INTERNATIONAL JOURNAL OF RESEARCH IN COMMERCE, ECONOMICS & MANAGEMENT

IJRCM

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

Indexed & Listed at:

Ulrich's Periodicals Directory ©, ProQuest, U.S.A., EBSCO Publishing, U.S.A., Cabell's Directories of Publishing Opportunities, U.S.A., Google Scholar,
Open J-Gage, India [link of the same is duly available at Inflibnet of University Grants Commission (U.G.C.)],
The American Economic Association's electronic bibliography, EconLit, U.S.A.,
Index Copernicus Publishers Panel, Poland with IC Value of 5.09 & number of libraries all around the world.
Circulated all over the world & Google has verified that scholars of more than **5000 Cities** in **187 countries/territories** are visiting our journal on regular basis.
Ground Floor, Building No. 1041-C-1, Devi Bhawan Bazar, JAGADHRI – 135 003, Yamunanagar, Haryana, INDIA

http://ijrcm.org.in/

CONTENTS

Sr. No.	TITLE & NAME OF THE AUTHOR (S)	Page No.
1.	**GEOGRAPHIC DIVERSIFICATION AND BANK PERFORMANCE: EVIDENCE FROM ETHIOPIA** *DR. P. HRUSHIKESAVA RAO & ELEFACHEW MOSSISA*	1
2.	**RELATIONSHIP BETWEEN FIRM RESOURCES AND SMALL FIRM GROWTH IN BANGLADESH** *MD. MOSHARREF HOSSAIN, YUSNIDAH IBRAHIM & MD. MOHAN UDDIN*	6
3.	**INNOVATION NETWORK IN TAIWAN TELECOMMUNICATION INDUSTRY BASED UPON SOCIAL NETWORK PERSPECTIVE** *CHUN-YAO TSENG & TZU-LIN CHIANG*	11
4.	**ADVENT OF THE RETAIL SECTOR IN INDIAN ECONOMY: A PERSPECTIVE ACROSS DECADE** *SWATI SAXENA & DR. HUSEIN ABDULRAHIM HASAN*	16
5.	**GOODS AND SERVICES TAX: A LEAP FORWARD ECONOMIC GROWTH AND DEVELOPMENT** *MINAKSHI GUPTA*	19
6.	**INITIAL PUBLIC OFFERING UNDER-PRICING: A CASE STUDY OF TWITTER IPO** *SAVITHA, P & B. SHIVARAJ*	25
7.	**THE CONFINE OF EFFICIENT CONTRACT BETWEEN PRINCIPALS AND DISTRIBUTORS PERFECTLY CONTROL MARKETING MIX STRATEGIES: CHANNEL MANAGEMENT PERSPECTIVE OF FAST MOVING CONSUMER GOODS (FMCG) INDUSTRIES IN INDONESIAN** *DR. AGUS TRIHATMOKO, R., DR. MUGI HARSONO, DR. SALAMAH WAHYUNI & DR. TULUS HARYONO*	31
8.	**AN ANALYSIS OF NON PERFORMING ASSETS OF INDIAN BANKS** *OMBIR & SANJEEV BANSAL*	37
9.	**FINO'S TECHNOLOGICAL SOLUTIONS FOR THE YESHASVINI COOPERATIVE FARMERS HEALTH CARE SCHEME** *DR. G. KOTRESHWAR & V.GURUSIDDARAJU*	43
10.	**PERFORMANCE OF FISH WORKERS COOPERATIVE SOCIETIES** *A. NALINI & DR. P. ASOKAN*	46
11.	**A STUDY ON ASSOCIATION AND CAUSALITY RELATIONSHIP BETWEEN NSE EQUITY SPOT AND DERIVATIVE MARKETS** *SATYANARAYANA KOILADA*	48
12.	**DIVIDEND POLICY AND ITS IMPACT ON STOCK PRICE: A CASE STUDY ON SENSEX COMPANIES** *BHAGYA LAKSHMI.K & DR. N. BABITHA THIMMAIAH*	54
13.	**IMPACT OF GLOBALIZATION ON THE EXTERNAL SECTOR OF INDIAN ECONOMY** *IBRAHIM CHOLAKKAL*	58
14.	**A STUDY ON GROWTH AND INSTABILITY IN INDIA'S BANANA CULTIVATION AND EXPORT** *DR. R. GANESAN*	62
15.	**ROLE OF ASHA WORKERS IN RURAL DEVELOPMENT WITH REFERENCE TO KOTTAYAM DISTRICT** *TISSY ERUTHICKAL*	66
16.	**ROLE OF MECHANIZATION IN AGRICULTURAL IN THE PRESENT SOCIO-ECONOMIC SITUATIONS: A CASE STUDY OF ANDHRA PRADESH** *H. RAMANJINEYULU & DR. K. SOMASEKHAR*	70
17.	**CRITICAL ANALYSIS OF THE RIGHT TO FAIR TRIAL** *RIDDHIMA MUNSHI & DR. SANJAY SOLANKI*	73
18.	**DYNAMIC CAUSALITY RELATIONSHIP BETWEEN FDI INFLOWS, TRADE BALANCE, AND ECONOMIC GROWTH IN WORLDWIDE SELECTED TOP 25 HOST COUNTRIES DURING POST LIBERALIZATION REGIME: A QUANTITATIVE APPROACH** *SARMITA GUHA RAY*	78
19.	**WORKING CONDITIONS OF THE UNORGANISED SECTOR IN KERALA: REFERENCE TO SALES WOMEN IN THE TEXTILE SHOPS** *FREEDA V SIMON*	84
20.	**INTRA-GENERATIONAL RELATIONSHIPS AMONG THE AGED PENSIONERS OF BHUBANESWAR, ODISHA** *AMITA MOHAPATRA*	86
	REQUEST FOR FEEDBACK & DISCLAIMER	91

CALL FOR MANUSCRIPTS

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

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

GUIDELINES FOR SUBMISSION OF MANUSCRIPT

1. **COVERING LETTER FOR SUBMISSION:**

DATED: _____________

THE EDITOR

IJRCM

Subject: **SUBMISSION OF MANUSCRIPT IN THE AREA OF _______________________.**

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

DEAR SIR/MADAM

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

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

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

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

NAME OF CORRESPONDING AUTHOR	:
Designation/Post*	:
Institution/College/University with full address & Pin Code	:
Residential address with Pin Code	:
Mobile Number (s) with country ISD code	:
Is WhatsApp or Viber active on your above noted Mobile Number (Yes/No)	:
Landline Number (s) with country ISD code	:
E-mail Address	:
Alternate E-mail Address	:
Nationality	:

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

<u>NOTES</u>:

a) The whole manuscript has to be in ***ONE MS WORD FILE*** only, which will start from the covering letter, inside the manuscript. ***<u>pdf. version</u> is liable to be rejected without any consideration***.

b) The sender is required to mention the following in the **SUBJECT COLUMN of the mail**:

New Manuscript for Review in the area of (e.g. Finance/Marketing/HRM/General Mgt./Engineering/Economics/Computer/IT/ Education/Psychology/Law/Math/other, please specify)

c) There is no need to give any text in the body of the mail, except the cases where the author wishes to give any **specific message** w.r.t. to the manuscript.

d) The total size of the file containing the manuscript is expected to be below **1000 KB**.

e) Only the **Abstract will not be considered for review** and the author is required to submit the **complete manuscript** in the first instance.

f) ***The journal gives acknowledgement w.r.t. the receipt of every email within twenty-four hours*** and in case of non-receipt of acknowledgment from the journal, w.r.t. the submission of the manuscript, within two days of its submission, the corresponding author is required to demand for the same by sending a separate mail to the journal.

g) The author (s) name or details should not appear anywhere on the body of the manuscript, except on the covering letter and the cover page of the manuscript, in the manner as mentioned in the guidelines.

2. **MANUSCRIPT TITLE:** The title of the paper should be typed in **bold letters**, **centered** and **fully capitalised**.
3. **AUTHOR NAME (S) & AFFILIATIONS:** Author (s) **name**, **designation**, **affiliation** (s), **address**, **mobile/landline number** (s), and **email/alternate email address** should be given underneath the title.
4. **ACKNOWLEDGMENTS:** Acknowledgements can be given to reviewers, guides, funding institutions, etc., if any.
5. **ABSTRACT:** Abstract should be in **fully Italic printing**, ranging between **150** to **300 words**. The abstract must be informative and elucidating the background, aims, methods, results & conclusion in a **<u>SINGLE PARA</u>**. ***Abbreviations must be mentioned in full***.
6. **KEYWORDS:** Abstract must be followed by a list of keywords, subject to the maximum of **five**. These should be arranged in alphabetic order separated by commas and full stop at the end. All words of the keywords, including the first one should be in small letters, except special words e.g. name of the Countries, abbreviations etc.
7. **JEL CODE:** Provide the appropriate Journal of Economic Literature Classification System code (s). JEL codes are available at www.aea-web.org/econlit/jelCodes.php. However, mentioning of JEL Code is not mandatory.
8. **MANUSCRIPT:** Manuscript must be in ***<u>BRITISH ENGLISH</u>*** prepared on a standard A4 size ***<u>PORTRAIT SETTING PAPER</u>***. *It should be free from any errors i.e.* ***grammatical, spelling*** *or* ***punctuation.*** *It must be thoroughly edited at your end*.
9. **HEADINGS:** All the headings must be bold-faced, aligned left and fully capitalised. Leave a blank line before each heading.
10. **SUB-HEADINGS:** All the sub-headings must be bold-faced, aligned left and fully capitalised.
11. **MAIN TEXT:**

<u>THE MAIN TEXT SHOULD FOLLOW THE FOLLOWING SEQUENCE</u>:

INTRODUCTION

REVIEW OF LITERATURE

NEED/IMPORTANCE OF THE STUDY

STATEMENT OF THE PROBLEM

OBJECTIVES

HYPOTHESIS (ES)

RESEARCH METHODOLOGY

RESULTS & DISCUSSION

FINDINGS

RECOMMENDATIONS/SUGGESTIONS

CONCLUSIONS

LIMITATIONS

SCOPE FOR FURTHER RESEARCH

REFERENCES

APPENDIX/ANNEXURE

<u>The manuscript should preferably be in ***2000 to 5000 WORDS***, But the limits can vary depending on the nature of the manuscript</u>.

12. **FIGURES & TABLES:** These should be simple, crystal **CLEAR**, **centered**, **separately numbered** & self-explained, and the **titles must be above the table/figure**. **Sources of data should be mentioned below the table/figure**. *It should be ensured that the tables/figures are referred to from the main text*.

13. **EQUATIONS/FORMULAE:** These should be consecutively numbered in parenthesis, left aligned with equation/formulae number placed at the right. The equation editor provided with standard versions of Microsoft Word may be utilised. If any other equation editor is utilised, author must confirm that these equations may be viewed and edited in versions of Microsoft Office that does not have the editor.

14. **ACRONYMS:** These should not be used in the abstract. The use of acronyms is elsewhere is acceptable. Acronyms should be defined on its first use in each section e.g. Reserve Bank of India (RBI). Acronyms should be redefined on first use in subsequent sections.

15. **REFERENCES:** The list of all references should be alphabetically arranged. ***The author (s) should mention only the actually utilised references in the preparation of manuscript*** and they may follow Harvard Style of Referencing. **Also check to ensure that everything that you are including in the reference section is duly cited in the paper**. The author (s) are supposed to follow the references as per the following:

- All works cited in the text (including sources for tables and figures) should be listed alphabetically.
- Use (**ed.**) for one editor, and (**ed.s)** for multiple editors.
- When listing two or more works by one author, use --- (20xx), such as after Kohl (1997), use --- (2001), etc., in chronologically ascending order.
- Indicate (opening and closing) page numbers for articles in journals and for chapters in books.
- The title of books and journals should be in italic printing. Double quotation marks are used for titles of journal articles, book chapters, dissertations, reports, working papers, unpublished material, etc.
- For titles in a language other than English, provide an English translation in parenthesis.
- ***Headers, footers, endnotes** and **footnotes** should **not be used** in the document**.* However, **you can mention short notes to elucidate some specific point**, which may be placed in number orders before the references.

PLEASE USE THE FOLLOWING FOR STYLE AND PUNCTUATION IN REFERENCES:

BOOKS

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

CONTRIBUTIONS TO BOOKS

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

JOURNAL AND OTHER ARTICLES

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

CONFERENCE PAPERS

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

UNPUBLISHED DISSERTATIONS

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

ONLINE RESOURCES

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

WEBSITES

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

GEOGRAPHIC DIVERSIFICATION AND BANK PERFORMANCE: EVIDENCE FROM ETHIOPIA

DR. P. HRUSHIKESAVA RAO
CHAIRPERSON
FACULTY OF COMMERCE & MANAGEMENT STUDIES
ANDHRA UNIVERSITY
VISAKHAPATNAM

ELEFACHEW MOSSISA
RESEARCH SCHOLAR
DEPARTMENT OF COMMERCE & MANAGEMENT STUDIES
ANDHRA UNIVERSITY
VISAKHAPATNAM

ABSTRACT

This paper examines the effect of geographic diversification on financial performance of selected banks from Ethiopia. The data consists of twelve private and government commercial banks for a period of 6 years from 2008/09-2013/14. The fixed effects model was used to estimate the regression and geographic diversification was found to have a positive and significant effect on both return on average asset and average equity. However, this positive effect of increased geographic diversification on performance tends to dissipate as banks get bigger in size as well.

KEYWORDS

Ethiopia, geographic diversification, bank performance, financial intermediaries.

I. INTRODUCTION

Modern portfolio theory predicts that if the streams of cash flows from different activities are not perfectly positively correlated, a firm that is as diversified as possible will be able to stabilize its reported performance, or conversely, will be able to maximize profits given the level of risk. For financial institutions, these forms of diversification may be geographic, income, broad asset sector, or industrial. The heavily accumulated evidence over the years on this particular area points to either direction as to how diversification affects firms' performance/risk, however. Some have found evidence that diversification indeed benefits firms as it brought about stability in returns and/or resulted in maximum returns for given amount of risk. Others have documented evidence substantiating the opposite, diversification worsens a firm's risk return profile. Still others found evidence that diversification did not affect a firm's risk return profile whatsoever.

The differences and, at times, the contradictions among studies that explored the issue of diversification and performance/risk can be numerous. Differences in models/perspectives by scholars, complexity of the nature of the relationship between performance and diversification could be the source of the difference. According to Pandya & Rao, 1998, Intervening variables (mode of diversification, institutional context, managerial capability, ownership structure) that affect the way diversification and the return/risk indicators (return on assets, return on equity, efficiency measures, stability/variability of returns, market valuations) could intensify this relationship.

To our knowledge, no study has been conducted to investigate the effect on financial performance, if any, of geographic diversification by commercial banks in Ethiopia. This paper tries to investigate the impact of geographic diversification on profitability of Ethiopian commercial banks.

II. BRIEF REVIEW OF THE LITERATURE

Does Diversification enhance or destroy firms' financial performance? This question has been explored extensively since Markowitz, (1952) came up with the theory that predicted returns will have minimal variability if investments in securities is shared among various assets. The greater the number of assets in a portfolio, the more stable are the stream of cash flows for given return and the maximum the returns will be given the amount of risk. In an attempt to test if this theory holds if applied to firms, many researchers have posed this question and came up with some times confirming and sometimes refuting answers.

The studies that have found evidence for a positive effect of bank diversification on returns and/or risks include: Boyd, Graham, & Hewitt, (1993), Templeton & Severiens, (1992), Pandya & Rao, (1998), Lown, Osler, Sufi, & Strahan, (2000). Others advise against the diversification strategy for they found evidence of decreased returns, increased exposure or risk of failure and loss or dissipation of shareholders' wealth and even diseconomies of scale associated with increased diversification Lang & Stulz, (1994), Berger & Ofec, (1995), Comment & Jarrel, (1995), Stiroh (2002), Hayden, Porath, & Westernhagen, (2007), Laeven & Levine, (2007), Delong, (2001).

If returns from different areas are not perfectly positively correlated, banks benefit from diversifying geographically as this diminishes risk of failure Diamond, (1984) and Pyle, (1971). Economies of scale and resulting elevated earnings is another benefit that accrues to diversifiers into new areas (Chandler, (1977); Gertner, Scharfstein, & Stein, (1994); and Berger, Demsetz, & P., (1999)). The aforementioned scholars' theories however were challenged by corporate governance theorists that brought to light the agency problem that surfaces if affiliates are to be located in a geographically dispersed areas (Jensen, (1986), Jensen & Meckling, (1976), Jensen & Murphy, (1990) and Scharfstein & Stein, (2000).

Though to a lesser extent than it deserved as noted by Morgan and Samolyc (2003), geographic diversification by banks has been explored using data from different countries with varied institutional settings over the years.

Jayratne & Strahan, (1996) examined the effect of the Riegle-Neal Interstate Banking and Branching Efficiency Act that allowed US banks to operate outside their home state. They found that performance of the banks improved after entry restrictions were lifted and the loan qualities progressed. Berger & DeYoung, (2001) studied the effect of geographic expansion on cost and profit efficiency for over 7,000 U.S. banks, for the period 1993-1998. They found that parent banks expanding into neighboring states are able to achieve better efficiency but this tends to dissipate as affiliates move away from their parent companies.

Emmons, Alton, & Yeager, (2001) simulate mergers of community banks both within and across economic market areas. They found that the potential for reduction in idiosyncratic risk dominates the possible marginal reduction in risk by diversifying across markets. Deng & Elyasiani, (2005) studied 388 bank holding companies for the period 1994-2003. Unlike previous studies, their data accounts for both the number of locations in which a bank holding company operates, and the level of activity in each location. Their results show that total risk, idiosyncratic and systematic risk decline significantly with geographic expansion.

Acharia, Hassan, & Saunders, (2002) studied 105 Italian banks over the period 1993–1999 for the various forms of diversification effect on bank risk and return. Their study revealed that geographical diversification results in an improvement in the risk–return tradeoff for banks with low levels of risk. Schmid & Walter, (2008) investigated if geographic diversification is value-enhancing or value destroying in the financial services sector for a rather long period from 1985-2004 and found that geographic diversification is value-destroying when there are more geographic segments and the activities are distributed relatively evenly over these segments except for the investment banking sector. More recently, Jochem, (2013) studied American banks' performance during the 2008-11 US financial crisis. His findings showed that banks geographically diversified can reduce risk of failure by a sizeable amount.

