significant traditional variables. Finally, the last two categories of "Advocate Recommendation" and "Personal Financial Needs" received weights of 0.89 and 0.71 respectively. This fact shows that equity investors in the Bombay Stock Exchange consider themselves quite independent of any influences outside

Their own personal feelings, although it is quite a mystery just how the investors' own subjective judgments were formed. Nevertheless, the average investor fancies himself or herself free of any direct influence, and shows a puzzling total disregard for matters concerning their personal financial needs.

#### CONCLUSION

This study tested the doctrine of the behavioral finance theory on the factors that influence investment choices under conditions of uncertainty. The analysis performed on the data collected appears to give a fairly accurate view of the average equity investor in the Bombay Stock Exchange (BSE). Experienced and knowledgeable investors would readily admit that the structure and relative weights of the chosen categories reflect on the average, a still unsophisticated and immature investor profile. The results revealed by our sample of 200 respondents confirm that there seems to be a certain degree of correlation between the factors that behavioral finance theory and previous empirical evidence identify as the influencing factors for the average equity investor, and the individual behavior of active investors in the Bombay Stock Exchange (BSE) influenced by the overall trends prevailing at the time of the survey in the BSE

#### LIMITATIONS OF THE STUDY

1. Sample size is limited to 200 novice individual investors in the Indian stock market. The sample size may not adequately represent the inter sample size may not adequately represent the international market.

2. The simple sampling techniques are due to time and financial constraints.

3. This study has not been conducted over an extended period of time having both ups and downs of stock market conditions which a significant factor influence

on investor's of various factors.

4. This study considered only BSE experienced investors.

# SUGGESTIONS FOR FUTURE RESEARCH

This study examined the factors that appear to exercise the greatest influence on the individual stock investor, and included not only the factors investigated by preceding studies and derived from prevailing behavioral finance theories, but also introduced additional factors generated through personal interviews that have been found to influence the stockholders' investment decisions in India. Future research should attempt to authenticate the two questions that this paper addressed: First, what relative importance do decision variables and especially economic decision variables have for individual investors making stock purchase decisions? Secondly, are there homogeneous clusters or groups of variables that form identifiable decision determinants that investors rely upon when making stock investment decisions? Cross national data collected from random samples of individual stock investors with substantial holdings should attempt to validate this study's conclusions that individuals base their stock purchase decisions on economic priority criteria combined with many other diverse variables in its place of merely relying on a single integrated approach

#### REFERENCES

Baker, H.K., and J.A. Haslem, "Toward the Development of Client-Specified Valuation Models," Journal of Finance, Vol. 29, No. 4, pp. 1255-1263, 1974.

INTERNATIONAL JOURNAL OF RESEARCH IN COMMERCE, ECONOMICS & MANAGEMENT

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

# www.ijrcm.org.in

Baker, H.K., M.B. Hargrove, and J.A. Haslem, "An Empirical Analysis of the Risk Return Preferences of Individual Investors," *Journal of Financial and Quantitative Analysis*, Vol. 12, No. 3, pp. 377-389, 1977.

Benningan, S., Financial Modeling, MIT Press, Cambridge, MA, 1997.Blume, M.E., and I. Friend. "The Changing Role of the Individual Investor", John Wiley & Sons, New York, New York, 1978.

Brock, W., J. Lakonishok, and B. LeBaron, "Simple Technical Trading Rules and the Stochastic Properties of Stock Returns," *Journal of Finance*, Vol. 47, No. 5, pp. 1731-64, 1992.

Bak, P., M. Paczuski, and M. Shubik. 1997. Price variations in a stock market with many agents. *Physica A: Statistical and Theoretical Physics* 246 (3-4):430-453. Barber, Brad M., Chip Heath, and Terrance Odean. 2003. Good Reasons Sell: Reason-Based Choice Among Group and Individual Investors in the Stock Market. *Management Science* 49(12):1636-1652.

Chen, N.F., "Some Empirical Tests of the Theory of Arbitrage Pricing," Journal of Finance, Vol. 38, No. 5, pp. 1393-1414, 1983

Cohn, R.A., W.G. Lewellen, R.C. Lease and G.G. Schlarbaum, "Individual Investor Risk Aversion and Investment Portfolio Composition," *Journal of Finance*, Vol. 30, No. 2, pp. 605-620, 1975.

Ezlika Ghazali and Md.Nor Othman, (2001), "Investment Behaviour of Active and Passive Investors: A Comparative Study of Kuala Lumpur Stock Exchange Individual Investors", Proceedings of the Asia Pacific Management Conference, 607-622, pg. 7, 8, 11, 12.

Goodwin, H.T., Active Portfolio Management. Richard D. Irwin, Chicago, Illinois, 1995.

Granger, G.W., "Investigating causal relationships by econometric methods and cross-spectral methods," Econometrica, Vol. 37, No. 3, pp. 424-38, 1969.

Grinold, R.C., "The Fundamental Law of Active Management," Journal of Portfolio Management, Vol. 15, No.3, pp. 30-37, 1989.

Kent D., Hirshleifer., and Siew Hong Teoh. (2001). Investor psychology in capital markets: evidence and policy implications, *Journal of Monetary Economics*, 49(1), 139-209.

Kent, D., Hirshleifer, D. and Subrahmanyam, A., (2001). Overconfidence, Arbitrage, and Equilibrium asset pricing. Journal of Finance 56, 921-965

Odean, Terrance, 1998a, Are investors reluctant to realize their losses? Journal of Finance, 53, 1775-1798.

Odean, Terrance, 1998b, Volume, volatility, price and profit when all trades are above Average, Journal of Finance, 53, 1887-1934.

Odean, Terrance, 1999, Do investors trade too much?, forthcoming American Economic Reviews

Rajarajan V (2000), "Investor's Lifestyles and Investment Characteristics", *Finance India*, Vol. XIV, No. 2, pp 465478.

Rajarajan, V.,"investor's Life styles and Investments Characteristics" Finance India, June, Vol.XIV No.2(2000), pp 465478

Yates, J. Frank, 1990, Judgment and Decision Making, (Prentice Hall, Englewood Cliffs, New Jersey).



# STUDY THE PERFORMANCE OF STATE BANK OF INDIA IN COMPARISON TO ICICI FOR THE PERIOD 2001-09: AN EMPIRICAL STUDY

# ANOOP MOHANTY ASST. PROFESSOR LOVELY SCHOOL OF MANAGEMENT LOVELY PROFESSIONAL UNIVERSITY PHAGWARA

SUMEET BAJWA EXECUTIVE THE SOUTH INDIAN BANK LTD. LUDHIANA

# ANUJ MOHANTY ASST. MANAGER THE SOUTH INDIAN BANK LTD. GHAZIABAD

### ABSTRACT

Last decade has seen dynamic transformation in the Indian banking. The financial system comprising of variety of participants like different markets and regulators, instruments and players have improved their overall efficiency. The Banking sector seems to be the most vibrant among all with more emphasize on sustainable growth and profitability in the era of NPA management and adequate capital infusion under BASEL II norms. An uncompetitive banking structure will fail to respond to the needs of economic growth with long-term impact. In this paper, we emphasize the need to bring competitiveness within the key players of banking sector itself. The industry is witnessing fast changes in the form of operational regulations: Cheque truncation, introduction of Islamic banking, licenses to NBFC's, Basel accord norms for capital enhancement, replacement of BPLR with base rate, teaser rates, daily calculation of saving account interest at a minimum of 4%, redefinition of priority sector, foreign exchange fluctuations, risk management etc. This study aims at bringing the factors into limelight which have resulted in the transformation of financial positions the two biggest banks of India banking arena. The paper revealed that out of the seven factors, the impact of employee's productivity, net profit, earning per share, net interest margin is positive whereas NPA level, return on asset and capital adequacy ratio have negative impact on the financial position of both banks during the time frame of 2001-2009.

#### **KEYWORDS**

Capital Adequacy Ratio, Earning per share, Teaser rate, Benchmark prime lending rate, NBFC.

#### INTRODUCTION

ast decade has seen dynamic transformation in the Indian banking. The financial system comprising of variety of participants like different markets and regulators, instruments and players have improved their overall efficiency. The Banking sector seems to be the most vibrant among all with more emphasize on sustainable growth and profitability in the era of NPA management and adequate capital infusion under BASEL II norms. Some banks have established an outstanding track record of innovation, growth and value creation being reflected in their market valuations. The cost of banking intermediation in India is higher and bank penetration is far lower than in other markets. Though India's banking proved its strength during the global recession 2008 but still need is there to have a better regulatory framework with more accurate operation guideline. While the onus for these changes lies mainly with regulators and bank managements. An uncompetitive banking structure will fail to respond to the needs of economic growth with long-term impact. In this paper, we emphasize the need to bring competitiveness within the key players of banking sector itself. The industry is witnessing fast changes in the form of operational regulations: Cheque truncation, introduction of Islamic banking, licenses to NBFC's, Basel accord norms for capital enhancement, replacement of BPLR with base rate, teaser rates, daily calculation of saving account interest at a minimum of 4%, redefinition of priority sector, foreign exchange fluctuations, risk management etc.

Competition has emerged in the Indian banking sector after the reforms of 1991 with the liberalization of banking sector and introduction of private banks to act as a competitive base for the already existing nationalized commercial banks. The new generation banks have leverage on technology, tailored products and better customer services to compete in an unmatched competitor i.e. (PSU Banks). The race is lead by Axis bank formerly known as UTI Bank, ICICI Bank, HDFC Bank etc. The race for acquisition of market share from existing player is very tough keeping customer reservations for govt. banks over private players. This paper covered the transition period of 2001 to 2010 to study the changes in the market share in specific reference to State Bank of India and Industrial Credit and Investment Corporation of India.

#### INDUSTRIAL CREDIT AND INVESTMENT CORPORATION OF INDIA

Bank is India's largest private sector bank by market capitalisation()and second largest overall in terms of assets(). The Bank has a network of 1,700 plus branches and about 4,721 ATMs spread across India and abroad with over 24 million customers. ICICI Bank offers a wide range of banking products and services to both corporate and retail customers through a variety of delivery channels and specialised subsidiaries like investment banking, life and non-life insurance, venture capital and asset management etc. It is also the largest issuer of credit cards in India. The Bank is expanding in overseas markets with wholly-owned subsidiaries, branches and representatives offices in 18 countries (i.e. Canada, Russia and the UK, offshore banking units in Bahrain and Singapore, an advisory branch in Dubai, branches in Belgium, Hong Kong and Sri Lanka, and representative offices in Bangladesh, China, Malaysia, Indonesia, South Africa, Thailand, United Arab Emirates and USA). The bank's current and savings account (CASA) ratio increased to 30% in 2008 from 25% in 2007.

State Bank of India, the largest state controlled bank in India. Government of India nationalised the Imperial Bank of India in 1955, with the Reserve Bank of India taking a 60% stake, and renamed it the State Bank of India. In 2008, the Government took over the stake held by the Reserve Bank of India. SBI provides a range of banking products through its vast network in India and overseas (i.e. over 16000 branches). With an asset base of \$250 billion, it has a market share of about 20% in deposits and advances. It has improved its efficiency through computerisation and Golden handshake schemes (VRS). It has converted all its branches under Core Banking System (CBS) with largest ATM networks in the region.

# **REVIEW OF LITERATURE**

Manthoss, Molyneux & Pasiouras (2008) 'Regulations and productivity growth in banking'. The study covered the period of 1999-2006 in 22 countries. In their study they have used the Malmquist index to estimate the productivity growth of banks using variables like capital requirements, official supervisory power, market discipline, and restrictions on bank activities. The results indicate that regulations and incentives that promote private monitoring have a positive impact on productivity. Restrictions on banks' activities relating to their involvement in securities, insurance, real estate and ownership of non-financial firms also have a positive impact

Kundapur V. K., (2007) studied the scope of capital infusion to keep the growth pace to the existing level to make ICICI Bank number one before the doors opens for foreign banks. It states that the faster pace of asset creation will bring synergy to compete with biggers domestic and international entities. (ICICI Bank had assets of Rs344,658 crore as on March 31, 2007, against SBI's estimated figure of Rs 554,573crore)

Arpit, A (2005), "ICICI Bank to see more growth in private banking" the study reveals the bank's expansion strategy through target marketing (HNI) and doubling its assets under management. Strategies used were expansion of new branches, specialized training programs and target marketing. It revealed that GDP forecast with increasing purchasing power leads to faster growth of banking sector. The study also emphasis scope of rise in profit was on account of other income and lower costs of funds.

**Mohan**. and **Ray (2004)** "*Productivity Growth and Efficiency in Indian Banking*" This study Compared the performance of public, private, and foreign banks operating in India. It measured the productivity covering twenty seven public sector banks, twenty one private sector banks & fourteen foreign banks during the period of 1992-2000. They measured productivity by using output as loan income, investment income and non-interest income parameters. For inputs, they considered interest and operating cost (which includes labor and non-labor, noninterest costs). Out of a total of six comparisons they have made, there are no differences in three cases, PSB's do better in two, and foreign banks in one.

# **OBJECTIVE OF STUDY**

1. To study the factor affecting the market share of SBI & ICICI.

2. To analyze the impact of various economic changes on SBI in comparison to ICICI.

### **RESEARCH METHODOLOGY**

**Descriptive Research**: It describes data and characteristics about the population or phenomenon being studied. The idea behind this type of research is to study frequencies, averages and other statistical calculations. Although this research is accurate, it does not gather the causes behind a situation.

Sources of Data: We have used secondary data for our research study. The secondary data have been collected mainly from RBI monthly bulletins, books on financial sector, financial express, various newspapers and other literature available in the field.

Study Period: the study has covered the period of 2000 to 2009.

We have considered affect of the following parameters: productivity per employee, net profit, NPA level, earning per share, net interest margin, and return on asset, capital adequacy norms.

#### FACTORS AFFECTING THE GROWTH OF SBI

1. NET PROFIT: net profit is calculated by subtracting a company's total expenses from total revenue, thus showing what the company has earned (or lost) in a given period of time (usually one year) also called net income or net earnings.

2. NET INTEREST MARGIN: performance metric that examines how successful a firm's investment decisions are compared to its debt situations. A negative value denotes that the firm did not make an optimal decision, because interest expenses were greater than the return generated by investment. 3. NPA's: A classification used by financial institutions that refer to loans that are in jeopardy of default. Once the borrower has failed to make interest or principal payments for 90 days the loan is considered to be a non-performing asset.

4. CAPITAL ADEQUACY RATIO: A measure of a bank's capital. It is expressed as a percentage of a bank's risk weighted credit exposures.

# CAR = Tier One Capital + Tier Two Capital

# Risk Weighted Assets

5. RETURN ON ASSET: It is an indicator of how profitable a company is relative to its total assets. ROA gives an idea as to how efficient management is at using its assets to generate earnings. Calculated by dividing a company's annual earnings by its total assets, ROA is displayed as a percentage. Sometimes this is referred to as "return on investment". The formula for return on assets is:

# = <u>Net Income</u>

#### Total Assets

6. PRODUCTIVITY PER EMPLOYEE: Productivity refers to the efficiency of the labour employed it is further classified under the following sub heads:-

a. Business per employee: it is an important ratio that looks at a company's sales in relation to the number of employees they have. It is calculated as:

total revenue
No. of employees.

#### b. Profit per employee: Calculated as

\_

Calculated as:

<u>revenue – cost</u> No. of employees.

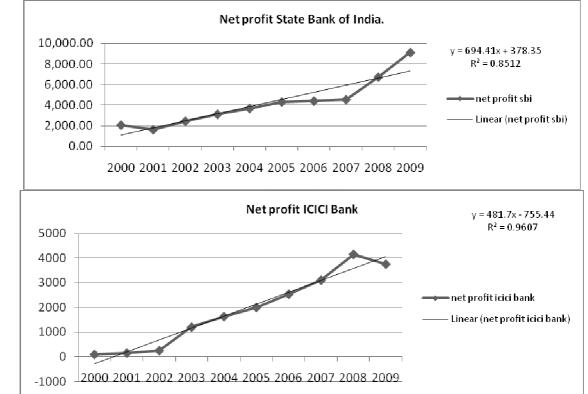
7. Earnings per Share: The portion of a company's profit allocated to each outstanding share of common stock. Earnings per share serve as an indicator of a company's profitability. Calculated as:

# Net Income - Dividends on Preferred Stock

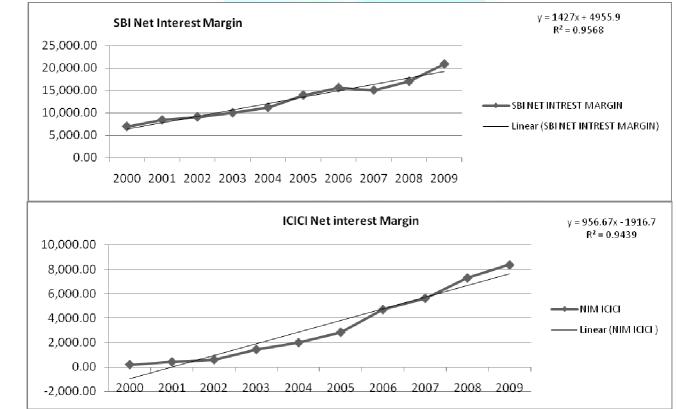
# Average Outstanding Shares

# ANALYSIS

# A. DEPOSITS STATE BANK OF INDIA AND ICICI BANK



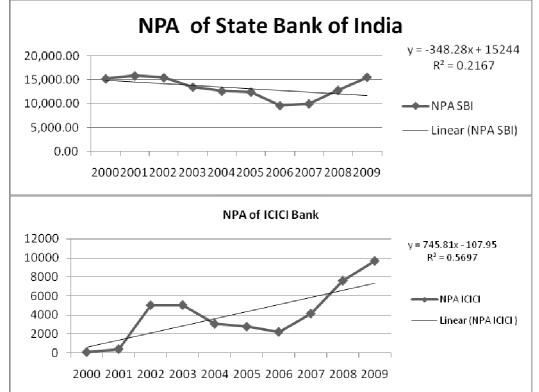
Net Profit:\_ The net profit of the SBI bank during the period has increased from 2051 cr. in 2000 to 9121 cr. in 2009. On the other side the net profits of ICICI bank in 2000 was Rs.105 cr. to Rs. 3758 cr. in 2009. From the table we can analyze that the profit of ICICI during the increased by 35 times. On the other hand the profit of SBI during the period increased by only 4.5 times In this study we have compared net profit with various quantitative parameters and we tried to find out the relationship for the same in below mentioned paragraph. The relation of net profit and - it has strong correlation with net interest margin (.954) with significance level of 0%, business per employee (.975, 0%), profit per employee (.976, 0%) and earnings per share (.989, 0%) and negative correlation with non performing asset, capital adequacy ratio and return on asset. B. NET INTEREST MARGIN STATE BANK OF INDIA AND ICICI BANK



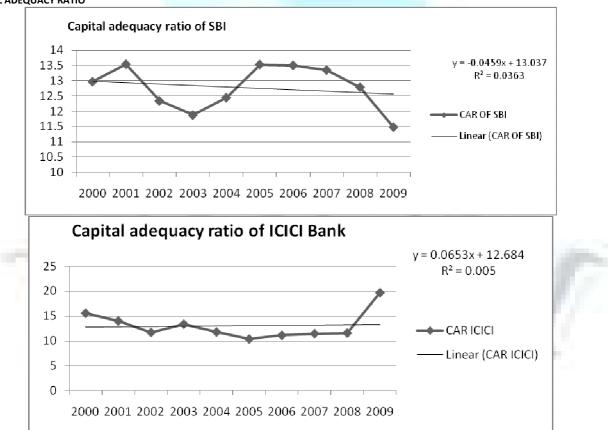
NET INTEREST MARGIN: the net interest margin (interest received - interest expenses) of the SBI during the period has increased from 6,928.35cr. in 2000 to 20,873.14 cr. in 2009. On the other side the net profits of ICICI bank in 2000 was Rs.105 cr. to Rs. 3758 cr. in 2009. The net interest margin has strong positive

correlation with net profit, business per employee, productivity and earnings per share. It has negative correlation with non performing asset, capital adequacy ratio and return on asset.

C. NONPERFORMING ASSETS OF STATE BANK OF INDIA AND ICICI BANK

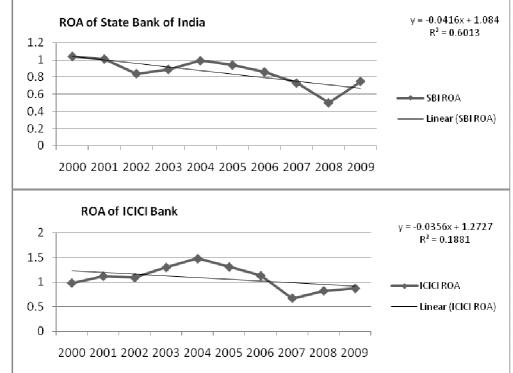


NPA's: Nonperforming assets are defined as assets which are overdue by 90 days. The NPA of SBI has decreased from 6.41 percent in 2000 to 1.76 percent in 2009. It means bank has well managed its NPA. The NPA of ICICI bank has increased form 1.53% in 2000 to 2.09% in 2009 which mean bank is not efficient in managing its NPA. The NPA does not have any significance relation with others factors. D. CAPITAL ADEQUACY RATIO



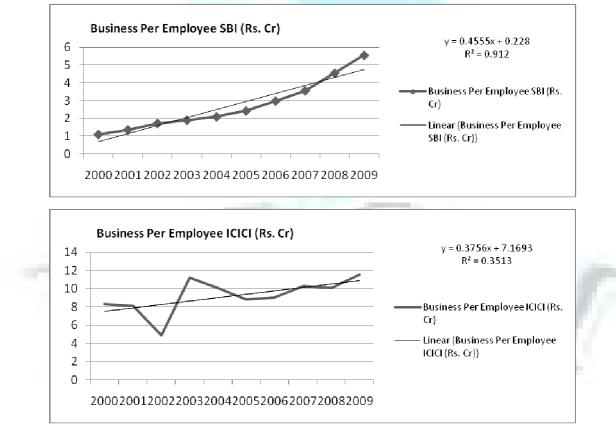
CAPITAL ADEQUACY RATIO: Capital adequacy ratio of SBI has increased from 11.49% in 2000 to 12.97% in 2009 and for ICICI BANK it has decreased from 19.64% in 2000 to 15.53% in 2009. It has positive but weak correlation with return on asset with less 41.2% of the confidence level.

### E. RETURN ON ASSET OF STATE BANK OF INDIA AND ICICI BANK



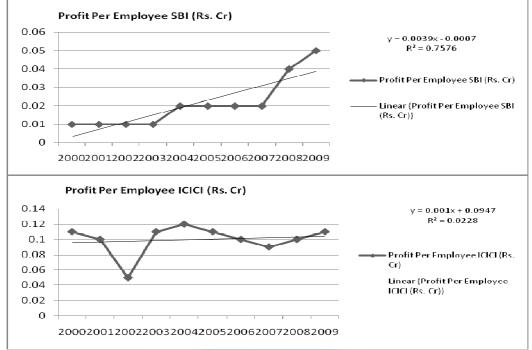
**RETURN ON ASSET:** An indicator of how profitable a company is relative to its total assets. ROA gives an idea as to how efficient management is at using its assets to generate earnings. The ROA of the SBI .75% in 2000 to 1.04% in 2009. While on the other hand ROA if ICICI Bank is much more than the SBI bank. it also increased for ICICI Bank from 8.3% in 2000 and 11.53% in 2009. It means ICICI's management is more efficient in using its assets. It has strong but negative correlation with net profit with confidence level of 97.5%. this is same with the case of NIM, business per employee, productivity per employee and earnings per share.





BUSINESS PER EMPLOYEE: SBI's per employee has been in 2000 is Rs. 1.11 cr .while it increased to Rs.5.56 cr. in 2009. On the other side ICICI bank's per employee business much more than the SBI's. ICICI's per employee business in 2000 is Rs. 8.3 cr. and Rs. 11.54 cr. in 2009. It has strong and positive correlation with net profit, profit per employee, earinigs per share with confidence level of 100%.

#### G. PROFIT PER EMPLOYEE SBI AND ICICI BANK



Profit per employee: it has strong and positive correlation with net profit (.976, 100%), NIM (.974, 100%), earnings per share (.944, 100%), business per employee (.952, 100%).

CORRELATION ANALYSIS OF SBI ON THE BASIS OF	VARIOUS PRE-DECIDED PARAMETER

		Net Profit	NIM	NPA	CAR	ROA	Business per employee	Profit per employee	EPS
Net profit	Pearson Correlation	1							
	Sig. (2-tailed)								
	Ν	10							
NIM.	Pearson Correlation	.954**	1						
	Sig. (2-tailed)	.000							
	Ν	10	10						
Non Performing	Pearson Correlation	140	362	1					
asset	Sig. (2-tailed)	.699	.303						
	Ν	10	10	10					
CAR	Pearson Correlation	424	206	- .452	1				
	Sig. (2-tailed)	.222	.568	.190					
	Ν	10	10	10	10				
ROA	Pearson Correlation	699 <sup>*</sup>	704	.270	.198	1			
	Sig. (2-tailed)	.025	.023	.451	.583				
	Ν		10	10	10	10			
Business Per	Pearson Correlation	.975**	.966**	- .219	332	- .798 <sup>**</sup>	1		
Employee	Sig. (2-tailed)	.000	.000	.543	.349	.006			
	N		10	10	10	10	10		
Profit Per	Pearson Correlation	.976**	.909**	- .036	385	691*	.952**	1	
Employee	Sig. (2-tailed)	.000	.000	.922	.272	.027	.000		
	N		10	10	10	10	10	10	
Earning Per share	Pearson Correlation	.989**	.974**	- .259	373	678 <sup>*</sup>	.966**	.944**	1
	Sig. (2-tailed)	.000	.000	.470	.288	.031	.000	.000	
	Ν	10	10	10	10	10	10	10	10

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

		Net Profit	NIM	NPA	CAR	ROA	Business per employee	Profit per employee	EPS
Net profit	Pearson Correlation	1							
	Sig. (2-tailed)								
	Ν	10							
NIM	Pearson Correlation	.973**	1						
	Sig. (2-tailed)	.000							
	Ν	10	10						
Non	Pearson Correlation	.714 <sup>*</sup>	.753 <sup>*</sup>	1					
Performing Assets	Sig. (2-tailed)	.020	.012						
	Ν	10	10	10					
CAR	Pearson Correlation	.046	.222	.342	1				
	Sig. (2-tailed)	.899	.537	.333					
	Ν	10	10	10	10				
ROA	Pearson Correlation	476	580	365	277	1			
	Sig. (2-tailed)	.165	.079	.300	.439				
	Ν	10	10	10	10	10			
Business	Pearson Correlation	.640*	.592	.413	.331	106	1		
Per employee	Sig. (2-tailed)	.046	.071	.235	.350	.772			
employee	Ν	10	10	10	10	10	10		
Profit	Pearson Correlation	.228	.157	106	.258	.299	.759 <sup>*</sup>	1	
Per employee	Sig. (2-tailed)	.525	.665	.770	.472	.401	.011		
employee	Ν	10	10	10	10	10	10	10	
Earning	Pearson Correlation	.963**	.895 <sup>**</sup>	.661*	133	304	.623	.223	1
Per share	Sig. (2-tailed)	.000	.000	.038	.714	.393	.054	.536	
	Ν	10	10	10	10	10	10	10	10

# CORRELATION ANALYSIS OF ICICI ON THE BASIS OF VARIOUS PRE-DECIDED PARAMETER

\*\*. Correlation is significant at the 0.01 level (2-tailed).
\* . Correlation is significant at the 0.05 level (2-tailed).

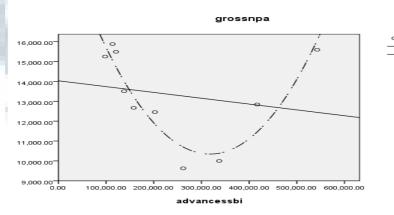
INTERPRETATION Regression Analysis

1. Advances to Gross NPA(SBI)

Coefficients <sup>a</sup>								
Model	Unstandardize	d Coefficients	Standardized Coefficients	t	Sig.			
	В	Std. Error	Beta					
1 (Constant)	14028.143	1458.952		9.615	.000			
Advances SBI	003	.005	193	558	.592			

a. Dependent Variable: GNPA

Equation Y on X Y =14028 - .003X







## ADVANCES TO GROSS NPA (ICICI BANK)

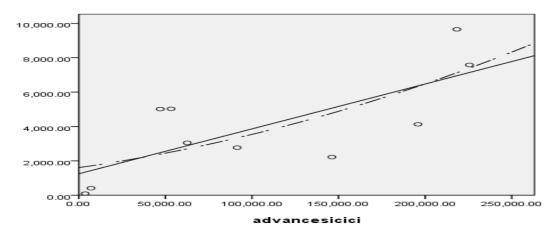
Coencients								
Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.			
	В	Std. Error	Beta					
1 (Constant)	1249.730	1102.268		1.134	.290			
advancesicici	.026	.008	.743	3.140	.014			

Coofficients

a. Dependent Variable: Gross NPA

#### Equation Y on X Y= 1249.730 + .023X

#### grossnpa



O Observed Linear

We can see from the two graphs SBI's performance is parabolic in nature which shows that to a certain point as the advances are increasing the gross NPA rate is decreasing. After a certain level with the increase in advances the gross NPA also starts increasing at a faster rate. SBI's graph is a representation of ideal banking industry. While on the hand ICICI Bank's graph is linear in nature indicating a adverse relationship i.e. advance are increasing along with gross NPA which is due to be there aggressive policy in lending.

#### 1. Deposits to advances

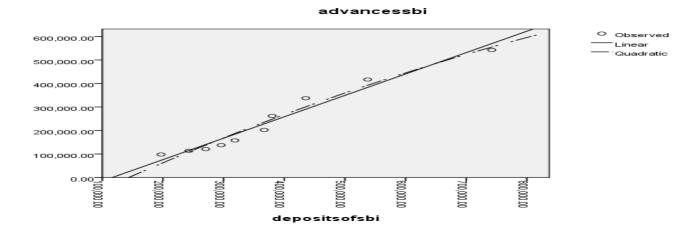
Coefficients <sup>a</sup>									
Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.				
	В	Std. Error	Beta						
1 (Constant)	-105799.017	25917.177		-4.082	.004				
deposits	.910	.063	.981	14.345	.000				

a. Dependent Variable: Advances

#### Y on x

y = -105799 + .910

Representing SBI's Advances - Deposit relationship.

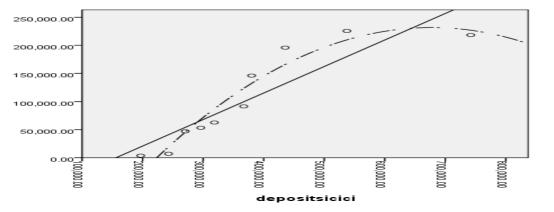


Coefficients <sup>a</sup>							
/lodel	Unstandardize	ed Coefficients	Standardized Coefficients	t	Sig.		
	В	Std. Error	Beta				
(Constant)	2234.125	5930.490		.377	.716		
deposits	.908	.041	.992	21.984	.000		
		-					

a. Dependent Variable: Advances

# Y on X y = 2234.12 + .908x

#### advancesicici



O Observed — Linear — Quadratic

We can see from the two graph that the SBI's graph is more linear than to ICICI's graph. It means that as the deposits of the SBI are increasing –advances are also increasing which is good for SBI. But if we see the graph of ICICI Bank we find in initial stage as the deposit are increasing advances also increasing but after a certain level it started decreasing.

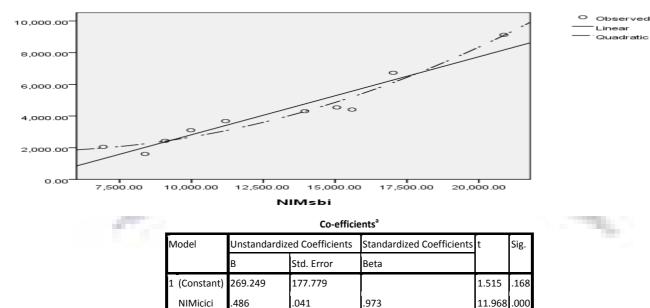
2. NIM to Net Profit

Co-efficients <sup>a</sup>										
Model	Unstandardize	d Coefficients	Standardized Coefficients	t	Sig.					
	В	Std. Error	Beta							
1 (Constant)	-2107.663	733.101		-2.875	.021					
NIMsbi	.492	.054	.954	9.050	.000					
a. Dependen	a. Dependent Variable: Net profit of State Bank of India.									

Y on X

y = -2107.66 + .492x

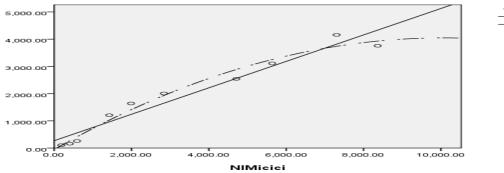
#### netprofitsbi



a. Dependent Variable: Net profit ICICI Bank

Y on X y = 269.24 + .041

#### netprofiticici



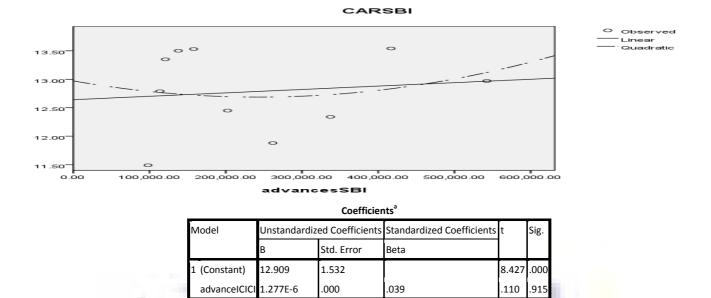
O Observed Linear Quadratic

In the case of SBI firstly as the NIM increasing with a declining net profit but after some time with an increase in NIM there is an increase in net profit. On the other hand the situation is reverse in case of ICICI Bank. As the NIM of the ICICI Bank increasing the net profit is increasing but after certain point as the NIM increasing are increasing net profit started decreasing which is not good for ICICI Bank.

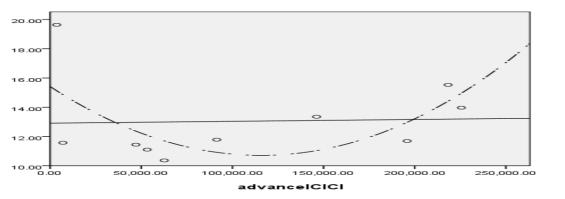
Advances to CAR 3.

Coefficients <sup>a</sup>								
Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.			
	В	Std. Error	Beta					
1 (Constant)	12.641	.476		26.579	.000			
Advances SBI	5.977E-7	.000	.123	.349	.736			

a. Dependent Variable: CARSBI



CARICICI



a. Dependent Variable: CARICICI

Observed Linear Quadratic

**INTERNATIONAL JOURNAL OF RESEARCH IN COMMERCE, ECONOMICS & MANAGEMENT** 93 A Monthly Double-Blind Peer Reviewed Refereed Open Access International e-Journal - Included in the International Serial Directories

# VOLUME NO. 1 (2011), ISSUE NO. 7 (NOVEMBER)

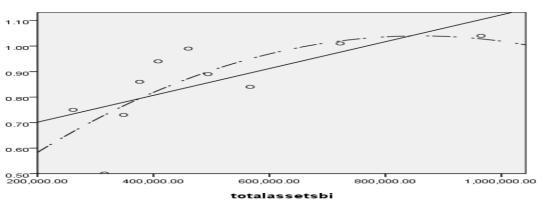
In the case of the advances to CAR both the banks have shown same trend.

4. Total Asset to ROA

Co-efficients <sup>®</sup>								
Model	Unstandardize	ed Coefficients	Standardized Coefficients	t	Sig.			
B Std. Error		Std. Error	Beta					
1 (Constant)	.596	.104		5.739	.000			
Total asset SBI	5.258E-7	.000	.689	2.690	.027			

roasbi

a. Dependent Variable: ROA SBI

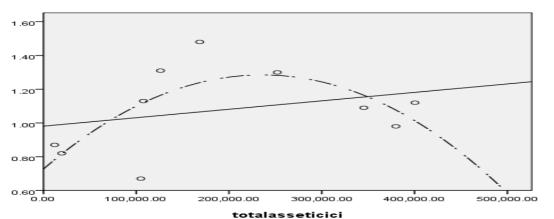


O Observed — Linear — Quadratic

Co-efficients <sup>a</sup>								
Model	Un-standardized Coefficients		Standardized Coefficients	Т	Sig.			
	В	Std. Error	Beta					
1 (Constant)	.981	.137		7.154	.000			
totalasseticici	5.002E-7	.000	.291	.859	.415			

a. Dependent Variable: ROA-ICICI

#### roaicici



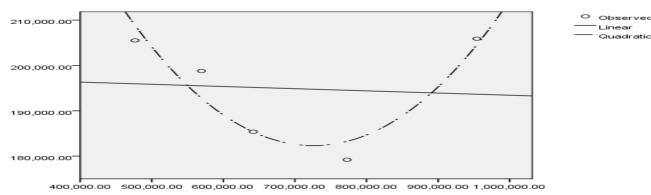
Observed Linear

The graph of the SBI Bank is less parabolic in nature as compare to ICICI Bank. SBI's return on asset is less volatile but on the other hand ICICI Bank's return on asset much volatile. In this SBI has shown more consistency in comparison to ICICI Bank. 5. No. of Employees to Total Business

Coefficients <sup>a</sup>								
Model Unstandardized Coefficients Standardized Coefficients				Т	Sig.			
	В	Std. Error	Beta					
1 (Constant)	905601.172	1.731E6		.523	.637			
numberofemployees	-1.142	8.866	074	129	.906			

a. Dependent Variable: total business

#### numberofemployees



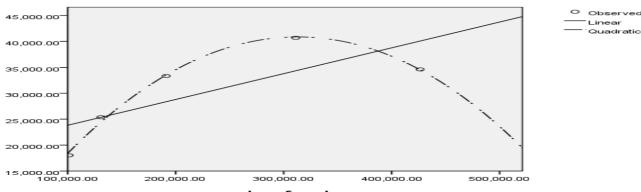
totalbusiness

# Coefficients<sup>a</sup>

Model	Unstandardized Coefficients		Standardized Coefficients	Т	Sig.
	В	Std. Error	Beta		
1 (Constant)	18844.878	6358.237		2.964	.059
Number of employees	.050	.024	.764	2.049	.133

Dependent Variable: total business.

#### totalbusiness



numberofemployees

We can see from the SBI's graph firstly as the no. of employee are increasing total business is declining but after a certain level as a no. of employee are increasing total business is also increasing. But in the case of ICICI Bank is reverse. Initially As the no. of employees are increasing total business are increasing but after a certain level it started decreasing.

#### FINDINGS

- 1. The Foreign Ownership in State Bank of India has been reduced to 18% although it 20% permitted by RBI.
- 2. The retail exposure in the portfolio of ICICI Bank is 72.89% while it 31% in SBI. Even after than great potential is there for SBI but the market is underestimating this potential. This due to the govt. ownership in which market does not believe.
- 3. From the correlation analysis we found that SBI is leading in 5 parameters (net profit, NIM, business per employee, profit per employee, EPS) and ICICI Bank is leading only in one parameter(NPA) while there no significance correlation in two parameters(CAR, ROA).
- 4. From the regression analysis we found that in all parameters (NIM to net profit, business per employee to net profit, net profit to EPS, NIM to EPS, business per employee to profit per employee) SBI is having positive high degree of relationship with higher level of significance.
- 5. In 2007 SBI lost its first position to ICICI Bank but in 2009 SBI regained its first position again.

#### ECONOMIC ENVIRONMENT

The economy of India is the eleventh largest economy in the world and the fourth largest by purchasing power parity (PPP). In the 1990s, following economic reform from the socialist-inspired economy of post-independence India, the country began to experience rapid economic growth, as markets opened for international competition and investment. In the 21st century, India is an emerging economic power with vast human and natural resources, and a huge knowledge base. Economists predict that by 2020, India will be among the leading economies of the world. India was under social democratic-based policies from 1947 to 1991. The economy was characterized by extensive regulation, protectionism, and public ownership, leading to pervasive corruption and slow growth. Since 1991, continuing economic liberalization has moved the economy towards a market-based system. The Rupee hit a record low during early 2009 on account of global recession. However, due to a strong domestic market, India managed to bounce back sooner than the western countries. Since September 2009 there has been a constant appreciation in Rupee versus most Tier 1 currencies. A rising rupee also prompted Government of India to buy 200 tons of Gold from IMF. the growth rate of GNP, fiscal deficit, and world interest rate have had positive effect on long-term interest rates during the pre-reform period, whereas only the fiscal deficit and expected inflation appear as significant determinants of interest rates during the post-reform period. Surprisingly, the factors like money supply, growth rate of GNP, and world interest rates are shown to have played little role in the process of long-term interest rates determination

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

# www.ijrcm.org.in

during the post-reform period. Our findings also suggest that there has been a structural break for the long-term nominal interest rates but not for the real interest rates during 1970-2000. However, the intensity by which the rate of inflation is influenced depends on the savings-investment gap. The study also finds that while the liberalization of interest rates has been a welcome measure, the soft or low interest rates policy has given rise to many adverse economic and social consequences.

# LIMITATIONS OF THE STUDY

- > We could not merge the data of both banks on a single diagram, so it is difficult to compare both bank.
- Time, money and resources are constraints.
- > Data for the no. of employees is available for only 5 years (2004-2008).

# CONCLUSION

ICICI being aggressive has better growth rate in terms of deposit growth as compared to SBI. The net interest margin has strong positive correlation with net profit, business per employee, productivity and earnings per share in both the cases (SBI & ICICI). The study concluded negative correlation of net profit with non performing asset, capital adequacy ratio and return on asset. SBI established since long having a better control on NPA whereby ICICI being a new entity has aggressively gone for growth leading to higher NPA formation hence needing better NPA management for its asset base. The return on assets of State Bank of India is .89% as ompared to 1.156% of ICICI bank which indicates risky portfolio for ICICI. Business per employees in SBI is Rs.5.56 crores as compared to ICICI's Rs.11.54 crores reflecting better productivity of employees in private set up due to targets and incentive system. SBI's profit per employee is .027 crores as compared to .09 crores of ICICI bank reflecting large employee base for SBI and lesser returns due to conservative lending policies. The aggressive policies of ICICI may be generating shorter gains but SBI will be generating consistent returns with less NPA rate hence we can conclude that SBI and ICICI both are working with different organizational structures and strategies leading to market leadership in their own domains.

# REFERENCES

- Varshney P.N, "Banking Law and Practices" by Sultan Chand And Sons (2002).
- Sharma R.K, Gupta S.K, Singh J, "Banking and Foreign Trade" by Kalyani Publishers (2002).
- > Dr. Bhattacharya K.M, Agarwal O.P, 'Basics of Banking and Finance' by Himalaya Publishing House (2006).
- Swain B.K, "Commercial Banking in a changing Scenario" by Excel Books (2006).
- Prof. Gordon E, Dr. Natarajan k, Banking Theory, Law and Practice by Himalaya Publishing House (2009).
- > Dr. Srivastava P.K, "Banking Theory and Practice" by Himalaya Publishing House (2009).
- Iyengar G.V, "Introduction to Banking" by Excel Books (2009).
- Desai V, "Banks Institutional Management" by Himalaya Publishing House (2007).
- Batra G.S, Dangwal R.C, "Banking and Development Finance" by Deep and Deep Publications (2001).
- > Banerjee A, Singh S.K, "Banking and Financial Sector Reforms in India" by Deep and Deep Publishers (2002).



# LIFE SATISFACTION AMONG ASHA WORKERS

# VIJAYA U. PATIL ASST. PROFESSOR DEPARTMENT OF HOME SCIENCE GOVERNMENT HOME SCIENCE COLLEGE HASSAN

# RUKMINI S. ASST. PROFESSOR DEPARTMENT OF PSYCHOLOGY GOVERNMENT HOME SCIENCE COLLEGE HASSAN

# ABSTRCT

The present research aimed to study the Life satisfaction among ASHA workers, the life satisfaction in different age group among ASHA workers and to find the life satisfaction in different income group among ASHA. Sample of the study consisted 72 ASHA workers from the villages coming under Primary Health Center, Bageshpura, Haranahally, Kondenahal, and CHC, Gandasi, of Arsikere taluk Hassan district, Karnataka. Their age ranged between 20 to >40 years. The personal data sheet prepared by the investigator and Life satisfaction scale by Dr. (Mrs), Pramila Singh & George Joseph was used to measure the Life satisfaction. Simple totaling and average has been calculated to find out the objectives of the present study. The result indicates that, Among 72 ASHA workers, 25 (34.72%) are having High life satisfaction, as high as 40(55.5%) of them are having Average life satisfaction and 7 (9.72%) are having Low life satisfaction. Among 31 members in the age range of 20-30 years, as high as 18 (58.06%) are having average life satisfaction, where as in among 39 in age range of 30-40 years , as high as 22 (56.41%) of them are having average life satisfaction. Among ASHA workers having income more than Rs 2000, 18 (38.29%) are in high life satisfaction, 29 (61.70%) are having average life satisfaction.

### **KEYWORDS**

ASHA workers, Life satisfaction, Age, Income.

#### INTRODUCTION

ATISFACTION is a Latin word that means to make or do enough. Satisfaction with one's life implies contentment with or acceptance of one's life circumstances, or the fulfillment of one's wants and needs for one's life as a whole. In essence, life satisfaction is a subjective assessment of the quality of one's life. Because it is inherently an evaluation, judgments of life satisfaction have a large cognitive component.

Life satisfaction is an overall assessment of feelings and attitudes about one's life at a particular point in time ranging from negative to positive. It is one of three major indicators of well-being: life satisfaction, positive affect, and negative affect (Diener, 1984). Although satisfaction with current life circumstances is often assessed in research studies, Diener, Suh, Lucas, & Smith (1999) also include the following under life satisfaction: desire to change one's life; satisfaction with past; satisfaction with future; and significant other's views of one's life. It represents how satisfied people feel with their life generally, as contrasted with positive affect ,sometimes called just 'happiness', which represents how they feel at a single point in time. That is, life satisfaction involves people thinking about their life as a whole, including factors such as whether they are achieving their goals, are doing as well as other people around them, and are happy generally rather than just right now. Life satisfaction is thus a longer-term measure than affect. Life satisfaction is a measure of well-being.

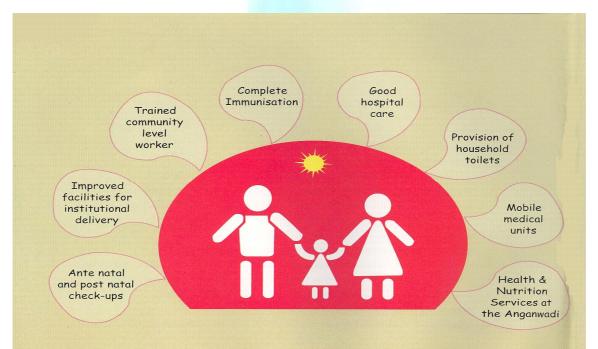
Life satisfaction is often considered a desirable goal, in and of itself, stemming from the Aristotelian ethical model, *eudaimonism*, (from *eudaimonia*, the Greek word for happiness) where correct actions lead to individual well-being, with happiness representing the supreme good (Myers, 1992). Moreover, life satisfaction is related to better physical (Veenhoven, 1991) and mental health (Beutell, 2006), longevity, and other outcomes that are considered positive in nature. Men and women are similar in their overall levels of life satisfaction (Diener, Suh, Lucas, & Smith, 1999) although women do report more positive and negative affect. Married people are more satisfied with their lives and those with life-long marriages appear to be the most satisfied (Evans & Kelly, 2004). Life satisfaction tends to be stable over time (e.g., Cummins, 1998) suggesting a dispositional (e.g., Judge & Hulin, 1993), and perhaps, even a genetic component (e.g., Judge et al. 1994). Fujita and Diener (2005) have examined the life satisfaction set-point (a relatively stable level that an individual will return to after facing varying life circumstances) reporting that there are longitudinal changes in satisfaction levels for about one-quarter of their respondents.(1).

Life satisfaction is used to assess the impact of conflict levels on overall feelings about one's life. Importantly, life satisfaction exhibits the strongest relationship with work-family conflict of all non-work variables studied (Allen et al. 2000). Research has shown that, beyond direct relationships between work-family conflict and life satisfaction, how people deal with such conflicts is also important. Life satisfaction, like job satisfaction, has been one of the most frequently studied outcomes of work-family conflict (Kossek & Ozeki, 1998). Findings indicate that, the higher the level of work-family conflict, the lower the level of life satisfaction.

# WHO IS ASHA?

- Accredited Social Health Activist (ASHA) -One of the key components of the National Rural Health Mission is to provide every village in the country with a trained female community health activist ASHA or Accredited Social Health Activist. Selected from the village itself and accountable to it, the ASHA will be trained to work as an interface between the community and the public health system. Following are the key components of ASHA:
- ASHA must primarily be a woman resident of the village married/ widowed/ divorced, preferably in the age group of 25 to 45 years.
- She should be a literate woman with formal education up to class eight. This may be relaxed only if no suitable person with this qualification is available.
- ASHA will be chosen through a rigorous process of selection involving various community groups, self-help groups, Anganwadi Institutions, the Block Nodal
  officer, District Nodal officer, the village Health Committee and the Gram Sabha.
- Capacity building of ASHA is being seen as a continuous process. ASHA will have t undergo series of training episodes to acquire the necessary knowledge, skills and confidence for performing her spelled out roles.
- The ASHAs will receive performance-based incentives for promoting universal immunization, referral and escort services for Reproductive & Child Health (RCH) and other healthcare programmes, and construction of household toilets.
- Empowered with knowledge and a drug-kit to deliver first-contact healthcare, every ASHA is expected to be a fountainhead of community participation in
  public health programmes in her village.

- ASHA will be the first port of call for any health related demands of deprived sections of the population, especially women and children, who find it difficult to access health services.
- ASHA will be a health activist in the community who will create awareness on health and its social determinants and mobilize the community towards local health planning and increased utilization and accountability of the existing health services.
- She would be a promoter of good health practices and will also provide a minimum package of level and make timely referrals.
- ASHA will provide information to the community on determinants of health such as nutrition, basic sanitation & hygienic practices, healthy living and working conditions, information on existing health services and the need for timely utilisation of health & family welfare services.
- She will counsel women on birth preparedness, importance of safe delivery, breast-feeding and complementary feeding, immunization, contraception and
  prevention of common infections including Reproductive Tract Infection/Sexually Transmitted Infections (RTIs/STIs) and care of the young child.
- ASHA will mobilise the community and facilitate them in accessing health and health related services available at the Anganwadi/sub-centre/primary health centers, such as immunisation, Ante Natal Check-up (ANC), Post Natal Check-up supplementary nutrition, sanitation and other services being provided by the government.
- She will act as a depot older for essential provisions being made available to all habitations like Oral Rehydration Therapy (ORS), Iron Folic Acid Tablet(IFA), chloroquine, Disposable Delivery Kits (DDK), Oral Pills & Condoms, etc.
- At the village level it is recognised that ASHA cannot function without adequate institutional support. Women's committees (like self-help groups or women's health committees), village Health & Sanitation Committee of the Gram Panchayat, peripheral health workers especially ANMs and Anganwadi workers, and the trainers of ASHA and in-service periodic training would be a major source of support to ASHA. As a whole ASHA are integrated part of the National Rural Health Mission (2005-2012) Which is as follows-



Palmore erdman & Luikart clark (1972), In an analysis of health, activity, social-psychological, and socio-economic variables thought to influence life satisfaction in middle age, it was found that self-rated health was the predominant variable. The amount of organizational activity and belief in internal control were the second and third most important variables related to life satisfaction. Organizational activity, in turn, was mainly related to intelligence and to internal control orientation among the men, but among women it was mainly related to lack of employment and to physical performance status. Several variables thought to be related to life satisfaction were found to have little or no relationship: age, sex, total social contacts, career anchorage, marital status, and intelligence.

Robert W. Rice; Janet P. Near; Raymond G. Hunt (1980), "The Job-Satisfaction/ Life-Satisfaction Relationship: A Review of Empirical Research", After a brief discussion of the nature and importance of work, this article reviews empirical research that relates satisfaction with work to satisfaction with life. The review covers more than 350 job-satisfaction/life-satisfaction relationships reported in 23 studies that vary widely in terms of the sample, instrumentation, and date of survey. For more than 90% of the cases, the direction of this relationship is positive; and none of the scattered negative relationships is statistically reliable. The magnitude of the reported zero-order relationship between job satisfaction and overall life satisfaction is typically modest, with correlations mostly in the mid..30 for males and mid-.20's for females. The typical job-satisfaction/life-satisfaction. Discussion of these findings focuses on conceptual and methodological concerns at the more general level of the relationship between work and non work.

Levin Jeffrey S. , Chatters Linda M. , and Taylor Robert Joseph ., (1993), In the study Religious Effects on Health Status and Life Satisfaction among Black Americans, tests a theoretical model linking religiosity, health status, and life satisfaction using data from the National Survey of Black Americans, a nationally representative sample of Blacks at least 18 years old. Findings reveal statistically significant effects for organizational religiosity on both health and life satisfaction, for non organizational religiosity on health, and for subjective religiosity on life satisfaction. Analyses of structural invariance reveal a good overall fit for the model across three age cohorts ( $\leq$  30, 31–54,  $\geq$  55) and confirm that assuming age invariance of structural parameters does not significantly detract from overall fit. In addition, after controlling for the effects of several socio demographic correlates of religiosity, health, and well-being, organizational religiosity maintains a strong, significant effect on life satisfaction. These findings suggest that the association between religion and well-being is consistent over the life course and not simply an artifact of the confounding of measures of organizational religiosity and health status.

Julia Mc Quillan, Rosalie A. Torres Stone and Arthur L. Greil (2007), in the study Infertility and Life Satisfaction Among Women, Using data from a random sample of 580 Midwestern women, the authors explore the association between lifetime infertility and life satisfaction. Past research shows lower life satisfaction among those seeking help for infertility. The authors find no direct effects of lifetime infertility, regardless of perception of a problem, on life satisfaction; however, there are several conditional effects. Among women who have ever met the criteria for infertility and perceive a fertility problem, life satisfaction is significantly lower for non mothers and those with higher internal medical locus of control, and the association is weaker for employed women. For women with infertility who do not perceive a problem, motherhood is associated with higher life satisfaction compared to women with no history of infertility.

INTERNATIONAL JOURNAL OF RESEARCH IN COMMERCE, ECONOMICS & MANAGEMENT A Monthly Double-Blind Peer Reviewed Refereed Open Access International e-Journal - Included in the International Serial Directories www.ijrcm.org.in Judge, Timothy A.; Watanabe, Shinichiro (1993), In the study Another look at the job satisfaction-life satisfaction relationship. The relationship between job satisfaction and life satisfaction has been heavily researched over the years. In spite of this research interest, results have not proved conclusive in demonstrating the causal nature of the relationship. In the present study, a causal model was hypothesized and tested that involved simultaneous consideration of cross-sectional and longitudinal effects between job and life satisfaction. This type of analysis has not previously been conducted and allows the strongest conclusions to date regarding the causality between these constructs. Results based on a national probability sample of workers indicate that job and life satisfaction, were significantly and reciprocally related. The cross-sectional results suggest a relatively strong relationship between job and life satisfaction, but the longitudinal results a weaker relationship over a 5-yr period, particularly with respect to the effect of job satisfaction on life satisfaction. The meaning of these results in the context of past research on the job satisfaction–life satisfaction relationship is discussed.

Ernst Kossek, Ellen; Ozeki, Cynthia (1998), Work–family conflict, policies, and the job–life satisfaction relationship: A review and directions for organizational behavior–human resources research. This review examines the relationship among work–family (w-f) conflict, policies, and job and life satisfaction. The metaanalytic results show that regardless of the type of measure used (bidirectional w-f conflict, work to family, family to work), a consistent negative relationship exists among all forms of w-f conflict and job–life satisfaction. This relationship was slightly less strong for family to work conflict. Although confidence intervals overlap, the relationship between job–life satisfaction and w-f conflict may be stronger for women than men. Future research should strive for greater consistency and construct development of measures, examination of how sample composition influences findings, and increased integration of human resources policy and role conflict perspectives, including whether a positive relationship between w-f policies and satisfaction is mediated by w-f conflict.

Joseph C. Rode (2004), Job satisfaction and life satisfaction revisited: A longitudinal test of an integrated model, Research indicates that job satisfaction is significantly related to life satisfaction. However, previous studies have not included variables that may confound the relationship. Furthermore, the vast majority of studies have relied on cross-sectional data. I tested a comprehensive model that examined the relationship between job and life satisfaction and a broad personality construct called 'core self-evaluations', as well as nonwork satisfaction and environmental variables, using a nationally representative (US), longitudinal data set. Results indicated that core self-evaluations was significantly related to both job satisfaction and life satisfaction over time, and that the relationship between job satisfaction and life satisfaction was not significant after taking into account the effects of core self-evaluations and nonwork satisfaction. Implications for theory and practice are discussed.

### OBJECTIVES

- 1. To study the Life satisfaction among ASHA workers
- 2. To find the life satisfaction in different age group among ASHA workers and
- 3. To find the life satisfaction in different income group among ASHA.

### MATERIALS AND METHODS

Sample of the study consisted 72 ASHA workers from the villages coming under Primary Health Center, Bageshpura (10), Haranahally (34), Kondenahal (10), CHC, Gandasi (18), of Arsikere taluk Hassan district, Karnataka. The respondents were given assurance of confidentiality.

### TOOLS

Following tools were employed in the present study:

- 1. Personal data sheet
- 2. Life satisfaction scale by Dr.(Mrs), Pramila Singh & George Joseph was used to measure the Life satisfaction

#### PERSONAL DATA SHEET

The socio demographic data for the present research was elicited using this personal data sheet. The researcher prepared this schedule himself. This is detailed schedule, which consists of provision to collect data on age, sex, income etc.

#### Life satisfaction scale by Dr. (Mrs.), Pramila Singh & George Joseph

The scale consists of 34 items, each item is to be rated on the 5 point scale. Always, often, sometimes, seldom and never, which are respectively scored as 5, 4, 3, 2&1. The items relate to the individuals all around activities and thus give a global picture of one's life satisfaction level. The higher the score on the Life satisfaction scale the higher will be the level of life satisfaction. Norms of the Life satisfaction scale is as follows.