III. METHODOLOGY

Data source and sample selection: Included in the sample are all private and state owned banks that have been in operation and have issued annual reports for at least five years, excluding the Development Bank of Ethiopia, that has been set up specifically to help execute development policies formulated by the government. A total of twelve banks were part of the study for covering the period 2008/09 to 2013/14. The data type is entirely a secondary. The data was gathered from the banks' annual reports, reports from the National Bank of Ethiopia, and annual reports from the Ministry of Finance and Economic Development.

Variables: To test the relationship between the banks' geographic diversification and their financial performance, three sets of variables (the independent variable, the dependent variables and control variables) are measured and their relationship analyzed using the STATA 12 statistical package. Return on average assets (ROAA), and return on average equity (ROAE) are calculated as the ratio of after tax income to total assets and to total equity respectively. These measures show the percentage of profit that a company earns in relation to its overall resources.

Geographic Diversification: This measures the degree with which the banks have diversified into the nine regional states and the two chartered cities in the country. To gauge the extent of geographic diversification, use was made of the Herfindahl Hirschman Index (HHI_Geo) as was put forward by Morgan & Samolyk, (2003), Alessandrini, Croci, & Zazzaro, (2005), Cotugno & Stefanelli, (2012) and, Brighi & Venturelli, (2013). The measure is given by:

$$HHI\_Geo_{it} = 1 - \sum_{j=1}^{k} \left(\frac{Bank\ branches\ in\ state_{ijt}}{Total\ bank\ branches_{\ it}} \right)$$

Where the subscripts *i, j* and *t* represent the banks, the regional states and, year respectively (j= 1, 2, 3,… k, where k is equal to the 11 regions in the country). The values of this measure range from 0 to 1, where the value 1 highlights maximum geographical diversification, (with branches equally distributed among the regions throughout the country) while the values close to zero represent no geographic diversification at all. The different company specific and macro level control variables that have a bearing on the profitability of the banks are discussed below.

Bank Size: Despite fear that banks should not be allowed to grow so large in Size as to become too big to fail, various researches show that big banks are more profitable and have better capital adequacy than small banks (Short, 1979). Shehzad, Haan, & Scholtens, (2013)) found this to be true in their paper that studied bank profitability in Organization for Economic Co-operation and Development (OECD) countries. This was in contrast to the empirical works by Athanasoglou, Brissimis, & Delis, (2008) and Goddard, Molyneux, & Wilson, (2004) who studied European banks and found a weak relationship between size and profitability. In this paper, bank size is the main control variable that enables us to distinguish the effect of diversification from scale effects. It is measured by taking the natural logarithm of average assets of the banks and a positive effect of size on profitability is anticipated.

Capital: Whether well capitalized banks outperform the highly leveraged ones is an issue extensively explored in the capital structure literature. The widely held theory is that higher capital-asset ratio (CAR) is associated with a lower after-tax return on equity (ROE).

In the world of Modigliani and Miller with perfect capital markets and no bankruptcy costs, the capital structure (whether the assets were financed with debt or equity) should not matter, and value can only be generated by the assets. However, with asymmetric information and bankruptcy costs, the way with which assets are financed could create value (Modigliani & Miler, (1958), Modigliani & Miller, (1963)). Berger (1995) found evidence that CAR and ROE are positively related. This was attributed to the fact that highly capitalized banks tend to face lower cost of funding due to lower prospective bankruptcy costs.

Banks that operate in a highly regulated environment which requires them to hold a higher amount of capital regard this binding restriction as a cost. To the extent that banks try to pass some of the regulatory cost on to their customers, a positive relationship may be anticipated between capital and profit [Flamini, (2009)]. In Ethiopia the banking sector is strictly regulated and banks could not transfer this regulatory cost to their customers as the most important source of income (i.e., the lending rate) is set by the central bank. Hence a negative relation between capital and profitability (or conversely, a positive association between leverage and profit) is expected.

Credit Risk: The ratio of loan loss provisions to total assets is used to proxy for the level of credit risk the banks are taking on. Poor loan screening and monitoring practices result in a higher value of this ratio. This variable is expected to have a negative effect on the banks' earnings.

Expenses Management: Operating expenses can be used to measure how efficiently management has been using the assets at its disposal. Improved management of these expenses will increase efficiency which translates to better profits. It is measured as the ratio of operating expenses to total assets and is expected to be negatively related to profitability.

Inflation: How Inflation affects bank profitability depends on whether the inflation is anticipated or unanticipated (Perry, (1992)). If an economy of a nation is mature enough to make reasonable forecast of inflation possible, then banks may be able to adjust their interest rates beforehand to counter the increase in operating costs. Hence, inflation and profitability may be associated positively. The variable inflation is expected to have a negative sign in the regression outputs.

GDP: Total economic activity in a country is primarily measured by gross domestic product (GDP). Growing GDP (favorable economic condition) is expected to influence various factors that in turn affect the supply of (demand for) deposits and funds. This variable is expected to have a positive effect on the profitability of the banks.

Model Specification: We estimate a regression of the form:

$$y_{it} = \alpha + \beta_1 Size_{it} + \beta_2 HHI\_Geo_{it} + \beta_3\, Capratio_{it} + \beta_4 Genexpratio_{it} + \beta_5 Llratio_{it} + \beta_6 Inflation_{it} + \beta_7\, Gdp + \varepsilon_{it} \qquad (1)$$

Where y_{it} is a measure of a bank's financial performance (either return on average asset or average equity). The subscripts *t* and *i* denote time (year) and individual banks respectively. The parameters β_1 through to β_7 are the coefficients of the explanatory variables, (discussed above) to be estimated. $\varepsilon_{it} = \mu_i + v_{it}$, where μ_i is the unobserved heterogeneity that is time invariant and, v_{it} the idiosyncratic error that varies over time and entities. The hausman test shows that the fixed effects model is appropriate to estimate the model.

To examine if the effect of geographic diversification varies across different sizes of the banks, we estimate a model that includes an interaction term between size and diversification index following (Morgan & Samolyk, 2003). The model with the interaction term is given by:

$$y_{it} = \alpha + \beta_1 Size_{it} + \beta_2 HHI\_Geo_{it} + \beta_3\, Capital_{it} + \beta_4 Size * HHI\_Geo_{it} + \beta_5 Genexpratio_{it} + \beta_6 llratio_{it} + \beta_7 Inflation_{it} + \beta_8\, Gdp + \varepsilon_{it} \qquad (2)$$

The notations in this equation are the same as the ones in equation one above (except the inclusion of an additional control variable) and this model has also been estimated using the fixed effects method.

IV. RESULTS AND DISCUSSION

Tables 1 and 2 provide summary statistics for the variables and correlation matrix among the explanatory variables used in the analysis. After outliers have been eliminated, the number of observation for all the variables is 61 except for loan loss ratio.[1] The return on average asset and has a mean value of 3.16% and a standard deviation of 0.68%. Return on average equity has a mean and standard deviation of 25% and 6.9% respectively. The mean herfindhal index is 0.63 roughly indicating a strategy by the banks favoring geographic diversification. The variance covariance matrix does not show strong correlation among any two of the independent variables which indicates that there is no problem of multicollinearity in the model. The variance Inflation factor (VIF) has also been run and there is no indication of multicollinearity among the variables.[2]

[1] This is because loan loss provision data for construction and business bank of Ethiopia and a few other banks could not be obtained.
[2] The results of this test would be availed upon request from the authors.

TABLE 1: DESCRIPTIVE STATISTICS

Variable	Obs	Mean	Std. Dev.	Min	Max
ROAA	61	3.1621	0.6793	1.2400	4.9500
ROAE	61	25.1843	6.8922	12.0423	40.4437
Size	61	22.5287	0.8660	20.3982	24.9200
HHI_Geo	61	0.6344	0.1267	0.2455	0.9075
Capratio	61	13.1774	3.5373	7.9100	22.0974
Genexpratio	61	1.4573	0.4829	0.3515	2.8219
Llratio	52	0.3576	0.5349	-0.1031	3.4946
Inflation	61	18.1574	12.4517	2.8000	36.4000
GDP	61	2.3047	0.0824	2.1633	2.4336

TABLE 2: CORRELATION MATRIX BETWEEN EXPLANATORY VARIABLES

	Size	HHI_Geo	Capratio	Llratio	Genexpratio	inflat~n	GDP
Size	1						
HHI_Geo	0.1347	1					
Capratio	-0.3866	0.2178	1				
Llratio	-0.067	0.0859	-0.0807	1			
Genexpratio	-0.7493	-0.1339	0.1658	0.0416	1		
Inflation	0.0179	0.0788	-0.1634	-0.1316	-0.1661	1	
GDP	-0.0433	-0.0191	-0.0043	0.0199	-0.003	-0.5658	1

Table 3 presents regression result based on the first equation without the interaction term between geographic diversification and asset size. Size (natural logarithm of total assets) has a positive and statistically significant impact on both measures of returns as expected. Capital ratio (Capratio) is found to significantly affect performance negatively (ROAE) during the sample period as hypothesized. The negative relationship reflects a standard risk-return payoff: firms with higher capital ratio are less risky and therefore generate lower earnings. The banks' management may be extremely risk averse that operates cautiously and ignores profitable investment opportunities.

GDP growth and inflation are found to be negatively related to bank profitability but the coefficients are not statistically significant. The negative sign for GDP purports to lend support to the view that improved economy and the resulting developed business environment lowers bank entry barriers. This intensifies competition harming the banks' profitability as was suggested by Tan & Floros, (2012). Unreported regression of per capita income on banks' earnings also had the same effect as GDP on performance measures. The negative effect of inflation on the banks' performance was expected. This may be an evidence of the banks' failure to anticipate inflation and consequently adjust the prices of their services before the effect of inflation sets in to heighten their costs of operation.

TABLE 3: REGRESSION RESULTS WITHOUT INTERACTION TERMS BETWEEN GEOGRAPHIC DIVERSIFICATION AND BANK SIZE

	Dependent Variables	
	ROAE	ROAA
Size	4.100*	0.578**
	0.0121	0.0051
Capratio	-1.449*	-0.0180
	0.0225	0.8126
HHI_Geo	38.67**	4.618*
	0.0093	0.0124
Genexpratio	-9.035*	-1.170*
	0.0321	0.0266
Llratio	-3.691*	-0.4080
	0.0420	0.0699
Inflation	-0.0378	-0.0035
	0.5495	0.6573
GDP	-2.2430	-0.2660
	0.7936	0.8038
_cons	-51.2200	-9.8700
	0.2962	0.1106
N	*52*	*52*
R-sq	*0.4672*	*0.3944*
F (7,33) =4.13 p-value = [.0023]		
Hausman test H0: RE vs. FE: CHISQ(7) = 15.20, p-value = [.0355]		

p-values in parentheses. * p<0.05, ** p<0.01, *** p<0.001

The hypothesized negative relationship between the variables Llratio (Loan loss ratio) and Genexpratio (general expenses ratio) have also been confirmed by the regression results. These coefficients are highly statistically significant. The variable of our major interest, geographic diversification positively affects both returns on asset and returns on equity and significantly so at 95% level for ROAE and at 90% for ROAA.

TABLE 4: FIXED EFFECTS REGRESSION RESULTS WITH INTERACTION TERM BETWEEN BANK SIZE AND GEOGRAPHIC DIVERSIFICATION

	Dependent Variables	
	ROAE	**ROAA**
Size	20.18***	2.251***
	0.0000	0.0004
Capratio	-1.839**	-0.0587
	0.0011	0.3977
HHI_Geo	609.1***	63.98**
	0.0002	0.0022
Size_HHI_Geo	-26.81***	-2.790**
	0.0004	0.004
Genexpratio	-6.939*	-0.952*
	0.049	0.0441
Llratio	-2.989*	-0.335
	0.0486	0.0961
Inflation	-0.0369	-0.0034
	0.4813	0.6274
GDP	-3.206	-0.366
	0.6527	0.7011
_cons	-387.9***	-44.90**
	0.0002	0.0011
N	52	52
R-sq	0.6444	0.5346
F (8, 32 =7.25, p-value = [.0000]		
Hausman test H0: RE vs. FE: CHISQ(8) = 239.14, p-value = [.0000]		

p-values in parentheses. * p<0.05, ** p<0.01, *** p<0.001

Table 4 above presents regression coefficients along with their p-values for model (2) that includes interaction term variable between size and geographic diversification. The model has a better explanatory power than the previous one as its R-squared (0.6444 for ROAE and 0.5346 for ROAA) and F-statistic (0.0000) are higher for this model. The interaction term has a statistically significant negative effect with p-values 0.0004 and 0.004 for ROAE and ROAA respectively. If firms' geographic diversification is accompanied by commensurate increase in asset size, then the banks' profitability declines. This implies that large sized banks do not reap as much benefit from geographically diversifying as the smaller banks do. The benefits from diversifying tend to get smaller with bank sizes. The coefficients for the other control variables are positive in this model and have a larger statistical significance.

V. CONCLUSION

The study set out to investigate the effect of geographic diversification strategies on the financial performance of Ethiopian commercial banks during the period 2008/09 2013/14. To our knowledge, this paper is the first of its kind to examine this phenomenon in Ethiopia. The profitability of Ethiopian commercial banks is found to be highly affected by their size, capital ratio, loan loss ratio and general expenses ratio. The negative coefficient of capital ratio implies that the banks should only aspire to have the bare minimum capital requirements by the National Bank of Ethiopia and leverage their operations to boost their profitability.

The macro variables GDP and inflation have been found to have no statistically significant effect on the earnings of the banks. The banks should focus on their core internal competences to improve their performance. The geographic diversification index has a highly significant positive effect on the returns on asset and equity. An interesting outcome of the regression results is that interaction between size and the diversification measure impacts performance negatively. Diseconomies from diversification sets in once the size effect is controlled for by an interaction term. The implication is that for the banks to reap the benefits of geographic diversification, the banks should be cautious on the scale inefficiencies that result from the accompanying increase in their asset size. The National Bank of Ethiopia should devise policies and incentives that encourage geographic diversification by the banks even more.

REFERENCES

1. Acharia, V. V., Hassan, I., & Saunders, A. (2002). Should banks be diversified? Evidence from individual bank loan portfolios. Journal of Business, 79, 1355-1412.
2. Athanasoglou, P. P., Brissimis, S. N., & Delis, M. D. (2008). Bank-specific, industry-specific and macroeconomic determinants of bank profitability, Journal of International Financial Markets Institutions and Money, 18, 121–36.
3. Berger, A. (1995). The relationship between capital and earnings in banking. Journal of money credit and banking, 27, 432-456.
4. Berger, A., & DeYoung, R. (2001). The Effects of Geographic Expansion on Bank Efficiency, Working Paper, Board of Governors of the Federal Reserve System.
5. Berger, A., Demsetz, R., & P., S. (1999). The Consolidation of the Financial Services Industry: Causes, Consequences, and Implications for the Future. Working Paper, Board of Governors of the Federal Reserve System.
6. Berger, P. G., & Ofec, E. (1995). Diversification's Effect on Firm Value. Journal of Financial Economics, 37, 39-65.
7. Boyd, J. H., Graham, S. L., & Hewitt, R. S. (1993). Bank holding company mergers with nonbank financial firms: Effects on the risk of failure. Journal of Banking & Finance,17 (1), 43-63.
8. Brighi, P., & Venturelli, V. (2013). The effect of revenue and geographic diversification and bank performance. CEFIN Working Papers, 43.
9. Chandler, A. D. (1977). The Visible Hand. Cambridge, MA: Belknap Press.
10. Delong, G. (2001). Stockholder gains from focusing versus diversifying bank mergers. Journal of Financial Economics, 59(2), 221-252.
11. Demsetz, R. S., & Strahan, P. E. (1997). Diversification, Size, and Risk at Bank Holding Companies. Journal of Money, Credit and Banking, 29(3), 300-313.
12. Deng, S., & Elyasiani, E. (2005). Geographic Diversification, Bank Holding Company Value, and Risk. Journal of Money, Credit and Banking, vol. 40 iss.(6).
13. Diamond, D. (1984). Financial Intermediation and Delegated Monitoring. Review of Economic Studies, 59, 393-414.
14. Eisemann, P. (1976). Diversification and the congeneric bank holding company, Journal of Bank Research, 68-77.
15. Emmons, W. R., Alton, G. R., & Yeager, T. J. (2001). The Importance of Scale Economies and Geographic Diversification in Community Bank Mergers. Federal Reserve Bank of St. Louis.
16. Flamini, V. (2009). The Determinants of Commercial Bank Profitability in Sub-Saharan Africa. IMF working paper.
17. Gertner, R. H., Scharfstein, D. S., & Stein, J. C. (1994). Internal Versus External Capital Markets. NBER Working Paper No. 4776.
18. Goddard, J., Molyneux, P., & Wilson, J. O. (2004). The profitability of European banks: a cross-sectional and dynamic panel analysis, Manchester School, 72, 363–81.
19. Hayden, E., Porath, D., & Westernhagen, N. v. (2007). Does diversification improve the performance of German banks? Evidence from individual bank loan portfolios. Journal of Financial Services Research, 32, 123-140.

20. Jayratne, J., & Strahan, P. E. (1996). Entry restrictions Industry evolution and dynamic efficiency evidence from commercial banking. Federal Reserve Bank of Newyork, 9630.
21. Jensen, M. C. (1986). Agency costs of free cash flow, corporate finance, and takeovers. American Economic Review 76, 323-329.
22. Jensen, M. C., & Murphy, K. J. (1990). Performance pay and top management incentives. Journal of Political Economy 98, 225-264.
23. Jensen, M., & Meckling, W. (1976). Theory of the Firm: Managerial Behavior, Agency Cost and Ownership Structure. Journal of Financial Economics, 3, 305–360.
24. Jochem, T. (2013). Geographic Diversification and Bank Stability: Evidence from the 2008-2011 U.S. Banking Crisis.
25. Laeven, L., & Levine, R. (2007). Is there a diversification discount in financial conglomerates. Journal of Financial Economics 85, 331–367.
26. Lang, L. H., & Stulz, R. M. (1994). Tobin's q, corporate diversification and firm performance. Journal of Political Economy, 102, 1248-1280.
27. Lown, C. S., Osler, C. L., Sufi, A., & Strahan, P. E. (2000). The Changing Landscape of the Financial Services Industry: What Lies Ahead? FRB of New York Economic Policy Review, 6(4), 39-55.
28. Cotugno, M., & Stefanelli, V. (2012). Geographical and Product Diversification during Instability Financial Period: Good or Bad for Banks? International Journal of Economics and Finance, 85, 87-100.
29. Markowitz, H. (1952). Portfolio Selection. Journal of Finance, 77-91.
30. Modigliani, F., & Miler, M. H. (1958). 1958. The Cost of Capital, Corporation Finance and the Theory of Investment. American Economic Review 48(3), 261–97.
31. Modigliani, F., & Miller, M. H. (1963). Corporate Income Taxes and the Cost of Capital: A Correction. The American Economic Review, 53(3), 433-443.
32. Morgan, D. P., & Samolyk, K. (2003). Geographic Diversification in Banking and its Implications for Bank Portfolio Choice and Performance. Federal Reserve Bank of New York.
33. Pandya, M. A., & Rao, V. R. (1998). Diversification and Firm Performance: An Empirical Evaluation. Journal of Financial and Strategic Decisions, 11, 67-81.
34. Perry, P. (1992) 'Do banks gain or lose from inflation'. Journal of Retail Banking 14(2), 25-30.
35. Pyle, D. H. (1971). On the Theory of Financial Intermediation. The Journal of Finance, 26 (3), 737-747.
36. Scharfstein, D., & Stein, J. (2000). The Dark Side of Internal Capital Markets: Divisional Rent-Seeking and Inefficient Investment, Journal of Finance, 55(6), 2537–2564.
37. Schmid, M. M., & Walter, I. (2008). Geographic Diversification and Firm Value in the Financial Services Industry.
38. Sharfstein, D. S. (1998). The Dark Side of Internal Capital Markets II: Evidence from Diversified Conglomerates. NBER Working Paper No. 6352.
39. Shehzad, C. T., Haan, D. J., & Scholtens, B. (2013). The relationship between size, growth and profitability of commercial banks. Applied Economics, 45, 1751–1765.
40. Short, B. (1979). The relation between commercial bank profit rates and banking concentration in Canada, Western Europe and Japan. Journal of Banking and Finance, 3.
41. Smith, R., Staikouras, C., & Wood, G. (2003). Non-interest income and total income stability. Bank of England working papers, 198.
42. Stiroh, K. J. (2002). Diversification in Banking: Is Noninterest Income the Answer? Staff report, Federal Reserve Bank of New York.
43. Strobel, F. (2010). Bank insolvency risk and aggregate Z-score measures: a caveat. Economics Bulletin, 30(4), 2576-2578.
44. Tan, Y., & Floros, C. (2012). Bank profitability and GDP growth in China: a note. Journal of Chinese Economic and Business Studies, 10(3), 10:3, 267-273.
45. Templeton, W. K., & Severiens, J. T. (1992). The Effect of Nonbank Diversification on Bank Holding Company Risk. Quarterly Journal of Business and Economics, 31, 3-17

RELATIONSHIP BETWEEN FIRM RESOURCES AND SMALL FIRM GROWTH IN BANGLADESH

MD. MOSHARREF HOSSAIN
RESEARCH SCHOLAR, UNIVERSITI UTARA MALAYSIA, SINTOK, KEDAH; &
ASST. PROFESSOR
BANGLADESH INSTITUTE OF BANK MANAGEMENT
MIRPUR

YUSNIDAH IBRAHIM
PROFESSOR & DEAN
SCHOOL OF ECONOMICS, FINANCE & BANKING
COLLEGE OF BUSINESS
UNIVERSITI UTARA MALAYSIA
SINTOK, KEDAH

MD. MOHAN UDDIN
VISITING SR. LECTURER
SCHOOL OF ECONOMICS, FINANCE & BANKING
COLLEGE OF BUSINESS
UNIVERSITI UTARA MALAYSIA
SINTOK, KEDAH

ABSTRACT

The significant contributions of small enterprises towards the social and economic development have captured the attention of different stakeholders including national governments and some other international development organizations. Different concepts and theories of firm growth have been developed through the workings of diverse group of academicians and researchers although these are very fragmented and inconsistent. Still there is no single overarching model exists that can explain best about the growth matter for small firms. Hence, it is critically important to study on small firm growth and to identify the reasons that are associated with growth. As small businesses around the world do not have the same characteristics and their growth is multifaceted, it is quite difficult for researchers to conclude with a certain number of reasons. Studies in many countries focused on some specific factors and no comprehensive research on this issue is available to draw the conclusion. Therefore, the current study intends to propose a model to understand how different resources affect the growth of small firms operating in Bangladesh which will be tested empirically in future. From the proposed model it is assumed that the resources will enhance the growth of small firms and the government and private organization supports will enhance the relationship between these resources and small firm growth. It is expected that from the proposed model all the stakeholders will have at least the basic idea about the impact of these resources on small firm growth. This idea can be used for different policy initiatives and further development of small businesses.

KEYWORDS
Bangladesh, firm resources, small firm growth, government support, private organization support.

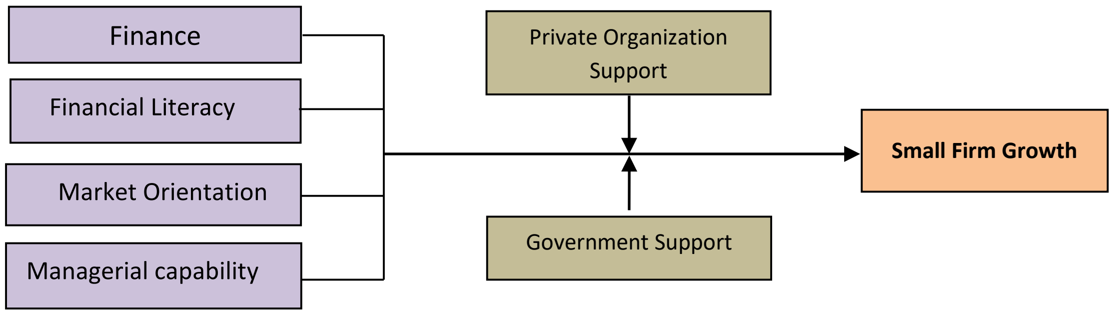
1. INTRODUCTION

The significant contributions of small enterprises towards the social and economic development have captured the attention of different stakeholders including national governments and some other international development organizations. Small Enterprises (SEs) play a very significant role in the developing economy in terms of sustainable growth, employment creation, development of entrepreneurship and contribution to export earnings (Mamun, Hossain & Mizan, 2013). They are more productive compared to the micro enterprises and large firms, to some extent, by driving employment and competition. Small businesses are important due to their geographic location and the inclusion of women entrepreneurs in the labour forces. They are also significant for the society for building social network, ensuring life standard of poor people, export earnings, reducing social unrest, creating new entrepreneurs, satisfying consumers' needs with competitive price, fulfilling the requirements of many large businesses etc.

Considering the significant contributions and potentialities of small businesses towards the economic development, researchers of many developed and developing countries have motivated to work on small firms' growth and its determinants for many years. Different concepts and theories of firm growth have been developed through the workings of diverse group of researchers although these are very fragmented and inconsistent. There is no specific theory to explain the small firm growth and the factors constraining or stimulating the growth (Olaore, 2014). Even there is no single overarching model exists that can explain best about the growth matter for small firms (Dobbs & Hamilton, 2007; Omar, Lim, & Basiruddin, 2014). Moreover, many researchers are confused why some small firms grow and others do not when they operate their activities in the similar situation (Tuck & Hamilton, 1993; Wiklund & Shepherd, 2003). The reality is that since firms can grow in different ways (for example, through expansion of sales or asset size, increasing employment and so on), the growth of a firm follows a multidimensional phenomenon and these various forms of growth may have different determinants and effects (Delmar, Davidsson, & Gartner, 2003).

Looking back to the earliest contributions towards firm's growth, it is observed that the prominent researchers Penrose (1959) and Barney (1991) considered firm as a collection of bundle of resources which provide the means to take some advantages and offer opportunities to grow. These resources are related to the internal and external environments which influence small firms' growth. According to Barber, Metcalfe, and Porteous (1989) some of these factors are external to the firm where they operate and which cannot be altered but many of the factors are internal which generated from the inherent characteristics of a firm and its manager. Therefore, the major objective of the study is to propose a model to understand how different resources affect the growth of small firms operating in Bangladesh and will suggest a roadmap for the stakeholders, financial institutions to the large extend, for formulating and implementing their policies and strategies to boost up the small firm's growth in future. Figure 1 shows the integrated model that will be empirically tested in future.

FIGURE 1: PROPOSED RESEARCH FRAMEWORK



2. RESEARCH DESIGN

The study will employ a quantitative research approach and the structured questionnaire will be used as the research instrument. A cross-sectional analysis will be done as data will be collected for a specific point in time. The target populations of the study are the small businesses operating in Bangladesh. The study will include three broad sectors of small businesses namely, manufacturing, trading and service sectors operating in three divisions (it is evident that most of the small businesses are located in Dhaka, the capital city; Chittagong, the commercial hub and Rajshahi divisions) of Bangladesh. According to Economic Census 2013 of Bangladesh Bureau of Statistics (BBS) there are 859,318 small firms operating in Bangladesh. Out of total number, 598,645 small firms are located in three selected divisions. But, there is no comprehensive list or addresses of these small firms. Hence, based on the Krejcie and Morgan (1970) table 384 small businesses are selected as the sample size. Since the focus of the study is the growth of small firm, the unit of analysis is small firms operating in Bangladesh. The owner will be interviewed (managers will be considered where owners are absent from their businesses operation) for collecting data.

The variable finance will be measured by 11 items adapted from the study of Shariff and Peou (2008) and modified some items as per the contextual requirement. Two items will be deleted and another two items will be added from the study of Federico et al. (2012). The financial literacy will be measured through 10 questions adapted from Lusardi and Mitchell (2007). Market orientation strategy will be measured by 12 items adapted from Suliyanto and Rahab (2012) and managerial capability from two dimensions with 18 items from Bourne and Franco-Santos (2010). The government support have 9 items adapted from Indarti and Langenberg (2004); Yusuf (1995); Hansen et al. (2009); Rashid (2012); Abdullah (1999); Hung et al. (2011) and private organization support has two dimensions and 8 items from Indarti and Langenberg (2004), Geringer et al. (2002) and Chen (2003). Finally, the growth of small firm will be measured by seven growth indicators (both financial and non-financial) adapted from Wickham (2006), Arrighetti (1994), Federico et al. (2012) and Ahmad et al. (2011).

3. FIRM RESOURCES

In general, firm of any size use different resources to support its start-up, operations, growth and survival. The resources which influence firm growth or performance can be distinguished as internal (financial capital, management capacity, knowledge and skills, physical resources, technological, etc.) and external (market condition, institutional arrangements, etc.) resources (Buckley, 1989). According to the theory of *Resource Based View*, the bundle of resources firms have directly and indirectly affects firm's performance and growth by generating competitive advantages. Barney (1991), defines the resources concept of an organization as all kinds of assets, different capabilities, organizational processes, business attributes, information, strategies, education and knowledge, etc. Based on the concept of RBV, the proposed model uses various resources namely, finance, financial literacy of owner-manager, market orientation strategy and the managerial capability as independent variables and will test their impact on the growth of small firm operating in Bangladesh.

3.1 FINANCE

Irrespective of the size, all the firms either large or small require financial resources for fulfilling business start-up needs, funding investment and to facilitate the operation, expansion and growth potential. According to RBV, financial resources are the most significant resources for growth and performance of small business (Wiklund, Patzelt, & Shepherd, 2009). This resource includes the ability of the firm to generate internal funds and the capacity to borrow from external sources, as well as other financing mechanisms that include cash balances, supplier credit, advance receipts, venture capital, leasing, factoring, etc. Different theories and approaches describe the financial behaviour of small firms differently but the general agreement suggest that all over the world small firms face constraints of financial resources and the internal and external financing has great implication on small firm growth and performance.

3.2 FINANCIAL LITERACY OF OWNER-MANAGER

Financial literacy can be defined as the ability of a person to manage the financial resources effectively. More specifically, financial literacy is the bundle of skills and knowledge of a person by which he/she can make any informed financial decisions. Due to the complexity in the business finance arena, owner-manager of small businesses is confronted with complex financial decisions in order to operate their businesses. Financial literacy therefore becomes very urgent for them for making financing decisions. However, empirical studies reveal that in most of the advanced and developing economies, the level of financial literacy is very low and only a few people understand the basic financial concepts (Cole, Sampson, & Zia, 2009; Lusardi & Tufano, 2009). Due to the less attention to develop financial literacy, this situation creates a significant challenge for the owner-managers of small firms to achieve their businesses performance.

3.3 MARKET ORIENTATION STRATEGY

Market orientation can be defined as the strategy of a firm by which it discovers and meets the needs and expectations of its customers with the product mix. The previous marketing strategies focused on selling existing products through establishing the selling points. However, the concept of market orientation is exactly the opposite, and it attempts to design and produce products according to the demand of customers. The market orientation concept has been identified as one of the important issues for the organizational performance. Many of the earlier studies (Kotler & Levy, 1969; Lawton & Parasuraman, 1980; Levitt, 1960; McNamara, 1972) argue that the primary purpose of almost every organization is to serve according to the needs of their customers to satisfy them as like to their daily management routines. Day by day this concept became popular and used as the marketing concept (McNamara, 1972), which has subsequently been used to represent market orientation (Ghani & Mahmood, 2011). This model also argues that firm can ensure customer satisfaction through fulfillment of their needs, wants and aspirations in order to achieve its success.

3.4 MANAGERIAL CAPABILITY

According to Makadok (2001), capability is a special type of resource which is firm-specific and non-transferable, the primary aim of which is to enhance the productivity of other resources. Hence, managerial capability is one kind of resources and can be defined as the set of skills and abilities of a manager (Castanias & Helfat, 2001). These kinds of skills and abilities are required for an individual to carry administrative and operational functions of a firm. For SEs, managerial capability generally means the relevant capability of the owner-manager to acquire necessary resources, proper utilization and management of those resources in order to achieve the goal of the firm. Most of the problems of SMEs that are related to the marketing, finance, operations, production, distribution, personnel management, quality control, Bookkeeping, etc., are essentially the managerial problems. Therefore, by developing the capabilities that are required to enhance managerial effectiveness, owner-managers may avoid or minimize the negative impact of such problems on firm survival.

4. SMALL FIRM GROWTH

There are many variables to measure the growth of a firm. Ardishvili, Cardozo, Harmon, and Vadakath (1998) and Delmar (2006) identify many possible and almost identical growth indicators such as sales, assets, market share, employment, profits or income, and physical output through rigorous literature review. Since every growth measure has some advantages and disadvantages, no single measure can be thought as the best one for firm growth (Davidsson, 1989). The fundamental characteristic of the small firms is the heterogeneity in nature implying that all the firms in different categories and clusters do not grow in the same way and can vary significantly over time. Thus, the growth of small firms is not uni-dimensional rather it is a multidimensional phenomenon. For various groups of small business, it is advantages to use multiple measures to uncover different empirical relationships. Some prominent researchers' advised composite measures using different indicators (Davidsson, 1989; Delmar, 2006). Therefore, a different form of measure and method for firm's growth is important for better understanding of the firm growth process (Delmar et al., 2003). The study uses sales, profit, capital asset size, market share and employment to measure the growth of small firm.

5. GOVERNMENT AND PRIVATE ORGANIZATION SUPPORT

The study uses government and private organization support as the moderating variables with the expectation that these two variables will moderate the relationships between firm resources and small firm growth. In any country either developed or developing, government play a pivotal role for developing the SME sector (Handoko et al., 2014) as this sector has been recognised as one of the main drivers for economic development. Baum and Locke (2004) argue that the success of the entrepreneurship business primarily depends on the role that any government plays for developing the business. However, it is recognized that small businesses all over the world lack access to finance and other supportive help from the formal sector. Therefore, it is a major concern for the government to develop and support the small businesses for the economic development of the respective countries (Vargas-Hernández, 2012).

Government of every country, especially in developing country, has been undertaken different initiatives, policies and programs for supporting small enterprises. However, it is quite difficult for the government to provide every kind of support in order to address their heterogeneous needs for certain number of reasons. First of all, this sector is very heterogeneous and their needs and expectations are also multifaceted. Secondly, the sector is much unorganized and each and every firm may has some unique problems. Thirdly, the sector is very sensitive with the change in environment and so forth. In these consequences, beside the government they need some supports from other private supporting institutions. Realizing the importance of such support, along with the government initiatives some other private organizations (for example, MIDAS, some private commercial banks, NBFIs, NGOs, Jubo Unnoyan, FBCCI, WECCI, NASCIB, and others) in Bangladesh provide different financial and non-financial supports to small enterprises for strengthening the SME sectors.

6. PROPOSITION DEVELOPMENT

6.1 FINANCE AND SMALL FIRM GROWTH

In every country it is the common problem for the small firm to have better access in formal finance and therefore the lack of such resources hider their normal business operation and growth. Access to finance facilitates small businesses to enter into the market, to generate growth, reduce the riskiness of the firms, and help innovation and to capture opportunities for future growth. From the start-up to the maturity, in all stages firms need financial resources in order to generate other resources to facilitate growth. Different theories and approaches describe the financial behaviour of small firms differently but the general agreement suggest that all over the world small firms face constraints of financial resources and the internal and external financing has great implication on small firm growth and performance. Therefore, the study expects that if small firms can have better access to finance according to the business requirements, it will enhance the growth of their businesses.

Proposition 1: There is a significant positive relationship between finance and small firm growth.

6.2 FINANCIAL LITERACY AND SMALL FIRM GROWTH

In order to manage the financial activities, proper investment and dealing with the external financial environment, financial literacy of the owner-manager is the precondition. For small businesses, generally the owner-manager starts the business and accepts all the responsibilities for the operations of the firm. Therefore, the performance or growth of the firm mainly depends on the qualities of the owner-manager and how they utilize their abilities to the success. The owner-managers are the important resources for the small firm who make plan, use other resources and take all kinds of decisions including the financial and investment decision as well as carry out the functional activities of their business; all of which ultimately affect the growth of the business. Lack of proper financial literacy results the poor financial access and management Thus, if the owner-manager can gain sufficient amount of financial skills and knowledge, it will help them to take proper short and long term decision regarding financial resources which ultimately gear-up their businesses growth or performance.