Satisfaction level	Range of score				
High	136 - 175				
Average	81 - 135				
Low	35 - 80				

# STATISTICAL METHODS

Simple totaling and average has been calculated to find out the objectives of the present study

# **RESULTS AND DISCUSSION**

The objectives of the present study are to find out the Life satisfaction among ASHA workers, To find the life satisfaction in different age group among ASHA workers and To find the life satisfaction in different income group among ASHA workers. Sample of the study consisted 72 ASHA workers from the villages coming under Primary Health Center, Bageshpura, Haranahally, Kondenahal, CHC, Gandasi, of Arsikere taluk Hassan district, Karnataka. Relevant statistical techniques to test the objectives formulated for the study. The results were presented in the Tables.

They are in the age group of 20 to >40 years. **Table 1 & Graph 1** shows that among 72 ASHA workers under study 31(43.2%) of them are in age range between 20-30 years, 39 (54.1%) in age range between 30-40 years And rest 2 (2.7%) are in >40 years of age group.

Table 2 & Graph 2 shows Income of ASHA workers studied. Among 72 ASHA workers, 9 (12.5%) are having income between 500-1000 Rs/month, 16 (22.22%) are having 1000-2000 Rs/month and as high as 47 (65.27%) are having > 2000 Rs of income per month.

Table 3& Graph 3 shows Satisfaction level among ASHA workers. Among 72 ASHA workers, 25 (34.72%) are having High life satisfaction, as high as 40 (55.5%) of them are having Average life satisfaction and 7 (9.72%) are having Low life satisfaction.

Table 4 shows Age of the ASHA workers & Life satisfaction level. Among 31 members in the age range of 20-30 years, 8 (25.80%) are having high life satisfaction, but as high as 18 (58.06%) of them are having average life satisfaction and 5 (16.12%) of them are in low level of life satisfaction. Somewhat same result we can see in age range of 30-40 years , among 39 ASHA workers in this age group, 17 (43.58%) are having high life satisfaction, but as high as 22 (56.41%) of them are having average life satisfaction and in the age group >40 years only 2 are there & both of them are having low life satisfaction.

Table 5 shows Income of the ASHA workers & Life satisfaction level. Among 9 members in income group of 500-1000 Rs/month, 2 (22.22%) are in high life satisfaction, 2 (22.22%) are having average life satisfaction and 5 (55.55%) are in low level of life satisfaction. Among 16 members in income group of 1000-2000 Rs/month, 5 (31.25%) are in high life satisfaction, 9 (56.25%) are having average life satisfaction and 2 (12.5%) are in low level of life satisfaction. Among ASHA workers having income more than Rs 2000, 18 (38.29%) are in high life satisfaction, 29 (61.70%) are having average life satisfaction.

# CONCLUSION

The success of a community or nation is frequently judged by objective standards. Political parties often remind citizens of the prosperity of the nation during their party's governance as a method to encourage appreciation and re-election. To persuade people that quality of life has improved under their administration, they cite such factors as low unemployment rates, greater income, lower taxes, lower crime rates, and improvements in education and health care. The quality of life of the individual, however, cannot be quantified in this manner. Indeed, objective measures of quality of life (i.e., income, education) are often weakly related to people's subjective self-reports of the extent to which they are satisfied with their lives. For example, one might predict that individuals who have suffered a traumatic spinal cord injury would be significantly less satisfied with their lives than individuals who have not suffered such an injury. However, empirical research has not supported this contention -- in fact, disabled individuals do not report lower levels of satisfaction than non-disabled ones. It is clear that a one-to-one relationship between observable life circumstances and subjective judgments of life satisfaction does not always exist. A great deal of psychological research has explored the sources of people's life satisfaction. These sources include one's overall wealth, whether one is single or married, male or female, or young or old ect.(9)

With all these views in mind in the present study we can come to a conclusion that ASHA's being a part of a dream health project National Rural Health Mission (2005-2012) are doing excellent job. ASHA being primarily a woman resident of that village with less income in the form of honorarium which sometimes becomes even less than Rs1000/month are showing surprisingly average & high level of life satisfaction. What we, before study drawn a hypothesis that their life satisfaction may be low has not proved. May be the feeling of happiness that I am serving my village people increased their level of satisfaction. Still as ASHA is working as an interface between the community and the public health system their honorarium can be increased or they can be fixed a respectable salary.

### LIMITATIONS OF THE STUDY

The sample was not representative of the urban population. The sample size was very small. Except Age & Income the effect of other demographic variables was not studied.

### SUGGESTION FOR THE FURTHER STUDY

The effect of demographic variables can be studied to know their effect on life satisfaction.

### ACKNOWLEDGMENT

We convey our sincere thanks to the Medical officer & staff ,Primary health center Bageshpur , Haranahally, kondenahal and CHC gandasi of Arasikere taluk , Hassan district for giving us permission to collect the data and for their cooperation for our research work. We are thankful to all our respondents for their cooperation. We are thankful to our family and friends.

#### REFERENCES

- 1. Buetell, N. (2006). Life satisfaction, a Sloan Work and Family Encyclopedia entry. Retrieved May 10, 2007, from the Sloan Work and Family Research Network website: http://wfnetwork.bc.edu/encyclopedia\_entry.php?id=3283&area=academics.
- 2. Ernst Kossek, Ellen; Ozeki, Cynthia (1998), Work–family conflict, policies, and the job–life satisfaction relationship: Journal of Applied Psychology, 83(2), Apr 1998, 139-149.
- 3. Joseph C. Rode (2004), Job satisfaction and life satisfaction revisited: A longitudinal test of an integrated model, Human Relations, September 2004, 57 (9), 1205-1230
- 4. Judge, Timothy A.; Watanabe, Shinichiro (1993), Another look at the job satisfaction-life satisfaction relationship, Journal of Applied Psychology, 78(6), Dec 1993, 939-948.
- 5. Julia Mc Quillan , Rosalie A. Torres Stone and Arthur L. Greil (2007), Infertility and Life Satisfaction Among Women, Journal of Family Issues 28:7, July 2007, 955–981
- 6. Levin Jeffrey S., Chatters Linda M., and Taylor Robert Joseph., (1993), Religious Effects on Health Status and Life Satisfaction among Black Americans, The Journals of Gerontology,50B:3. June 1994.
- 7. Palmore Erdman and Luikart Clark (1972), Health and Social factors related to life satisfaction, Journal of Health and Social Behavior, 13, 1.
- 8. Robert W. Rice; Janet P. Near; Raymond G. Hunt (1980), "The Job-Satisfaction/ Life-Satisfaction Relationship: A Review of Empirical Research" Basic and Applied Social Psychology , 1(1),1980, 37 64
- 9. Sousa, L., & Lyubomirsky, S. (2001). Life satisfaction. In J. Worell (Ed.), Encylopedia of women and gender: Sex similarities and differences and the impact of society on gender (Vol. 2, pp. 667-676).

#### APPENDIX

#### TABLE 1: AGE DISTRIBUTION OF ASHA WORKERS STUDIED

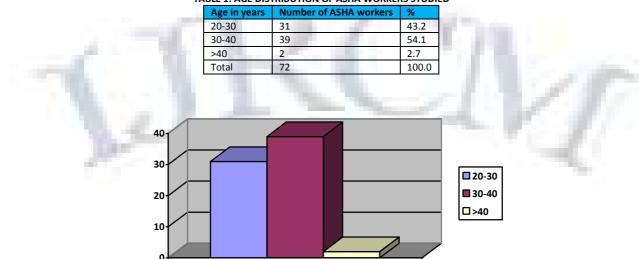


TABLE 2: INCOME OF ASHA WORKERS STODIED							
Income in Rs/Month	Number of ASHA workers	%					
500-1000	9	12.5					
1000-2000	16	22.22					
>2000	47	65.27					
Total	72	100.0					

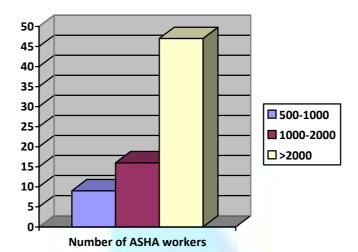
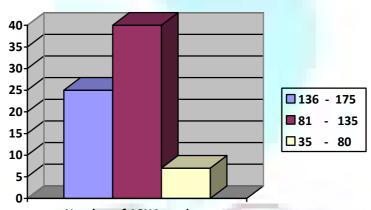


TABLE 3: SATISFACTION LEVEL AMONG ASHA WORKERS

TABLE 5. SATISFACTION LEVEL AMONG ASTA							
Satisfaction level	Range of score	Number of ASHA workers	%				
High	136 - 175	25	34.72				
Average	81 - 135	40	55.5				
Low	35 - 80	7	9.72				
Total		72	100				



Number of ASHA workers

Age Group	Life satisfaction				
	High	Average	Low	Total	
20-30 years	8 (25.80%)	18(58.06%)	5(16.12%)	31	
30-40 years	17(43.58%)	22(56.41%)	0	39	
>40	0	0	2(100%)	2	
Total	25	40	7	72	

TABLE 5: INCOME OF THE ASHA WORKERS & LIFE SATISFACTION LEVEL Income(Rs/month) Life satisfaction

income (its) monthly				
	High	Average	Low	Total
500-1000	2(22.22%)	2(22.22%)	5(55.55%)	9
1000-2000	5(31.25%)	9(56.25%)	2(12.5%)	16
>2000	18(38.29%)	29(61.70%)	0	47
	25	40	7	72

# MICROFINANCE THROUGH COOPERATIVES: PERFORMANCE AND PROSPECTS

# DR. SUBRATA MUKHERJEE ASST. PROFESSOR MUGBERIA GANGADHAR MAHAVIDYALAYA BHUPATINAGAR

# ABSTRACT

Credit Cooperative is the panacea and alchemy for poverty. Access to finance and to financial services is the means to ameliorate the problems of poverty through financial inclusion of the marginalized sections of the society. Cooperative form of enterprise can aptly be applied in all the stages of economic cycle namely production and the consumption stages. Primary Agricultural Credit Societies are the lowest tier in the three tier structure of the cooperative credit and with its presence throughout the country the credit requirement of the small and marginal farmers is taken care off. There is an increasing growth rates in the deposits and loan disbursement. But the increasing overdue of the loan is alarming which has aggravated after the waiver of loan scheme in 2008. The United Nations estimated in 1994 that the livelihood of nearly three billion people, or half of the world's population, was made secure by cooperative. Cooperatives provide over 100 million jobs around the world, 20% more than multinational enterprises. Cooperative credit which were sprouted out of the needs of the poor and marginalized farmers are working to alleviate the credit requirement and are functioning before the birth of the commercial banks. The Government has to be kind enough to assist the cooperative sector to surmount the problems rather to use this sector for political mileage.

# **KEYWORDS**

Microfinanace, Co-operatives, Poverty.

#### INTRODUCTION

icrofinance is our business - Cooperating out of poverty" is the message given by International Cooperative Alliance during the United Nation's Year of Micro credit in 2005. Accesses to finance and to financial services are the means to ameliorate the problems of poverty. Financial inclusion of the proletariat and the marginalized sections of the society through micro credit provided by the cooperative institutions can only surmount the evils of poverty. Micro credit or more broadly micro finance helps in the socio-economic development of poor and low-income communities of women and men throughout the world. Cooperatives are amongst the most successful micro credit institutions. In particular, savings and credit cooperatives, insurance cooperative and mutuals and cooperative banks have assisted many millions of people to help themselves and build a more secure and sustainable future. Micro credit is not something that cooperatives ventured doing in the last few decades as started by commercial banks but it has its presence for over 150 years pioneered by Friedrich Raiffeisen of Germany. Credit Cooperatives have demonstrated that they can provide micro credit services to poor and low income communities in a sustainable way. Being rooted in local communities and managed by local people, such cooperatives can take advantages of social capital in situations where financial capital is scarce. The role of credit unions in providing micro credit to women is especially noteworthy. Access to financial services has enabled women around the world to start small enterprises which in turn have improved the livelihoods of their families allowing them to send their children to school, access health care and decent housing. Cooperatively managed micro credit institutions enable the poor to pool their resources so that they can be used for productive investments and job creation within a sustainable future. The social control and democratic management style that is proper to cooperatives secure savings even at low levels and ensures repayment of loans. Cooperative has a great role in the formation of seed capital and help in the socio-economic upliftment. Financial inclusion of the marginalized sections of the society is very essential for economic upliftment which is possible with the help of Primary Agricultural Credit Societies (PACS) through formation of Self Help Groups (SHGs) and Joint Liability Group (JLGs).

Cooperative is the panacea and alchemy for poverty. The concept of "networking" is initiated from the concept of "Cooperation" the basic principle of which honesty, democracy and trust. Every group of individual, associated to secure a common end by joint effort may be said to cooperate. The basis of association is voluntary and democratic. The concept of cooperation started among the poorest of the poor in the Western Countries like Germany, Italy and England around 1830 – 40s. The basic problem at that time was non-availability of seed capital.

#### **ROLE OF COOPERATIVES**

For practical purposes the economic cycle falls into two main divisions: i) Supply and Consumption and ii) Production and Sale. Supply of Raw Material Production & Sale Consume

Vendor	Producers	1	Customers
--------	-----------	---	-----------

There is no point in the cycle to which the cooperative theory and method may not be applied. Individuals of modest means, who need to purchase goods for either professional or domestic consumption, form a cooperative supply society in order to obtain the advantages enjoyed by men of large means; clubbing together their little contributions in a common fund, the members are able (i) to avoid the middlemen and buy wholesale from the producer (and best of all from the cooperative producer) who finds it convenient to sell his product in bulk. (ii) to secure good quality and employing a skilled buyer. (iii) to buy in the right market at the right time and hold the goods in stock until required by the members. They thus escape from the evils of dear goods, bad quality and misadjudgement of the market.

Let us now discuss about the various forms / types of cooperatives and how they can help in the socio-economic upliftment of the poor and marginalized sections of the society.

**PRODUCERS' COOPERATIVES** – Producers' Cooperative enables the producers of similar or like products to pool their resources and make them efficient, cost competitive and effective in production. It helps to take advantages of economies of scale and reduce the input cost. In this age of competition there are many producers of branded goods who procure the components, ensure quality control, get these components assembled, and emboss their brand name and sale the products. It has become a strategy to take the advantage of leverage i.e. with least capital investment; through outside procurement; ensuring quality get the maximum profit without involving in the complexity of production and labour management. A single person can never get the expertise of the manufacturing as well as the function of selling. Many persons are engaged in small scale industries, animal husbandry and allied agricultural activities in rural area like Bakery, Coke Briquette, Embroidery and Zari work, Human Hair Processing (Wig), Handlooms, Incensed (Agarbatti) stick making, molasses of Date Palm (Khejur Gur) and Fan Palm (Taal Gur), Betel Leaf, Poultry, Prawn Cultivation and many others who are struggling to get themselves vibrant due to lack of marketing skills. If government takes initiatives through the Industrial Development Officers working at block levels to form Cooperative among the producers or manufacturers and the marketing is taken care off by the consumers or marketing cooperatives then it may definitely improve the socio-economic conditions of these people. We have conducted a project on small scale industries of Purba Medinipur district of West Bengal and from our empirical study on twenty four small scale and tiny industries operating in the district we have found that many of the firms are not registered. So, these firms are not able to have access to better credit and

# www.ijrcm.org.in

other facilities. The average age of the persons engaged in these industries mainly belong to the age group of forties and fifties. Most of the firms are operating as a family run business. The people who are engaged in the work have learnt through their experience and have no formal training in the trade. There are only few firms which are run on cooperative basis and that too mainly in handloom and fishing. So, through better use of producers' cooperatives the dissemination of the knowledge of production and proper training can be taken care off.

CONSUMERS' OR MARKETING COOPERATIVES - Today ITC, Reliance, Goenka are getting into the retail activities of the agricultural sector. With the formation of producers' cooperative they can develop their skills in the area of production and through formation of consumers or marketing cooperatives, the marketing or selling of the products will become effective at the same time the small and tiny producers will get right price for their produce and ultimately the final consumers will also be benefited with lesser cost of products due to the absence of middlemen. The middlemen are the maximum gainers of the economy where they can compel the small producers to deprive from the right price as well as the final consumers who are also charged high.

CREDIT COOPERATIVES - Short term Cooperative Credit structure has three tier with State Cooperative Banks having 31 in numbers are at the top of the structure with District Central Cooperative Banks are 373 in numbers operating in the middle and 95,633 Primary Agricultural Credit Societies operating at the lowest tier. Credit Cooperatives provides a full range of financial and insurance services to their members.

### **MICROFINANCE THROUGH COOPERATIVES**

Primary Agricultural Credit Societies (PACS) being the lowest tier of the three tier structure of the cooperative credit. PACS operate under the District Central Cooperative Banks. From the "Performance of Primary Agricultural Credit Societies" ending 31.03.2009 published by National Federation of State Cooperative Banks Ltd reveals that as on 31.03.2009 there were 95,633 PACS operating in India with total membership of 13.235 crores covering 6,05,922 villages. No other credit institution can be compared with the huge existing infrastructure, network and potential in catering rural credit in India. The numbers of borrowers from the PACS were 4.29 crores in the year 1999-00 which was increased to 7.94 crores in the year 2007-08. The paid up capital of the total number of PACS operating in India was Rs 7,005 crores as on 31.03.2009. In the Budget of the year 2008 Mr. P. Chidambaram waived the agricultural loan to a tune of Rs 60,000 crores of which Rs 48,000 crores were from cooperative banks. Had Mr. P. Chidambaram provided the same amount of money in the budget to the cooperative sector then it would not be exaggerated to say that the infrastructure of the PACS would have improved to a class of multinational banks and yet they be operating in the rural area and be able to cater the credit requirement of the rural and marginalized farmers in its entirety. The cooperative sector have always been used by the politicians to gain cheap popularity and to gain political mileage rather than to improve the ailing and frail condition of the PACS and make the cooperative sector more vibrant. The nominal growth rate of deposits of the PACS was 8.20% during 1999-00 to 2008-09. In terms of volume of the total deposits increased from Rs 12,459 crores to Rs 26,243 crores during the same period. The nominal growth rate of borrowing of the PACS was 8.70% during 1999-00 to 2008-09. In terms of volume the borrowings was increased from Rs 22,350 crores to Rs 48,919 crores during the same period. The working capital of the PACS increased from Rs 42,710 crores in the year 1999-00 to Rs 94,579 crores in the year 2008-09. The nominal rate of growth of the loan issued was 10.30% during 1999-00 to 2008-09. In terms of volume the loan amount increased from Rs 23,662 crores in the year 1999-00 to Rs 58,686 crores in 2008-09. The nominal rate of growth of loans outstanding was 8.70% during 1999-00 to 2008-09.

From Table 1 it is guite clear that the rate of collection of total loans to total demand increased from 64.60% in 1999-00 to 70.88% in 2006-07. But after the loan waiver scheme the percentage of collection of loan to total demand decreased to 64.33% in 2007-08 which further decreased to 55.15% in 2008-09. The simple theory of loan waiver leads to the decrease in the collection rate of loan is known to a lay man but great economist like Dr. Manmohan Singh, Mr. Pranab Mukherjee, Mr. P. Chidambaram, Mr. Montek Singh Ahluwalia are unaware of the basic fundamental of the economy. Is it irony or mere mockery of the cooperative credit sector which is the backbone of the rural credit?

Total number of godowns managed by PACS are 65,289 with total capacity of 2,41,13,026 tonnes. Out of 95,633 PACS 64,872 PACS are viable and 23,046 are potentially viable. If the government becomes serious with atleast these PACS which are viable or potentially viable then also the number would be far more than the total number of banks comprising Commercial, Private and Foreign banks. From the experience we are having a feeling that the policies of the government intends to remove Garib (i.e. poor and marginalized section of the society) rather to remove Gariby (i.e. poverty).

TABLE I					
Year	Total Demand	Total Collection	Percentage of Total Collection to Total Demand	Loans Overdue	Percentage of Overdue to Total Demand
	Rs Crores	Rs Crores		Rs Crores	
1999-00	26,798	17,313	64.60	9,484	35.39
2000-01	28,764	18,726	65.10	10,038	34.90
2001-02	34,077	23,010	67.52	11,067	32.47
2002-03	40,341	25,051	62.10	15,289	37.90
2003-04	44,237	27,942	63.16	16,295	36.87
2004-05	47,785	31,733	66.41	16,052	33.59
2005-06	50,979	35,503	69.64	15,476	30.36
2006-07	54,112	38,359	70.88	15,753	29.12
2007-08	67,293	43,289	64.33	24,003	35.67
2008-09	84,549	46,626	55.15	37,924	44.85

TABLE 1

The Government should make use of the manpower working in the PACS. The service condition of the people working is not at all satisfactory. The difference between the working method between the commercial banks and cooperative banks is that once the loan is sanctioned for micro credit no follow up action is initiated to supervise the purpose for utilization of loan and the ability to service the loan may be attributed to the shortages of manpower. The follow up action of the cooperative credit is far better which can be verified from the collection and repayment of the loan. The Government should take initiative for the development of the manpower working in the various tiers of the cooperative credit institutions through proper training, improved salary structure even if some subsidy is provided by the finance ministry.

Gresham's law is an economic principle stated in 1558 which states "... that when Government compulsorily overvalues one money and undervalues another, the undervalued money will leave the country or disappear into hoards, while the over valued money will flood into circulation". It is commonly stated as: "Bad money drives out good", but is more accurately stated: "Bad money drives out good if their exchange rate is set by law". We have to remember the old Gresham's law in the formulation of policy for economic development. Today in the developing world the poor and the financially sound people should not be brought within the same scheme otherwise the financially sound people will always deprive the marginalized and poor people. So care should be taken during the formulation of the policy that financially sound people should be separate out from the marginalized sections of the society otherwise the objective for the development of the poor will not be achieved. Under capitalism bad quality can never be eliminated. The consumer and the producer are helpless, the legislator ineffective and the shareholder indifferent.

The benefits of micro credit not only empower a man to develop economically but also it empowers a man to develop his rationality and do away with the orthodox mentality. Rational behaviour makes matured human beings and helps in political movements. Social evils are the results of poverty. Poverty not only deprives personal development but also creates social evils and hinders the overall development of the society. Increase in population and poverty are positively correlated. The interpersonal relationship among the siblings deteriorate with age and the poverty which at one time gives perception that increase in the number of siblings will create hands for earnings; the same able and earning sibling does not looks after the old parents and other members of the family out of poverty, scanty and meager source of earnings. The child of an educated mother will not turn out to be uneducated. Through providing micro credit and development in socio-economic condition the literacy rate among the girl child will increase and then only the society can become educated and vibrant to fight

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

# www.ijrcm.org.in

against the orthodox and social evils. Proletariat women are more matured than their counterpart men. When they form SHGs and money is provided to them, then they can manage it better. Empirical study shows that the inclination for repayment of the loan is high in case of these women in order to get further loan. They try to nourish their child and make them educated. Poverty is a long term disease. Problem of poverty cannot be surmounted through adoption of any temporary and myopic schemes or policies. A long term prescription has to be adopted and a conducive climate have to be made for building up better and greater interpersonal relationship through political and social means. When a person stands alone he feels himself insecure and unsafe but when he belongs to a group he feels secured and safe. The leadership of the group provide to lead a disciplined life and make him mature. The socio-economic condition of the people belonging to the group and the mentality should be same for proper functioning of the group.

Gandhiji stressed on self-employment. The idea of Charkha provides a person to earn his own livelihood. A proletariat not able to provide a square meal can never build a vibrant society. Every individual has a capacity to earn his livelihood. Cooperative credit can only unearth the potential hidden in the human. Micro credit is the key to enlighten the unknown potential inside the men. As Swami Vivekanand said "Education is the manifestation of knowledge which is inside him". Micro credit helps in the development of self employment. I would put it in the other way cooperative helps a human through providing money for the manifestation of the potential which is within him. Empirical studies have shown that proletariat never cares about the exorbitant interest charged by the usurers. They make loan from those usurers with an objective of improving their economic condition but fell within the debt trap and in the clutches of the usurers. The credit cooperatives have been able to free the downtrodden and marginalized people from the clutches of the usurers through closer relation and easier terms of loans. Cooperative not only helps in the economic development but also provides in the social progress of the women through SHGs. Cooperative helps in building up self confidence, self respect and dignity. When the loan is waived in the adverse conditions then it affects the members in an adverse manner. The confidence, respect and dignity which have been acquired gets hurt and force them to lose their nerve and forces them to previous condition from where they have developed themselves.

International Cooperative Alliance reports that the Cooperative Movement brings together over one billion people around the world. The United Nations estimated in 1994 that the livelihood of nearly three billion people, or half of the world's population, was made secure by cooperative enterprise. These enterprises continue to play significant economic and social roles in their communities. Some facts about the movement that demonstrate their relevance and contribution to economic and social development which clearly shows that even developed capitalist countries are also dependent on the cooperative form of enterprise and cooperative play a significant role in the socio-economic development of these countries. Cooperatives provide over 100 million jobs around the world, 20% more than multinational enterprises. In Asia 45.3 million people are members of a credit union. In Canada, four out of every ten Canadians are members of at least one cooperative. Canadian maple sugar cooperatives produce 35% of the world's maple sugar production. In France, 23 million people are members of a least one cooperative so any proximately 38% of the population. 75% of all agricultural producers are members of at least one cooperative bank. In France, the cooperative movement has a turnover of 181 billion Euros. Cooperatives handle 60% of retail banking, 40% of food and agricultural production and 25% of retail sales. In Germany, there are 20 million people i.e. 1 out of 4 people are members of cooperative. In Japan, 1 out of every 3 families is a member of a cooperative. In Japan, the agricultural cooperatives report outputs of USD 90 billion with 91% of all Japanese farmers in membership. In 2007 consumer cooperative. In Japan, the agricultural cooperatives are member of a cooperative. In Korea, agricultural cooperatives have a members of a cooperative. In United States, 4 out of 10 individuals is a member of a cooperative. In Korea, agricultural cooperatives have a members of a cooperative. In United States, 4 out of 10 individu

#### PROBLEMS FACED BY COOPERATIVE CREDIT INSTITUTIONS

The Finance Minister Mr. Pranab Mukherjee said in his budget speech on 28.02.2011 about the financial inclusion and to improve the supply response of the agriculture to the expanding domestic demand. Further he told about identifying about 73,000 habitations for providing banking facilities using appropriate technologies. A multi-media campaign, "Swabhimaan" has been launched to inform, educate and motivate people to open bank accounts. During the year, banks will cover 20,000 villages and remaining villages will be covered during 2011-12. I would like to bring to the notice of the Finance Minister about the existing 95,633 Primary Agricultural Credit Societies (PACS) as mentioned in the publication of Reserve Bank of India in Trends and Progress of Banking in India in 2009-10. There exists one PACS for less than three Panchayats in India (total number of Panchayats being 2,50,000 as mentioned in the budget speech). These PACS have manpower, existing infrastructure and knowledge of banking. I wonder how Finance Minister can talk of financial inclusion without a single word in his budget speech about PACS. PACS being the lowest tier in the three tier system of Cooperative Banking. A sum of Rs 20,157 crores have been provided to Commercial Banks in 2010-11 and during this fiscal year a further Rs 6,000 crores is being provided. Earlier in the year 2008 then Finance Minister Mr. P. Chidambaram have waived agricultural loan for Rs 60,000 crores out of which Rs 48,000 crores was provided from Cooperative Banks. This year also Rs 3,000 crores have been waived for Handloom weavers and perhaps the entire amount will be from Cooperative Banks. Nobel laureate Md Younus have reiterated the fact that waiver of loan creates financial impediments in the working of the rural banks (in India Cooperative Banks are the only rural banks which operates in villages). The repayment of the loan can be rescheduled for longer time horizon instead of waiving it off. The Commercial Banks operates in Sub-Divisional towns or utmost in Block area or in villages surrounding the block but not in the interior rural areas. The Commercial Banks fulfill their lending to priority sectors not by giving loans to small and marginal farmers. This can be verified and compared from the size of the loan given by the Commercial Banks and that of the Cooperative Banks. The size of the loan of commercial banks is 6 to 7 times higher than the size of the loan given by the cooperative banks. Further these PACS can also help in marketing of the agricultural produce which can reduce the supply chain. Swasthya Bima Yojana has been provided to MGNREGA beneficiaries; I would urge Finance Minister to include SHG women which PACS can aptly provide. I would like to request Finance Minister to look into the situation of PACS and free from the clutches of the local politicians (PACS have been able to free many small and marginal farmers from the clutches of the usurers but have fallen in the clutches of the local politicians) and improve the conditions of the PACS and help in fulfilling the dream of financial inclusion and improving agricultural supply in response to the expanding domestic demand. In reacting to the budget speech Sunil Mittal, Mukesh Ambani, C Rangarajan, Kumar Birla, Lakshmi Narayan have talked about less than top 5% of the Indians but no one dare to talk about the PACS looking after more than 30% of the population of India in providing agricultural and other credits.