Proposition 2: The financial literacy of the owner-manager is significantly positively related to the growth of small business***.***

6.3 MARKET ORIENTATION STRATEGY AND SMALL FIRM GROWTH

The success of any firm largely depends on how successfully firm can sell its products and services according to the needs and desires of customers. Small businesses operate their businesses with relatively small investment and their future growth and survival mostly depends on readily available market and easy access. Many of the researchers and policy makers consider market orientation as one of the important business strategies for the success of any business (Deng & Dart, 1994; Kohli & Jaworski, 1990; Narver & Slater, 1990). Through the market orientation strategy, firm attempts to design and produce products according to the demand of customers that ultimately achieve the comparative advantages to growth and survive. market oriented firm identify the needs, wants and preferences of customers, try to provide products and services according to their needs which subsequently enhance the satisfaction levels of the customers and therefore increase firm performance. Thus, it is expected that implementing the market orientation strategy, small firm can improve their business growth or performance

Proposition 3: Market orientation strategy is significantly positively related to the small firm growth.

6.4 MANAGERIAL CAPABILITY AND SMALL FIRM GROWTH

Managerial Capability that derived from the set of knowledge, skills and competencies is highly require for an individual to carry administrative and operational functions of a firm. This is a special type of resource which is firm-specific and non-transferable, using by this firm can enhances the productivity of other resources Makadok (2001). It is assuming that the owner of the SME who has entrepreneurial spirit and possess a good set of management capabilities can effectively coordinate all kinds of resources to achieve efficient results. On the other hand, lack of managerial capabilities mostly hinders the operations of the business and its performance. However, researchers argue that, small firm owner-managers in both developed and developing countries lack managerial knowledge and skills (Jayne, 2007; Matlay, Redmond & Walker, 2008; Walker & Webster, 2006) that jeopardise their potentiality of growth. Therefore, it is expected that with other resources, the managerial capability of owner-manager can effectively organize and manage the business in order to generate the growth or performance of the small firm

Proposition 4: There is a strong positive relationship between Managerial capability and small firm growth.

6.5 THE MODERATING EFFECT OF GOVERNMENT SUPPORT

It is recognized that small businesses all over the world lack access to finance and other supportive help from the formal sector. Due to their characteristics of smallness and larger number, they deserve more help from the government sector for developing themselves and subsequently to contribute to the economy. According to Lütkenhorst (2006), the success of SME sector is highly linked to how the government support the business through developing the policies and programmes and creating conducive environment for the survival of the firms. From the literature it is clear that proper and adequate supports from the government which are the requirements of small businesses facilitate the growth or performance. On the other hand, the lack of such supports are highly impedes the growth or performance of small firms (Islam, 2009; Mashenene & Rumanyika, 2014; Olawale & Garwe, 2010). It is expected that if the government design good policy initiatives with a package of support, provide infrastructures facilities and also ensure the regulatory, legal and conducive environment, this variable will enhance the relationship between firm resources and small firm growth.

Proposition 5: Government support significantly moderates the relationship between firm resources (included in the proposed model) and small business growth.

6.6 THE MODERATING EFFECT OF PRIVATE ORGANIZATION SUPPORT

It is quite difficult for any government to provide every kind of support in order to address the heterogeneous needs of small firms. Since, the sector is unorganized with higher environmental sensitivity and consists a large group of enterprises with multifaceted needs, government alone cannot fulfil their needs with the policies and packages of support services. As a consequence, private organizations may solve the SEs problems as they have some expertise, skills and abilities to offer different support services for developing the SE sector of any country. Therefore, the study assumes that if the private organizations provide required support to the small business with affordable cost and make them aware, these will enhance the relationship between the resources and small firm growth.

Proposition 6: Private organization support significantly moderates the relationship between firm resources (included in the proposed model) and small business growth.

7. CONCLUSION

Throughout the world there is a consensus that the development of the economy and the society as well as the reduction of poverty depend on the high rates of economic growth. The rate at which the economies grow is generally determined by the trade and investment, government support in terms of finances and ensuring conducive environment, and institutional arrangement. Among all the economic players, small and medium enterprises, by number, dominate the whole world business segment. Therefore, by developing the small business sector through its expansion and growth, any country can ensure its economic growth. However, the growth of small business is multifaceted and a set of factors affect its growth. Therefore, the current study intends to propose a model to understand how different resources affect the growth of small firms operating in Bangladesh which will be tested empirically in future. It is expected that from the proposed model all the stakeholders will have at least the basic idea about the impact of these resources on small firm growth.

REFERENCES

1. Abdullah, S. H., (1999), "Management in Malaysia: A basic text on general management with local references to management a Malaysian business." Kuala Lumpur: Malaysian Institute of Management.
2. Ardishvili, A., Cardozo, S., Harmon, S., & Vadakath, S. (1998), "Towards a theory of new venture growth" Paper presented at the Babson entrepreneurship research conference, Ghent, Belgium.
3. Arrighetti, A. (1994), "Entry, growth and survival of manufacturing firms," Small Business Economics, Vol. 6, No. 2, pp 127-137.
4. Barber, J., Metcalfe, J. S., & Porteous, M. (1989), "*Barriers to growth in small firms."* Routledge.
5. Barney, J. (1991), "Firm resources and sustained competitive advantage," *Journal of management,* Vol. 17, No. 1, pp 99-120.
6. Baum, J. R., & Locke, E. A. (2004), "The relationship of entrepreneurial traits, skill, and motivation to subsequent venture growth," *Journal of applied psychology, Vol. 89, No.* 4, pp. 587.
7. Berger, A. N., & Udell, G. F. (1993), "Lines of credit, collateral, and relationship lending in small firm finance: Board of Governors of the Federal Reserve System (US)".
8. Boardman, C. M., Bartley, J. W., & Ratliff, R. L. (1981), "Small business growth characteristics," *American Journal of Small Business, Vol. 5, No.* 3, pp 33-45.
9. Bourne, M., & Franco-Santos, M. (2010), "Investors in People, managerial capabilities and performance", The centre for business performance, cranfield school of management.
10. Buckley, P. J. (1989), "Foreign direct investment by small and medium sized enterprises: The theoretical background," *Small Business Economics,* Vol. 1, No. 2, pp. 89-100.
11. Castanias, R. P., & Helfat, C. E. (2001), "The managerial rents model: Theory and empirical analysis," *Journal of management,* Vol. 27, No. 6, pp. 661-678.
12. Chen, H.-C. (2003), "*Cross-cultural construct validation of the learning transfer system inventory in Taiwan."* Marshall University.
13. Cole, S., Sampson, T., & Zia, B. (2009), "Financial literacy, financial decisions, and the demand for financial services: Evidence from India and Indonesia," Harvard Business School: Working Paper 09-117.
14. Davidsson, P. (1989), "Entrepreneurship and small firm growth." *Stockholm: The Economic Research Institute (diss.)*.
15. Delmar, F. (2006), "Measuring growth: methodological considerations and empirical results," *Entrepreneurship and the Growth of Firms,* Vol. 1, pp. 62-84.
16. Delmar, F., Davidsson, P., & Gartner, W. B. (2003), "Arriving at the high-growth firm," *Journal of business venturing,* Vol. 18, No. 2, pp. 189-216.
17. Deng, S., & Dart, J. (1994), "Measuring market orientation: a multi-factor, multi-item approach," *Journal of marketing management,* Vol. 10, No. 8, pp. 725-742.
18. Dobbs, M., & Hamilton, R. (2007), "Small business growth: recent evidence and new directions," *International journal of entrepreneurial behavior & research,* Vol. 13, No. 5, pp. 296-322.
19. Federico, J., Rabetino, R., & Kantis, H. (2012), "Comparing young SMEs' growth determinants across regions," *Journal of Small Business and Enterprise Development,* Vol. 19, No. 4, pp. 575-588.
20. Geringer, J. M., Frayne, C. A., & Milliman, J. F. (2002), "In search of 'best practices' in international human resource management: Research design and methodology," *Human resource management,* Vol. 41, No. 1, pp. 5-30.
21. Ghani, U., & Mahmood, Z. (2011), "Factors influencing performance of Microfinance firms in Pakistan: Focus on market orientation," *International Journal of Academic Research,* Vol. 3, No. 5, pp. 125-132.
22. Handoko, F., Smith, A., & Burvill, C. (2014), "The role of government, universities, and businesses in advancing technology for SMEs' innovativeness," *Journal of Chinese Economic and Business Studies,* Vol. 12, No. 2, pp. 171-180.
23. Hansen, H., Rand, J., & Tarp, F. (2009), "Enterprise growth and survival in Vietnam: does government support matter?" *The Journal of Development Studies,* Vol. 45, No. 7, pp. 1048-1069.
24. Hung, D. K. M., Effendi, A. A., Talib, L. S. A., & Rani, N. A. B. A. (2011), "A preliminary study of top SMEs in Malaysia: key success factor vs government support program," *Journal of Global Business and Economics,* Vol. 2, No. 1, pp. 48-58.
25. Indarti, N., & Langenberg, M. (2004), "Factors affecting business success among SMEs: Empirical evidences from Indonesia," *The Second Bi-annual European Summer University*.
26. Islam, M. S. (2009), "Start-up and growth constraints on small-scale trading in Bangladesh," *Journal of Chinese entrepreneurship,* Vol. 1, No. 3, pp. 227-239.
27. Islam, M. S. (2013), "Business Development Services and Small Business Growth in Bangladesh," *Universal Journal of Industrial and Business Management* Vol. 1, No. 2, pp. 54-61.
28. Jayne, V. (2007), "Lifting New Zealand performance: why the focus falls on management?" *New Zealand Management,* Vol. 54, No. 9, pp. 30-36.
29. Kohli, A. K., & Jaworski, B. J. (1990), "Market orientation: the construct, research propositions, and managerial implications," *The Journal of Marketing*, pp. 1-18.
30. Kotler, P., & Levy, S. J. (1969), "Broadening the concept of marketing," *The Journal of Marketing*, pp. 10-15.
31. Krejcie, R. V., & Morgan, D. W. (1970), "Determining sample size for research activities," *Educational and Psychological Measurement*.
32. Kyambalesa, H. (1994), "*Successful in managing a small business*." UK: Ashgate Publishing Ltd.
33. Lawton, L., & Parasuraman, A. (1980), "The impact of the marketing concept on new product planning," *The Journal of Marketing*, pp. 19-25.
34. Levitt, T. (1960), "Marketing myopia," *Harvard business review,* Vol. 38, No. 4, pp. 24-47.
35. Lusardi, A., & Mitchell, O. S. (2007), "Financial literacy and retirement planning: New evidence from the Rand American Life Panel," *Michigan Retirement Research Center Research Paper No. WP, 157*.
36. Lusardi, A., & Tufano, P. (2009), "Debt literacy, financial experiences, and overindebtedness: National Bureau of Economic Research.
37. Lütkenhorst, W. (2006), "*Private sector development: The support programmes of the small and medium enterprises branch*: UNIDO.

38. Makadok, R. (2001), "Toward a Synthesis of the Resource-Based View and Dynamic-Capability Views of Rent Creation," *Strategic management journal,* Vol. 22, No. 5, pp. 387-401.
39. Mamun, A. A., Hossain, M. M., & Mizan, A. N. K. (2013), *"SME Financing: Demand Side Problems and Supply Side Responses*." (Research Monograph No 3). BIBM, Dhaka.
40. Mannan, M. A. (1993), "*Growth and development of small enterprise: the case of Bangladesh*." UK: Ashgate Publishing Co.
41. Mashenene, R. G., & Rumanyika, J. (2014), "Business Constraints and Potential Growth of Small and Medium Enterprises in Tanzania: A Review," *European Journal of Business and Management,* Vol. 6, No. 32, pp. 72-79.
42. Matlay, H., Redmond, J., & Walker, E. A. (2008), "A new approach to small business training: community based education," *Education+ Training,* Vol. 50, No. 8/9, pp. 697-712.
43. McNamara, C. P. (1972), "The present status of the marketing concept," *The Journal of Marketing*, pp. 50-57.
44. Narver, J. C., & Slater, S. F. (1990), "The effect of a market orientation on business profitability," *The Journal of Marketing*, pp. 20-35.
45. Olaore, R. A. (2014), "Challenges in Managing Entrepreneurial Small Firm's Growth and Transition in Nigeria," *Historical Research Letter, Vol. 9*, pp. 13-17.
46. Olawale, F., & Garwe, D. (2010), "Obstacles to the growth of new SMEs in South Africa: A principal component analysis approach," *African Journal of Business Management,* Vol. 4, No. 5, pp. 729-738.
47. Omar, R., Lim, K. Y., & Basiruddin, R. (2014), "Board of Directors and Small Medium Enterprise's Firm Growth with Firm Culture as Moderating Factor in Malaysia," *Procedia-Social and Behavioral Sciences, Vol. 164*, pp. 315-323.
48. Penrose, E. T. (1959), "*The Theory of the Growth of the Firm*." New York: Oxford University Press.
49. Rashid, M. M. (2012), "Proposed research direction for sustainable SMEs in Bangladesh," *Bangladesh Research Publication,* Vol. 2, No. 2, pp. 1-10.
50. Stanworth, M. J. K., & Gray, C. (1991), "*Bolton 20 Years On, Small Business Research Trust*." London: Paul Chapman Publishing Ltd.
51. Teo, S., & Cheong, S. (1994), "Difficulty faced by SMEs in Obtaining financing from financial institutions," *Journal of Enterprising Culture,* Vol. 2, No. 4, pp. 955-968.
52. Tuck, P., & Hamilton, R. (1993), "Intra-industry size differences in founder-controlled firms," *International Small Business Journal,* Vol. 12, No. 1, pp. 12-22.
53. Vargas-Hernández, J. G. (2012), "Sustainable cultural and heritage tourism in regional development of Southern Jalisco," *World Journal of Entrepreneurship, Management and Sustainable Development,* Vol. 8, No. 2/3, pp. 146-161.
54. Walker, E., & Webster, B. (2006), "Management competencies of women business owners," *The International Entrepreneurship and Management Journal,* Vol. 2, No. 4, pp. 495-508.
55. Wickham, P. A. (2006), "*Strategic entrepreneurship* (4th ed.)" Pearson Education.
56. Wiklund, J., & Shepherd, D. (2003), "Aspiring for, and achieving growth: the moderating role of resources and opportunities," *Journal of management studies,* Vol. 40, No. 8, pp. 1919-1941.
57. Wiklund, J., Patzelt, H., & Shepherd, D. A. (2009), "Building an integrative model of small business growth," *Small Business Economics,* Vol. 32, No. 4, pp. 351-374.
58. Yusuf, A. (1995), "Critical success factors for small business: perceptions of South Pacific entrepreneurs," *Journal of Small Business Management, Vol. 33*, pp. 2-68.

INNOVATION NETWORK IN TAIWAN TELECOMMUNICATION INDUSTRY BASED UPON SOCIAL NETWORK PERSPECTIVE

CHUN-YAO TSENG
PROFESSOR
DEPARTMENT OF BUSINESS ADMINISTRATION
TUNGHAI UNIVERSITY
TAIWAN

TZU-LIN CHIANG
DEVELOPMENT & QUALITY ENGINEER
JUILI ENTERPRISE
TAIWAN

ABSTRACT
This study uses social network perspective to investigate the innovation network of the telecommunication industry in Taiwan. Moreover, this study attempts to understand and explains the relative position and the invention relationship among Taiwan's telecommunication innovation network, and discusses Taiwan's tele-communication industry in the structural characteristics. Based on patent and citation analysis from USPTO data, this study investigates innovation network in Taiwan telecommunication industry from 1979 to 2008. This study uses three network centrality indicators (degree centrality, betweenness centrality, and closeness centrality) to elevate innovation network in Taiwan's telecommunication industry. Additionally, this study employs neighbor analysis to investigate connection in sub-group. The study found the relative position of individual in innovation network would influence the innovation information obtained. The result revealed that it has no critical inventor in innovation network, but has a lot of small and less linkage groups in one. There are many strong ties relationships, but less weak ties relationships in innovation network of Taiwan communication industry. According to Granovetter's (1973) weak tie theory, it should encourage creating more innovation with weak ties in Taiwan telecommunication industry.

KEYWORDS
innovation network, social network, telecommunication industry, weak tie, patent citation.

INTRODUCTION
Because innovation is the dominating resource in the knowledge-based economy, effective management of knowledge and innovation thus has become a key to corporate success, technology progress and economic development (Babco, 2004). Many studies found that the ability to establish effective relationships in innovation network for developing organizational innovative capacity. Innovation network is defined as the linkages between organizations or individuals, in order to create, capture and integrate the different knowledge needed to develop technologies. In Taiwan, the high-tech firms cooperate mutually from the beginning of the invention input to the end of innovation product, and they build an innovation network with a tight relationship. Firms create innovations and protect them through patent application. In innovation network, members connect with each others and share information. Moreover, inventors might utilize innovation network to create new inventions and patents. To understand the relationship of the innovation network, this study would investigate the relationship between patent inventors in Taiwan telecommunication industry.

REVIEW OF LITERATURE AND OBJECTIVE OF THE STUDY
Social network perspective utilizes "relationship" to be a tool to evaluate the status of members (Garton, Hyaythornthwaite, and Wellman, 1997) and understand how the network influences each other (Scott, 1991; Waeeerman & Faust, 1994). Innovation network, taking a view of social network perspective, likes a social network and owes various connections with others behind it. Social network analysis provides a viewable system to analyze the connection of a network (Beaucage and Beaudry, 2006). In generally, networks have five kind of special characteristics: size, heterogeneity, density, linking, and overlapping. There are three basic elements in network, including actors, relationship among actors, and the connection among actors. To take an actor as a node, and the relationship among actors as lines, and then it forms a social network (Granovetter, 1973). An actor could be one person (Wellman, 1996; Wellman et al., 1997), an organization, a company, a unit or an event (Laumann and Knoke, 1990). An actor might be shown in several networks, and play a different kind of roles at the same time. The different roles of an actor could induce the connection effect with others. With a social network perspective, it points up the critical actor in the social network by illustrating map. According to this, it could know the most critical strategy role. Freeman (1979) pointed out that there is three indicators to elevate the criticality of an actor, including degree centrality, betweenness centrality, and closeness centrality. From three network centralities, we could find out "the star" of the network. The star is center point, and lot of connection link to the star or around. For example, a giant social network must have a center point, and this point owns the important strategy power in the whole network. For the whole network, the center point is the highlight and the whole network would all focus on it. Restated, this study uses social network perspective to investigate the innovation network of the telecommunication industry in Taiwan. Moreover, this study tries to understand and explains the relative position and the invention relationship among Taiwan's telecommunication innovation network, and discusses Taiwan's telecommunication industry in the structural characteristics

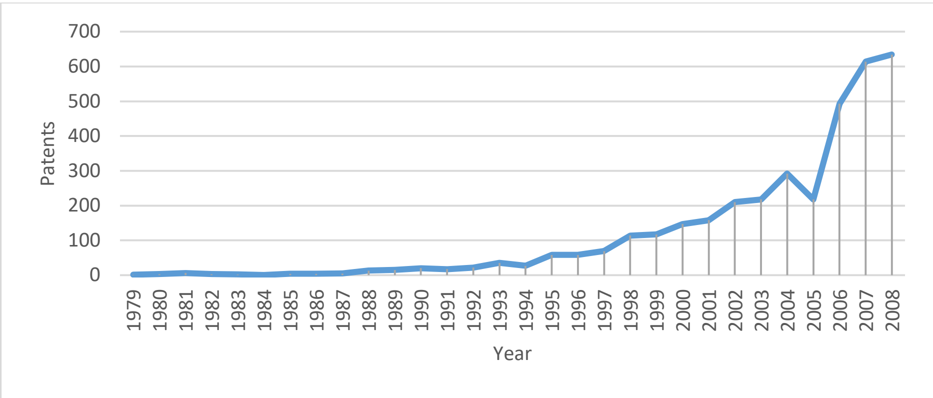
RESEARCH METHODOLOGY
Patents contain references to relevant prior art, including other patents. These references are called citations. Backward citations of a central patent are the references cited by the central patent. Forward citations of a central patent are the patents that refer to the central patent. A citation network consists of patents as nodes and citation relationships between them as links. The nodes and links form a network or graph. This study investigates innovation network of Taiwan communication industry based on citation network, and it was formed by citing patents and cited patents (Stuard & Podolny, 1996; Lai & Wang, 2009). With a social network perspective, it appears the relationship among the patent or innovation information. In addition, we also could realize the degree of citation and the relative status. This study employed Netminer software to build up an innovation network and analyzes the connection of it.

Patents and citation data set used in this study are collected from the patent pilot database which based on the U.S. Patents and Trademark Office (USPTO). Due to the classification of International Patent Classification (IPC) set up by WIPO (World Intellectual Property Organization), it could show a clear filed of an industry in code. Each patent application is assigned by patent examiners to one main technology code and one (or more) secondary technology codes. This study adopted a technology-oriented classification by Breschi et al. (2003), telecommunication related technologies belong to 19 different sub-patent categories: H03b, H3c, H03d, H03h, H03k, H03l, H03m, G08b, H01p, H01q, H04b, H04h, H04j, H04k, H04l, H04n1, H04n7, H04n11, and H04q. Based on patent and citation analysis from USPTO data, this study investigates innovation network in Taiwan telecommunication industry from 1979 to 2008.

ANALYSIS AND RESULTS

Figure 1 displays the patent count in Taiwan telecommunication industry from 1979 to 2008. It had a low level of patent count in ICT before the 2000 year, and it had increased incrementally over time after the 2005 year, peaking in 2008 year. The total patent count of Taiwan telecommunication industry is 3577 from 1979 to 2008.

FIGURE 1: PATENT COUNT IN TAIWAN TELECOMMUNICATION TECHNOLOGY DURING 1979-2008



To examine innovation network in Taiwan telecommunication industry, this study utilized patent inventor has at least 3 patents, and analyzed the relationship of their connection. This study found that it has 406 patent inventors and 692 connection lines. Based upon citation network analysis, innovation network in Taiwan telecommunication industry is shown as **Figure 2**.

From the innovation network, it could appear the core member by using evaluating the degree centrality (Krackhardt, 1993). In analysis of the whole innovation network, the result of in degree centralization index (InDegree) is 39.91%, and out degree centralization index (OutDegree) is 35.455%. It means that in this network it is less similar to Star-shaped, and the network has no critical patent highly connected with others (Krackhardt, 1993). (**FIGURE 3 and 4**). In analysis of individual inventors, results from analyzing the degree of centrality, we obtained the minimum is 0, and the maximum is 0.41. The inventors has the maximum degree centrality are Feng; Sheng, Lien; Jung-Cheun,Liu ; Tong. Therefore, in this innovation network of Taiwan telecommunication industry, these three investors stand at the critical status and have most powerful impact on their network.

FIGURE 2: INNOVATION NETWORK IN TAIWAN TELECOMMUNICATION TECHNOLOGY BASED UPON CITATION NETWORK DURING 1979-2008

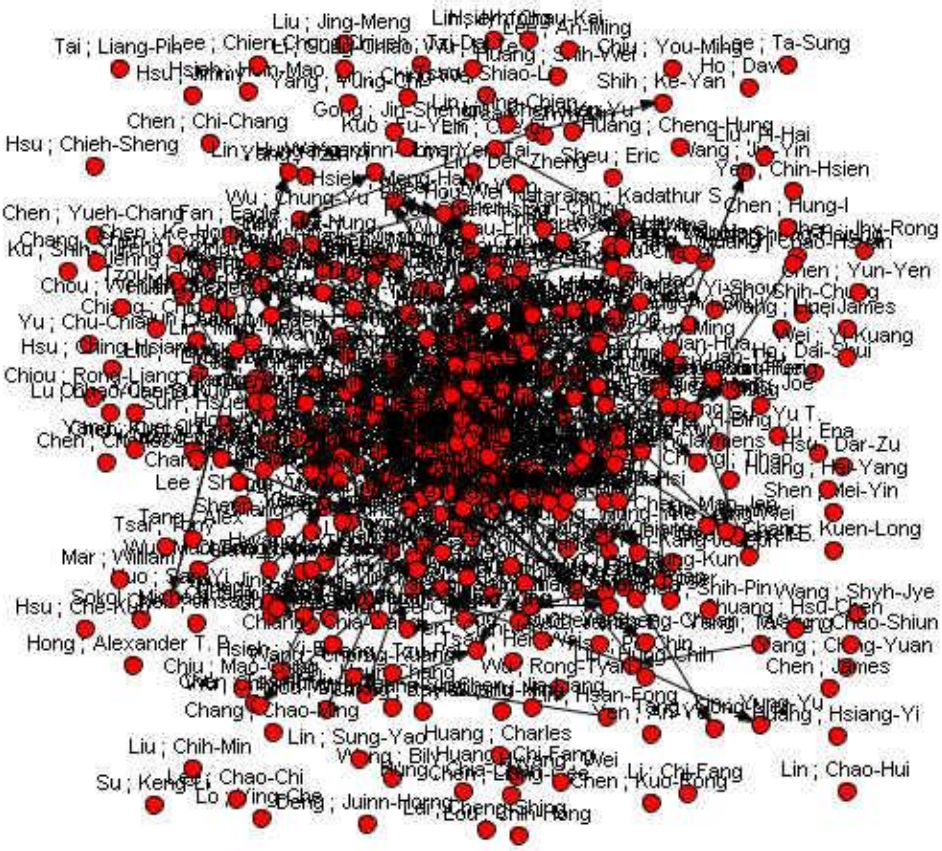


FIGURE 3: INDEGREE CENTRALITY IN INNOVATION NETWORK

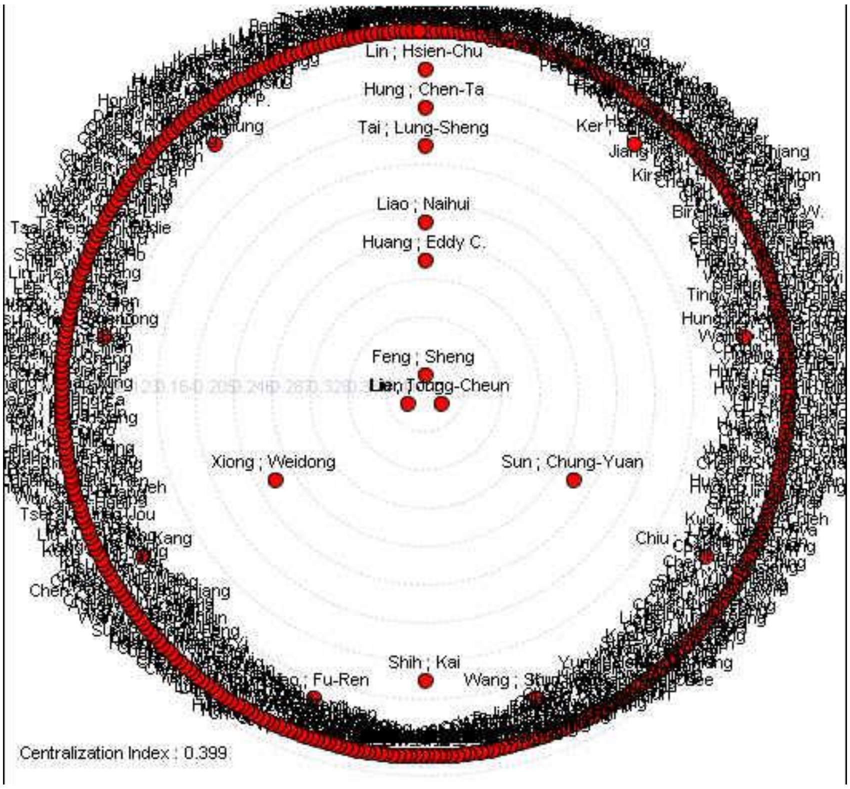
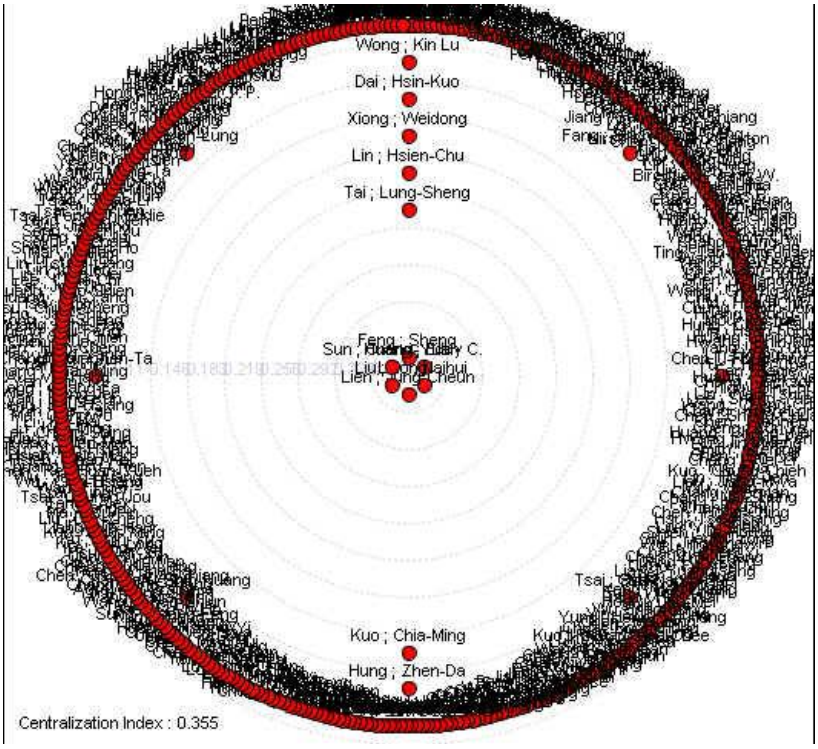


FIGURE 4: OUTDEGREE CENTRALITY IN INNOVATION NETWORK

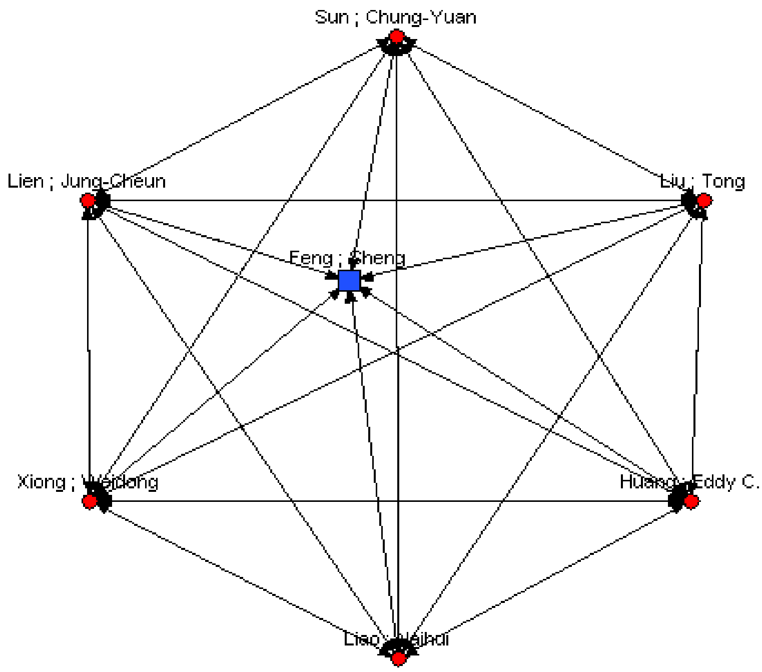


Closeness centrality is an indictor evaluated the shortest distant for a point to the others. The closeness centrality of Taiwan telecommunication innovation network could reveal the citing relationship with other inventors. In analysis of the whole network, results show the inCloseness is 10.321% and outCloseness is 12.971%. They are smaller than degree centralities. In analysis of individual inventors, Chiu; Tsung-Wen and Tseng; Kuo-Hua, has the maximum closeness centrality, and it means that these inventors are highly connected with others.

Betweenness centrality is a measure of the influence a node has over the spread of information through the network. In analysis of the whole network, results show the betweenness network node between central index is only 0.482%, and it is very low. In analysis of individual inventors, inventors with the maximum betweenness centrality are Chiu and Tsung-Wen. In other words, Chiu and Tsung-Wen play most intermediary role in the Taiwan telecommunication innovation network.

To discusses Taiwan's telecommunication industry in the structural characteristics, this study use neighbor analysis to investigate connection in sub-group. The study employed the inventor “Feng; Sheng” who citing 166 patents in Taiwan telecommunication industry as a research representative. Based upon the result of neighbor analysis, this study found that 7 inventors, including “Feng; Sheng”, are full conntected (**FIGURE 5**). In the illustration, every node has mutual connection with each other, that is, every inventor cites the patents of the other 6 inventor.

FIGURE 5: SUB-NETWORK WITH THE CENTER OF "FENG; SHENG"



Knowledge flows of innovation in ICT between India and China. Main knowledge sources of innovation in ICT between India and China are same from external knowledge inflow (99.65% and 97.65%). Both USA and Japan are main knowledge sources of innovation in India and China. France and Germany are third and fourth knowledge sources of innovation in India. In China, Taiwan and South Korea are found to be third and fourth knowledge sources of innovation in China. Top 10 countries of knowledge outflow for India and China are similar to results of knowledge inflow. India and China have high interrelationships with fully developed countries, but China has a higher level of knowledge spillover with Asia's newly industrialized countries (Taiwan, South Korea). On the other hand, knowledge inflows are more eight times than knowledge outflows in India and China. India and China are found to be knowledge accepters more than knowledge creators.

CONCLUSIONS AND DISCUSSION

Based on the social network analysis, this study examines the innovation network of Taiwan telecommunication industry from 1979 to 2008. The relative position of individual in the innovation network would influence the information which could acquire. For example, member in the center of network has most linkages with actors and stand a key position of knowledge flow. Though the linkages, it could acquire the most information and resource. Many researchers (Ibarra, 1993; Tsai, 2001) believed that the one who is closer to the center of network might touch the innovation knowledge and resource more. The study found the relative position of individual would influence the innovation information obtained.

In analysis of the whole innovation network, the mean of degree centrality, betweenness centrality, and closeness centrality are 0.012, 0, and 0.008. The three indicators of centrality are very low. It demonstrates little inventors can stand on the most core status in innovation network of Taiwan telecommunication industry, and the connection of this innovation network is less. There are so many inventors have no connection with others in the whole telecommunication industry network, but only a part of the inventors have higher degree of connection. In addition, with Neighbor analysis it found that 7 inventors are full conntected, and that cause a situation of Strong Ties. For small group analysis, we could realize members of the small group only tightly connected with the one from the same group and did not connected with other groups. In a word, there no core inventors in the innovation network of telecommunication industry, but there are a lot of small groups has less connections with outside. Granovetter (1973) commended that strong ties facilitate the connections and acts with other individual with similar traits, but weak ties help the communications with other different groups and promotes the transmission of information. We find there are many strong ties, but less weak ties in innovation network in Taiwan communication industry. According to Granovetter's (1973) weak tie theory, ties among members of a social group are likely to be strong. However, ties that reach outside the clique tend to be weak. It also posits that rich networking leads to more non-redundant sources of information, since non-redundant contacts offer information that is additional rather than just overlapping (Burt 1992). The weak ties actually are sources of more knowledge than are strong ties. For an innovation network, the more information it has, the better the knowledge creation promoted. Therefore, it should encourage creating more innovation with week ties in Taiwan telecommunication industry. The government should encourage inventors walking out of his small group, and enhance forming weak ties. Once the weak tie relationship is established well, telecommunication industry in Taiwan must be very powerful and competitively.

REFERENCES

1. Babco, E. (2004) *Skills for the Innovation Economy: What the 21st Century Workforce Needs and How to Provide It*. Washington, DC: Commission on Professionals in Science and Technology.
2. Beaucage, J.S. and Beaudry, C. (2006) *The importance of Knowledge Networks within Canadian Biotechnology Cluster*s, International Schumpeter Conference, Sophia-Antipolis.
3. Breschi, S., Lissoni, F. and Malerba, F. (2003). *Knowledge networks from patent citations? methodological issues and preliminary results.* DRUID summer conference 2003 on creating, sharing and transferring knowledge, the role of geography, institutions and organizations, Copenhagen 12-14
4. Burt, R.S. (1992). *Structural Holes: The Social Structure of Competition*, MA: Harvard University Press.
5. Freeman, L. C. (1979) 'Centrality in social network: I. Conceptual clarification', *Social Networks*, 1, pp.215-239.
6. Garton, L., Haythornthwaite, C. and Wellman, B. (1997). 'Studying Online Social Networks', *Journal of Computer-Medicated Communication*, 3(1).
7. Granovetter, M. (1973) 'The Strength of Weak Ties', *American Journal of Sociology*, 78(6), pp.1360-1380.
8. Herring, S.C., Scheidt, L.A., Bonus, S., and Wright, E. (2005) 'Weblogs as a bridging genre', *Information, Technology and People*, 18(2), pp.142-171.
9. Ibarra, H. (1993) 'Network centrality, power and innovation involvement: Determinants of technical and administrative roles', *Academy of Management Journal*, 36(3), pp.471-501.
10. Krackhardt, D. (1993) *Crisis in a Cluster: Simmelian Ties in Organizations*, International Social Networks Conference, Tampa, Florida, February.
11. Lai, K.K. and Weng C.S. (2009) 'The isomorphic development of insurance - the perspective of social network analysis', *International Journal of Services Technology and Management*, 12, pp.85-104.
12. Laumann, E.O. and Knoke, D. (1987) *Organization State: Social Choice in National Policy Domains*, Madison, WI: University of Madison Press.
13. Nonaka, I. and Takeuchi, H. (1995) *The knowledge-creating company: How Japanese Companies Create the Dynamics of Innovation*, Oxford University Press.