#### SUGGESTIONS

- Cooperative can provide an alternative economic model if it is perceived as an economic model rather a means to gain political mileage and cheap
  popularity. When the livelihood of nearly three billion people, or half of the world's population, was made secured by cooperative enterprise as estimated
  in 1994 by the United Nations there is no utterance of a single word in the Budget of the Central Government on development of cooperative enterprises.
- Concerted policies have to be developed where cooperative principles can be applied in the economic cycle of production and consumption together
  rather giving emphasis on cooperative model in production and consumption separately. Proper training for production and marketing of the produce of
  the cooperative have to be taken care off.
- As Lenin admitted that world is not ready to work without individual gain, the cooperation may claim to offer a means of removing the evils of capitalism without exciting the passions of the syndicalist or accepting the clumsy yoke of the State.
- The cooperative societies which mostly operate as the outlet of the Public Distribution System (PDS) have to be restructured and developed. The
  infrastructure of these cooperative societies like building and the manpower can be developed and need not have to start from scratch. Only the orthodox
  modes of functioning have to be changed and modern outlook have to be adopted. These outlets can be changed into Departmental Stores with better
  packaging of the products and developing the existing infrastructure.
- Steps have to be taken to recover the loans which are overdue to PACS amounting to achieved both in developing and developed countries are not properly highlighted and disseminated. Capitalists who advocate for free market economy

INTERNATIONAL JOURNAL OF RESEARCH IN COMMERCE, ECONOMICS & MANAGEMENT A Monthly Double-Blind Peer Reviewed Refereed Open Access International e-Journal - Included in the International Serial Directories

take recourse of tax exemptions and tax holidays from the government in order to work in rural areas at the interest of the cooperatives which existed and are working in the rural areas and also without the commensurate attention of the government as given to the Capitalists.

- Government should take initiatives to make the underprivileged people vibrant and financially sound rather breaking the backbone of the rural credit through waiver of loan. From the "Performance of Primary Agricultural Credit Societies" ending 31.03.09 published by National Federation of State Cooperative Banks Ltd reveals that the rate of collection of total loans to total demand increased from 64.60% in 1999-00 to 70.88% in 2006-07. But after the loan waiver scheme the percentage of collection of loan to total demand decreased to 64.33% in 2007-08 which further decreased to 55.15% in 2008-09.
- The service conditions of the employees of the PACS are not satisfactory and are ill paid. This also forces them to engage in unfair practices. In order to motivate the people engage in the cooperative societies the business diversification is very essential, simultaneously the salary of the employees can be linked with the performance of the business i.e. the salary should comprised of two parts one fixed and other variable which can be a certain percentage on the disbursement and collection of loans. This can help to act as surveillance on the utilization of the loan and timely collection. "Follow up" action is very essential for the collection of the loan and interest there upon, this can be effectively done by the employees of the societies who disburse the loan. Lack of follow up action is a major reason for non collection of principal and interest on loan.
- It is seen that all financial institutions cooperative banks and commercial banks operating in a locality are engaged in the formation of Self Help Groups separately. Government should take initiatives to coordinate among these financial institutions and more joint effort should be made to make these Self Help Groups vibrant. Rule and terms of loans should be flexible and more authority should be given at branch level. Reschedule for repayment of loan and provision for providing further loans should be decided at the branch level in the joint meeting of the representative of government and financial institutions.
- Women of the SHGs are engaged in various activities where they lack proper training. Better training of the women engaged in SHGs should be given.
- Government is forcing financial institutions to form SHGs but no specific initiatives are taken to market the produce of the SHG. So these self help groups are not motivated to carry on their activities for a longer period. Government should take initiative to take the products of the SHGs for the consumption of the Integrated Child Development Schemes (ICDS), MGNREGA programme, Mid Day Meals provided at schools and various other programmes run by the State and the Central Government. No such initiatives are being taken. Many programmes are working separately but there is no one to coordinate the programmes which should be taken at Block level as well as Sub-Divisional level.
- Health, Education and job are the three things which have to be addressed simultaneously to improve the socio-economic conditions of the people. To provide better medical the unorganized labourers should be brought within the purview of both the Life and General Insurance which can be made possible only with the help of these PACS.
- The reach of commercial banks and regional rural banks in the countryside both in terms of the number of clients and accessibility to the small and marginal farmers and other poorer segments is far less than that of cooperatives. This is a compelling need to find ways for strengthening the cooperative movement and making it a well managed and vibrant medium to serve the credit needs of rural India, especially the small and marginal farmers.
- Diversification of the business products with improved service is essential for sustainability of banks through greater business volumes and improved productivity. Diversification of business from banking to non banking activities like taking the corporate agency of Life Insurance Corporation of India and one of the subsidiaries of the General Insurance Corporation of India or any other leading insurance company.
- Duration of credit cycle depends on the past experiences of the regions which are generally prone to natural calamities. A credit scheme should be developed to break the vicious cycle of low productivity, low income, low surplus and low investment.
- Cooperative banks are doing their business in rural sectors and most of the customers in rural sector are either illiterate or semi-literate. Therefore, to attract more and more customers better customers services like quick disbursement of loans, explanation of the terms and conditions of the deposits and loans, filling up the documents etc are to be given.
- In order to provide insurance coverage to the unorganized sector Gramin Accidental Policy (GAP) is introduced where premium for GAP is deducted from the amount of loan provided to the farmers. For unnatural death, partial and total disability, compensation is provided to the family members of the farmers through PACs but the major drawback is due to the ignorance of the farmers resulting non reporting to the PACs and non-submission of the requisite documents in due time. Steps should be taken for timely reporting and disbursal of the claim.
- Premium for crop insurance is also deducted from the loan given to the farmers. When disaster takes place mainly due to heavy rain, the loss to farmers are compensated from crop insurance. The main drawback of this scheme is that due to large number of farmers the compensation is not received by all of them. Steps should be taken for commensurate compensation of loss incurred by the farmers.
- The PACS are mainly engaged in disbursement of agricultural loan. Since, the area of operation are limited they can go in for diversification of business like opening of consumer cooperative (including opening of retail outlets for public distribution system), wholesale distribution of fertilizers and feed for fishes etc. The concept of PURA that is providing urban facilities to rural areas as advocated by our ex-president A.P.J.Kalam on India 2020 A vision for the New Millennium can be achieved through the ground level credit societies. Many PACS serve as retail outlet for public distribution system in traditional methods. Modern marketing concept must be used in upgrading and developing this system. The modern concept of packaging like selling the same quality of product in small quantity has enable to expand the customer base. These societies can serve as retail outlet for various consumer goods. The present situation is that the secretary is the honorary member, the service condition of the employees are not at all satisfactory with the current economic situation of increase in price level. The greatest advantages of these societies are the existence of the infrastructure including land and building. The only requirement is the adoption of suitable policy and its proper implementation.
- In order to motivate the loanees in timely payment of interest and principal amount of loan interest subsidy can be given to those loanees who pay the interest and repay the loan timely. The interest subsidy can be a certain percentage of the profit of the PACS which can be given after discussion in the general meeting. It may be argued that the giving of interest subsidy will lead to the decrease in the profitability of the PACS. The working capital cycle which varies from six month to one year can be reduced. This can help these credit societies in reducing the working capital cycle and blocking of funds.
- The documentation of the annual reports should be more transparent and be framed in tune with the commercial banks. It should cover the steps being taken for better implementation of the corporate governance. The maintenance of accounts should be more detailed. The PACS and the Central Cooperative Banks are not maintaining the accounts using the same principle. The actual loan overdue in the societies is different from the actual loan overdue for the same society in the books of the Central Cooperative Bank. So, the maintenance of accounts of the Central Cooperative Banks and its constituent PACS should follow same principle and the difference in accounting policy is not desirable.

### CONCLUSION

"Vina Sahakara, Nahim Uddhar" – Without Cooperation, No Development. Society cannot allow its weaklings to perish, just as a parent cannot permit his crippled offspring to perish. Protection of the weak and not the survival of the fittest is the motto of cooperative. It is cooperation that tries to achieve this end – the protection of the weak – not indeed by allowing them to remain weak, but by enabling them to get the necessary strength. The growing importance of the cooperative cannot be underestimated. UN has proclaimed year 2012 as International Year of Cooperative. It is essential that the cooperatives should communicate in a better way with the members and outside world so that it can be differentiated itself with other economic models. Better communication will help to know the spirit and objectives, activities undertaken by the cooperatives and to create an intimate relation through continued loyalty and commitment. Government should not only use the cooperatives as a means of political mileage but proper missions and visions have to be adopted in order to develop the frail conditions of the cooperatives in general.

### REFERENCES

1. Report of the Task Force on Credit Related Issues of Farmers (Chairman: Umesh Chandra Sarangi), June 2010.

- 2. Economic Survey 2010-11 (www.indiabudget.nic.in).
- 3. Purohit, Brijesh C and Redy, V Ratna. (1999), "Capital Formation in Indian Agriculture: Issues and Concern" NABARD Occasional Paper 8.
- 4. Report of Trend and Progress of Banking, Reserve Bank of India, 2010.
- 5. Source: "Performance of Primary Agricultural Credit Societies" as on 31.03.2009. Published by National Federation of State Cooperative Banks Ltd.
- 6. Sivasankar, P.R. & Krishnamoorthy, D.(1995), "Co-operative Finance for Agriculture in India" Banking Finance, March, Kolkata, PP.8-12.
- 7. Prakash, Daman.(1991), "Strength of a Co-operative Institution" Banking Finance, March, Kolkata, PP.23-24.
- 8. Ojha, G.(1994), "Strategy for Recovery Management." Nafscob Bulletin, April June, Mumbai, PP.5-9.
- 9. Task Force on Revival of Rural Cooperative Credit Institutions (Vaidyanathan Committee).
- 10. Report of the Task Force to Study the Cooperative Credit System and Suggest Measures for its Strengthening (Jagdish Capoor Report).
- 11. Expert Committee on Rural Credit (ECRC) (Vyas Committee Report).
- 12. Joint Committee on Revitalisation Support to Cooperative Credit Structure (Vikhe Patil Committee Report).



# A STUDY ON CUSTOMER SATISFACTION TOWARDS CROSS SELLING OF INSURANCE PRODUCT AND SUPPLEMENTARY SERVICES- WITH REFERENCE TO PRIVATE SECTOR BANKS IN COIMBATORE DISTRICT

# DR. C. MEERA ASST. PROFESSOR PARK COLLEGE OF ENGINEERING & TECHNOLOGY COIMBATORE

# DR. M. ESWARI ASST. PROFESSOR WOMEN'S CHRISTIAN COLLEGE CHENNAI

### ABSTRACT

In modern competitive environments services are gaining increasingly more importance. Now days, greater attention is paid to all the Bank-customer touchpoints, aiming to optimize the interaction and user friendly services. Higher penetration of technology and increase in global Literacy levels has set up the expectations of the customer higher than never before. Increased cross selling of products including mutual funds, gold coins, life and non life insurance products which will enable increase of non interest income. Cross selling of all products of the bank to Corporate customers as well as their staff by opening salary accounts etc. Increasing use of modern technology has further enhanced reach and accessibility. The aim of the study is to trace the customer satisfaction towards cross selling of insurance product and the other services rendered by private sector Banks.

#### **KEYWORDS**

Insurance product, Retail banking services, Satisfaction towards Supplementary services.

### INTRODUCTION

In India the growth ratio of Private Banks when compared to the public sector banks is 3:1 where Private Bankers are more of Technology oriented and they are entitled to decision at a great pace. This freedom and trust put on the Private Bankers have helped them to concentrate on expansion. This growth needs to be ascertained so that the reach of private Bankers and their technology can be of more use to the consumers. Due to increasing competition in retail banking, understanding the customer perception about service quality is becoming indispensible. The private sector Banks are posing a very stiff competition to the public sector banks through their initiatives for meeting customer expectations and gaining a cutting edge. This is reflected by the increasing market share and better profitability of private Banks in comparison to that of the public sector Banks. At the same time public sector banks have also responded to the Challenges posed by the private sector Banks through conscious efforts to enhance their service.

### NEED AND IMPORTANCE OF THE STUDY

Customer satisfaction is dynamic and to be studied regularly, increasing awareness, living standards and urbanization has led to increase in the changing preferences and the same has forced the marketers to change their product features, packaging styles, distribution channels and so on. There is a fundamental shift in the usage behavior of consumers from traditional ways to modern ways with respect to the services rendered Technological innovation in banking services is an opportunity to differentiate mature market. The technological innovation includes ATM, Internet banking, Phone Banking, Mobile banking etc. These technologies can be used by the customers in an independent way without interaction of an assistant or an employee. Nowadays, banking automation service is indispensible in order to obtain efficiency to provide basic financial needs.

### **OBJECTIVES OF THE STUDY**

- To study the Retail Banking services with respect to private sector Banks in Coimbatore District
- To study the customer satisfaction towards cross selling of insurance product by the private sector Banks in Coimbatore District.
- To study the factors influencing the customer satisfaction towards cross selling of insurance product by the Bank.

### **RESEARCH DESIGN**

The design of the study is Descriptive in nature. It is a fact finding investigation with adequate interpretation, it gathers the information for formulating more sophisticated studies.

### METHODOLOGY OF THE STUDY

The validity of research is based on the systematic method of data collection and analysis. Both primary and secondary data were used for the study. Banks were selected based on the ground of concentration of Private sector Banks in that area.

#### SOURCES OF DATA

The primary data was collected through the questionnaire from selected sample respondents. Secondary data collected from regional, branch offices of the private sector Banks, websites of the banks and lead Journals. The primary objective of the study is to analyze the customer satisfaction on retail banking. The period of study was from 2007-2009

### SAMPLING

Coimbatore District is purposefully selected, in the first exploratory stage of study review of literature was undertaken to familiarize with various aspects of the study. In the second stage primary data were collected from the customers of the Private sector Banks through questionnaire. Four hundred and eighty eight respondents were selected on convenience sampling method.

#### SAMPLE SELECTED FOR THE STUDY

The study area is limited to Coimbatore District. Coimbatore, the second biggest city of the southern state of Tamil Nadu, is identified as one of the fast developing metros of India. The city of Coimbatore called as the "Manchester of South India" with a salubrious climate. The city is endowed with large number of Educational Institutions, Textile Mills, Foundries and Agro based industries. It is also known for the manufacturing of the centrifugal pump sets and a host of engineering goods. A list of Private sector banks selected are AXIS Bank, ICICI Bank, HDFC Bank,Karur Vysya Bank and so on.

#### FRAMEWORK OF ANALYSIS

The study being "A Study On Customer Satisfaction Towards Cross selling of Insurance Product and supplementary services – With Reference To Private Sector Banks In Coimbatore District", centers around the dependent variable customers usage behavior and their relationship with the related independent variables such as Age, Gender, Marital status, Education, Occupation, Family Income, Number of years of banking and Frequency of visit to bank. Statistical tools Anova and Garrett ranking were used appropriately.

### ANOVA (ANALYSIS OF VARIANCE)

In analysis of variance a continuous response variable known as a dependent variable is measured under experimental conditions identified by classification variables known as independent variables. The analysis of variance is a powerful statistical tool for tests of significance. The test of significance based on tdistribution is an adequate procedure only for testing the significance of the difference between two sample means. In a situation when three or more samples are consider at a time, an alternative procedure is needed for testing the hypothesis that all the samples are drawn from the populations with the same mean. The basic purpose of the analysis of variance is to test the homogeneity of several means. It is used for studying the differences among the influence of various categories of one independent variable on a dependent variable is called one-way ANOVA. It is designed to test whether a significant difference exists among the three or more sample means. In this analysis, the total variance in a set of data is divided into variation within groups and variation between-group. The analysis of variance technique is used when the independent variables are of nominal scales and the dependent variable is metric or least interval scaled.

### LIMITATIONS OF THE STUDY

- 1. The samples are drawn on convenience; the results are reliable to that place only.
- 2. This study is not made for a specific bank or specific service. But it is a general study of retail banking services provided by the banks.
- 3. As the study is based on Questionnaire, the results vary according to the opinion of the respondents.
- 4. For convenience and want of time, four hundred and eighty eight respondents alone were taken for the study.

### HYPOTHESIS OF THE STUDY

There is no relationship between socio economic factors and opinion towards cross selling of insurance product.

### **REVIEW OF LITERATURE**

Aruna Dhade, Manish Mittal<sup>8</sup> in their study "Preferences, Satisfaction Level and Chances of Shifting: A Study of the Customers of Public Sector and New Private Sector Banks" stated the phenomenal changes taking place in the banking industry indicate that the new private sector banks have gradually won the market with their customer-centric approach. The depleting market share of the public sector banks poses a threat to them. The focus is on the primary opinion of the customers of these banks. The State Bank of India (SBI) is selected as the representative of the public sector banks and HDFC, ICICI, IDBI and UTI as representatives of the new private sector banks. The study is divided into three parts: the first part deals with customers' preferences while selecting the bank of their choice; the second part covers the satisfaction level of the customers; and the third part is an attempt to record the instances of customers of the SBI are more sensitive with regard to the processing time taken for account handling and technological updates. Dissatisfaction in those areas can lead to shifting to another bank, while in the case of private banks' customers, proximity to residence and sometimes delay in the processing time can be the likely reasons to change the existing bank with a new one.

Luis V. Casalo, Carlos Flavian, Miguel Guinalíu<sup>9</sup> in the study titled "The role of satisfaction and website usability in developing customer loyalty and positive wordof-mouth in the e-banking services" stated customer loyalty and positive Word-of-Mouth (WOM) have been traditionally two main goals aimed at by managers. The purpose of this study is to characterize both concepts in the e-banking context. The influence of satisfaction and website usability in developing customer loyalty and positive WOM in the e-banking business were measured. After the validation of measurement scales, hypotheses are contrasted through structural modeling. The research showed that satisfaction with previous interactions with the bank website had a positive effect on both customer loyalty and positive WOM, in addition website usability was found to have a positive effect on customer satisfaction and, as expected, loyalty was also significantly related to positive WOM. In order to develop customer loyalty and positive WOM, banks that operate in the internet should: prioritize ease-of-use in website development, and identify the needs of online customers in order to offer them what they really want. Although the increasing competitiveness in e-business is motivating an exponential growth in the number of studies that analyze loyalty development and WOM in the internet.

### ANALYSIS AND INTERPRETATION

### ANOVA (ANALYSIS OF VARIANCE)

### AGE AND CROSS SELLING OF INSURANCE PRODUCT OF BANK

It is believed that the opinion on cross selling of insurance product of Bank may be influenced by age of the respondents. In order to verify the assumption, the respondents with different age profile have same opinion on cross selling of insurance product of the bank; analysis of variance (ANOVA) is used.

S. No.	Age	Mean	Fo	Significance (p)	S/NS
1	Up to 25 yrs	4.65			
2	26-35Yrs	4.96			
3	36-45 yrs	4.86	2.509	.58	NS
4	46 and above	5.74			

### TABLE 1: AGE AND CROSS SELLING OF INSURANCE PRODUCT OF BANK

#### S – Significant; NS – Not Significant

From the above table, mean value for opinion on cross selling of insurance product of Bank among respondents with age up to 25 years is 4.65, the mean value 26 4.96, for respondents with age to 35 vears is mean value for respondents age 36 to 45 years is 4.86, mean value for respondents with age above 46 years is 5.74. Since the significance value is greater than level of significance .05(P>0.05), the hypothesis is accepted. Hence opinion on cross selling of insurance product of Bank is not influenced by age of the respondents. It is concluded that respondents with different age profile have on an average same opinion on cross selling of insurance product of Bank. EDUCATION AND CROSS SELLING OF INSURANCE PRODUCT OF BANK

It is believed that the opinion on cross selling of insurance product of Bank may be influenced by Education of the respondents. In order to verify the assumption, the respondents with different education have same opinion on cross selling of insurance product of Bank Analysis of variance (ANOVA) is used.

<sup>&</sup>lt;sup>8</sup>Aruna Dhade, Manish Mittal. "Preferences, Satisfaction Level and Chances of Shifting: A Study of the Customers of Public Sector and New Private Sector Banks", The Icfai University Journal of Bank Management, Vol. VII, Issue 2, 2008, pp. 62-74.

<sup>&</sup>lt;sup>9</sup>Luis V. Casalo, Carlos Flavián, Miguel Guinaliu. "The role of satisfaction and website usability in developing customer loyalty and positive word-of-mouth in the ebanking services" International Journal of Bank Marketing, Vol. 26, Issue 6, 2008, pp. 399 – 417.

#### TABLE 2: EDUCATION AND CROSS SELLING OF INSURANCE PRODUCT

IADLL	TABLE 2: EDUCATION AND CROSS SELETING OF INSURANCE PRODUCT								
S. No.	Education	Mean	Fo	Significance (p)	S/NS				
1	Diploma/Hr. sec	4.94							
2	UG	4.56							
3	PG	4.76	3.718	.029	NS				
4	Professional	5.56							

S – Significant; NS – Not Significant

From the above table, mean value of opinion on cross selling of insurance product of Bank among the respondents with Diploma/Hr. Secondary is 4.94, the mean value for respondents with UG degree is 4.56, the mean value for respondents PG degree is 4.76, the mean value for respondents with professional degree is 5.56. Since the significance value is less than level of significance .05(P<0.05) the hypothesis is rejected. Hence opinion on cross selling of insurance product is associated with education. In order to find which group differs significantly from others towards opinion on cross selling of insurance products, Post HOC Test is used.

TABLE 2.1: POST HOC TEST							
I <sup>th</sup> group	Other group	Mean Difference	Significance (p)	Remarks			
Professional	UG	099228	0.018	Significant difference			

From the post of analysis the respondents with professional degree have strong opinion on cross selling of insurance product of the bank than the respondent with UG degree.

#### FAMILY INCOME AND CROSS SELLING OF INSURANCE PRODUCT

It is believed that the opinion on cross selling of insurance product of bank may be influenced income of the respondents. In order to verify the assumption, the respondents with different family income have greater opinion on cross selling of insurance product of Bank, Analysis of variance (ANOVA) is used.

#### TABLE 3: FAMILY INCOME AND CROSS SELLING OF INSURANCE PRODUCT

S. No.	Family Income	Mean	Fo	Significance (p)	S/NS
1	Up to 2 lacs	4.60			
2	2 to 3 lacs	4.56			
3	3-4 lacs	4.76	3.718	0.012	S
4	4 lacs and above	5.56			

#### S - Significant; NS - Not Significant

From the above table, mean value for opinion on cross selling of insurance product of bank among respondents with income up to 2 lacs is 4.60, mean value for respondents with income 2 to 3 lacs is 4.56, mean value for respondents with income 3 to 4 lacs is 4.76, mean value for respondents with income above 4 lacs is 5.56. Since the significance value is less than level of significance .05(P<0.05), the hypothesis is rejected. Hence the opinion on cross selling of insurance product of Bank is influenced Income of the respondents. In order to find which group differs significantly from others towards opinion on cross selling of insurance products, Post HOC Test is used.

TABLE 3.1: POST HOC TEST						
I <sup>th</sup> group	Other group	Mean Difference	Significance (p)	Remarks		
3 lacs to 4 Lacs	Up to 2 lacs	1.5085	.022	Significant difference		

From the above Post HOC analysis, the respondents with family income 3 to 4 lacs have strong opinion on cross selling of insurance product of the bank than the respondents with income up to 2 lacs.

### OCCUPATION AND OPINION ON CROSS SELLING OF INSURANCE PRODUCT OF BANK

It is believed that the opinion on cross selling of insurance product of bank may be influenced by occupation of the respondents. In order to verify the assumption, the respondents with different occupation have same opinion on cross selling of insurance product; Analysis of variance (ANOVA) is used.

#### TABLE 4: OCCUPATION AND OPINION ON CROSS SELLING OF INSURANCE PRODUCT OF BANK

S. No.	Occupation	Mean	Fo	Significance (p)	S/NS
1	Salaried	4.95			
2	Business	5.45	6.903	0.001	S
3	Others	4.04			

#### S – Significant; NS – Not Significant

From the above table, mean value for opinion on cross selling of insurance product of Bank among respondents of salaried category is 4.95, mean value for respondents of business category is 5.45, and mean value of respondents of others category is 4.04. Since the significance value (p) is less than level of significance .05(P<0.01) the hypothesis is rejected. Hence the opinion on cross selling of insurance product of Bank is associated with occupation of the respondents. It is concluded that opinion on cross selling of insurance product differ significantly between the occupation groups. In order to find which group differs significantly from others towards opinion on cross selling of insurance products, Post HOC Test is used.

#### TABLE 4 1. POST HOC TEST

I <sup>th</sup> group	Other group	Mean Difference	Significance (p)	Remarks		
Business	Others	1.40336	0.001	Significant difference		

From the above Post HOC analysis, the respondents of business category have strong opinion on cross selling of insurance product of the bank, than the respondents of others category.

### NUMBER OF YEARS OF BANKING AND OPINION ON CROSS SELLING OF INSURANCE PRODUCT OF BANK

It is believed that the opinion on cross selling of insurance product of Bank may be influenced by year of banking by the respondents. In order to verify the assumption the respondents with different years of Banking have same opinion on cross selling of insurance product, analysis of variance (ANOVA) is used.

#### TABLE 5: NUMBER OF YEARS OF BANKING AND OPINION ON CROSS SELLING OF INSURANCE PRODUCT OF BANK

S. No.	Years of Banking	Mean	Fo	Significance (p)	S/NS
1	Less than 10 years	4.83	.392	.676	NS
2	11-20 Years	5.08			
3	Above 20 Years	5.05			

S – Significant; NS – Not Significant

From the above table, mean value for opinion on cross selling of insurance product of Bank among respondents with less than 10 years of banking is 4.83, the mean value for respondents with 11 to 20 years of banking is 5.08, and mean value for respondents having above 20 years of banking is 5.05. Since the significance value is greater than level of significance .05(P>0.05), the hypothesis is accepted. Hence the respondents with different year of banking are not

INTERNATIONAL JOURNAL OF RESEARCH IN COMMERCE, ECONOMICS & MANAGEMENT 109 A Monthly Double-Blind Peer Reviewed Refereed Open Access International e-Journal - Included in the International Serial Directories

associated with opinion on cross selling of insurance product of Bank. It is concluded that respondents with different years of Banking on average have same opinion on cross selling of insurance.

### FREQUENCY OF VISIT TO BANK AND OPINION ON CROSS SELLING OF INSURANCE PRODUCT OF BANK

It is believed that the opinion on cross selling of insurance product of Bank may be influenced by the frequency of visit to bank. In order to verify the assumption Analysis of variance (ANOVA) is used.

S. No.	Frequency of visit to Bank	Mean	Fo	Significance (p)	S/NS			
1	Once in a week	5.15	.773	.509	NS			
2	Twice in a month	4.83						
3	Once in a month	4.72						
4	Once or twice in a year	5.07						

#### TABLE 6: FREQUENCY OF VISIT TO BANK AND OPINION ON CROSS SELLING OF INSURANCE PRODUCT OF BANK

S – Significant; NS – Not Significant

From the above table, opinion on cross selling of insurance product of Bank among the respondents with frequency of visit to bank once in a week is 5.15, the mean value for respondents with frequency of visit twice in a month is 4.83, the mean value for respondents with frequency of visit once in a month is 4.72, mean value of respondents with frequency of visit to bank once or twice in a year is 5.07 Since the significance value(p) is greater than level of significance value .05(P>0.05) the hypothesis is accepted. Hence the opinion on cross selling of insurance product of Bank is not associated with frequency of visit to bank. It is concluded that the respondents with different frequency of visit to Bank on an average have same opinion on cross selling of insurance product of Bank.

### PROBLEMS FACED BY THE CUSTOMERS IN USING SUPPLEMENTARY SERVICE

The private sector bank delivers value in the services to the customers with its instilled technological support. The technology some times creates technical hurdles while availing the service. The respondents were asked to rank the most striking problem in operating the services, weights are given and the highest weighted average score is given first rank and the least weighted average score with last rank.

#### TABLE 7: PROBLEMS FACED BY THE CUSTOMERS IN USING SUPPLEMENTARY SERVICES

S. No.	Problems	Weighted average score	Rank
1	E-channels are creating more confusion	2.99	Х
2	Charge for Service have more hidden cost	3.60	1
3	More formalities for query rectification	3.22	IX
4	Card products sometime creates technical hurdles	3.24	VII
5	Branch timings not adequate	2.59	XI
6	Unsuitable location of ATMs	3.45	Ш
7	Lack of ATM services	3.35	VI
8	Inability to manage information properly and to deliver products or services	3.43	IV
9	Inadequate information regarding product use and problem resolution procedures	3.29	VII
10	Restriction in withdrawal	3.51	П
11	Lack of knowledge regarding use of technology based services	3.36	V

The table reveals the problems faced by the customers while using the supplementary services. "Charge for Service have more hidden cost" was ranked was first by the respondents with the average score of 3.60. "Restriction in withdrawal" was ranked second by the respondents with the average score of 3.51. "Unsuitable location of ATMs" was ranked third by the respondents with the average score of 3.45. "Inability to manage information properly and to deliver products or services" was ranked fourth by the respondents with the average score of 3.43. "Lack of knowledge regarding use of technology based services" was ranked fifth by the respondents with the average score of 3.36. "Lack of ATM services" was ranked sixth by the respondents with the average score of 3.35. "Inadequate information regarding product use and problem resolution procedures" was ranked seventh by the respondents with the average score of 3.29. "Card products sometime create technical hurdles" was ranked eighth by the respondents with the average score of 3.29.

"More formalities for query rectification" was ranked ninth by the respondents with the average score of 3.22. "E-channels are creating more confusion" was ranked tenth by the respondents with the average score of 2.99. "Branch timings not adequate" was ranked eleventh by the respondents with the average score of 2.59.