14. Scott, J. (2000) *Social Network Analysis: A Handbook*. Sage Publications, London, 2nd Ed.
15. Stuart, T.E., and Podolny, J.M. (1996) 'Local Search and the Evolution of Technological Capabilities', *Strategic Management Journal*, 17, pp.21-38.
16. Tsai, W. (2001) 'Knowledge Transfer in Intraorganizational Networks: Effects of Network Position and Absorptive Capacity on Business Unit Innovation and Performance', *Academy of Management Journal*, 44, pp.996-1004.
17. Wassermann, S., and Faust, K. (1994) *Social Network Analysis Methods and Applications*, Cambridge University Press, Cambridge.
18. Wellman, B. (1996) *For a Social Network Analysis of Computer Networks: A Sociological Perspective on Collaborative Work and Virtual Community*, ACM SIGCPR/SIGMIS conference, 1-11.
19. Wellman, B., Wng, R., Tindall, D. and Nazer, N. (1997) 'A Decade of Network Change: Turnover, Mobility and Stability', *Social Network*, 9, pp.27-50.

ADVENT OF THE RETAIL SECTOR IN INDIAN ECONOMY: A PERSPECTIVE ACROSS DECADE

SWATI SAXENA
RESEARCH SCHOLAR & ASST. PROFESSOR
SHRI CHIMANBHAI PATEL INSTITUTE OF MANAGEMENT AND RESEARCH
AHMEDABAD

DR. HUSEIN ABDULRAHIM HASAN
PRINCIPAL
SHREE SARVAJANIK COMMERCE COLLEGE
GODHRA

ABSTRACT
In the last decade investors are focusing attention on investing in emerging economies that are particularly high growth potential economies. The focus of retailers is on constructing a basket of markets with different market synergies. Indian retail sector offers the opportunities to the investors due to economic liberalization, political willingness, and demographic changes in the urban population. This paper is a part of a detailed study of the retail sector and emergence of formats of retailing that are been witnessed in India. This is an attempt to sensitize the recent growth and development in the sector within the past decade. It has been framed by fetching data for the growth of retail sector, formats, changing consumer preferences and ever evolving responses to consumers towards this dynamic sector in India. It is a secondary databased paper.

KEYWORDS
retail, growth of retail, retail formats, consumer behavior.

INDIAN RETAIL MARKET & SCENARIO
Indian economy has witnessed phenomenal growth during the last decade (2005 onwards) [1]. The country is among one of the fastest growing economies with an impressive average growth The real gross domestic product (GDP) stood at 6.9 percent in 2009-2010. The GDP growth for 2010-2011 is 7.1 percent. Growing at a compounded annual growth rate (CAGR) of 15 per cent overall retail market in India including both organized and unorganized sectors is likely to reach a whopping Rs 47 lakh crore by 2016-17 from the level of Rs 23 lakh crore recorded in 2011-12, according to a joint study by apex industry body ASSOCHAM and Yes bank.

[5]In the early decade, organized retail, constituted a meagre 7% cent of total retail in 2011-12 & is estimated to grow at a CAGR of 24 per cent and attain 10.2 per cent share of total retail by 2016-17In value terms the modern trade stores are expected to increase by 13% in 2013-19.

RETAIL MARKET SIZE IN INDIA
[6]India's retail market is expected to nearly double to us$ 1 trillion by 2020 from us$ 600 billion in 2015, driven by income growth, urbanization and attitudinal shifts. The number of super markets are expected to increase to 8500 by 2016.

The overall retail market is expected to grow at 12 per cent per annum, modern trade would expand twice as fast at 20 per cent per annum and traditional trade at 10 per cent.

Retail spending in the top seven Indian cities amounted to Rs 3.58 trillion (us$ 57.6 billion), with organized retail penetration at 19 per cent as of 2014. Online retail is expected to be at par with the physical stores in the next five years.

India is expected to become the world's fastest growing e-commerce market, driven by robust investment in the sector and rapid increase in the number of internet users. India's e-commerce market is estimated to expand to over us$ 100 billion by 2020 from us$ 3.5 billion in 2014.

LANDSCAPE OF RETAIL SPACE AND PENETRATION IN INDIA

FIGURE 1: KPMG, INDIAN RETAIL GROWTH STORY 2014, TECHSCI RESEARCH[SS1]

Figure 1 depicts the penetration of organized and unorganized retail sector of the Indian market of the year 2015. With only 5 % share of organized retail penetration in the year 2015, the growth of the sector is attributed to the various demographic changes in the composition of the population.

THE DRIVERS OF RETAIL GROWTH IN INDIA
[3] Indian market has high complexities in terms of a wide geographic spread and distinct consumer preferences varying by each region necessitating a need for localization even within the geographic zones. India has highest number of outlets per person (7 per thousand) Indian retail space per capita at 2 sq. ft. (0.19 m^2)/ person is lowest in the world Indian retail density of 6 percent is highest in the world. 1.8 million Households in India have an annual income of over ₹4.5 million (us$75,150.00).

While India presents a large market opportunity given the number and increasing purchasing power of consumers, there are significant challenges as well given that over 90% of trade is conducted through independent local stores. Challenges include: geographically dispersed population, small ticket sizes, complex distribution network, and little use of it systems, limitations of mass media and existence of counterfeit goods. A number of merger and acquisitions have begun in Indian retail market. PWC estimates the multi-brand retail market to grow to $220 billion by 2020.
Both organized and unorganized retail are bound not only to coexist but also achieve rapid and sustained growth future. The drivers for retail growth are favorable demographics, increasing urbanization, nuclearization of families, rising affluence amid consumers, growing preference for branded products, credit availability and higher aspirations for quality products, emergence of new categories are augmenting the retail market to the next level.
Along with the demand aspect the supply side of retail growth is being supported by expansion plans of existing players and the entry of new players various formats changes and evolution as well as due to rising number of tier-2 and tier-3 cities. These factors will further give rise to increasing supermarket space, which will finally lead to rise in number of larger formats in the retail sector. It is estimated that (2) by 2018 it is predicted that the Indian retail sector is bound to change at a CAGR of 13 per cent to fulfil us$ 950 billion.

REFORMS OVER THE LAST DECADE

- (2)India in 1997 allowed foreign direct investment (FDI) in cash and carry wholesale. Then, it required government approval. The approval requirement was relaxed, and automatic permission was granted in 2006.
- Between 2000 to 2010, Indian retail attracted about $1.8 billion in foreign direct investment, representing a very small 1.5% of total investment flow into India.
- Single brand retailing attracted 94 proposals between 2006 and 2010, of which 57 were approved and implemented. One of the primary restraint inhibiting better participation was that India required single brand retailers to limit their ownership in Indian outlets to 51%.
- The organized retail market in 2007 was growing at 35 percent annually while growth of unorganized retail sector was pegged at 6 percent.
- Organized retail is expected to garner about 16-18 percent of the total retail market (us$65–75 billion) up till 2013.
- In 2011 Indian retail market as generating sales of about $470 billion a year, of which a minuscule $27 billion comes from organized retail such as supermarkets, chain stores with centralized operations and shops in malls.
- 25% market share of the organized retail is the expected growth of Indian retail industry through 2021.
- The economist forecasts that Indian retail will nearly double in economic value, expanding by about $400 billion by 2020.

RETAIL REFORMS IN INDIA

(3) Until 2011, Indian central government denied foreign direct investment (FDI) in multi-brand Indian retail, forbidding foreign groups from any ownership in supermarkets, convenience stores or any retail outlets, to sell multiple products from different brands directly to Indian consumers.
The government of man Mohan Singh, prime minister, announced on 24 November 2011 the following:

- India will allow foreign groups to own up to 51 per cent in "multi-brand retailers", as supermarkets are known in India, in the most radical pro-liberalization reform passed by an Indian cabinet in years;
- single brand retailers, such as apple and ikea, can own 100 percent of their Indian stores, up from the previous cap of 51 percent;
- both multi-brand and single brand stores in India will have to source nearly a third of their goods from small and medium-sized Indian suppliers;
- All multi-brand and single brand stores in India must confine their operations to 53-odd cities with a population over one million, out of some 7935 towns and cities in India. it is expected that these stores will now have full access to over 200 million urban consumers in India;
- multi-brand retailers must have a minimum investment of us$100 million with at least half of the amount invested in back end infrastructure, including cold chains, refrigeration, transportation, packing, sorting and processing to considerably reduce the post-harvest losses and bring remunerative prices to farmers;
- The opening of retail competition will be within India's federal structure of government. In other words, the policy is an enabling legal framework for India. The states of India have the prerogative to accept it and implement it, or they can decide to not implement it if they so choose. Actual implementation of policy will be within the parameters of state laws and regulations.

According to a wall street journal article it was estimated that investments in Indian organized retail will generate 10 million new jobs between 2012–2014, and about five to six million of them in logistics alone. the retail market is being opened to just 53 cities out of about 8000 towns and cities in India, inspite of the fact that the Indian retail sector was opened up for demarcation between multi brand and single brand retailing segment.

SINGLE-BRAND RETAIL REFORMS.

(4) On 11 January 2012, India approved increased competition and innovation in single-brand retail. The reform was to attract investments in operations and marketing, improve the availability of goods for the consumer, encourage increased sourcing of goods from India, and enhance competitiveness of Indian enterprises through access to global designs, technologies and management practices. The reform proposed single-brand retailer, with greater than 51% foreign ownership, to source at least 30% of the value of products from Indian small industries, village and cottage industries, artisans and craftsmen. Major brands like Ikea postponed its paln to enter in India due to the sourcing crtiterion. The Indian retail industry in the single-brand segment has received foreign direct investment (FDI) equity inflows totaling us$ 275.4 million during April 2000–May 2015, according to the department of industrial policies and promotion (DIPP). While on 19 Feb. 2013 Tamil nadu became the first state in the country to stoutly resist MNC 'invasion' into the domestic retail sector. In Chennai, Tamilnadu CMDA authorities placed a seal on the massive warehouse spreading across 7 acres that had reportedly been built for one of the world's leading multinational retail giants, Wal-Mart.

ENLARGEMENT OF FORMATS OF RETAILING

The pioneering formats are adoptions of western formats that have brought about paradigm shift in the concept of shopping and shopper buying behavior from low price to convenience, value and superior shopping experiences (prasad and aryasri, 2011). India is going to become fifth largest consumer market from its present twelfth position and overtakes Germany to be behind the U.S. Japan, china and the UK. real consumption is estimated to grow. Modernization of traditional markets through public-private partnership (PPP), initiating uniform license regime applicable nationwide thereby doing away with numerous permits currently required for establishment of retail outlets, facilitating innovative banking solutions to ensure credit availability to unorganized retailers and farmers from financial institutions, stringent rules against collusion and predatory pricing and a code of conduct for organized retail sector for dealing with their suppliers, added the ASSOCHAM secretary general while listing major policy recommendations to spur growth in India's overall retail sector.
The store-based retailing has witnessed a CAGR of 7.6 per cent during 2011-16 and will grow by 44 per cent in absolute terms during this period. Within store-based retailing, grocery retailers are forecasted to grow at a CAGR of 8.9 per cent during 2011-16 and non-grocery retailers is expected to grow at six percent. Amid traditional grocery retailers, Kirana stores will continue to be the largest contributor to value share by 2016 and is likely to account for 61 per cent share. While, hypermarkets are likely to see rapid growth between 2011-16 registering a CAGR of 13.4 per cent-87.4 per cent in absolute terms. Modern grocery retailers as a whole would grow at a CAGR of 11.7 per cent between 2011-16 as compared to 8.2 per cent for traditional grocery retailers.

FUTURE SCENARIO OF RETAIL SECTOR IN INDIA

E-commerce is expanding steadily in the country. Customers have the ever increasing choice of products at the lowest rates. E-commerce is probably creating the biggest revolution in the retail industry, and this trend would continue in the years to come. Retailers should leverage the digital retail channels (e-commerce), which would enable them to spend less money on real estate while reaching out to more customers in tier-2 and tier-3 cities.

Both organized and unorganized retail companies have to work together to ensure better prospects for the overall retail industry, while generating new benefits for their customers.

Nevertheless, the long-term outlook for the industry is positive, supported by rising incomes, favorable demographics, entry of foreign players, and increasing urbanization.(4)

CONCLUSION

Acceptance and willingness to Implementation of GST is expected to enable easier movement of goods across the country, thereby improving retail operations for pan-India retailers. he modern retail market is expected to grow from USD 60 billion to USD 180 billion during FY15 - FY20. The government has approved a proposal to scrap the distinctions among different types of overseas investments by shifting to a single composite limit, which means portfolio investment up to 49 per cent will not require government approval nor will it have to comply with sectoral conditions as long as it does not result in a transfer of ownership and/or control of Indian entities to foreigners. As a result, foreign investments are expected to be increase, especially in the attractive retail sector. It accounts for over 10 per cent of the country's gross domestic product (GDP) and around 8 per cent of the employment. India is the world's fifth-largest global destination in the retail space. (7) About 51 per cent FDI in multi brand retail, FDI of up to 100 per cent in single brand retail and for cash and carry(wholesale) trading and exports, Introduction of Goods and Service. Tax (GST) as a single unified tax system from next fiscal year are the booster dose for retail growth in India.

FUELING INVESTMENT FLOW IN INDIAN RETAIL SECTOR

1) Paytm plans to set up 30,000–50,000 retail outlets where its customers can load cash on their digital wallets. The company is also looking to enroll retailers – mostly kirana stores – as merchants for accepting digital payments.
2) Mobile wallet company Mobikwik has partnered with jabong.com to provide mobile payment services to jabong's customers.
3) Data wind partnered with homeshop18 to expand its retail footprint in the country. Under the partnership, homeshop18 and data wind would jointly launch special sales programmes across broadcast, mobile and internet media.
4) Fashion and you has opened three distribution hubs in Surat, Mumbai and Bengaluru to accelerate deliveries.
5) Abu Dhabi-based lulu group plans to invest Rs 2,500 crore in a fruit and vegetable processing unit, an integrated meat processing unit, and a modern shopping mall in Hyderabad, Telangana.
6) Aditya Birla retail, the fourth-largest supermarket retailer in the country, acquired total hypermarkets owned by jubilant retail.
7) With an aim to strengthen its advertising segment, flipkart acquired mobile ad network Adiquity, which has a history of mobile innovations and valuable experience in the ad space.
8) Us-based pizza chain Sbarro plans threefold increase in its store count from the current 17 to 50 over the next two years through multiple business models.
9) Amazon, the world's largest online retailer, is readying a U S $ 5.0 billion war chest to make India its biggest market outside the US.
10) Wal-Mart India private ltd, a wholly owned subsidiary of Wal-Mart stores Inc., plans to open 500 stores in India in the next 10–15 years.
11) British retail major Tesco invested Rs 850 crore (US$ 133.8 million) in multi-brand retail trading by forming an equal joint venture with Tata group company Trent; to form the joint venture, Tesco, which operates the star bazaar retail business in India purchased 50 per cent stake in Trent hypermarket ltd.

NOTES

SITP	-	Scheme for Integrated Textile Park, FDI - Foreign Direct Investment, 2021, JANUARY 2016
E	-	Estimated figure for 2020, ASEAN - Association of Southeast Asian Nations

REFERENCES

1. Central statistical organization (CSO) & investing in India-2010, KPMG Network, October 2010
2. McKinney global institute report, 2010.
3. Business standard,' India's overall retail market to reach Rs 47 lakh crore' by 2016-17: Assocham, capital market February 12, 2014 last updated at 14:49 IST
4. http://www.ibef.org/industry/retail-india.aspx
5. A Study titled 'FDI' in retail: advantage farmers' jointly conducted by the associated chambers of commerce and industry of India (ASSOCHAM) and yes bank.
6. The Boston consulting group and retailers association of India published a report titled, 'retail 2020: retrospect, reinvent, rewrite'
7. Ernst & Young, Technopak, TechSci Research

GOODS AND SERVICES TAX: A LEAP FORWARD ECONOMIC GROWTH AND DEVELOPMENT

MINAKSHI GUPTA
PROFESSOR
LOKMANYA COLLEGE OF COMMERCE
SHIVRANJANI

ABSTRACT
A good tax policy plays an important role in the growth and development of any economy. It mainly affects all the activities of economy viz- production, distribution and consumption. A uniform tax policy helps to bring equality and uniformity, efficient allocation of resources, equality of income, maximum utilization of resources, and to minimize the discrepancies into any of the economy. In the developing countries like India apart from other reforms tax policy also plays an important role for efficient utilization of resources and gaining the maximum welfare. In India the prevalent tax structure involves direct (Income tax, corporate tax and wealth tax) and indirect taxes (sales tax, octroi, VAT, custom duty, excise duty, etc.). In direct taxes Value Addition Tax (VAT) plays the major role. VAT was firstly introduced in France in 1954 by Maurice Laure, after that this concept is used by many of the countries. India has also adopted VAT; Goods and Services Tax (GST) is also a type of VAT. In India indirect taxes play a major role and the major part of the govt. revenue comes from indirect taxes only, so it is considered that some reforms in the indirect taxes can bring major benefits in the economy and GST is one among them. The main objective of this study is to find out the effects of (GST) on the growth and development of India, and this can be done with the help of analyzing the effects of GST on international trade viz- exports and imports, revenue, production, Gross Domestic Product (GDP), employment and efficiency of various sectors as industry, agriculture and services. This paper found that GST would prove very beneficial for the growth and development of the Indian economy.

KEYWORDS
goods and service tax (GST), VAT, growth and development.

INTRODUCTION
Goods and Services Tax (GST) is one of the important concepts in the present scenario. It is the proposed Value Added Tax (VAT) in India. This is also known as **The Constitution (One Hundred and Twenty-Second Amendment) Bill, 2014**. It is replacement of all the indirect taxes prevailed in India, levied by the central and state government on the manufacturing, consumption and sale of goods and services in the entire India. GST will consolidate all state economies and will be consider as greatest tax reform **(Phukan, 2015).** This tax will be taxed at each stage of the purchase and sale on the basis of Input –tax method and will provide Tax Credit facility to all the registered GST business paid on the purchase of input for goods and services. With the approval of GST all the goods and services will be charged with uniform rate of tax by a single authority, India being a federal economy GST will be concurrently levied by State and central govt. This will help to reduce the double taxation, easy administration of taxes, and to reduce the tax burden on consumers that is currently 25-30%.it is considered as GST will help to promote the growth and development in the economy.

HISTORY
It was first recommended by Kelkar Task Force on implementation of Fiscal Reforms and Budget Management Act 2004 **(Ministry of Finance, 2004)**, then the model of GST was proposed by the Vajpayee govt. by forming the committee headed by Wasim Das Gupta. During the central budget of 2006-07 Palaniappan Chidambaram (Union Finance Minister) announced the introduction of GST from April 1, 2010, and it was the duty of the state finance ministers and central government to create the roadmap for GST. After the announcement a joint working group was formed in May 2007 by the Empowered Committee of the state finance ministers, and after the intensive internal discussions and interaction with experts and representatives of CCI, a report was submitted to the Empowered Committee on November 19, 2007. Empowered Committee then discussed the report in its meeting and was sent to the GOI in April 2008 and got the comments of GOI in December 2008 and these comments were duly considered by the Empowered Committee (EC). In 2011 the previous UPA govt. also proposed the introduction of GST by introducing Constitution Amendment Bill in Lok Sabha but it was then rejected by many states. GST bill was passed in the Lok Sabha by 352 votes in its favour on 6th may 2015.

WHAT IS GST?
GST is mainly the upgraded version of VAT (value added Tax).It is basically the indirect tax levied on most of the goods and services except liquor, under a single domain at the country level. It will be concurrently levied by state and central government on all the goods and services uniformly, earlier the rate f tax on all the goods and services was different. It is not the origin based tax but the destination based tax viz- payable at the final consumption point but will be collected at each stage of value addition through a tax credit mechanism (Phukan, 2015). It is levied to provide revenue to the federal government.

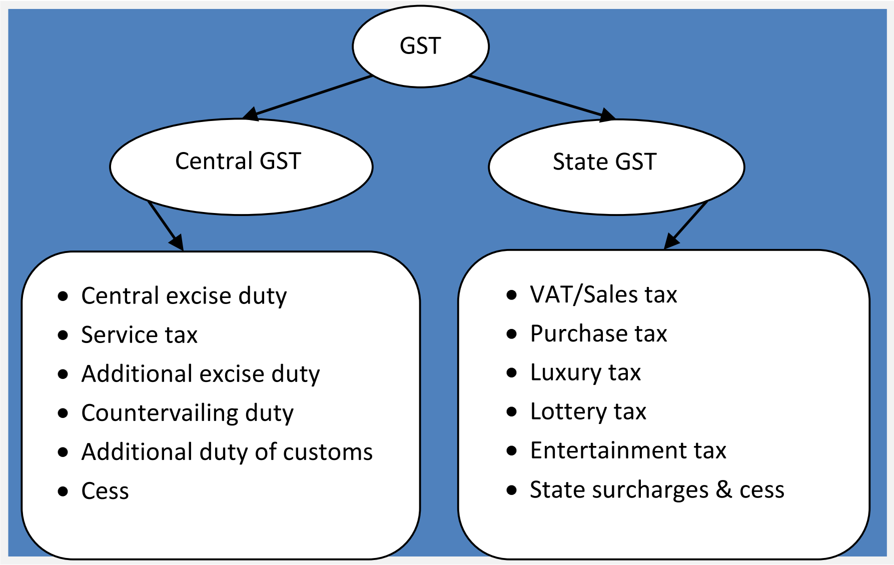
DEFINITION OF GST
The term GST is defined in Article 366 (12A) to mean “any tax on supply of goods or services or both except taxes on supply of the alcoholic liquor for human consumption”. (Mahure, 2015)

MOTIVES OF GST
- To reduce the cascading effect of taxes on taxes
- One country-one tax
- Subsume all indirect taxes
- Reduction of tax evasion and corruption in the country
- Increase in productivity and transparency
- Increase in tax –GDP ratio (Ranjan, 2015)

PROPOSED MODEL OF GST
According to the Empowered Committee there will be two segments/ dual structure of the GST-
- State Goods and Services Tax (SGST)-collected and levied by State.
- Central Goods and Services Tax (CGST)-collected and levied by centre.

Both of these forms of GST will be levied on the taxable value of transaction of all the goods and services except few without any differentiation between goods and services, at a uniform rate of 14 -16%. GST will subsume these taxes.

FIG. 1



EXCEPTIONS IN GST

Alcohol and petroleum products are exempted from GST; they will tax as per the existing rules. Tobacco will come under GST, but will be levied by extra duty than GST. Exports and supplies to the SEZs will be taxed at zero rates.

ADVANTAGES OF GST BILL

Introduction of a GST is very much essential in the emerging environment of the Indian economy.

- There is no doubt that in production and distribution of goods, services are increasingly used or consumed and vice versa. Separate taxes for goods and services, which is the present taxation system, requires division of transaction values into value of goods and services for taxation, leading to greater complications, administration, including compliances costs. In the GST system, when all the taxes are integrated, it would make possible the taxation burden to be split equitably between manufacturing and services.
- GST will be levied only at the final destination of consumption based on VAT principle and not at various points (from manufacturing to retail outlets). This will help in removing economic distortions and bring about development of a common national market.
- It will also help to build a transparent and corruption-free tax administration. Presently, a tax is levied on when a finished product moves out from a factory, which is paid by the manufacturer, and it is again levied at the retail outlet when sold.

LITERATURE REVIEW

GST is the upgraded version of VAT and VAT was adopted by almost 130 countries for the growth and development. This section studies the effects of VAT on various countries.

- **Kearney, Robinson, & Thierfelder, (2005)** in this paper analyzed the VAT in the South Africa and found that their regressive VAT prevails and is one of the important source of government revenue as compare to other instruments. In this paper distortions in the economy were measured by analyzing the change in marginal cost occurred to raise the revenue by changing the rate of VAT with the help of computable general equilibrium (CGE) model. This paper found that VAT will benefit the low-income households without placing extra burden on high –income households. They demonstrate that alternative tax structures can benefit low-income households without placing excess burdens on high-income households.
- **Keen & Lockwood, (2007)** in their paper found that VAT is having a significant impact on the revenue equation, VAT is having positive as well as negative impacts but positives are more than the negative ones. VAT positively affects the Per Capita Income, all the countries those have adopted the VAT for Goods and Services have gained a more effective tax instrument in bringing the development. But this is not true for Sahara Africa.
- **NCAER TEAM, (2009)** in their paper presented a report for the assistance of Finance Commission on the proposed effects of GST on the development of international trade in India and found that proposed GST would be very beneficial for the growth of all the exporting industries viz- textile, cotton and all. GST would help to promote the exports in India and would help to increase the government revenue for the welfare of the country.
- **Wawire, (2011)** in his paper found that the determinants of VAT are GDP, volume of trade, volume of imports, demographic, institutional, and structural features of the economy. The elasticity of VAT toward these factors is greater that one, and it is found that KENYA's economy is responsive to all these determinants especially the international trade. To increase the tax revenue to the government as economy grows there is the requirement of an effective tax system.
- **UNEGBU & IREFIN, (2011)** in this studied the impact of VAT on economic and human developments of emerging nations from 2001-2009 with special reference to Adamawa State of Nigeria with the help of both primary and secondary data. Regression, discriminant analysis and ANOVA were used in testing the hypotheses. This study found that secondary data shows the significant maximum impact of VAT on economic and human development but the primary data showed the minimum impact. VAT has significant impact on consumption pattern also.
- **Leslie, (2013)** in this paper studied the effects of VAT GST on Bahamian economy and found that VAT helped to equally distribute the fiscal burden to all the departments. VAT will help in widen the tax base for Bahamian economy, bring equality, will enhance the efficiency in collecting revenue for government, and will provide help to the economy in comply with the WTO and enjoy all its benefits.
- **Komal, (2013)** in her paper found that for the proper functioning of VAT transparency is required in all the states in India in VAT. There is equal channel for the distribution of VAT at all the levels. According to this paper VAT is beneficial for consumers and government. The single window system is required for the proper functioning of VAT and CST should be abolished.
- **Asogwa & Nkolika, (2013)** analyzed the impacts of VAT on the investment level in the Nigeria after the introduction of VAT in 1993 there. This paper concluded that VAT is one of the important sources of revenue and it helped to increase the investment level in the Nigeria.
- **Neha & sharma, (2014)** in their paper they explained that GST is a better approach of indirect taxes, GST would help to reduce the tax evasion and cascading effects of taxes and all the distortions that are the major problems in the current scenario. All these problems can be solved by adopting the GST model. Due to subsume of all state and centre taxes the tax base structure will be broaden, thereby increasing the revenue of the government and will increase exports and competitiveness of industry.
- **KUMAR, (2014)** in his paper found that GST will be a step forward the major reforms in indirect taxes in India. GST will be helpful in the development of common National Market and will remove all the distortions prevailed in the system.

RATIONALE/ OBJECTIVES

1. To understand the GST
2. To know the present scenario of GST in India
3. To check the effects of GST on Growth and Development in India

RESEARCH METHODOLOGY

This paper is mainly descriptive and exploratory in nature and mainly aims to study the available literature regarding the VAT and GST. The secondary data is collected after going through all the newspapers, websites, journals, articles, and reports and from all other sources related to GST.

DESIRED OUTCOMES ON ECONOMIC GROWTH AND DEVELOPMENT

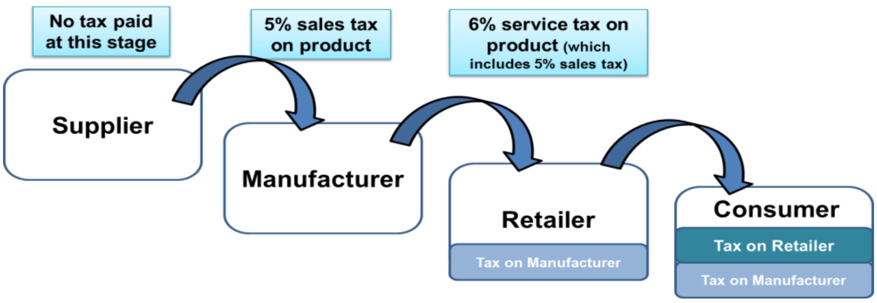
For all around development and growth it is required that all the sectors, industries, and departments should grow simultaneously. These are the certain desirable outcomes of GST on the economy. GST will be beneficial to each and every stakeholder in the economy viz-consumers, producers or corporate entities, Government, external sector as well as the complete economy. It is presented in the given diagram.

TABLE 1

CORPORATE ➢ Export competitiveness will improve ➢ Reduction in cost of production ➢ Increase in profitability ➢ Reduction in effective Tax burden, as full input tax credit is allowed	**GOVERNMENT** ➢ Broaden tax base ➢ Increase in revenue ➢ Substantively common tax base for centre and state ➢ Uniformity in compliance and administration ➢ Simplified process will reduce cost
CONSUMERS ➢ Chances of decline in prices in long run ➢ Increase in consumption	**ECONOMY** ➢ GDP will improve ➢ Increase in export earnings ➢ Increase in FDI and FII

1. **MANUFACTURING GROWTH**- Under the “Make in India” project of India’s PM Sh. Narender Modi, they are inviting global firms for establishing manufacturing firms in India. According to the Denis Medvedev, senior country economist of the World Bank-India, GST will be the critical reform for the growth of manufacturing segment in India, as GST will help to remove the inefficiency in the Tax regime prevailed in India, converting India to a common market, transform India into a common market, and boosting the manufacturing segment **(ET Bureau , 2014).**
2. **REDUCTION IN CASCADING EFFECT IN GST**-It will help to reduce the cascading effect of the present tax structure. This will bring the complete change in the present indirect tax structure by changing in tax incidence, reporting, tax computation and credit utilization. At present following system is followed as shown in the following diagram:

FIG. 2

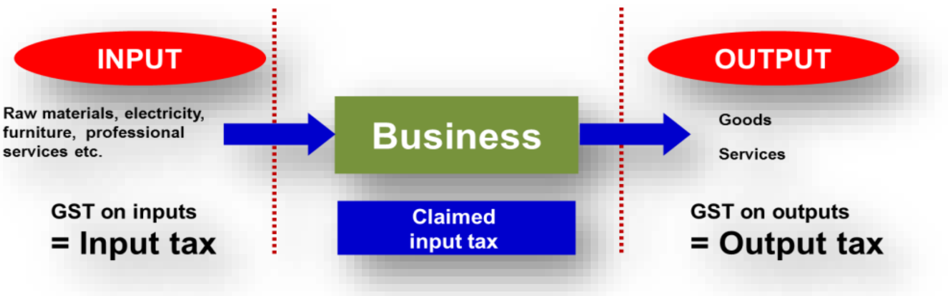


Source-Royal Malaysia customs Department Site

This diagram shows that there is a cascading effect of tax on consumer. Consumer has to bear all the burden of taxes levied at each stage.

3. **REDUCE THE TAX BURDEN OF THE CONSUMERS**-GST helps to make the tax system smooth and transparent, and avoids the double taxation. The diagram shows that how all the input taxes are claimed and not transferred to end customer, thus reduce the burden on consumers.

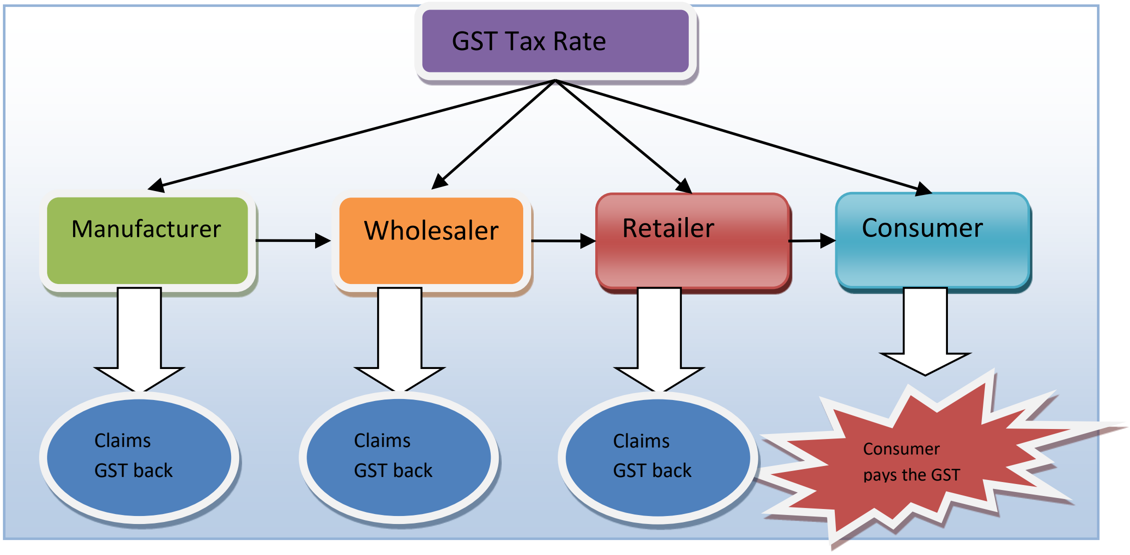
FIG. 3



GST to Consumer = Output Tax- Input Tax

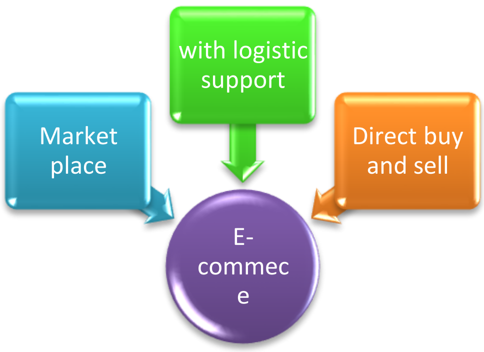
4. **TAX ON CONSUMPTION NOT ON PRODUCTION-** GST will be levied on destination not on the origin, so it is tax on the consumption not on production. Only the final consumer will bear the burden of the GST. It will be levied on each stage of production but will be reimbursed back to all the intermediaries. **(Ranjan, 2015)**

FIG. 4



5. **UNDIVIDED MARKET-** The basic idea of GST is to create an enlarged single, developed, cooperative and undivided Indian market to make the Indian economy united stronger and powerful (Phukan, 2015).
6. **SIMPLIFIED TAX STRUCTURE-** GST will replace all the indirect taxes like sales tax VAT, CST, service tax and excise duty prevailed in the country levied by central and state government. GST will be having the uniform rate for all the goods and services that will reduce the hassle in the tax regime. In the new scenario there will be one Central GST or C-GST and State GST or S-GST. Currently, states levy VAT or sales tax within the state transactions and CST (Central Sales Tax) on sale outside the state territories. All CST will be removed and an additional 1% tax will be levied to benefit the manufacturing states like Gujarat and Tamil Nadu. (PTI, 2015). At present the highest tax rate of 20% on goods and 12% on services can be replaced with 14 % to 16% range of GST.
   According to Ambareesh Murthy, founder of Pepperfry.com , GST will bring transparency and will simplify the tax.GST will pave the way to single and common tax system and will make easy the transportation of goods and making life easy for those who in interstate trading (Pathak & Kamath, 2014).
7. **BENEFICIAL FOR DEVELOPMENT OF E-COMMERCE -**GST will prove very beneficial for the e-commerce, one of the very emerging and penetrating industries. E-commerce works on these three models as mentioned in the figure below.
   (i) **Market place**- Only providing platform to sellers, not indulging in direct or indirect selling. For e.g. Flipkart, Amazon, Snapdeal etc.
   (ii) **With Logistic facility**- it provides not only platform but transport facilities also. But in the second model of logistic support it was considered as the sector to provide goods and services both, so huge taxes were imposed.
   (iii) **Direct buy and sell**- E- commerce industries directly indulge themselves into the buy and sell business with the consumers.