#### FINDINGS

Opinion on cross selling of insurance product of Bank is not influenced by age of the respondents. Respondents with different age profile have on an average same opinion on cross selling of insurance product of Bank.

Opinion on cross selling of insurance product is associated with education. In order to find which group differs significantly from others towards opinion on cross selling of insurance products, Post HOC Test is used. From the analysis the respondents with professional degree have strong opinion on cross selling of insurance product of the bank than the respondent with UG degree.

Cross selling of insurance product of Bank is influenced by Income of the respondents. The respondents with family income 3 to 4 lacs have strong opinion on cross selling of insurance product of the bank than the respondents with income up to 2 lacs.

Opinion on cross selling of insurance product of Bank is associated with occupation of the respondents. The respondents of business category have strong opinion on cross selling of insurance product of the bank, than the respondents of others category.

The respondents with different year of banking are not associated with opinion on cross selling of insurance product of Bank.

Opinion on cross selling of insurance product of Bank is not associated with frequency of visit to bank. It is concluded that the respondents with different frequency of visit to Bank on an average have same opinion on cross selling of insurance product of Bank.

### SUGGESTIONS

- The bank staff would be fully trained in handling insurance products to ensure transparency and full disclosure of features of the product.
- Strategies consistent with the bank's vision, knowledge of target customers' needs, defined sales process for introducing insurance services, simple yet
  complete product offerings, strong service delivery mechanism, quality administration, synchronized planning across all business lines and subsidiaries,
  complete integration of insurance with other bank products and services, extensive and high-quality training, sales management tracking system for
  reporting on agents' time and results of bank referrals and relevant and flexible database systems.
- Handling of customers with customer awareness levels increasing, they are demanding greater convenience in financial services.

#### CONCLUSION

Marketing of insurance products under the same roof of a Bank branch it facilitates a customer to carry out all his financial and investment needs with just a visit to his bank branch. The success of such tie-ups would have to be viewed in totality. Many Insurance companies have tie-ups with banks and this would benefit the masses, the customers can get insurance products under a single umbrella. Customers are the valuable asset for service organization in banking sector; even

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

the customers are literates they prefer to undertake banking transaction themselves. They hesitate to depend upon technology based service to a maximum extent. The Banks need to equip themselves with internal capabilities and build efficient and viable business models to create advantage of new opportunities available into a long term sustainable competitive advantage. For effective marketing bank should have staff with right soft skill such as concern for customers' problem, positive attitude, good communication and negotiation skill.

### REFERENCES

- Amartya Sen. Resources Values and Development, Oxford University Press, Bombay, Edition -1984.
- Gupta, S.P. Statistical Methods, Sultan Chand & Sons Educational Publishers, New Delhi-2006.
- Hitoshi Kume, "Statistical Methods for Quality Improvement", Productivity Press (India) Pvt Ltd, Madras, Ed-2006.
- Kapoor, G.P. "Commercial Banking in India", A.P.H. Publishing Corporation, New Delhi, Ed-2005.
- Kothari, C.R. Research Methodology Methods and Techniques. New Age International (P) Ltd., publishing New Delhi. Ed-2004
- Krishnaswami, O.R. and M.Ranganatham, "Methodology of Research in Social Sciences", Himalaya Publishing House, New Delhi, Ed-2007.
- Kulbir Singh Sidhu, "Statistics in Education and Psychology", Sterling Publishers Private Ltd, New Delhi, Ed-2006.
- Sathya Swaroop Debasish and Bishnupriya Mishra. "Indian Banking System-Development Performance and Services", Mahamaya Publishing House, New Delhi, Ed -2005.
- Antony Beckett, Paul Hewer, Barry Howcroft. "An exposition of consumer behaviour in the financial services industry", International Journal of Bank Marketing, Vol. 18, Issue 1, 2000, pp. 15 – 26.
- April Wright. "Technology as an Enabler of the Global Branding of Retail Financial Services", Journal of International Marketing, Vol. 10, Issue 2, 2002, pp. 83-98.
- Aruna Dhade, Manish Mittal. "Preferences, Satisfaction Level and Chances of Shifting: A Study of the Customers of Public Sector and New Private Sector Banks", The Icfai University Journal of Bank Management, Vol. VII, Issue 2, 2008, pp. 62-74.
- Augustine, L. Garini and Prasanta Athma. "Customer Service in Commercial Banks-Expectation and Reality", Indian Journal of Marketing, Vol. XXIII, June 1994, pp. 3-12.
- Balwinder Singh, B., Malhotra, P. "Adoption of Internet Banking: An Empirical Investigation of Indian Banking Sector", 2004.
- Baumann, Chris, Burton, Suzan, Elliott, Gregory, Kehr, Hugo M. "Prediction of attitude and behavioral intentions in retail banking", The International Journal of Bank Marketing, Vol. 25 (15), Number 2, 2007, pp. 102-116.



# FINANCIAL DISTRESS: BANKRUPTCY MEASURES IN ALEMBIC PHARMA Z-SCORE MODEL

# D. SASIKALA ASST. PROFESSOR AUXILIUM COLLEGE FOR WOMEN VELLORE

### ABSTRACT

The term Financial Distress is a situation where a firm's operating cash flows are not sufficient to satisfy current obligations and the firm is forced to take corrective action. Financial distress may lead a firm to default on a contract, and it may involve financial restructuring between the firm, its creditors and its equity investors. Sometimes, financial distress leads to bankruptcy. This paper uses Z-score model (Altmans' 1968) to predict risk of Financial distress of Alembic Pharma, from the year 2004-2010. It is obvious that the Z-score model of alembic pharma is in the grey zone, indicating poor financial performance. Manages should take immediate actions to turn around the company's results.

### **KEYWORDS**

Financial distress, Z-score model, Bankruptcy.

### INDUSTRY PERSPECTIVE

he Indian Pharma Industry has been resilient to the economic challenges. Our Country is holding its ground in the midst of the current global financial crisis. The Indian economy is expected to emerge as the fastest growing economy by 2013 and to be the 3rd largest economy by 2050 (Source: BRICs Report, Goldman Sachs). The GDP growth will be driven by both exports and domestic consumption. The current spending on healthcare [public and private] is estimated at 6% of GDP and expected to increase to 10% of GDP by 2016. India is also emerging as a low-cost, high quality option for outsourcing of research, manufacturing and other services. This offers a great opportunity for the Indian pharmaceutical industry and Indian pharma companies.

The Global pharmaceutical Industry is witnessing a growing importance of generics. Global pharmaceutical market intelligence company IMS Health believes the Indian generic manufacturers will grow at a faster clip as drugs worth approximately \$20 billion in annual sales will face patent expiry in 2011. In fact, with nearly \$105 billion worth of patent-protected drugs to go off-patent (including 30 of the best selling US patent-protected drugs) by 2012, Indian generic manufacturers are positioning themselves to offer generic versions of these drugs. With drugs going off patent each year, generics represent a major outsourcing opportunity for pharmaceutical producers in India. The global pharmaceutical outsourcing market is rapidly growing.

#### DOMESTIC FORMULATION BUSINESS

Alembic has now made a mark in some specialized therapies such as Diabetology, Cardiology and Gynaecology as well. Alembic undertook a massive restructuring exercise which started in Q1FY09. The market share grew to 1.91% against 1.81%. (March, 2010). However, the Company did not achieve primary sales target due to adjustment in trade inventory. The Company is confident of posting better performance on domestic formulations in the ensuing quarters. INTERNATIONAL BUSINESS

Alembic's export recorded a performance during the year to cross Rs. 100 crores and registered 42% growth over last year. The Company has represented to the Government against the dumping of Pen-G being done by China in Indian markets. Anti dumping measures are being considered at the highest level in Government of India. *In the meantime, the Company continued to incur heavy losses on this account.* 

#### FINANCE

The Company has registered a consolidated total income of Rs.1140.77 Crores for the year under review as compared to Rs. 1120.16 Crores for the previous year ended on 31st March, 2009. The consolidated Profit, before providing for Interest, Depreciation, Non-recurring Income, expenses and Taxes, was Rs.116.88 Crores for the year under review as compared to Rs. 130.38 Crores for the previous year. The Company has made a consolidated profit after tax of Rs.39.54 Crores for the year under review, as compared to Rs. 10.82 Crores for the previous year.

#### FINANCIAL DISTRESS LEADING TO BANKRUPTCY

Financial distress is usually associated with some costs to the company known as costs of financial distress. A common example of a cost of financial distress is bankruptcy cost. These direct costs include auditors' fees, legal fees, management fees and other payments. But cost of financial distress can occur even if bankruptcy is avoided.

Financial distress in companies can lead to problems that can reduce the efficiency of management. As maximizing firm value and maximizing shareholder value cease to be equivalent managers who are responsible to shareholders might try to transfer value from creditors to shareholders. As a firm's liquidation value slips below its debt, it is the shareholders' interest for the company to invest in risky projects which increase the probability of the firm's value to rise over debt. Risky projects are not in the interest of creditors as they increase the probability of minimizing the firm's value. Since these projects do not necessarily have a positive net present value costs may rise from lost profits.

Equally management might choose to prolong bankruptcy, which has the same effect on probabilities of a change in the firm's value. Management might also distribute high dividends to "Save" money from the creditors. Another source of indirect costs of financial distress is higher costs of capital; short-term loans by contractors and banks will be expensive and hard, if not impossible to get.

### **REVIEW OF LITERATURE**

Many research works have been conducted over the period to evaluate the financial distress of the company with the help of the various ratios or by applying the Multiple Discriminant Analysis to predict the corporate fitness, Chen and Shimerda, Dugan and Zavgren (1981), have outlined seven financial factors that can help to predict financial distress: return on investment, financial leverage, capital turnover, short-term liquidity, cash position, inventory turnover and receivables turnover. By using financial ratios, the accuracy of predicting bankruptcy of a firm is grater than 90 per cent. The Altman model uses various ratios to consider the seven factors noted above. Morris (1988) argue that in so far as bankruptcy is due to unforeseeable even and therefore, it cannot be predicted. L. C. Gupta (1999) attempted a refinement of Beaver's method with the objective of predicting the business failure. Whereas Mansur.A.Mulla (2002) made a study in textile mill with the help of Z score model for evaluating the financial health with five weighted financial ratios and followed by Selvam M and thers (2004), this study had revealed about cement industry's financial health with special reference to India Cements Limited. Bagchi S.K (2004) analysed about practical implication of accounting ratios in risk evaluation and concluded that accounting ratios are still dominant factors in the matter of credit risk evaluation. Krishna Chaitanya (2005) used Z model to measure the financial fitness of IDBI and concluded that IDBI is likely to become insolvent in the years to come. Anup Chowdhury and Suborna Barua (2009) investigated the financial attributes of Z category shares companies using Z score analysis and found that 90 per cent of those companies are suffering with financial problem .Rajesh and N.R.V Ramana Reddy (2010) made an attempt to measure the financial distress of chittoor Cooperative sugars Limited along with liquidity, solvency and leverage position with Altman's Z-score model.

### OBJECTIVES

- To analyze the financial performance of the company through liquidity, working capital investment efficiency and solvency ratios.
- To measure the financial distress of the company with Altman's Z-score model
- To evaluate the company's performance to its financial health and the utilization of its assets.

### LIQUIDITY TEST

The liquidity ratios are used to measure the short-term solvency and indicate the ability of a firm to meet its debt requirements as and when and they become due. Current liabilities are used as the denominators of the ratios because they are considered to represent the most urgent debt, requiring retirement within one year or most preciously, with one operating cycle. The available cash resources to satisfy these obligations must come primarily from cash or the conversion of cash of other current assets.

Current ratios of the company are in the standard norm (2:1) during the study period. Quick ratios are also in the standard norm (1:1)

TABLE - 1 LIQUIDITY RATIOS						
Year	Current Ratio	Quick Ratio				
2004	2.7	1.84				
2005	2.66	1.53				
2006	2.71	1.6				
2007	4.06	3.07				
2008	2.97	1.85				
2009	3.02	1.78				
2010	2.47	1.39				

FIGURE -1 LIQUIDITY RATIOS

## Liquidity Ratios 4.5 4 3.5 3 Ratios Current Ratio 2.5 2 Quick Ratio 1.5 1 0.5 0 2 5 1 3 4 6 7 Years

#### WORKING CAPITAL INVESTMENT EFFICIENCY TEST

In order to substantiate the liquidity test, it is essential to test the working capital investment efficiency test also, because inventory and accounts receivable, the two important constituents of current assets, may sometimes block the proprietor's funds. A blockage occurs when money becomes tied up in slow paying debtors, or in slow moving stock. In such a case, the business may appear to have a satisfactory amount of working capital but little or no liquidity. These are the common working capital investment efficiency ratios:

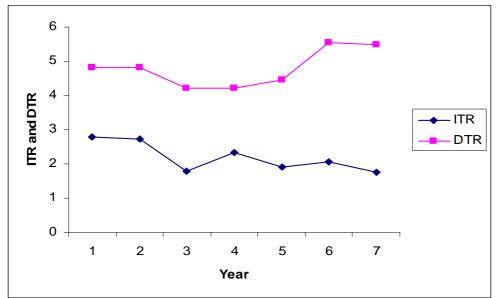
- Inventory turnover ratio (cost of sales / inventory)
- Days inventory outstanding (365/ITR)
- Debtors turnover ratio( credit sales /Average debtors)
- Days sales outstanding (365/DTO)

#### TABLE - 2 WORKING CAPITAL INVESTMENT EFFICIENCY RATIOS

Year	Inventory Turnover ratio	Days stock outstanding	Debtors Turnover ratio	Days sales outstanding
2004	2.79	131	4.81	76
2005	2.72	134	4.83	76
2006	1.79	204	4.21	87
2007	2.34	156	4.22	86
2008	1.91	191	4.45	82
2009	2.05	178	5.54	66
2010	1.77	206	5.49	67

INTERNATIONAL JOURNAL OF RESEARCH IN COMMERCE, ECONOMICS & MANAGEMENT A Monthly Double-Blind Peer Reviewed Refereed Open Access International e-Journal - Included in the International Serial Directories WWW.ijrcm.org.in

#### FIGURE - 2: WORKING CAPITAL INVESTMENT EFFICIENCY RATIOS



It is found from table -2 that the inventory turnover ratio is decreasing indicating gradual increase of cost of goods sold. It reflects an additional burden on the part of the working capital of the company. The overall days stock outstanding is more. The debtor's turnover ratio showing a fluctuation trend, indication the credit sales of the company is increasing year by year. Days sales outstanding ratio is normal compared to the initial years. But the overall working capital efficiency of the company is poor.

### SOLVENCY RATIOS

#### ALTMAN'S Z - SCORE TEST

Business all across the country has a need to know about the financial health of a company. For this purpose, Edward Altman, using Multiple Discriminant analysis combined set of 5 financial ratios to come up with the Altman Z-score. This score uses statistical techniques to predict a company's financial health i.e, fiscal fitness using a company's financial statements.

The Z-score formula is a measurement of the financial health of company and is a powerful diagnostic tool that forecasts the probability of a company entering bankruptcy within a two-year period.

TABLE - 3 SOLVENCY RATIOS								
Year	WC/TA	RE/TA	EBIT/TA	EQ/TA	SA/TA			
2004	0.31	0.34	0.22	0.39	1.02			
2005	0.29	0.41	0.19	0.46	0.88			
2006	0.33	0.47	0.23	0.51	0.97			
2007	0.47	0.44	0.24	0.47	0.86			
2008	0.39	0.35	0.23	0.38	1.13			
2009	0.39	0.41	0.13	0.33	1.12			
2010	0.35	0.3	0.1	0.33	1.07			

It is found from the table 3 that it is showing inefficient mobilization of working capital during the study period. The retained earnings mobilization is low during the study period. The EBIT to total assets also shows that the company is not in a position to meet the financial obligations like interest and tax payments. Equity to total assets is also low, shows the interest of shareholders is low due the financial ill health of the company. The sales of the company is low to compare total assets invested by the company. Overall the solvency position of the company is not good.

### Z-SCORE ESTIMATED FOR PRIVATE FIRMS

- T1 = Working Capital / Total Assets
- T2 = Retained Earnings / Total Assets
- T3 = Earnings before Interest and Taxes / Total Assets
- T4 = Market Value of Equity / Total Liabilities
- T5 = Sales/ Total Assets

### Z' SCORE BANKRUPTCY MODEL

Z' = 0.717T1 + 0.847T2 + 3.107T3 + 0.420T4 + 0.998T5

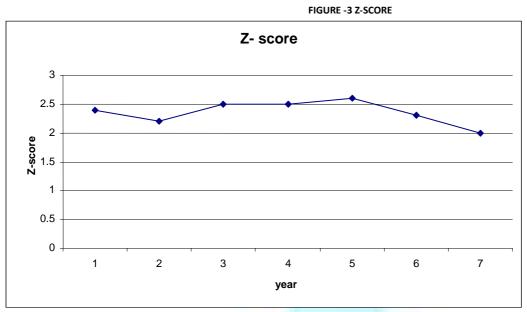
ZONES OF DISCRIMINATION

Z' > 2.9 - "Safe" Zone

1.23 < Z' < 2. 9 - "Grey" Zone

Z' < 1.23 - "Distress" Zone

TABLE - 4: Z-SCORE VALUE							
Year	2004(1)	2005(2)	2006(3)	2007(4)	2008(5)	2009(6)	2010(7)
Z-Score	2.4	2.2	2.5	2.5	2.6	2.3	2



T1 - Working capital to total assets. This ratio measures the liquid assets of a company in relation to the over all capitalization of the company. Usually, when a company experiences consistent operating losses, it will also experience shrinking current asset in relation to the total asset of the company. This ratio is multiplied by the weighing factor 0.717.

T2 - This measures the cumulative profits retained in the business over time. It is calculated by dividing total assets into retained earnings. This ratio is very closely related to the age of a company. For example, young companies usually have a low ratio because they have no sufficient time to accumulate profits. Therefore this ratio supports the premise that young companies after having a higher incidence of failure in their earlier years. This is multiplied by weighing factor 0.847.

T3 - This is calculated by dividing total assets into a company's earnings before interest and taxes. This is a true measure of the productivity of a company's total assets, or the earning power of its assets. A multiplier of 3.107 is used in this ratio.

T4 - The book value of a company's total liabilities is divided into the market value of its equity. The equity is the combined market value of all shares and types of stock, with liabilities representing both short and long term. When values are not available, book values may be substituted. This ratio reflects between what point a company's assets can decline in value before the liabilities exceed the assets and the company reaches a point of insolvency. The multiplier 0.42 is used.
 T5 - This ratio measures the ability of a company's assets to generate sales. It also reflects how well the management deals with competitive pressures. It is calculated by dividing the total assets into net sales and uses the multiplier 0.998.

It is interesting to note that four of the ratios are total assets as the denominator. This emphasis the importance of total assets in measuring the performance of a company. Also that T3 has the highest weighting (multiplier) factor of 3.107. This indicates how important it is for companies to manage its assets in being able to generate earnings. This is no surprise to most managers, but is clearly emphasized in this ratio.

### FINDINGS

- 1. Current ratios of the company are in the standard norm(2:1) during the study period. Quick ratios are also in the standard norm(1:1)
- 2. Inventory turnover ratio is decreasing indicating gradual increase of cost of goods sold. It reflects an additional burden on the part of the working capital of the company.
- 3. The overall day's stock outstanding is more.
- 4. The debtor's turnover ratio showing a fluctuation trend, indication the credit sales of the company is increasing year by year.
- 5. Days sales outstanding ratio is normal compared to the initial years.
- 6. But the overall working capital efficiency of the company is poor.
- 7. Solvency ratios infer inefficient mobilization of working capital during the study period.
- 8. The retained earnings mobilization is low during the study period.
- 9. The EBIT to total assets also shows that the company is not in a position to meet the financial obligations like interest and tax payments.
- 10. Equity to total assets is also low, shows the interest of shareholders is low due the financial ill health of the company.
- 11. The sale of the company is low to compare total asses invested by the company.
- 12. Overall the solvency position of the company is not good.
- 13. Z-Score of T1 = Working Capital / Total Assets is 2.4 grey zone
- 14. Z-Score of T2 = Retained Earnings / Total Assets is 2.2 grey zone
- 15. Z-score of T3 = Earnings Before Interest and Taxes / Total Assets is 2.5 grey zone
- 16. Z-score of T4 = Market Value of Equity / Total Liabilities is 2.6 grey Zone
- 17. Z-score of T5 = Sales/ Total Assets is 2 grey zone.

### **SUGGESTIONS & CONCLUSION**

It is obvious that the Z-score model of alembic pharma is in the grey zone, indicating poor financial performance. May be in another 2 years the company's bad financial position will lead to bankruptcy. The managers should protect their company from failures. They should take immediate actions should be taken by managers to turn around the company's results.

### REFERENCES

- 1. Dr. N. S Nagarajan and Dr. K. Kaliyaperumal, 2008, Research Methodology, First Edition, SKM Publications
- 2. Dr. S. shajahan, 2009, Research Methods for Management, Third Edition, JAICO Publishing house.
- 3. S.N. Murthy U Bhojanna, 2007, Research Methodology, first Edition, EXCEL books
- 4. P.Mohana Rao & Alok K.Pramanik, 2001, Working capital management, DEEP & DEEP Publications Pvt. Ltd.
- 5. P.K. Viswanathan, Business Statistics, PEARSON Education.
- 6. T.S.Reddy & Y.Hari Prasad Reddy, Reprint 2007, Management Accounting, Margham publications.

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

- 7. Aruna saini & Ram Dhan Saini, 2010, Journal of Accounting and Finance , Volume 24, No.2
- 8. Published Annual reports of Dr.Reddy's Laboratories
- 9. A.Murthy (2010), First Edition, Financial Management, Margham publications.
- 10. N.P. Srinivasan & M. Sakthivel Murugan, 2006, Financial Management, Vrinda Publications (P) Ltd.
- 11. M. Rajesh and Dr. NRV Ramana redy, (2010), "An empirical Study on Financial Distress", Journal of Finance.
- 12. Altman.E.I (1968), Financial Ratios, Discriminant Analysis and the Prediction of Corporate Bankruptcy". Journal of Finance.
- 13. Anup Chowdhury & Suborna Barua (2009), "Rationalities of Z-category shares in Dhaka stock Exchange: Are they in Financial Distress Risk?" BRAC University Journal.
- 14. Bagchi SK (2004)," Accounting Ratios for Risk Evaluation," The Management Accountant, July, Vol 39.
- 15. Gupta, L.C."Return Indian Equity shares reviewed in ICFAI, "Journal of Applied Finance, Vol 6, and No.4.October 2000.
- 16. Krishna Chaitnya V,(2005)," Measuring Financial Distress of IDBI using Altman Z-score model", ICFAI University journal of Bank Management.
- 17. Mansur.a.Mulla,"Use of Z score Analysis for Evaluation of Financial Health of Textile Mills A case Study" abhigyan, Vol.XIX.
- 18. McDonald, B., Morris, M. (1985)," The functional specification of financial ratios: an empirical examination", Accounting & Business Research, Vol. 15
- 19. Selvam, M.Vanitha, S., & Babu (2004), "A study on financial health of cement industry "Z score analysis", The Management Accountant, July Vol.39.
- 20. Zavgren, C.V (1985), "Assessing the vulnerability to failure of American industrial firm: A logistic analysis." Journal of Business, Finance and Accounting.



# ESTIMATING THE CONTRIBUTION OF FOREST TO ECONOMIC DEVELOPMENT: A CASE STUDY OF NTFPS IN KARNATAKA

# A. R. KULKARNI ASST. PROFESSOR CENTRE FOR MULTI-DISCIPLINARY DEVELOPMENT RESEARCH DHARWAD

# D. R. REVANKAR RESEARCH ASSISTANT CENTRE FOR MULTI-DISCIPLINARY DEVELOPMENT RESEARCH DHARWAD

### ABSTRACT

The paper tries to estimate the value of non-timber forest products (NTFPs) collected by the local people across different types of forests in Karnataka. It shows that on an average 55 per cent of households who are living in the vicinity of forest, collect these products. The average estimated value of NTFPs collected by households is Rs.6752 per household during the year 2003-04. The value of NTFPs collected by households varies from Rs. 15427 in Tropical Thorn forest to Rs. 3420 in Evergreen forest per hectare. The total estimated value of NTFP collected by the local people is Rs. 1858 crores in Karnataka.

### KEYWORDS

Forest, NTFP, SDP.

### INTRODUCTION

TFPs are the biological materials other than wood, which are extracted from natural forests for human use. These products are usually extracted with simple, traditional techniques causing little damage on ecosystems<sup>1</sup>. Forests provide wide range of goods and services, which have significant economic value. These include fertile soil and wood, non-timber products (NTFPs), recreation, landscape value and a wide range of environmental benefits such as climate regulation, watershed protection and the conservation of biodiversity. Though they are providing many benefits and services to the survival of the human beings, they have been depleted in terms of area and productivity. Depletion of forests in terms of transfer of forest land to other land uses and illegal cutting, etc are mainly because of underestimation of benefits of forests. Therefore, forest resources needs to be valued for better management and protection of forests. This would lead to optimum resource allocation for forest sector which is currently getting lower budgetary allocation.

Forests play very important role in the socio-economic development of the state by providing timber, firewood and NTFPs. These NTFPs provide sustenance to the rural and tribal people, who collect a large part of their daily necessities, including food and medicines, from the forests. Most of these products represent a direct subsidy to the rural poor, and constitute an integral element of the factors alleviating their poverty. For landless and marginal farmers living in the vicinity of forests, forest-related activities generate their primary source of income. In Karnataka, collection of non-timber forest produce is being entrusted to Tribal Societies wherever these exist. There are 19 such Tribal Societies in Karnataka. Wherever the societies do not exist the leases for NTFP collection are granted through tender-cum-auction sales. There are about 70 to 80 various NTFPs available in Karnataka. The major NTFPs collected in Karnataka are; *Beedi leaves, Honey, Wax, Tamarind, Seegekai, Cashew nut, Alalekai, Antwalkai, Fruits, Rosha Grass, Gum, Halmaddi, Nellikai, Ivory, Muruganahuli, Amsole, Vatehuli, Ramapatra, Uppigehuli, and others<sup>2</sup>. The value of these officially extracted NTFPs is Rs.37 core during the year 2003-04. Apart from these officially collected in the contributions of the forests to the state economy. Failure to take these resources into account means not only neglecting a considerable source of wealth, but also prevents optimal resource allocation. Estimation of total value of NTFPs help in understanding the magnitude and importance of NTFPs in the economy of Karnataka. In this context, the present paper attempts to estimate the value of NTFPs, in section 3 the sampling and methodology employed in the study are discussed. The findings of the study are discussed in section 4. The last section presents the concluding observations.* 

#### LITERATURE REVIEW ON VALUATION OF NTFPS

The studies dealing with the valuation of NTFPs are presented in tabular format for better understanding about the main objectives, methods and findings of various studies (table 1). The strengths and weaknesses of the Valuation Methods used in some studies are also presented in table 2.



#### TABLE 1: STUDIES ON VALUATION OF NTFPs

Study (Year)	Methodology	Findings
1. Lal <sup>3</sup> (1990)	Used market prices to value NTFPs available in India.	Value of wood Rs.118.8 billion per year.
		Fodder Rs. 22 billion per year.
		Other NTFPs Rs. 10.9 billion per year.
2. Chopra⁴ (1993)	Estimated the value of NTFPs for tropical deciduous forests in India. Used various valuation techniques to estimate the value of NTFPs. Following methods are used for valuation. <b>Fuelwood</b> : substitute good approach (price of soft coke) and labour input-cost of	The direct use value is US\$220 per hectare per year.
	time spent in collection. <b>Fodder</b> : Market value of fertilizer and milk output from cattle feeding on established pasture and scrubland.	
	Other forest products: Labour inputs –cost of time spent in collection.	
3. Gunatilake & Others⁵ (1993)	Study area: Knuckles National Wilderness Area in the Kandy and Mat ale districts of Sri Lanka. Direct use values of NTFPs are calculated excluding illegal extraction of wildlife, poles and ratten or products collected irregularly. Market prices of products or prices of close substitutes are used to value the NTFPs.	NTFPs provided 16.2 % and 5.3 % of total and cash income of the household per year. The value of NTFP extraction is US\$92 per hectare per year.
4. Howard <sup>6</sup> (1995)	Valuation of NTFPs is under taken as a part of financial and economic CBA with regard to Uganda's protected area system.	Direct use of wood and NTFPs by local communities is estimated at about US\$74 million per year.
5. Lescuyer & Guillaume <sup>7</sup> (1996)	An attempt has been made to estimate monetary valuation of all nutritious NTFP extracted by a rural village population in the East Cameroon. Three economic valuation techniques have been used for NTFPs, i.e., local market prices, the market price of the substitute of the non-marketed NTFP, and NTFP value by knowing the time spent in forest for its collect by the gatherer. Market price method and market substitute's method have produced results. But their application and results are questionable.	The value of NTFP extractions in Goute is FF 17945 for one year.
6.Emerton& Mogaka <sup>8</sup> (1996)	Used participatory method for valuation of forest resources in Aberdares, in Kenya. They used pictures to value forest use.	By using this method, timber, medicines, honey, building materials, wild foods, and hunting, grazing, charcoal, fuel wood are valued. This exercise demonstrates how it is possible to link local categories of value and find a common 'currency' which can bridge the gaps between commercial and subsistence activities.
7.Chopra & Kadekodi <sup>9</sup> (1997)	Estimated value of NTFPs based on the market price in two representative watersheds of the Yamuna river basin.	Value of NTFPs found quite high when compared to timber output.
8. Adger, et al <sup>10</sup> (2002)	Estimates value of NTFPs in Mexico. These estimates are based on the shadow prices.	It is found that the use value of NTFPs is likely to be relatively high compared to other values, and possibly very high in certain regions.

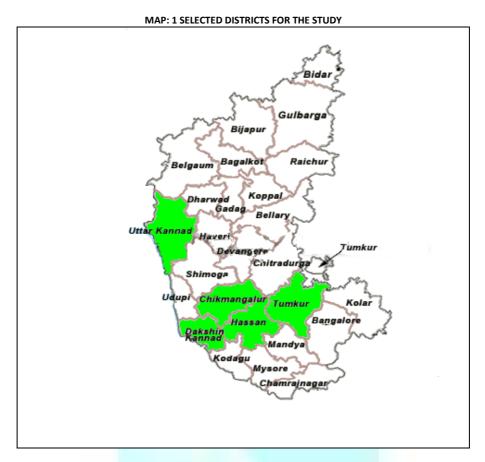
### TABLE: 2 STRENGTHS AND WEAKNESSES OF THE VALUATION METHODS

Valuation Method	Strengths	Weaknesses
Local market Price method	The resulting value estimates are derived from true household choices, facing prices that are 'real'. They reflect local demand and supply conditions.	Prices vary widely according to the place. Market transaction takes place in an oligopoly contest and not in pure perfect competition. NTFP economic value is diminished because it is the price of the first transaction that is chosen for the valuation. In general, the valuator is free to set the price. Product prices also vary according to the season. Often, the valuation use a low price set when supply exceeds demand. This choice is arbitrary and indicates a minimal or conservative NTFP value is sought. Application of this valuation technique implies a preliminary choice of the valuator as to the level of value he wants to set.
Valuation using substitute of the non- marketed NTFP	Substitute goods approaches may be used whenever close market substitutes for non-timber benefits exist.	Using a market substitute to give a value to a gathered product is difficult. Accepting the word of the villagers concerning their food substitutes is one thing; imputing a monetary value to these products is another. Furthermore, they are substitutable as food, but not economically or monetarily. It is not sure that a gatherer is willing to exchange his NTFP harvest against an equivalent non-market substitute harvest, even if he obtains the same satisfaction in consumption. It can be said that, in an economy where currency is rare, values of use do not correspond to values of exchange.
Travel Cost	This method recognizes that for some goods or services the consumer may have to incur substantial costs (in time or money), to obtain the particular good or service. For example, a recreation experience may involve considerable travel expenses; and gathering free fuel wood may require a considerable amount of time. It assumes that the value to the consumer is at least equal to the travel costs the consumer is willing to incur to obtain the desired good or service.	Quantity of NTFP collected and the time spent in gathering are required to value the resources. Similarly, it is difficult to consider gathering time as an opportunity cost. Because, many times people remain unemployed. Many times, quantity collected is not at all related to gathering time because of un certainly. In dry regions, people collect fuel wood from forests. In case of necessary products it is difficult to assign a value based on the transport cost.

Source: International Institute for Environment and Development (2003)

### SAMPLING AND METHODOLOGY

The study was conducted in Karnataka. The state is one of the southern states of the country and it has around 20 percent of the total geographical area under forest. The forest in the state constitutes some of the most magnificent forests like: evergreen forest, semi-evergreen forest, moist deciduous forest, dry deciduous forest, and thorn forests. About 60 percent of the Western Ghats are located in the state. Table 1 shows area under forest in Karnataka.



### TABLE: 1 AREA UNDER FOREST IN KARNATAKA

Forest Types	Area (Sq.Km)	%
Evergreen	4350	11.36
Semi-evergreen	1450	3.79
Moist Deciduous	5780	15.10
Dry Deciduous	7270	18.99
Thorn Forests (Scrub)	8340	21.78
Unwooded	11094	28.98
Total	38284	100.00
Source: Govt o	f Karnataka 200/	1

Source: Govt. of Karnataka 2004

For collecting primary data, the districts with different forest types have been selected. The selected districts are Tumkur, Chikkamagalur, Hassan, Dakshina Kannada, and Uttar Kannada. In each selected district, the forest ranges and villages having higher proportion of forest area are selected. Table 2 shows sample frame of the study.

	TABLE	: 2 SAMPLE FRAN	IE OF THE STUDY			
District	Ranges	Village Name	Type of Forest	Forest Area (Ha)	Population	
Chikkamagalore	Mudigere	Urubage	Ever Green	897	811	
	Chikkamagalore	Marle	Tropical Thorn	533	2611	
	Aldur	Kundur	SE & MD	2050	2257	
Hassan	Sakkeshpur	Heggadde	Ever Green	3600	2466	
	Arasikere	Shankarnahalli	Tropical Thorn	724	1244	
Tumkur	Bukkapatna	Bellaru	Dry Decidious	325	2166	
Dakshina Kannada	Puttur Range	Nikkiladi	Dry Decidious	80.3	1815	
	Sullia	Maddappadi	SE & MD	4595	1640	
	Subramanya	Subramanya	SE & MD	2915.5	3447	
Uttara Kannada	Jagalbet	Jagalbet	SE & MD	9096	2059	

In each selected villages 50 households have been randomly selected for getting detailed information about the quantity and value of NTFPs collected. The percentage of households covered for the study are 21 percent of SC, 13 percent of ST, 13 percent of OBC, 8 percent of Minorities and 46 percent of Others. Totally 500 households have been selected from 10 villages spread across 5 districts in Karnataka. Total values of NTFPs have been estimated using 'local market prices'.

#### FINDINGS OF THE STUDY

In the selected villages a significant proportion of households (55 per cent) collect NTFPs (Table 3). The collection of NTFPs depends upon several factors such as, availability of NTFPs in the forest, accessibility to the forest, availability of these products in the private lands, and fear of wild animals, etc. Therefore the

INTERNATIONAL JOURNAL OF RESEARCH IN COMMERCE, ECONOMICS & MANAGEMENT A Monthly Double-Blind Peer Reviewed Refereed Open Access International e-Journal - Included in the International Serial Directories

proportion of households collecting NTFPs varies across the villages. The proportion of households collecting NTFPs is highest in villages having semi evergreen and moist deciduous (SE & MD) forests while the villages having evergreen forests account for lowest collection of NTFPs in this region.

Type of Forest	Total No of HHs in the Sample	No. of HHs Collecting NTFPs	% of HHs Collecting NTFPs
Evergreen	100	36	36.0
SE & MD	200	137	68.5
Dry Deciduous	100	59	59.0
Tropical Thorny	100	44	44.0
Total	500	276	55.2

TABLE: 3 HOUSEHOLDS COLLECTING NTFPs IN STUDY AREA

In the selected villages, households collect various types of products from forest, such as; fuel wood, fodder, *muttal leaves, honey, nelli, magadi beru, kada bike hannu, gum, tumbare leaves, wax, tupra furit, medicinal leaves, seegekai, gaaliaubhadi balli, geru, malli balli, otae, vate, etc.* There is variation in products and quantity collected across the villages. On average households collect 18 quintals of fuel wood, 12 quintals of fodder, 16 quintals of *Muttal* leaves, 60 Kilograms of Tumbare leaves, 9 kilograms of Nelli kai and 8 kilograms of Sigekai in the selected villages. Households collect these NTFPs for their home consumption and for sale. In the selected villages, about 90 percent of the households collect these NTFPs mainly for home consumption and remaining 10 percent of households collect mainly for sale. It is observed that mainly landless and marginal farm households are engaged in collection and sale of these products. Fuel wood is the main item sold and other items are sold in small quantities. The selling and buying of NTFPs takes place mostly in the village or in the nearby village. The households collecting these NTFPs sell their products to rich households in the village. NTFPs are available in the particular season and in that season these are collected and marketed.

The value of NTFPs is obtained by multiplying the price into the quantity of NTFPs collected. Table 4 shows the average value of NTFPs collected by sample households. It shows that the average value of NTFPs collected by sample households is Rs. 6752 and it varies across the different types of forest regions from Rs. 3420 to Rs.15427.

#### TABLE: 4 VALUE OF NTFPS COLLECTED BY SAMPLE HOUSEHOLDS (Rs/HH/Annum)

Households in Different Types of Forests	Value of NTFPs Collected (Rs/HH)
Evergreen	3420
Semi-evergreen & Moist Deciduous	4204
Dry Decidious	7113
Tropical Thorn	15427
Average	6752

In order to know the magnitude of value of NTFPs collected in the selected villages we multiplied value of NTFPs collected per household by total forest area in the village and by total number of households. To get the value of NTFPs collected per hectare, we divided the total value of NTFPs collected in the village by total forest area in the village. Table 5 the shows estimated value of NTFPs per hectare across different types of forests in selected villages.

#### TABLE: 5 VALUE OF NTFPS IN SELECTED VILLAGES ACROSS FORESTS TYPES (Rs/ Hectare /Annum)

Type of Forest	Value of NTFP/HH/Year (Rs)	Forest Area (Ha)	Total No of HHs	Total Value of NTFP (Rs)	Value of NTFP Collected Per Hactare * (Rs)
Ever Green	3420	4497	655	2240414	498
SE & MD	4204	18657	1881	7908537	424
Dry Deciduous	7113	405	796	5661553	13979
Tropical Thorny	15427	1257	771	11894075	9462
Total	6752*	24816	4103	27704579	1116

Note: \* obtained by dividing the total value of NTFPs in the study area by the total households in the study area.

Table 5 shows that value of NTFP collected per hectare is more in case of dry deciduous forests and tropical thorny forests. Though there is abundant forest in and around the villages in evergreen and SE & MD types of forest; the value of NTFP collected by the villagers is less than expected. This is mainly due to two reasons. First, households depend on the private land for their biomass requirements and second, the various restrictions of forest department are imposed on collecting NTFPs in these areas.

#### Estimates of Value of NTFPs for Karnataka

In order to arrive at the total value of NTFPs for Karnataka, we use the estimates of the value of NTFPs per hectare (from Table 5) and multiply the same by the total forest area in Karnataka. Table 6 shows total value of NTFPs collected by households in Karnataka. It shows that the value of NTFPs collected by the households in Karnataka is Rs. 1857.7 crores for the year 2003-04.

Forest Types	Value of NTFPs Collected / Ha By HHs in Selected	Total Forest area in	Total Value of NTFPs Collected by HHs in
	Villages (Rs)	Karnataka (Ha)	Karnataka (Rs. crore)
Evergreen	498	435000	21.7
Semi-evergreen	424	145000	6.1
Moist deciduous	424	578000	24.5
Dry deciduous	13979	727000	1016.3
Thorn Forests (Scrub)	9462	834000	789.1
Total	1116.0@	3828400	1857.7

### TABLE: 6 VALUE OF NTFPS COLLECTED BY HOUSEHOLDS IN KARNATAKA

@ is average and not total

#### CONCLUDING OBSERVATIONS

In the selected villages 55 percent of the households collect NTFPs. About 90 of households use these NTFPs mainly for home consumption and remaining 10 percent of households sell these products in the local market. Fuel wood, fodder and *Muttal* leaves are the main products collected and the value of NTFPs collected per household is Rs.6752. The total value of NTFPs collected by the households in Karnataka is Rs. 1857.7 crores for the year 2003-04. The value of NTFPs collected by households is about 50 percent higher than the recorded value of NTFPs. Under estimation of value of NTFPs has resulted in less allocation of resources towards this sector and depletion of forest. Understanding of the total value of NTFPs and their importance in livelihoods of households would lead to higher allocation of resources, better management of forests and finally these would help in providing sustainable livelihood opportunities.

### REFERENCES

Adger and Others. Tropical forest values in Mexico" in Valuing the Environment in Developing Countries- Case Studies. 2002. Edited by David Pearce, Corin Pearce and Charles Palme

Chopra K. and G. Kadekodi. Natural Resource Accounting In The Yamuna Basin: Accounting For Forest Resources. 1997. IEG Monograph, New Delhi.

Chopra, K. The Value of Non-Timber Forest Products: An Estimation for Tropical Deciduous Forests in India. 1993. Economic Botany, Vol-47, No-3, Pp-251-257.

Emerton lucy and Mogaka Hexron. Participatory Environmental Valuation of Forest Resources in the Aberdares, Kenya. 1996. PLA notes, London

Government of Karnataka. Annual Administration Report. Forest Department, Varies Issues.

Government of Karnataka. State Forestry Action Programme (1997-2017) Karnataka Forest Department. 1996. Govt of Karnataka, Pp-23. Government of Karnataka. State of the Environment Report and Action Plan-2003. 2004. Department of Forest, Ecology and Environment, Government of India, Bangalore.

Gunatilake, H.M, Senaratne, D.M.A.H and P.Abeygunawardena. Role of Non-Timber Forest Products in the Economy of Peripheral Communities of Knuckles National Wilderness Area of Sri Lanka: A Farming Systems Approach. 1993. *Economic Botany*, Vol-47, No-3, Pp-275-281.

Howard, P. The Economics of Protected Areas in Uganda: Costs, Benefits, and Policy Issues. 1995. Dissertation. University of Edinburgh, summarized in Bagri, A., Blockhus, J., Grey, F. and F. Vorhies (eds), 1998. Economic Values of Protected Areas: A Guide for Protected Area Managers, IUCN: Gland.

International Institute for Environment and Development (2003), "Valuing Forests- A Review of methods and applications in developing countries (2003)" Environmental Economics Programme, London.

Lal, J.B. Economic Value of India's Forest Stock. Van Vigyan (Journal of the Society of Indian Foresters). 1990. Vol-28, No-3, Pp-63-72.

Lescuyer and Guillaume. Monetary Valuation of the Non-Timber Forest Products (NTFPs): Does it Contribute to Determine a Sustainable Management of those Resources?. 1996. 6<sup>th</sup> IASCP Conference, California.



# SUSTAINABILITY ISSUES IN EMERGING ECONOMIES - A STUDY WITH SPECIAL REFERENCE TO INDIAN ECONOMY

ANIRUDH SRIRAAM STUDENT VIT BUSINESS SCHOOL VIT UNIVERSITY VELLORE

VIVEK PRATAP SINGH STUDENT VIT BUSINESS SCHOOL VIT UNIVERSITY VELLORE

DR. AJAY SHARMA ASST. PROFESSOR VIT BUSINESS SCHOOL VIT UNIVERSITY VELLORE

### ABSTRACT

Sustainable development is one that meets the needs of the present without compromising the ability of future generations to meet their own needs. Sustainability speaks to something that lies within our ability to "keep it going" or to keep in existence. Whilst the world's population is increasing, we continue to use the natural assets of planet Earth faster than nature can regenerate them. There are a number of sustainable issues like famine, climate change, health and environment, inequality of income, child labour, corruption and so many others being experienced by emerging economies continuously for a long period. These issues are the hurdles which halt the country's economic and social development. What is needed at present is an overall economic and social uplift for the country. If these issues are solved or rectified, the economies may well achieve sustainable development. Through this paper, an attempt has been made to highlight some of the major sustainable issues currently experienced in India which need the attention of government and public at large. The objective of the paper is to unearth the challenges in constructing a shared vision of sustainability as an universal concern that transcend fractured interests of global, developing, eco-centric nations. It will try to problematize specific cases and discuss practical implications of the 'Indian view of sustainability' for a pragmatic analysis and identifying vulnerability displayed by the developing India towards sustainable development.

### **KEYWORDS**

Economy, Environment, Society, Sustainability.

### INTRODUCTION

ur natural, environmental, geological and the economic resources are depleting every minute due to an ever growing population. This evolution is uncontrollable due to an increased human activity, hence high population growth. Ecological footprint analysis which compares humanity's ecological impacts to the amount of biologically productive land and sea available to supply key ecosystem services (food supply, fibre, habitat, carbon storage, etc.) finds that the global economy started exceeding the planet's bio capacity in the 1980s, and overconsumption of resources has increased since then. Under a business-as-usual scenario, two planets would be required by 2030 to support the world's population. This assumes a continued unequal world with 15% of the population using 50% of the resources. What we require now is a secure future for humanity in its forthcoming generations.

There exist stacks of issues which affect emerging economies namely famine, health and environment, corruption, child labour; if left unsolved, will follow towards the extinction of human species. Famine is an important opponent to tackle whilst achieving a sustainable economy. It is present across the globe, especially in Africa, NE India – Rajasthan, Bihar. Famine follows floods which spoils crops and other vegetation. Many people die of hunger. Climate change is another factor that adds to the woes of an important emerging economy such as India. With poor infrastructure, the global warming heats the ice caps of the Himalayas, leading to glacier melting downstream to raise the water levels. Climatic change is portrayed as an important factor because of the nature of the environment. It is unyielding to treasure procurement on a developing nation in the course of droughts, floods, acid rain, and heat strokes.

Health and environment are the groundwork in obtaining a sustainable economy. This is a national level crisis wherein more than 40% of the citizens of India are living below the poverty line (BPL). Without homes, education and minimum healthcare protection, people die due to insignificant diseases. Following this, corruption is the major element which leads to growth of an economy. Lack of infrastructure and recycling of resources leaves India out of the chart towards a sustainable development.

### LITERATURE REVIEW

There are three main arena's for a balanced sustainable procurement; namely environmental, social and economic. The majority of research is being conducted in the environmental arena. Emerging research trends such as a move from predominantly private to public sector research are discussed. Subsequently, sustainability and innovation are discussed, and how sustainable supply can be seen as intimately linked with the pursuit of innovation.

### **ENVIRONMENTAL LOCUS**

Sustainable development is a phrase that does not occur frequently in academic literature, but has a variety of related terms, including green supply (Bowen, Cousins, Lamming, &Faruk, 2001a, 2001b), green purchasing (Chen, 2005; Min & Galle, 2001; Ochoa, Fuhr, & Gunther, 2003), green purchasing strategies (Min & Galle, 1997), green purchasing and supply policies (Green, Morton, & New, 1998), environmental purchasing (Carter & Carter, 1998; Carter, Ellram, & Ready, 1998; Carter, Kale, & Grimm, 2000; Legarth, 2001; Murray &Cupples, 2001; Zsidisin&Siferd, 2001), environmental supply chain management (Lamming &Hampson, 1996; Narasimhan& Carter, 1998), green supply chains (Klassen& Johnson, 2004; Rao& Holt, 2005; Walton, Handfield, &Melnyk, 1998), green value

chains (Handfield, Walton, Seegers, & Melnyk, 1997), green supply chain management (Sarkis, 2003; Zhu, Sarkis, & Geng, 2005) and environmental supplier performance (Humphreys, McIvor, & Chan, 2003; Noci, 1997).

Studies show that social and economic objectives are only recently receiving attention for sustainable development. The environmental issues have been the main locus around which green technology was developed. Research has investigated 'linkage between public procurement and social outcomes' (McCrudden, 2004) and reflecting increasing interest in corporate social responsibility, research has explored purchasing social responsibility (Carter, 2005; Carter & Jennings, 2002) and socially responsible buying (Drumwright, 1994; Maignan, Hillebrand, &Mcalister, 2002) and sourcing (Henkle, 2005).

The majority of sustainable supply research has been conducted in the private sector. However, the role of public procurement in greening, purchasing and supply has increasingly been investigated (Kunzlik, 2003; Li &Geiser, 2005; Swanson, Weissman, Davis, Socolof, & Davis, 2005). The relationship between public procurement and social issues (McCrudden, 2004) has been considered. Sustainable supply issues have also been researched from an international perspective (Carter et al., 1998; Kaufmann & Carter, In Press; Knight, Caldwell, Harland, &Telgen, 2004; Ochoa et al., 2003; Walker, 2006).

Sustainable development research has also increased in prevalence in the Supply and Operations field, with special issues of journals on the subject (Leopold-Wildburger, Weber, &Zachariasen, 2006; Wilkinson, Hill, &Gollan, 2001). Researchers have investigated sustainable supply network management (Young &Kielkiewicz-Young, 2001), sustainable consumption (Lovins&Lovins, 2001) sustainable food chains (Ilbery&Maye, 2005), sustainable development in business strategy (Lamming, Faruk, & Cousins, 1999) and sustainable procurement (Walker, 2006; Walker, Bakker, Knight, Gough, &McBain, 2006).

In this paper we use the term 'sustainable development', although in this research we sought the views of both public and private sector practitioners. Sustainable development is about not just how to buy but how to supply sustainably, so we see different perspectives on the process as essential.

### SUSTAINABILITY AND INNOVATION

Sustainability and innovation are counter-related to sustainable development. Their differentiating factor shows a continuous growth rate of innovation for sustainable development. Both are of course important in supply markets, but our focus here is on the former rather than the latter.

The 'Porter hypothesis' (Porter & Van de Linde, 1995) proposes that 'the view that environmental regulation erodes competitiveness' is out-dated. The authors suggest properly designed environmental standards can trigger innovations that lower the total cost of a product or improve its value. Examples are given of the Dutch flower industry, which innovated and lowered environmental impact and costs, and improved product quality and global competitiveness.

Porter's hypothesis is strongly opposed (Walley& Whitehead, 1994), disagreeing with the notion of a 'win-win' solution. In contrast, they underline the high costs associated with implementing environmental technologies and the lack of any real economic payback. Acknowledging the existence of the win-win solution, they point out that it is rare and suggest the goal should be to develop a strategy that internalizes the external costs brought about by environmental pressures. To do so managers must adopt a value approach, carrying out 'trade-offs' between the cost of responding to environmental issues against the benefits.

By adopting the conventional concept of value, Walley and Whitehead return to the traditional notion of the environment as a zero-cost good. They also fail to take into account the role of other actors, such as consumers, the public and NGOs, in driving and shaping the strategic response of the firm. A growing band of literature has endorsed the view of 'sustainable technological regimes or paradigms' (Green & Miles, 1996; Kemp, 1994), growing pressures from consumers and environmentalists driving firms towards the development of more environmentally-conscious technology strategies. Technologies can be perceived as being social constructions which tend to be produced in response to perceived market opportunities (Green & Miles, 1996). Environmental technologies differ in so much that they are not essentially driven by consumer preferences but by legislation and government regulations, policies and practices (Environmental Protection Agency, 1994).

Few studies highlight the systemic nature of innovation and how this may shape both the strategic decisions of the firm and the political decisions of the policymakers. The socio-economic dimension in influencing the direction of technological change has been highlighted (Kemp, 1994), whereby technology has been subject to evolutionary improvements not only in terms of cost, but also in terms of the socio-economic environment, for example accumulated knowledge, changes in capital outlays and alterations to existing regulations.

The influence of NGOs and consumers must not be over looked; few firms 'go green' simply in response to public pressure (Economic Social Research Council, 1999) although a wide range of socio-economic pressures may encourage firms to become 'greener' e.g. cost, shareholders, consumers, trade associations and pressure groups. In addition, organizations may wish to be seen in a positive light, emphasizing their commitment to the environment and sustainability.

Consequently, although past studies into sustainability and innovation have viewed the firm's response as a linear process whereby the firm reacts by developing or introducing a new or existing technology, it is clearly a far more systemic process, going beyond the relationship between environmental regulation and innovation, to include additional actors or stakeholders (Phillips, 2000). As Kay points out relevant factors should be seen within a framework of the firm's internal architecture, external architecture and network relationships (Kay, 1993). Government procurement policies can also play a significant role in encouraging the development of new processes or products; with public expenditure exceeding 50 per cent of GDP in some OECD countries (OECD, 2006) it can have a significant influence on technological development.

#### SUSTAINABILITY TRENDS

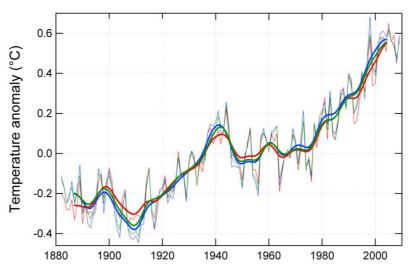
Environmental, Social and Corporate Governance, also known as ESG, describes the three main areas of concern that have developed as the central factors in measuring the sustainability.

### **ENVIRONMENTAL**

#### **GREENHOUSE GASES**

As the furore surrounding the threat of climate change and the depletion of resources has grown, investors have become increasingly aware of the need to factor sustainability issues into their investment decisions. In the past half century, utilization of mineral resources per capita, including fossil fuels, has been increasing steeply. Technological innovations have helped and improved material and energy efficiency to sheer upsurge in demand from rising incomes and populations. As the world population is increasing the demand for land occupancy increases drastically thus deforestation occurs at an exponential rate. 30% of land area on earth is covered by forest. Stress on the ecosystem is increasing due to human activities which include climate change (due to increased CO2 levels), deforestation, loss of biodiversity, water crisis. As a result, the ecological footprints of mankind exceed the bio-capacity or the carrying capacity of the planet. About 90 per cent of the world's commercially produced energy comes from fossil fuels. The World Energy Outlook (OECD, 1998) forecasts global energy demand will grow by 65 per cent and CO2 will increase by 70 per cent between 1995 and 2020, unless new policies are put in place. As the usage of fossil fuels are varies to raise a continue to raise.

continue to raise, the consequences become ever further exorbitant. Greenhouse gases from fuel combustion accumulating in the atmosphere continue to raise global temperatures, thereby accumulating global warming complications. Many countries have signed the Kyoto protocol at the United Nations Framework Convention on Climate Change (UNFCCC) in 1992. The goal of this global treaty is to stabilize the amounts of greenhouse gases in the atmosphere at a level that would prevent dangerous changes to the climate system. India is a developing nation which requires a lot of resources. Signing up for the Kyoto protocol wounds our resources, limiting our growth within cheap and dirty technologies. Ultimately, it will retard the growth rate of the nation.



#### FIGURE 1: TRENDS IN CLIMATE CHANGE

Carbon Trading is a market-based mechanism for helping mitigate the increase of CO2emissions into the atmosphere. Carbon trading markets are developed marketplaces that bring buyers and sellers of carbon credits together with standardized rules of trade. Any entity, typically a business, that emits CO2 to the atmosphere are required by law or may have an interest to balance their emissions through mechanism of C sequestration (buying C credits). Entities that manage agricultural land might sell carbon credits based on the accumulation of carbon in their agricultural soils. Similarly, business entities that reduce their carbon emission may be able to sell their reductions to other emitters. Nearly two-thirds of land in India is used for agricultural development. Awareness of carbon agriculture to the farmers would enhance the opportunity to preserve and give importance to the agricultural industry. India also is becoming one of the major countries for many industrial setups. Carbon trading will play an important role for a sustainable development in India.

### DEFORESTATION

Over half of the world's tropical rain forests have already been destroyed. Tropical forests are destroyed for several reasons. There is an ever increasing demand for both farm and grazing land which results in the burning and clearing of rain forests for agriculture production. Other grounds for deforestation may include the need for construction of roads and industrialization due to continued urbanization of the world. The need for fuel and timber for construction is an additional major factor leading to the destruction of the rain forests. The actual extent of the role that the rain forest and its subsequent deforestation play in global climate and its changes is difficult to gauge. According to the Information Unit on Climate Change, a change in climate caused by greenhouse gases would have great effects on future agriculture as well. The effects of deforestation on climate are more regional but no less important. Several different models and studies indicate that deforestation will lead to a reduction in average rainfall and increased surface temperature. Since the top soil in rain forests is thin, it lends itself to rapid soil erosion easily. Soil erosion then leads to greater amounts of run off and increased sedimentation in the rivers and streams. The combination of these factors leads to flooding and increased salinity of the soil. Without the trees there to act as a buffer between the soil and the rain, erosion is practically inevitable.

Thus it is required that citizens of India, Indian government, private organizations and NGO's take lead towards a sustainable future. While rain forest destruction has been slowed during the last decade it still continues at an alarming rate and needs to be discontinued entirely. Scientists have begun to show that reforestation can actually decrease the patterns of global warming by fixing the carbon dioxide in the atmosphere. Agroforestry and commercial plantations will not only be a mode of reforestation, but also a source of sustainable income for the nation's growth.

#### WATER SCARCITY

Local and regional imbalances over water availability are a growing concern globally. More than fifty countries are already experiencing moderate to severe water stress during part of the year, while many others have water stresses all year round. Many lakes and rivers have dried out following extensive extraction and damming to irrigate agriculture. Water-intensive agricultural products include meat, dairy products, sugar and cotton. The water footprint of a country measures the volume of freshwater used to produce the goods when compared to the services consumed by the inhabitants of the country over the product's supply chain. It is collective of internal and external water footprint. Internal footprint refers to the appropriation of domestic water resources whilst external footprint brings about the appropriation of water resources in other countries. Worldwide, 27 countries have an external water footprint, including India which accounts for more than 50 per cent of the total water consumption. Major rivers and lakes, which serve as sources of drinking water, are increasingly polluted from both industrial and agricultural sources, including nitrogen. Generally, river pollution increases with nitrogen use intensity, though with considerable dispersion. Surplus awareness of simple water saving measures among farmers and the use of water efficient technologies will contribute to the saving nation.

# SOCIAL

### CORRUPTION

Corruption in India is a consequence of the nexus between bureaucracy, politics and criminals. It has now come to a state where everything can be held for a consideration. India can no longer be considered a soft state. Today, only few ministers can be acknowledged having an honest image. Formerly, bribe was paid for getting wrong things done but now bribe is paid for getting right things done at right time. Indian administration is tainted with scandals. India is among 55 of the 106 countries where corruption is rampant, according to the Corruption Perception Index 2004 Report released by Transparency International India. Corruption in India leads to biased promotion and a pass out of prison. As the economy grows, the corrupt also grow to invent newer methods of unprincipled values towards the government and public.

The causes of corruption are many and complex. Emergence of political elite who believe in interest-oriented rather than nation-oriented programmes and policies strain the nations many sources of income. Artificial scarcity created by the people with malevolent intentions wrecks the fabric of the economy. Corruption is caused and increased because of the change in the value system and ethical qualities of those who administer. The old ideals of morality, service and honesty are regarded as an achronistic. At present, tolerance of people towards corruption, and complete lack of intense public outcry against corruption together with the absence of strong public forum to oppose corruption allow corruption to reign over people. Vast size of population coupled with widespread illiteracy and the poor economic infrastructure lead to endemic corruption in public life.

In a highly inflationary economy, low salaries of government officials compel them to resort to the road of corruption. Although complex laws exist, the procedures alienate common people to ask for any help from government. Furthermore, this adds to the confidence of the corrupt officers by swelling the emerging economy. During election is when corruption is at its peak level. Big industrialists fund politicians to meet high cost of election and ultimately to seek personal favour. Bribery to politicians buys both influence and votes. In order to get elected, politicians target and bribe the poor illiterate people.

Source: Anthropogenic versus natural causes of global warming - IPCC, Judith Curry, September 20, 2010

Corruption is an intractable problem. It might not be possible to root out corruption completely at all levels but as an emerging economy, one must take responsibility to contain it within tolerable limits. Combating corruption should be strategically handled by giving honest and dedicated people major control over the electoral expenses. Corruption has a corrosive impact on the economy. It worsens the image in international market and leads to loss of overseas opportunities. Corruption is a global problem that all countries of the world have to confront.

#### FAMINE

Famine is often caused by a shock or trauma to the community. This shock can be in the form of a natural disaster, such as drought, flood, hurricane or earthquake; an environmental disaster, such as a crop blight; or a social upheaval, such as war. The shock sends food prices skyrocketing as it become harder to obtain. People lose their jobs, hoard food, try to make a living with forms of self-employment, move out of the area altogether or stick around with the risk of starving to death. Death is often the ultimate result of famine, either from malnutrition, starvation or a combination of the two. Food's role in sustaining life is providing sufficient nutrition and sufficient energy in the form of calories, both of which are lacking during famine. People become weak, lose weight, have no energy and are unable to work.

Starvation occurs when the body begins to feed on itself. Vital organs first shrink and then become unable to function. Muscles shrink and become weak. Anaemia and chronic diarrhoea sets in, as does swelling from fluids trapped beneath the skin. The body temperature drops, sex drive diminishes and people become irritable and unable to concentrate. The final stages of starvation often include hallucinations, muscle pains, an irregular heartbeat and convulsions.

Famine often leads to civil unrest which can wreak havoc on the environment. Urban areas can be faced with looting while rural areas can suffer the raping of the land to gather whatever morsel may be somewhat edible. Crime becomes rampant, especially robberies, violence and murder for food items. Disease rages due to people's weakened immune systems with the reduced resistance to fight it. Mass migrations are another result of famine, leaving the land barren and devoid of life, humans included.

Deaths from starvation were reduced by improvements to famine relief mechanisms after the British left. In independent India, policy changes aimed to make people self-reliant to earn their livelihood and by providing food through the public distribution system at discounted rates. Famine has been a recurrent feature of life in the Indian sub-continental countries.

### **GOVERNANCE AND ECONOMIC**

To achieve overall sustainability, delinking or decoupling has to occur. This refers to breaking the link between the growth of an economic activity and growth of consumption of resources. Growth in population, income and wealth over the next 40 years is expected to put increasing pressure on resources. Countries would appear to face a dilemma, as progress in human development is positively correlated with a country's ecological footprint. Few countries fall into the "sustainable development quadrant".

The Indian Government has to use a number of measures to accomplish sustainable procurement, meet stringent efficiency standards for automobiles, appliances and new buildings. Moreover, renewable energy standard's need higher utilization. Besides energy, various subsidies should promote greener products and services. This in return, will counter the global economic crisis as well as green stimulus spending.

We are living in the times of volatility, uncertainty, complexity and ambiguity. By looking at the nature of the recent commodity price crisis (2007), financial crisis (2008), economic recession (2009), public debt crisis and oil spill disaster in the Gulf of Mexico (2010) one can arguably identify that all phenomena are related to governance failures.

- Failure of governance to limit debt levels in relation to GDP
- Failure of governance to acknowledge planetary boundaries and to decouple GDP from energy and resources
- Failure of governance to meet globally accepted targets in redistributing GDP for the benefit of the most vulnerable persons in the world

In the context of Satyam computer's scam, it enables us to find out in depth about corporate governance. While adopting the present model of corporate governance, there were discussions over its suitability for a country like India. The reason being, Indians merely copied the western model of corporate governance. The nation never bothered to observe the external debate world over on the various models of corporate governance.

Professor Jayant Rama Varma of IIM Bangalore had extensively commented on the unsuitability of the western code of corporate governance in his research paper on the subject titled 'Corporate Governance in India: Disciplining the dominant shareholder'. The paper argues over the issues involving corporate governance problems in India being different thus requiring different solutions. According to JayantVarma, the governance issue in the Anglo-Saxon world aims essentially at disciplining the management which has ceased to be effectively accountable to the owners. But in India the problem additionally involves disciplining the dominant shareholder and protecting the minority shareholders. Many public sector units that failed to appoint independent directors and breached some of the code of corporate governance were vindicated by the Securities and Exchange Board of India.

Satyam is a company which had won Golden Peacock Global Award for excellence in corporate governance. This company was named the winner by the World Council for Corporate Governance as recently as in September 2008. This was after approving the false balance sheet presented in the Board of Directors. The Satyam story poses a big question over the credibility of auditors in general, as Pricewaterhouse Coopers was auditor of the company. The bankers to Satyam included Bank of Baroda, BNP Paribas, ICICI, HDFC, Citi Bank, and HSBC. Even after placing false account details in its balance sheet no bank came out and asked details about that. Satyam was also being accused by the World Bank for bribing its employees to get certain contracts awarded in the company's favour.

The fact remains that bribing is done by almost all companies in different levels. But why did key observers which included SEBI or Vigilance department not take up the issue in relevant times. These high moral concepts are discussed and acted up on only when a crisis arises.

### LACK OF RESOURCES AND ECONOMIC DEVELOPMENT

Several factors are hooked to apprehend a nation's developed eminence. There are variations in the economic development of the countries due to historical, economic, social, geographical, political reasons. The developed countries of the world such as the United States of America analysed the local conditions effectively and correctly at an early stage and thus their economic policies have been exactly suitable for their nations. Hence it could become a developed nation at an early stage.

India would have been a developed nation had it not been a colony of Britishers, and had the population growth rates minimized. India also has been spending huge amounts on defence due to internal and external strife. For instance, it has been facing the problems of terrorism both within the nation and also from other neighbouring nations. India possesses huge quantities of natural resources and also has favourable climate to grow a wide range of crops. But political and administrative corruption seems to be one of the major obstacles for India's growth though the social and economic policies are effective on paper. For instance, the mixed economic system soon after independence and the present market oriented policies are suitable for India's domestic economic and social conditions.

Lack of proper technology, scarce natural resources, ineffective economic and social policies, high growth rates of population, poor quality of human resources, depressing infrastructure quality, recurring natural calamities, high cost of production of goods and services thus low comparative and absolute advantage in certain products, dependency on external resources, lack of demand for their primary products in the international market, etc. would delay the progress of nations.

Many African nations are in the process of development with the assistance from other nations. India helps many nations in their social and economic development. China has also been involved in infrastructure development in some African countries. Some of these countries frequently face the problem of diseases to the human resources and poor medical care, which is responsible for low production and productivity levels. Most of the population of these countries depends upon primary economic activities leading to meagre saving rates and investments which are responsible for low capital accumulation and economic growth.

Some countries of the world have been producing goods and services by using obsolete methods. Such methods are responsible for low yields and thus very low quality of life, life expectancy of the human resources too. In many parts of India, Pakistan, Bangladesh, Srilanka, etc. farmers are still dependant on traditional

INTERNATIONAL JOURNAL OF RESEARCH IN COMMERCE, ECONOMICS & MANAGEMENT A Monthly Double-Blind Peer Reviewed Refereed Open Access International e-Journal - Included in the International Serial Directories

methods of crop production. Bangladesh, Srilanka lose wealth often due to recurrence of natural calamities such as floods. Few countries in the Polar Regions do not have favourable climate which has been the major factor for retarding progress of their economy.

Australia and other pacific nations face threats from cyclones, floods. Similarly world's third largest economy Japan would have been in a better position had it learnt to predict the devastating calamities such as earthquakes. Thus natural calamities play a significant role to deferment the growth of economies. The present unrest in the Arab world is due to the prolonged rule by some dictators who have not been innovative in taking measures for the speedy economic growth of these nations.

India's major mineral resources include Coal, Iron ore, Manganese, Mica, Bauxite, Titanium ore, Chromite, Natural gas, Diamonds, Petroleum, Limestone and Thorium. India's oil reserves found in Bombay High, off the coast of Maharashtra, Gujarat, Rajasthan and in eastern Assam meet 25% of the country's demand. Rising energy demand concomitant with economic growth has created a perpetual state of energy crunch in India. India is deprived in oil resources and is currently heavily dependent on coal and foreign oil imports for its energy needs. India is rich in certain energy resources which promise significant future potential for clean and renewable energy resources like solar, wind, biofuels (jatropha, sugarcane).

### SUSTAINABLE RESOLUTION

### SUSTAINABLE PUBLIC PROCUREMENT

- Canada Policy on Green Procurement issued in April 2006; Environmental performance considerations, price, performance, quality and availability are
   embedded into the procurement decision-making process
- Japan In 2000, Law on Promoting Green Purchasing was made compulsory; Implement green procurement by encouraging local authorities, private
  companies and individuals to make efforts for purchasing environmentally sound products and services
- China January 2007, the central government were asked to give priority to environment-friendly products listed in a "green product inventory"; Products ranging from cars to construction materials should be approved by the China Certification Committee for Environmental Labelling; Products are required to meet the environmental protection and energy saving standards set by the State Environmental Protection Administration
- United States 2007 Executive Order integrates prior practices and requirements with the goal of increasing federal purchasing of energy efficient, recycled content, bio-based, and environmentally preferable products and services;
- Argentina Developed an action plan to implement sustainable public procurement (SPP); Implementation of research and training activities for procurement officials and policy-makers

#### SUSTAINABLE INFRASTRUCTURE AND BUILDINGS

- Sustainable Housing Internet based environmental classification systems, utilization of natural resources, and sinking ecological impacts
- Green Construction (South Korea) Low carbon projects, clean fuels, environmental friendly buildings
- Green Rating for Integrated Habitat Assessment (India) Minimize demand for renewable and non-renewable energy consumption, limiting waste generation through recycling, and reducing pollution
- Sustainable Public Transport (South Africa) Reduction in direct GHG emissions, air quality improvement, and noise level reductions
- Water for Everyone (Peru) Upgrading of waste water plants, and reduce the time spent in fetching water
- Energy Efficient Public Buildings (France) Reduce energy consumption, reduce GHG emissions

#### ECO-TAX MEASURES

The green tax shift is to implement a fiscal policy to internalise market distorting externalities, which leads to sustainable wealth creation. The broader measures required for ecological fiscal reform are initiated in many emerging economies especially in Canada, Malaysia, Finland, Germany and China where the government has employed this terminology. Various modes of eco-tax measures include taxation on emissions of SOx, NOx, CO2, hydrogen sulphide and radioactive waste. Taxes also include wastages of gas and electricity, fossil fuels, lead and industrial solid wastes. Malaysia was one of the very first countries to use effluent charges to control pollution from palm oil industries. Ireland too became one of the major countries to introduce and implement plastic bag taxes. Millions of litres of oil reserves have been saved due to reduced plastic bags. The United States, a developed nation have become one of the first major countries to set a surcharge tax on bottled water. Eco taxes which can be implemented and imposed upon as:

- Carbon taxes on the use of fossil fuels by greenhouse gases produced. Old hydrocarbon taxes don't penalize greenhouse gas (GHG) production.
- Duties on imported goods containing significant non-ecological energy input (to a level necessary to treat fairly local manufacturers)
- Severance taxes on the extraction of mineral, energy, and forestry products.
- License fees for camping, hiking, fishing and hunting and associated equipment.
- Specific taxes on technologies and products which are associated with substantial negative externalities.
- Waste disposal taxes and refundable fees.
- Taxes on effluents, pollution and other hazardous wastes.
- Site value taxes on the unimproved value of land.

#### GOVERNANCE MEASURES

The government policy inflates finance values beyond the true value of economic resources for unjust increase in demand. Due to improved demand of resources, human impact escalates across global natural systems and climatic factors. This causes an increase in debt levels in GDP, coupling of GDP with energy and resources. Amendments in government agendas for integrating social ecological considerations into their target objectives will result in better finance system. These systems will reduce public debts and aim for higher capital level. Better finance systems will also account for sustainable GDP growth. Through the apt participation in the WTO, liability and commitment will be reviewed and will prevent natural capital and offer protectionism in world economy.

Responsiveness, accountability and transparency are a must for a clean system. Bureaucracy, the backbone of virtuous governance, should be made citizens friendly, accountable, ethical and transparent. Fool-proof laws should be made so that there is no room for discretion for politicians and bureaucrats. Decision of the commission or authority should be challengeable only in the courts. Co-operation of the people has to be obtained for successfully containing corruption. People should exercise their right to recall the elected representatives if they see them becoming indifferent to the electorate. We will have to guard against all these crude fallacies while planning measures to fight corruption.

#### CONCLUSION

At present, this world only has a few developed nations. There are many countries struggling to attain a sustainable growth. Sustainable growth involves many factors. These can be further classified into environmental, social and governance factors. In this paper, we have elaborated and identified some problems faced by the emerging economies.

Current global consumption patterns are unsustainable. It is becoming apparent that efficiency gains and technological advances alone will not be sufficient to bring global consumption to a sustainable level; changes will also be required to consumer lifestyles, including the ways in which consumers choose and use products and services. As the world economy begins to recover from one of the worst economic crises in decades, information and communication technologies (ICT) are bound to play an increasingly prominent role as a key enabler of renewed and sustainable growth, given that it has become an essential element of the infrastructure underpinning competitive economies.

Fundamental changes in the way societies produce and consume are indispensable for achieving global sustainable development. Governments, relevant international organizations, the private sector and all major groups should play an active role in changing unsustainable consumption and production patterns.

As ecological reserves become increasingly rare, it will become critical. To forge new relationships and move toward policies that protects natural assets while improving health and well-being. In this game, everyone can win. Every single person will benefit from early action.

### REFERENCES

Bhatia, B.M (1985), *Famines in India: A Study in Some Aspects of the Economic History of India with Special Reference to Food Problem*, Delhi: Konark Publishers Helm, L, Billiald, S., Harrison, K., & Cavanagh, J. (2005). *Sustainable procurement in central government*. London: National Audit Office.

Joan Magretta. (2002). Growth through Global Sustainability. An interview with Monsanto's CEO, Robert B. Shapiro. Harvard Business Review.

Kemp, R. (1994). Energy Technologies and Technological Paradigms. In R. Kemp & et al(Eds.), *Technology and the Transition to Environmental Sustainability: Continuity and Change in Technological Systems*. Maastricht: CEC.

Legarth, J. B. (2001). Internet Assisted Environmental Purchasing. Corporate Environmental Strategy, 8(3), 269-274.

United Nations Research Institute for Social Development. (2000). Promoting socially responsible business in developing countries: The potential limits of voluntary initiatives. New York: UNRISD.

Walker, H. (2006). Sustainable procurement: the development of a conceptual framework. Paper presented at the American Academy of Management Conference, Atlanta, Georgia, USA.

World Bank. (2003). Global Economic Prospects and the Developing Countries. WorldBank, Washington, DC (January).



## STUDY OF CUSTOMER RELATIONSHIP MANAGEMENT IN RURAL GROCERY SHOPS

# DR. P. B. DESAI DEPARTMENT OF SOCIOLOGY SHIVAJI UNIVERSITY KOLHAPUR

### ABSTRACT

During the past two decades, the business environment across the world has undergone a sea change due liberalization and globalization. Customer has become very powerful and demanding. Businesses have realized that the answers to all their problems lie with one single entity, the customer. CRM and CEM have undoubtedly; become the most important competitive strategy for the organizations of 21st century. CRM and CEM are simple philosophy about understanding life long mutually profitable relationships with them. By using CRM technology, organizations aim at establishing one to one relationships with millions of customers, spread across the globe. Implementations of CRM projects are not only essential for big companies but also essential for small and medium enterprises. Therefore today Customer Relationship Management (CRM) is becoming popular concept. Hence this present article concentrates on the process of customer relationship management. It is believed that CRM processes are followed and implemented in the big firms, companies and small enterprises in big cities and town but we also find this process is followed and becoming popular in small grocery shops in villages also and for these shops CRM is not a new concept. Since from many years these grocery shops are maintaining CRM at informal level. Therefore present study made an attempt to study the process of CRM of grocery shops in Village Chinchali Belgaum district Karnataka State.

#### **KEYWORDS**

CRM, CEM, Village and Grocery Shops.

### INTRODUCTION

the single most important factor for the processes of any business enterprise is the customer. The globalization, liberalization and Information Technology and Internet transformed the whole business world. The internet has transformed the society into knowledge society and converted the world into a world market place. The customer has come to occupy his rightful, central place. CRM and CEM have undoubtedly; become the most important competitive strategy for the organizations of 21st century.

By using CRM technology, organizations aim at establishing one to one relationships with millions of customers, spread across the globe. Implementations of CRM projects are not only essential for big companies but also essential for small and medium enterprises. Therefore today Customer Relationship Management (CRM) is becoming popular concept. Hence this present article concentrates on the process of customer relationship management in grocery shops of villages.

Villages are changing fast due to contact urban cities nearby them. They are always finding new kind of change in day today life. It is believed that CRM processes are followed and implemented in the big firms, companies and small enterprises in big cities and towns but also find this process is followed and becoming popular in small grocery shops in villages also. Therefore present study made an attempt to study the process of CRM in grocery shops in Village Chinchali of Belgaum district, Karnataka State.

### **OBJECTIVES OF THE STUDY**

1) To understand the socio-economic characteristics of owners of grocery shops

- 2) To study the processes of CRM of these grocery shops.
- 3) To understand in what way they are carrying this process.
- 4) Providing suitable measures to increase this process

### **KEY CONCEPT**

#### Customer Relationship Management (CRM)

Relationship marketing has its origins in a book published by Regis Mckenna (1993) titled *"Relationship Marketing"*: Successful Strategies for the Age of the Customer. Regis argued that by knowing their customers and their preferences, organisations could increase the chances of retaining them. Different people called different terms, like customer management, customer care, customer centricity or customer centric management, but the term Customer Relationship Management has overtaken the market.(Prasad, R.S:2005). CRM stands for Customer Relationship Management.

According to Scoot Fletcher, CRM as a concept started gaining prominence since early 1997 and also generated a lot of interest among business, technology, medicine and academic institutions. Number of them defines in number of different ways. Some of them are as follows.

**CRM GURU.com**, a well known group of CRM experts, defines CRM as " a business strategy to acquire and retain the most valuable relationships. CRM requires a customer centric business philosophy and culture to support effective marketing, sales and service processes."

**Ronald S Swift** defines CRM as, an enterprise approach, to understanding and influencing customer behaviour through meaningful communications in order to improve customer acquisition, customer retention, customer loyalty and customer profitability. (Prasad, R.S.:2005)

Customer relationship management (CRM) is a multifaceted process, mediated by a set of information technologies that focuses on creating two-way exchanges with customers so that firms have an intimate knowledge of their needs, wants, buying patterns and market trends. In this way CRM helps companies to understand, as well as anticipate, the needs of current and potential customers. (From Wikipedia Free Dictionary)

CRM aims at understanding the customers, their present and future needs proving best possible services, enhancing customer experience and satisfaction, reducing the turnover and ensuring that remain for customers' life. There are three types of customer relationship management: Collaborative CRM, Operational CRM and Analytical CRM.

### STUDY AREA

The present study had been conducted in the village Chinchali of Belgaum district. in Karnataka State. The Belgaum district lies in the border area of Maharashtra State.. This village is semi urban area with population nearly 25,000.It has famous for its Weekly *Marketing* where all essential things are sold here. It is pleasant village and religious also. This village has number of crane crushers where jiggery is produced in large scale. It is famous religious place where selling of coconut is most profitable business which is considered as one of auspicious thing which every devotee can offer.

### METHOD OF STUDY

Case Study Method had been used. A single village Chinchali had been selected for present study.

### SOURCES OF DATA

Primary as well as secondary data was used. **Primary Data**: Primary data was collected through field work. **Secondary Data**: Secondary Data was collected through journals, books and internet.

### SAMPLING DESIGN

- 1) One village was purposively selected.
- 2) There are nearly big and too small grocery shops. Out of total shops 33% of shops had been selected .Thus, the study covered 10 shops.
- 3) Accidental sampling technique was used for the selection of ten shops.

### TOOLS FOR DATA COLLECTION

To collect the data interview scheduled, personal observations and informal discussion methods were used.

### NAMES OF GROCERY SHOPS

These shops have no separate names they are called by the name of the owners and the same are as per following:

- 1. Shankar Hukkeri grocery shop
- 2. Virupakshi Karade grocery shop
- 3. Shadhashiv Dandapure grocery shop
- 4. Sheetal Bugate grocery shop
- 5. Shrikant Hukkri grocery shop
- Annanasaheb Patil grocery shop
   Saniav Hirokode grocery shop
- Sanjay Hirokode grocery shop
   Sanjay Patil grocery shop
- Sanjay Patil grocery shop
   Mehabub Dange grocery
- Mehabub Dange grocery shop
   Ishwar Gachhi grocery shop

# SOCIO-ECONOMIC CHARACTERISTICS OF GROCERY SHOP OWNERS

# TABLE NO. - 1: AGE, CASTE CATEGORY AND EDUCATION LEVEL

Age	%	Caste category	%	Education	%
21-30	10	Open	90	Illiterate	-
31-40	30	OBC	10	Primary	30
41-50	20	SC&ST		Secondary	30
51-60	40	Total	100	Higher secondary	30
Total	100			Undergraduate	10
				Total	100

Table No-1 indicates socio-economic characteristics of Grocery Shop Owners such as age, caste category and education. By observing above table researcher has come to conclusion that majority of respondents belongs to the age group of 51-60. It is also observed that business is monopoly of higher caste. No respondent is from SC and ST category and all respondents are educated.

### **BUSINESS INFORMATION AND INCOME LEVEL**

#### TABLE NO. – 2: WORKERS, DAILY VISITING CUSTOMERS AND TOTAL TURNOVER

No of workers working	%	Daily Customers visiting	%	Daily total turnover	%
No employee	10	1-25	30	Rs 5000-4000	30
1-2	30	26-50	20	Rs 4001-3000	20
3-4	20	51-100	20	3001-2000	20
Above 4	40	Above 100	30	2001-1000	30
Total	100	Total	100	Total	100

**Table No-2** gave detail information regarding the information of business i.e. no of workers working in shops, daily customer visiting and daily total turn over. Majority of shop owners (i.e. 40%) have appointed the employees and they receive nearly 100 customers. It is also observed that majority of respondents' daily turn over is 5000-4000 rupees.

TABLE NO 3: SOURCE OF INCOME AND ANNUAL INCOMI
--

TABLE NO 3. 300KC	- OF IN	COIVIL AND ANNOAL INC	OIVIL
Source of Income	%	Total (Yearly) Income	%
Agriculture+Business	60	40,0000-300000	30
Business+service	-	300001-200000	30
Agri+business+service		200001-100000	20
Business only	40	Below 10000	20
Total	100	Total	100



**Table-No-3** indicates the source of income and total income of respondents. It is observed that business is not only major source of income of respondents. Along with business they are also practicing the agriculture and majority of respondents' yearly income is 4 to 3 lakhs.

### **CRM PROCESS IN VILLAGE GROCERY SHOPS**

CRM process is carried in village grocery shops by keeping informal relations with customers. They know their customers' background deeply. They also know what are the interests, wants and requirements of their customers. It is also important to note that to regain the customers they sell the goods on debits for one year or even for more than one year. Sometime they also lend the money to their customers in their critical conditions without interest. They never treat their customers as profit oriented things. They always consider the business as their work. Keeping these informal relationships will be a model for large and medium scale stores and companies. CRM process in rural grocery shops is carrying only by keeping informal relationships and keeping the background of customers.

### MEASURES

- 1. For rural development agriculture is not only sufficient. In rural areas business activities have more scope. Therefore encouragement should be given to the rural people to undertake the business activities.
- 2. Poverty is the one of major obstacle for the development of rural areas. Financial aid should be provided to the villagers to carry business activities in the villages.
- 3. Use of technology to interact with customers such as phones.
- 4. Adaptive marketing and Collaborative marketing should be developed.
- 5. Identifying some important events in a customer's life that offer an opportunity for the organization to interact with customers.
- 6. Well designed CRM incentives are given by studying existing process to the customers and employees.
- 7. Extensive change management activities are essential and must be planned focusing on the customers needs.
- 8. Customer care and workshops departments should be established.
- 9. Identifying needs/ requirements.
- 10. Valued Customer Experience.
- 11. Changing the mindset of Marketers.
- 12. Customer preferences don't remain static. So changing trend should be taken into consideration.
- 13. A single SMILE enough to welcome the customers and regain them.
- 14. Quality maintaining and reliability of things is sufficient to regain the customer.
- 15. Owner/ Employee must be good listener as well as good speaker.
- 16. There should be increase in standard of living of rural people then only business activities should be possible.

### CONCLUSION

Customer has become very powerful and demanding. Businesses have realized that the answers to all their problems lie with one single entity, the customer. CRM and CEM have undoubtedly; become the most important competitive strategy for the organizations of 21st century. CRM is simple philosophy about understanding life long mutually profitable relationships with them. By using CRM technology, organization aim at establishing one to one relationships with millions of customers, spread across the globe. Implementations of CRM projects are not only essential for big companies but also essential for small and medium enterprises in villages also. Hence awareness should be created among these small and medium enterprises in villages also and proper measures should be undertaken to implement these projects.

### ACKNOWLEGEMENT

I am gratefully to owners, employees of shops who provide me information regarding shops without hesitation.

### REFERENCES

- A, Stanley Brown, (20006), Customer Relationship Management, Canada John Wiley and Sons Limited.
- Bergeron, B., (2001), Essentials of CRM: Customer Relationship Management for Executives, John Wiley & Sons.
- Curry, J., Curry, A., (2000), The Customer Marketing Method: How to Implement and Profit from Customer Relationship Management. Free Press.
- Prasad, R.S. 2005, 'Understanding CRM, Present and Future, The ICAFAI University Press,
- Strauss, J., Frost, R., 2002. Customer Relationship Management. E Marketing, second ed. Prentice Hall, New York.
- Saxena, marketing Management, Tata McGraw-Hill publishing Company Limited, New Delhi. 2006
- CRMGuru.com
- www.tealeaf.com
- ken.wikipedia.org/wiki/Customer\_relationship\_management
- www.tmcnet.com/.../articles/4515-understanding-customer-experience-management
- www.confirmit.com/solutions/topic/customer-experience-management



### HEALTH AND DEVELOPMENT OF HEALTH CARE IN INDIA

# ZIBA ASL GHORBANI (PATANGIA) RESEARCH SCHOLAR GOKHALE INSTITUTE OF POLITICS AND ECONOMICS (DEEMED TO BE UNIVERSITY) PUNE

### ABSTRACT

The vast majority of India suffers from a poor standard of healthcare infrastructure which has not kept up with the growing economy and high levels of malnutrition and communicable diseases especially in rural areas. Nearly one million Indians die every year due to inadequate healthcare facilities. The broad objective of this article is to observe the characteristic features of the health care and health progress in India. At the same time, India's health care system in urban areas also includes entities that meet or exceed international quality standards. The majority of the Indian population is unable to access high quality healthcare provided by private players as a result of high costs. Many are now looking towards insurance companies for providing alternative financing options so that they too may seek better quality healthcare. Despite having centers of excellence in healthcare delivery, these facilities are limited and are inadequate in meeting the current healthcare demands. India is at a critical juncture where policy choices made or options not considered could well have a profound impact on the health and wellbeing of future generations. At the present stage of development of India, the health indicators have lagged behind the impressive economic progress evident over the past two decades. A new public health Policy needs to be drafted which will reconfigure the health system to make it more efficient and adequately trained health care providers. It is suggested that TFR (Total Fertility Rate) should be reduced to less than 1.5, especially between poor people and astates of Assam, Uttar Pradesh, Bihar, Jharkhand, Rajasthan, Madhya Pradesh and Chhattisgarh. And also primary health care of mother and child and access to safe drinking water for all should be more emphasised in health policy for developing of country, reducing poverty and huge costs of health and disease burden in India.

#### **KEYWORDS**

Development, Health Care, Health Indicators and Progress.

### INTRODUCTION

mproving health around the world today is an important social objective, which has obvious direct payoffs in terms of longer and better lives for millions. There is also a growing consensus that improving health can have equally large indirect payoffs through accelerating economic growth. Foe example, Gallup and Sachs (2001) argue that wiping out malaria in sub-Saharan Africa could increase that continent's per capita

growth rate by as much as 2.6% a year and a report by the World Health Organization (2001) states:

"...extending the coverage of crucial health services...to the world's poor could save millions of lives each year, reduce poverty, spur economic development and promote global security".

The Declaration of Alma Ata, 1978, 'Health...is a fundamental human right and the attainment of the highest possible level of health is a most important worldwide social goal...No individual should fail to secure adequate medical care because of inability to pay for it'.

The National Health Policy statement of 2002 and the National Macro-Economic Commission on Health are two key documents that describe the policy perspective on the health sector. The programmatic response to the policy that underscored the urgent need to revitalize and scale up access to basic health services in rural areas was the National Rural Health Mission (NRHM) which was launched in 2005. The Framework of Implementation of the NRHM enunciated the vision for strengthening the health system in the rural areas, which account for about 72 per cent of India's population.

### **PROGRESS OF HEALTH**

#### a) KEY INDICATORS

Life Expectancy at Birth-Life expectancy in India has more than doubled in the last sixty years. It increased from around 30 years at the time of independence to over 63.5 years in 2002-06. The overall life expectancy increased by 14.1 years in the rural areas and 9.9 years in the urban areas during the period 1970-75 to 2002-06. The wide variance in performance across states is of special concern. While in Kerala, a person at the time of birth is expected to live for 74 years, the expectancy of life at birth in states like Assam, Bihar, Madhya Pradesh, Orissa, Rajasthan and Uttar Pradesh is in the range of 58-62 years, a level Kerala achieved during the period 1970-75. Globally India's life expectancy is lower than the global average of 67.5 years and the average of most countries that won their independence from colonial rule at about the same time–China, Vietnam, Sri Lanka, and so on. (Table 1)

		TABLE 1: HEALTH IN	DICATORS OF SELECT COUNTRI	ES	
Country	GDP per capita PPP US \$	IMR (PER 1,000 Live Births Births) 2009	Life Expectancy at Birth M/F (in Years) 2009	MMR (per 1,00,000 Live Births) 2005	TFR 2007
India*	2753	53	62.6/64.2	254	2.6
China	5383	19	71.6/75.1	45	1.7
Japan	33632	3	79.4/86.5	6	1.3
United States	45592	7	77.1/81.9	11	2.1
Indonesia	3712	25	69.0/73.2	420	2.2
Vietnam	2600	13	72.6/76.6	150	2.2
Bangladesh	1241	47	65.5/67.7	570	2.9
Pakistan	2496	73	66.5/67.2	320	3.5
Sri Lanka	4243	17	70.6/78.1	58	1.9

Source: \*India—Registrar General of India, Government of India (GoI) (SRS 2008) and abridged life tables 2002-06 (2008); Others—'State of World Population' (2009) and 'State of World Children (2009)'. GDP per capita - HDR, 2009.

**INFANT MORTALITY RATE (IMR) AND CHILD HEALTH** - India's infant mortality rate too has declined steady but slowly, from 129 deaths per 1,000 live births in 1971 to 53 in 2008. Currently the urban IMR is 36 as compared to the rural IMR of 58.

As maternal and child health indicators, measured in terms of the number of maternal deaths or children that die within the first year of their life, childbirth, are accepted as proxies for assessing the functioning and status of the health system, high priority has been accorded to this aspect of health policy. The International Conference on Population and Development in 1995 was the milestone which resulted in India shifting the unitary focus on sterilization-centred

INTERNATIONAL JOURNAL OF RESEARCH IN COMMERCE, ECONOMICS & MANAGEMENT A Monthly Double-Blind Peer Reviewed Refereed Open Access International e-Journal - Included in the International Serial Directories

family planning approach to a broad-based reproductive and child health policy framework. Comprehensive policies containing the range of reproductive health services for women and an array of services for children were formulated.

The implementation of the Reproductive and Child Health Program was strengthened with its integration into the National Rural Health Mission, where improved program implementation and health systems development was seen as mutually reinforcing processes.

The strategy for child health care aims to reduce under-five child mortality through interventions at every level of service delivery and through improved child care practices and child nutrition.

More concerted efforts to tackle malnutrition and neo-natal mortality will facilitate a 5 point decline per year required for achievement of expected outcome. 6 States / Union Territories have achieved the goal of reducing IMR below 28 and 12 States are in the 30-40 range.

The implementation of the Reproductive and Child Health Program was strengthened with its integration into the National Rural Health Mission (NRHM), where improved program implementation and health systems development was seen as mutually reinforcing processes.

**DECREASING MMR (MATERNAL MORTALITY RATE)** - India had a MMR of 460 in 1984, declining to 254 deaths per 100,000 live births in 2004-2006. Kerala and Tamil Nadu reporting an MMR of 95 and 111 respectively, lower than Assam (480), Bihar/Jharkhand (312), Madhya Pradesh/Chhattisgarh (335), Orissa (303), Rajasthan (388) and Uttar Pradesh/Uttarakhand (440). These nine states account for 47% of India's population represent the core of poor performance on all four counts of life expectancy, IMR, MMR and TFR (Total Fertility Rate).

Key Strategies and Progress Achieved With the launch of the National Rural Health Mission (NRHM), the Reproductive and Child Health (RCH) program efforts got further boost with the two-legged policy of restructuring the rural health care system (the supply side) along with stimulating the demand side with the introduction of the innovative conditional cash transfer scheme for pregnant women to deliver in public health facilities.

In the five years since the launch of the NRHM in 2005, institutional deliveries have increased rapidly witnessing a remarkable jump in coverage from 7.39 to 90.37 lakh beneficiaries in 2008-09 accounting for an annual expenditure of Rs. 1,241 crores.

**TOTAL FERTILIY RATE (TFR)** - TFR is the average number of children that a woman would bear over her lifetime if she were to experience the current age-specific fertility rates. At a level of 2.1, which is called the replacement level, population stabilization could be said to have been achieved.

Total Fertility Rate had reduced from 5.2 in 1971 to 2.6 in 2008. Of concern are the states of Uttar Pradesh, Bihar, Jharkhand, Rajasthan, Madhya Pradesh and Chhattisgarh that account for over 40 per cent of India's population and have a TFR in the range of 3.0 to 3.9. India's record compares poorly with that of Japan, China and the United Sates which have TFRs of 1.3, 1.7 and 2.1, respectively. As per population projections, the population of India in the year 2025 will be 143.1 crore as compared to 145.3 crore of China.

The states of Andhra Pradesh, Delhi, Himachal Pradesh, Karnataka, Kerala, Maharashtra, Punjab, Tamil Nadu and West Bengal have already reached the goal of population stabilisation, i.e. TFR of 2.1 or below. But states like Bihar, Madhya Pradesh, Rajasthan and Uttar Pradesh need much greater support to achieve it. TFR varies significantly with female literacy, mean age of women at marriage, percentage of females working in non-primary sectors, infant and child mortality, type of housing, and level of urbanization.

### THE SOCIAL DETERMINANTS OF HEALTH

Nutrition, access to safe drinking water and sanitation and education are the three most important proximate determinants of health status that have an impact on both infectious disease and vital health statistics.

All these three are closely related to poverty and marginalization. Unhealthy lifestyle, tobacco, alcohol and other substance abuse underlie much of the noncommunicable disease epidemics we face. In addition marginalization and discrimination on account of gender and caste are social determinants themselves.

It is therefore not surprising that the poor performing states are those with the highest levels of poverty and the highest levels of malnutrition among children and adult women. Female literacy rates, School enrolment rates and rates of households with safe drinking water and sanitation are all distinctly lower.

MALNUTRITION AND ANEMIA: of great concern is the persistent level of malnutrition with over 40% of children and 36% of adults women classified as undernourished. The reasons for such high levels of malnutrition and anemia are complex. They include poverty, gender inequity, specific dietary patterns and recurrent illness all these acting in conjunction.

Patriarchy and gender discrimination contribute to malnutrition levels by early age of marriage and birth of the first child, reduced access to nutrition during critical periods like pregnancy, lactation, adolescence and the first five years of life and less access to education and health care. Keeping girls in schools till they complete adolescence could be one of the most effective health measures.

Half of children in India are underweight, one of the highest rates in the world and nearly same as Sub-Saharan Africa. India contributes to about 5.6 million child deaths every year, more than half the world's total.

The health department does promote correct infant and young child feeding practices including exclusive breastfeeding for the first six months and micronutrients supplementation, especially iron and folic acid tablets for children and pregnant women, Vitamin A supplementation and promotion of the use of iodised salt. The health department also organizes institutional care services in over 600 facilities for sick and severely malnourished children. The issues of availability of safe drinking water and sanitation along with other areas of preventive and promotive actions in health are also important.

WATER AND SANITATION- Water supply and sanitation in India is a matter of concern. As of 2003, it was estimated that only 30% of India's wastewater was being treated, with the remainder flowing into rivers or groundwater. The lack of toilet facilities in many areas also presents a major health risk; open defection is widespread even in urban areas of India, and it was estimated in 2002 by the World Health Organization that around 700,000 Indians die each year from diarrhea. No city in India has full-day water supply. Most cities supply water only a few hours a day. In towns and rural areas the situation is even worse.

According to the World Health Organization 900,000 Indians die each year from drinking contaminated water and breathing in polluted air. As India grapples with these basic issues, new challenges are emerging for example there is a rise in chronic adult diseases such as cardiovascular illnesses and diabetes as a consequence of changing lifestyles.

### INDIA 'S DISEASE BURDEN

THE CAUSES OF DEATHS - Communicable diseases, maternal, prenatal and nutritional disorders constitute 38 per cent of deaths. Non-communicable diseases account for 42 per cent of all deaths. Injuries and ill-defined causes constitute 10 per cent of deaths each. However, majority of ill-defined causes are at older ages (70 or higher years) and likely to be from non-communicable diseases.

Rural areas report more deaths (41 per cent) due to communicable, maternal, prenatal and nutritional conditions. The proportion of deaths due to noncommunicable diseases is less in rural areas (40 per cent). Injuries constitute about the same proportion (about 10 per cent) in both rural and urban areas.

**DISEASE** - India suffers from high levels of diseases including Malaria and Tuberculosis where one third of the world's tuberculosis cases are in India. In addition, India along with Nigeria, Pakistan and Afghanistan is one of the four countries worldwide where polio has not as yet been eradicated completely.

India had an estimated 2.27 million HIV-positive persons in 2008, with an estimated adult HIV prevalence of 0.29 per cent. This is nearly 7 per cent of the global burden of 33 million HIV cases.

As HIV prevalence among high-risk groups (HRG) is very high compared to that among the general population, India continues to be in the category of concentrated epidemic. The sexual mode continues to be the major mode of transmission, though transmission through injecting drug use and men having sex with men are on the rise in many new pockets.

**EPIDEMIOLOGIC TRANSITION OF INDIA** - Many countries have in the course of their development gone through what is known as an 'epidemiologic transition', where the initial high burden of disease and mortality due to infectious diseases and maternal and child mortality, declines and gives way to non-communicable diseases, injuries and geriatric problems as the main burden of disease.

India's epidemiologic transition, however, is marked by three challenges in disease control, all of which need to be managed concurrently. First, India has to complete its unfinished agenda of reducing maternal and infant mortality as well as communicable diseases such as Tuberculosis, vector-borne diseases of malaria, kala-azar and filaria, water-borne diseases such as cholera, diarrhoea, leptospirosis and the vaccine-preventable measles and tetanus. Second, India has to contend with the rising epidemic of non-communicable diseases including cancers, diabetes, cardiovascular diseases, chronic obstructive pulmonary diseases and injuries. And finally developing systems to cope with there is the category of the new and re-emerging infectious diseases like HIV and avian influenza.

### **ORGANISATION OF HEALTH CARE SERVICES**

**THE PUBLIC HEALTH SECTOR-** The provision of health care by the public sector is a responsibility shared by the state government, Central Government and local governments. General health services are the primary responsibility of the states with the Central Government focusing on medical education, drugs, population stabilisation and disease control. The National Health Programs of the Central Government related to reproductive and child health and to the control of major communicable diseases like malaria and tuberculosis have always contributed significantly to state health programs. More recently, under the NRHM, the Central Government has emerged as an important financier of state health systems development.

**THE PRIVATE HEALTH SECTOR**- At the time of independence only about 8 per cent of all qualified modern medical care was provided by the private sector. But over the years the share of the private sector in the provision of health care has at about 80 per cent of all outpatient care and about 60 per cent of all in-patient care.

Over 75 per cent of the human resources and advanced medical technology, 68 per cent of an estimated 15,097 hospitals and 37 per cent of 623,819 total beds in the country are in the private sector. Of these, most are located in urban areas. Of concern is the abysmally poor quality of services being provided at the rural periphery by the large number of unqualified persons. The rural women are more likely to die during childbirth due to lack of access to caesarean operations.

**NATIONAL RURAL HEALTH MISSION-** The policy response of the government to strengthen the health sector and attain its health objectives was the launching of the National Rural Health Mission in 2005. In its design and implementation, the NRHM has been greatly influenced by the principles of primary health care as outlined in the Alma Ata Declaration of 1978.

The NRHM seeks to be pro-poor in its focus and stresses on community participation and most critically aims to bring the people back into the public health system. The aim and thrust of the mission is ensuring a fully functional, community-owned, decentralized health care delivery system with inter-sectoral convergence and institutional integration across levels. The NRHM is thus conceived as a scheme that includes reproductive and child health programs and disease control programs as part of a sector wide health systems strengthening approach.

### **FINANCING OF HEALTH CARE**

Health Financing is an important component of health systems' architecture and deals with sources of funding the health system. From a public policy point of view, it is desirable that health financing is so arranged that it reduces the overall out-of-pocket (OOP) expenditure on healthcare and protects against financial catastrophe related to healthcare.

The per capita public health spending is low in India, being among the five lowest in the world. The public health expenditure in the country over the years has been comparatively low and as a percentage of GDP it has declined from 1.3 per cent in 1990 to 0.9 per cent in 1999, increased marginally to 1.1 per cent by 2009. The Central budgetary allocation for health over this period, as a percentage of the total Central Budget, has been stagnant at 1.3 per cent, but has almost doubled to 2 per cent by 2008-09. Taking cognizance of the important role of public health expenditure, the Eleventh Five-Year Plan (2007-12) document suggests the necessity of building a responsive public health system with the need for increasing the public spending on health from 0.9 % of GDP to 2-3% of GDP and stepping up investment on primary care, communicable diseases and HIV/AIDS prevention.

**SOURCES OF FUNDS-** As per the National Health Account (2004-05), the total health expenditure in India, from all the sources, was Rs. 1,33,776 crores, constituting 4.25 % of the GDP. Of the total health expenditure, the share of private sector was the highest at 78.05 %, public sector at 19.67 % and external flows contributed 2.28%. The provisional estimates from 2005–06 to 2008– 09 show that health expenditure as a share of GDP came down to 4.13 per cent in 2008–09. Though health expenditure has increased in absolute terms, the proportionately higher growth of GDP has resulted in a moderate increase in the share of health expenditure to GDP over the years. But the share of public health expenditure in the GDP has increased consistently from 2005–06 to 2008–09. It increased from 0.96% in 2005-06 to 1.10 % in 2008–09.

**PUBLIC FINANCING OF HEALTH** - Public spending on health accounts for around 1 per cent of the GDP. This ratio is among the lowest in the world, although in recent years the share of public spending in total health spending has been steadily increasing. An important issue in public spending on health relates to the distribution between the Central and state sectors. With the launch of National Rural Health Program (NRHM), the level of public spending on health has risen nearly 2.6 times between 2004-05 and 2009-10 (the estimates for 2009-10 are budget estimates). The share of the Central Government in the total health expenditure increased from 32.1 per cent in 2004-05 to 38.4 per cent in 2007-08. However, there has been a change in the composition between the treasury and society routes in so far as the Central grants to states are concerned. The share of Central grants through State health societies increased from 5.1 per cent in 2004-05 to 16.1 per cent in 2007-08. On the other hand, the share of Central grants to states through treasury route declined from 14.9 per cent in 2004-05 to 8.5 per cent in 2007-08.

Looking at the significance of public health expenditure in achieving better health outcomes and reducing catastrophic health expenditure, the Central and state governments in India have been increasing their expenditure on health, especially since 2005-06, due to the focus on health with the launch of NRHM. . The Union Health Budget increased from Rs.5,255 crores in 2000-01 to Rs.8,086 crores in 2004-05 and to Rs.21,680 crores in 2009-10 while that of States for 2009-10 was Rs. 43,848 crores.

	TABLE 2-GROWTI	H OF PUBLIC HEALTH EXPENDITURE AND GE	DP, INDIA, 1998-2006
Year	Growth of GDP (in %)	Growth of total public on	Total Public
	Expenditure on health (%)	health as % of GDP	expenditure
1996-97	15.9	12.9	0.88
1997-98	11.8	15.5	0.91
1998-99	15.8	18.7	0.94
1999-2000	12.1	14.7	0.96
2000-01	7.7	8.1	0.96
2001-02	8.7	4.5	0.93
2002-03	7.5	3.4	0.89
2003-04	12.8	7.5	0.85
2004-05	11.8	18.8	0.90
2005-06	12.9	17.2	0.94

Source: Database on Public Finance, CMIE.

HOUSEHOLD SPENDING ON HEALTH - Out-of-pocket (OOP) expenditure on healthcare forms a major barrier to health seeking in India. According to the National Sample Survey Organisation, the year 2004 showed 28 per cent of ailments in rural areas go untreated due to financial reasons—up from 15 per cent in 1995–96. Similarly, in urban areas, 20 per cent of ailments were untreated due to financial reasons—up from 10 per cent in 1995-96. Those who access 'free' government health services are expected to purchase medicines from private pharmacies; pay user fees for laboratory tests and of course the ubiquitous informal fees. Those who use the private services of course have to pay considerable amounts. Significantly, those who are insured also do not get full protection. While their OOP payments are reduced, they still have to pay for ambulatory care and for excluded conditions. It is clear that Indians (especially the vulnerable sections) do not have any form of financial protection and are forced to make OOP payments when they fall sick. This is regressive and has both economic as well as social consequences.

**SOCIAL HEALTH PROTECTION-** Apart from increasing public expenditure on direct provision of healthcare, the Central and state governments have also initiated various innovative schemes to increase access and choice of healthcare provider (public or private) to the people, especially in the form of various subsidized health insurance schemes. In order to reduce OOP expenditure of poor sections of the society, especially the unorganized sector which constitutes 93 per cent of the total work force, the XI Plan envisages effective risk pooling arrangements at the state level. A lot of health insurance schemes have been launched in the recent past, with Rashtriya Swasthya Bima Yojana (RSBY) being the most important one announced in the Union Budget 2007-08.

Since 2005-06, the Central Government has been implementing a health insurance scheme for handloom weavers and ancillary workers, and in 2008-09 the outlay for this was Rs.340 crores. The scheme covers handloom weavers and three dependents and the benefit package includes hospitalisation expenses including for all pre-existing diseases, as well as substantial provision for outpatient services. The scheme had covered 1.8 million weavers by 2008-09.

Haryana, Punjab, Maharashtra, Pondicherry, Tamil Nadu and Karnataka, Assam, Himachal Pradesh, Kerala, Sikkim, Uttarakhand, Himachal Pradesh and Jammu and Kashmir have initiated various models of health insurance schemes in 2008-09 and 2009-10.

**POLICY ISSUES FOR HEALTH FINANCING IN INDIA-** India should reiterate its commitment to achieving a target of increasing public spending on health to 3 per cent of the GDP. To achieve this level of funding, the following critical issues need to be addressed.

More attention needs to be paid to Centre–State financial flows. Under the NRHM, the Central and state governments are expected to share additional health expenditures in the ratio of 85:15. Beyond 2012, the state governments are expected to absorb a higher burden, with the ratio changing to 75:25. As per the estimates made in the note prepared by the Ministry of Health & FW for the XIII Finance Commission, the additional funding needed for this increase in states share is Rs. 15,710 crores for the period 2012-15. This arrangement, however, needs to be carefully examined on a state-by-state basis, mainly with due consideration to the state's fiscal ability. This also calls for working out appropriate incentive systems to ensure that states are rewarded financially for better utilization of public funds and also for recording improved health outcomes. Governments should move away from uniform norms of financing based on population size, geographical area and unit of operation (such as Primary Health Center PHC or sub-centre) towards differential funding based on services delivered, disease burdens, remoteness and difficulty of access.

Public expenditure in the health sector falls short of the target of 2 per cent of the GDP, as suggested in the Eleventh Five-Year Plan document. In order to achieve that target, the public expenditure on health will have to increase to around Rs.1,60,000 crores by 2011-12 as against the budgeted amount of Rs. 66,000 crores in 2009-10 by the Centre and states put together. This will imply that the annual expenditure in the health sector will have to increase by 56 per cent per annum in the next two years. Raising the level of public expenditure by this magnitude in such a short span is a difficult proposition and would require fundamental changes in some key macro-economic indicators. The Tax/Revenue-GDP ratio could be an important factor in this regard, as currently (as per World Development Indicator 2008) the Central Government revenue-to-GDP ratio in India is 12.7 per cent as against the 27 per cent global average. This clearly shows that increasing the tax to GDP ratio may go a long way in raising the level of public health spending to the desired levels, along with increasing the absorptive capacity in the states.

#### DEVELOPMENT OF HEALTH CARE IN STATE OF KERALA

Kerala's development experience has been distinguished by the primacy of the social sectors. Traditionally, education and health accounted for the greatest shares of the state government's expenditure. Health sector spending continued to grow even after 1980 when generally the fiscal deficit in the state budget was growing and government was looking for ways to control expenditure. But growth in the number of beds and institutions in the public sector had slowed down by the mid-1980s. From 1986–1996, growth in the private sector surpassed that in the public sector by a wide margin.

Public sector spending reveals that in recent years, expansion has been limited to revenue expenditure rather than capital, and salaries at the cost of supplies. Many developments outside health, such as growing literacy, increasing household incomes and population ageing (leading to increased numbers of people with chronic afflictions), probably fuelled the demand for health care already created by the increased access to health facilities. Since the government institutions could not grow in number and quality at a rate that would have satisfied this demand, health sector development in Kerala after the mid–1980s has been dominated by the private sector.

Expansion in private facilities in health has been closely linked to developments in the government health sector. Public institutions play by far the dominant role in training personnel. They have also sensitized people to the need for timely health interventions and thus helped to create demand. At this point in time, the government must take the lead in quality maintenance and setting of standards. Current legislation, which has brought government health institutions under local government control, can perhaps facilitate this change by helping to improve standards in public institutions.

#### CONSEQUENCE AND SUGGESTIONS

The Indian healthcare industry is seen to be growing at a rapid pace and is expected to reach over US\$70 billion by 2012 and US\$280 billion industry by 2020. The Indian healthcare market was estimated at US\$35 billion in 2007. In order to meet manpower shortages and reach world standards India would require investments of up to \$20 billion over the next 5 years.

Forty percent of the primary health centers in India are understaffed. According to WHO statistics there are over 250 medical colleges in the modern system of medicine and over 400 in the Indian system of medicine and homeopathy (ISM&H). India produces over 250,000 doctors annually in the modern system of medicine and a similar number of ISM&H practitioners, nurses and Para professionals. Better policy regulations and the establishment of public private partnerships are possible solutions to the problem of manpower shortage.

India faces a huge need gap in terms of availability of number of hospital beds per 1000 population. With a world average of 3.96 hospital beds per 1000 population India stands just a little over 0.7 hospital beds per 1000 population. Moreover, India faces a shortage of doctors, nurses and paramedics that are needed to propel the growing healthcare industry.

The majority of the Indian population is unable to access high quality healthcare provided by private players as a result of high costs. Many are now looking towards insurance companies for providing alternative financing options so that they too may seek better quality healthcare. Only 10% of the Indian population today has health insurance coverage, this industry is expected to face tremendous growth over the next few years as a result of several private players that have entered into the market. Increasing health insurance penetration and ensuring affordable premium rates are necessary to drive the health insurance market in India.

Special focus on 235 poor performing districts which contribute the bulk of child and maternal mortality and high fertility rate in the nation. The intervention would be in the form of a special district plan and closely monitored by a joint State–Centre monitoring mechanism. It also involves the introduction of skilled human resources from outside in the form of well-supported trainers and skilled and quality supervisors who would ensure that the necessary skills development in the existing workforce is improved.

The Report to the People on Health examines the progress made in the health sector, identifies the constraints in providing universal access and provides options and future strategies. In terms of life expectancy, child survival and maternal mortality, India's performance has improved steadily. Life expectancy is

now 63.5 years, infant mortality rate is now 53 per 1000 live births, maternal mortality ratio is down to 254 per lakh live births and total fertility rate has declined to 2.6. However there are wide divergences in the achievements across states. There are also inequities based on rural urban divides, gender imbalances and caste patterns.

Disease Control Programs have also shown considerable improvements. Polio is near elimination and diseases like Tuberculosis, Neonatal Tetanus, Measles and even HIV have shown decreasing trends. However, Malaria continues to be a challenge.

The crisis in unavailability of skilled human resources for the health sector has been addressed through the rapid expansion of medical education in the country. There is needed to consider a model of Primary Health Care where many of the health services would be provided by the locally selected and adequately trained

health care providers with medical doctors contributing largely to more specialised care.

Some key policy issues that need to be addressed in the short term. 1. Role of Centre in State Health Systems Development

2. Increase Public Investment

3. Role of Purchasing Health Care Services from the Private Sector

4. Focus on Health Determinants

5. Human Resources for Health

6. Impact of Technology

7. Health Promotion

8. Health training to public

9. Decreasing extremely TFR, especially between poor people

The new initiatives in health policy must be uniform and influence by vigorous public debates. The consensus of national goals, emerging from such a process is, likely to gain greater acceptance and honored by professional bodies, civil society organizations, the private sectors and community representatives.

### REFRENCES

1. Alleyne George A.O and Cohen Daniel (2002), "Health, Economic Growth, and Poverty Reduction" The Report of Working Group 1 of the Commission on Macroeconomics and Health', April World Health Organization Geneva.

2. Atun Rifat A and Fitzpatrick Susan (2005) "Advancing Economic Growth: Investing in Health TH", A summary of the issues discussed at a Chatham House conference held on 22–23 June.

3. Bajpai Nirupam and Goyal Sangeeta (2004), "Primary Health Care in India: Coverage and Quality Issues" Working Papers Series Center on Globalization and Sustainable Development", CGSD Working Paper No. 15, June, www.earth.columbia.edu.

4. Chunling Lu., et al., (2010), "Public financing of health in developing countries: A cross-national systematic analysis", Department of Global Health and Social Medicine, Harvard Medical School, Boston USA, Published Online April 9.

5. Commission of the European Communities (2007), White Paper, "Together for Health: A Strategic Approach for the EU 2008-2013", Brussels, 23th October.

6. Daron Acemoglu, Simon Johnson (2006), "Disease and Development: The Effect of Life Expectancy on Economic Growth" National Bureau of Economic Research, Working paper 12269.

7. Dreger, C. and Reimers, H.E. (2005). "Health care expenditures in OECD countries: a panel unit root and co integration analysis" International Journal of Applied Econometrics and Quantitative Studies. Vol.2-2.

8. Henderson J Vernon, Storeygard Adam, Weil David N. (2009), "Measuring Economic Growth from Outer Space", National Bureau of Economic Research , Cambridge, July.

9. Holger Strulik (2004), "Economic growth and stagnation with endogenous health and fertility", Journal of population Economics, Hamburg University, Springer-Verlag, 17:433–453.

10. Howitt Peter (2005), "Health Human Capital and Economic Growth: A Schumpeterian Perspective", Brown University, February 9.

11. Jamison Dean T, Lawrence J. Lau, Jia Wang, "Health's Contribution to Economic Growth in an Environment of Partially Endogenous Technical Progress", U.S. National Institutes of Health, Working Paper No. 10.

12. Mayer David (2001), "The Long-Term Impact of Health on Economic Growth in Latin America", Centro de Investigation Docencia Economics, Mexico, D.F., January.

13. Ministry of health and Family Welfare, Government of India (2010), "Annual Report to the People on Health", New Delhi India, September.

14. PAHO/WHO- Pan American Health Organization/World Health Organization- (2001), Division of Health and Human Development, HDP, Program of Public Policies and Health ,HDD, "Health and Economic Growth Phase II: 2001-2002".

15. Weil David N (2007) "Accounting for the Effect of Health on Economic Growth", The Quarterly Journal of Economics, Volume 122, Issue 3 August, Page: 1265-1306.

16. WHO- World Health Organization- (2009), "Health and Growth", ed. by Michael Spence and Maureen Lewis, Commission on Growth and Development, Washington, DC 20433.

17. WHO (2002), "Macroeconomics and Health: Investing in health for economic development", Report of the Commission on Macroeconomics and Health, Geneva.

18. World Bank. (2007) "World Development Report", Washington: World Bank Press.

# **REQUEST FOR FEEDBACK**

# **Dear Readers**

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

I would like to request you to supply your critical comments and suggestions about the material published in this issue as well as on the journal as a whole, on our E-mails i.e. **infoijrcm@gmail.com** or **info@ijrcm.org.in** 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 an appropriate consideration.

With sincere regards

Thanking you profoundly

Academically yours

Sd/-

**Co-ordinator**