FIG. 5



The GST will provide the relief to the E-commerce industry providing the logistic facility also. GST will also help in reducing the chances of minimizing the tax liabilities by utilizing the loopholes of the current distribution, warehousing, and sourcing strategies by inculcating the changes among them.

8. **COST EFFECTIVE SUPPLY CHAIN-** As with the introduction of GST the uniform rate of tax will be levied by avoiding the double taxation, so it will reduce the cost involved in the supply chain. With the help of GST supply chain will become most cost effective and can serve to the customers better.
   According to Ashish Jhalani, Founder of e-Tailing India "GST will resolve many supply chain issues surroundings e-commerce. The shipment and returns across the country will be done more efficiently and with lesser paperwork. The efficiency in the supply chain will also mean quicker deliveries. Companies will also be able to execute more efficient supply chain strategies, with warehousing based on strategy rather than tax requirements (like Octroi). More importantly, with a uniform tax structure across India, goods can be priced and margins calculated properly without worrying about where the product is finally shipping." (Pathak & Kamath, 2014)
9. **ECONOMIC INTEGRATION-** With the introduction of GST, India will convert into single uniform market for the flawless transfer of goods and services. According to the Finance Minister **Arun Jaitly** GST will lead to more revenues for states, increase in economic activities and will bring economic integration and growth in India. This will help to establish social and financial security in the people of nation and each state will be able to get fare funds for their development (Bureau, 2015).
10. **INCREASE IN REVENUE OF CENTER AND STATE GOVT. -** GST will help to promote the revenue of the center and state govt. by approximately $15 billion a year. This increase in revenue will be possible due to increase in exports increased due to the simplified tax structure. GST will segregate the burden of taxes among the various players like manufacturing and service segment in the economy. GST will help to diversify the income sources for govt. other than income tax and petroleum tax. (team , 2015)
11. **INCREASE IN EMPLOYMENT-**GST will provide immense help in creating new employment opportunities, as GST will help to promote growth in manufacturing segment by alluring the more industries in India under the PM Narender Modi's "Make in India" campaign and can boost the growth. (Phukan, 2015)
12. **INCREASE IN CONSUMPTION-** As it is mentioned earlier that the simplified tax structure will help to promote the manufacturing of more goods thereby reducing the cost and price of the goods and will lead to the more consumption of goods.

13. **REDUCTION IN TRANSPORTATION AND PRODUCTION COST-** Introduction of GST will facilitate the smooth movement of trucks across various states thereby decreasing the cost included such as octroi and other charges. This will help to reduce the production cost. Moreover due to the free movement of trucks and removal of CST there will not be any need to establish various warehouses in various states, and will help to reduce the production cost to 10%-15% (aggarwal, 2015). The transmit time of cargo vehicles can be reduced by combining the various check posts with immediate neighbors, and by issuing passes for transmit traffic States.
14. **COMPETITIVENESS-** GST will also help to enhance the competitiveness of exporting units and producing unit's earlier working under the distorted indirect tax structure, which were not able to face the competition posed by relatively efficient exporting and manufacturing units working under distortion-free indirect tax regime.
15. **INCREASE IN GDP-** Increased competitiveness in exports, returns to the factor of production and efficient allocation of productive resources and providing full tax offsets is expected to result in gains for GDP.
16. **BENEFIT TO THE PRODUCERS-** Producers now have to bear the less cost in terms of production cost and taxes and can claim back all the taxes paid earlier. This will help the producers in reducing cost, maximizing profits, penetrating market, increasing volume of sale and other economies of scale.
17. **BREAKING OF VICIOUS CIRCLE OF POVERTY-** Due to the growth of all the sectors and increased employment opportunities, GST will help to impact both the demand and supply aspect of Vicious Circle of Poverty propounded by Prof. Nurksey, Thereby reducing the poverty.
18. **INCREASE IN STANDARD OF LIVING-** GST will help to improve the standard of living by impacting growth and development of the economy.
19. **INCREASE IN PER CAPITA INCOME-** Various new source of income will evolve, and there will establish the equality in terms of tax structure, equal distribution of income will be possible and per capita income will increase.
20. **FAVORABLE IMPACTS ON BALANCE OF PAYMENT-** Exports and all the supplies to the SEZs will be charged at zero percent tax rate under GST and imports will be charged by uniform rates of CGST and SGST. This will help to promote the exports and reduce the import level and improving the Balance of Trade (BOT) and Balance of Payment (BOP).

PROBLEMS IN GST

- GST can negatively impact the real estate market, as due to GST the cost of new houses will be increased to 8 % and the demand will reduce by 12% (admin, 2015).
- GST will not include alcohol and petroleum thereby incurring heavy losses to exchequer.
- GST's proposed rate of 16% is very high as compare to the present 12.5%VAT.
- According to some economists CGST and SGST are nothing but 'Old Wine in New Bottle". These are the new names of excise duty, service tax, VAT and CST, hence nothing new.
- Strong need of development of infrastructure, without that no benefits can be ripened.
- GST would be required strong Information Technology (IT) at the very initial level, So IT should be developed to get the desired results.
- It is tough for a common man to fill the tax return
- Tax sharing between centre and state government can be a matter of concern (Ranjan, 2015).
- As uniform GST rate will prevail in the economy across all the states, no fiscal autonomy will be there for states. For the states to use this GST model for their economic and social objectives autonomy should be given to states (commission, T. f., 2009).

CONCLUSION

GST was introduced by the France in 1954, followed by acceptance of 140 countries. GST would be considered as a major breakthrough and the next biggest tax reform and logical step in the Indirect Tax regime after the introduction of VAT. But GST will be a long continuous process that requires major policy reforms; a number of legal and administrative reforms are required for the exact implementation of GST. These include amendments in the rules and regulations, constitution of India, conducting of various training programmes for staff, flagging of consumer awareness programmes, stakeholders' consent and consultation, assessment and audit manual. All these reforms require substantial time. GST can be seen more with the positive aspects as compare to the negative ones that may arise due to the structural problems of the country. Government is taking initiatives to create an atmosphere where easy execution of the GST would be possible. So it is recommended that priority should be given to the operational framework and excellent design for the GST (Srivastava, Kumar, Rao, Purohit, & Sengupta, march 2010). After implementing all these policy frameworks, it is expected that GST will help to establish equality of income, remove distortions, increase govt. revenue, facilitate the growth of all the sectors and promoting the exports and FDI and FII level, thereby improving the BOP and BOT of the country. All these will help to promote the Growth and Development in the country.

REFERENCES

1. Admin. (2015, june 24). *gst-merits-demerits-goods-services-tax-explained.* Retrieved from /www.gstindia.com: http://www.gstindia.com/gst-merits-demerits-goods-services-tax-explained/
2. aggarwal, v. (2015, dec). *GST will lower product costs by 10 to15%-TCI.* Retrieved from www.gstindia.com: http://www.gstindia.com/gst-will-lower-product-costs-by-10-15-tci/
3. Asogwa, F. O., & Nkolika, O. M. (2013, dec). Value Added Tax and Investment Growth in Nigeria: Time Series analysies. *IOSR Journal of Humanities And Social Science (IOSR-JHSS), 18*(1), 28-31.
4. Bureau, E. E. (2015, may 10). *GST will lead to economic integration of India: Arun Jaitley.* Retrieved from www.indianexpress.com.
5. CBEC Department. (2015, 12 01). *http://cbec.gov.in/resources//htdocs-cbec/deptt_offcr/status-gst-01122015.pdf*. Retrieved from www.cbec.gov.in.
6. Choudhury, V. (2015, may 7). *What is GST? And What Could be its Impact on the Indian eCommerce Avenue*. Retrieved from http://www.iamwire.com/2015/05/gst-impact-indian-ecommerce-avenue/116049.
7. commission, T. f. (2009). *Report of The Task Force On Goods & Services Tax.* New Delhi.
8. ET Bureau. (2014, oct 28). GST must to boost manufacturing, growth in India, says World Bank. *The Economic Times*.
9. Go, D. S., Kearney, M., Robinson, S., & Thierfelder, K. (2005, july). *An Analysis of South Africa's Value Added Tax.* Retrieved from http://elibrary.worldbank.org/doi/abs/10.1596/1813-9450-3671: http://elibrary.worldbank.org/doi/abs/10.1596/1813-9450-3671
10. Keen, M., & Lockwood, B. (2007). *The value added tax: its causes and consequences.* Department of Economics. Warwick: University of Warwick, Department of Economics. Retrieved from www2.warwick.ac.uk: http://www2.warwick.ac.uk/fac/soc/economics/
11. Komal. (2013). An Analysis of the Impact of Value Added Tax (VAT) in Delhi. *Global Journal of Management and Business Studies., 3*(3), 277-286. Retrieved from http://www.ripublication.com/gjmbs.htm
12. KUMAR, N. (2014, may). GOODS AND SERVICES TAX IN INDIA: A WAY FORWARD. *Global Journal of Multidisciplinary Studies, 3*(6), 216-225.
13. Leslie, B. D. (2013, dec). *VALUE ADDED TAX, AND ITS POSITIVE IMPLICATIONS TO THE BAHAMIAN ECONOMY.* Retrieved 2016, from http://www.academia.edu/6513894/VAT_Research_Paper_Final: http://www.academia.edu/6513894/VAT_Research_Paper_Final
14. Mahure, . (2015). GST- in India. In . Mahure, *GST- in India* (p. 684). e-book: e-book.
15. Ministry of Finance. (2004). *Report ofTask Force onimplementation of FRBM Act.* Government of India, ministry of finance. http://finmin.nic.in/reports/FRBM_report.pdf.
16. NCAER TEAM. (2009). *Moving to Goods and Services Tax in India: Impact on India's Growth and International Trade.* Government of India, National Council for Applied Economic Research. fincomindia.nic.in.

17. Neha, & Sharma, M. (2014, feb). A Study on Goods and Services Tax in India. *International journal's Research journal on Science and Management, 3*(10), 119-123.
18. Pathak, K., & Kamath, R. (2014, dec 19). *GST to benefit e-commerce the most*. Retrieved dec 31, 2015, from http://www.business-standard.com: http://www.business-standard.com/article/companies/gst-to-benefit-e-commerce-the-most-114121900196_1.html
19. Phukan, R. S. (2015, jan 28). *What is GST: How will it change India*. Retrieved 2015, from www.mapsofindia.com: http://www.mapsofindia.com/my-india/government/What is GST: How will it change India
20. PTI. (2015, dec 16). *Open to scrapping 1% additional tax for GST Bill passage: Jaitley.* Retrieved from www.indianexpress.com: http://indianexpress.com/article/business/economy/open-to-scrapping-1-additional-tax-for-gst-bill-passage-jaitley/#sthash.MpVz9gRr.dpuf
21. Ranjan, R. (2015, march 24). *What-are-the-pros-and-cons-of-the-new-GST-bill-in-India.* Retrieved from www.quora.com: www.quora.com/What-are-the-pros-and-cons-of-the-new-GST-bill-in-India
22. Srivastava, D. K., Kumar, K. S., Rao, C. B., Purohit, B. C., & Sengupta, B. (march 2010). *Eco-Taxes in a GST Regime.* Project Executed by Madras School of Economics, Chennai, Project Executed by Madras School of Economics, Chennai.
23. team. (2015, dec). *10 Facts About GST Goods and Services Tax – Advantages and Disadvantages.* Retrieved from www.top10wala.in: http://top10wala.in/facts-about-gst-india-advantages/
24. UNEGBU, A. O., & IREFIN, D. (2011). Impact of VAT on economic development of emerging nations. *Journal of Economics and International Finance, 3(8)*, 492-503.
25. Wawire, N. H. (2011). DETERMINANTS OF VALUE ADDED TAX REVENUE IN KENYA. *A paper to be presented at the CSAE conference to be held from 20th to 22nd March 2011* (p. 41). CSAE conference paper, March 2011.

INITIAL PUBLIC OFFERING UNDER-PRICING: A CASE STUDY OF TWITTER IPO

SAVITHA, P
ASST. PROFESSOR
DEPARTMENT OF MANAGEMENT STUDIES
KARNATAKA STATE OPEN UNIVERSITY
MUKTAGANGOTRI

B. SHIVARAJ
PROFESSOR
DEPARTMENT OF MANAGEMENT
UNIVERSITY OF MYSURU
MYSURU

ABSTRACT
This study is conducted to analyse the under-pricing phenomenon in Initial Public Offering (IPO) by Twitter, the most popular and fast growing online social networking and micro blogging service provider. On November 7, 2013, the first day of trading on the NYSE, Twitter shares opened at $26.00 and closed at US$44.90, giving the company a valuation of around US$31 billion. This was $18.90 above the initial offering price and Twitter ended with a market capitalization of $24.46 billion. Goldman Sachs, investment banker was the book runner. Twitter is backed by Union Square Ventures, Digital Garage, Spark Capital, and Bezos Expeditions. The issue netted about $1.8 billion through the sale of 70 million shares. Twitter is yet to make profits. Twitter was the most actively traded stock in the US on the issue day; more than 117.3 million shares had exchanged hands by the end of the day. From the analyses it is very clear that the Twitter IPO is under-priced. Since the closing price of the stock was $44.90 it was up by 73% on its first day. So Twitter potentially left about $1.25 billion on the table when they set the price of $26 a share. Twitter priced its initial public offering Wednesday night at $26 a share. The stock debuted at 10:49 a.m. ET on Thursday on the New York Stock Exchange, and the first trade came in at a price of $45.10 per share. Twitter isn't yet profitable: Twitter raised about $1.8 billion through the sale of 70 million shares Wednesday evening (6th November) at $26 a share. The offering's underwriters also have the option to buy another 10.5 million shares from Twitter. By comparison with the Facebook (FB) raised $16 billion in its IPO. The study has proven the presence of under-pricing in Twitter IPO.

KEYWORDS
under-pricing, investment bank, NYSE.

INTRODUCTION
The first public issue that is made by a company is referred to as an Initial Public Offering (IPO) or an unseasoned new issue. IPO is among the riskiest equity investments in the stock market. The firm generally has only a short earnings history and no history of public valuation. Thus, both principal agent and information asymmetry problems are likely to be very severe for IPO firms. A typical IPO firm is very young and has often taken a highly speculative position in a nascent industry. Firms that choose to go public generally hire an investment banking firm to underwrite the offering. The underwriter assists the firm in all legal procedures, and negotiates with potential public investors regarding the offer price. The underwriter tries to mitigate principal-agent problems by structuring the deal and recommending certain financial structures within the firm. The Investment Bank acts as an intermediary role and can be effective in mitigating information asymmetry problems associated with an IPO.

An additional motive for going public is to reduce debt. Firms that go public generally use a substantial portion of the IPO proceeds to pay off debt obligations. By issuing new shares in the IPO, the firm's entrepreneurs and management can dilute the voting power. Venture Capitalists that have partially financed a successful venture play several important roles in the IPO process. The VC has not only had substantial financial stake in the firm, but has participated in its development. VCs generally participates in negotiations about the offer price and the firm's post-IPO financial and ownership structures. Lerner (1994) examined the ability of VCs to time IPOs. VCs are anxious to liquidate their investment. Some analysts have argued that VCs are too aggressive in bringing their firms public quickly, perhaps even prematurely.

An IPO often results in substantial changes in the firm's ownership structure, management, governance structure and capital structure. For instance, an IPO firm's insiders generally dominate the ownership of the firm's shares just before the offering. IPO firms generally raise funds for the firm in the primary portion of the offering, which increases the firm's equity base and therefore reduces leverage. The reduction in leverage is more substantial if the proceeds of the primary portion of the offering are used to pay down debt. Both the primary and secondary portions of the offering bring in new shareholders to the firm. An IPO imposes substantial administrative burdens on the focal firm's management. These include time for preparing the registration statement and prospectus, and consulting with legal counsel, accountants, consultants and underwriters. Another substantial burden involves efforts to market the issue.

WHY ARE IPO's UNDER-PRICED?
The various reasons behind the under-pricing of the IPO according to the Researchers have been provided a number of explanations of which some of them are mentioned below:

LITIGATION RISK
As observed underwriter plays an intermediary role between the issuer and the capital market and makes pricing decisions that maximize his own welfare. Underwriter sets the issue price knowing that he will be sued in the future if there is evidence that the courts will judge as indicative of overpricing of the issue. There is a perfect sequential equilibrium in which some issues are overpriced, some are under-priced, there is under-pricing on average, and there exists a positive probability of successful litigation against the underwriter.

THE WINNER'S CURSE
Rock (1986) assumes the existence of both informed and uninformed traders while issuing the IPO and shows that under-pricing emerges to encourage participation by uninformed traders who would otherwise suffer the "winner curse" in trading with the informed traders. That means, uninformed investors realize that they tend to be more successful in obtaining shares of overpriced IPOs. In order to make them to participate, all IPOs must be discounted or under-priced. For the corporation, the implication is that the IPO will need to be significantly under-priced from what it believed to be its true value. This is the price of admission to the public market.

SIGNALLING MODELS
Several authors have provided the possible reason for under-pricing of the IPO. In these models, the intrinsically higher valued firms strategically under-price their stock in order to deter mimicking by lower valued competitors. High valued firms are under-priced in order to encourage information production by investors that will then be revealed in the secondary market price. These models involve firms dealing directly with investors, rather than through an investment banker. An

economic role for the underwriter as an intermediary also emerges in that risk-averse issuing firms may under-price in order to induce some investors to reveal information about market conditions. Under these circumstances, the existence of underwriters improves the economic efficiency of the IPO market.
Underwriters often reward valued customers with shares of under-priced IPOs. After receiving their allocation, these customers generally sell them quickly at a higher price in the secondary market, realizing a quick profit. This activity is called flipping. Many critics frown on flipping. However, it has to be realized that if none of the original purchasers of an IPO flipped, there would be no shares trading in the secondary market.

OBJECTIVES OF THE STUDY

1. To analyse IPO under-pricing for Twitter IPO.
2. To assess the extent of under-pricing.
3. To examine the reasons of under-pricing.
4. To understand the meaning of IPO under-pricing.

REVIEW OF LITERATURE

Timothy H. Lin (1996)

The author has made an attempt to investigate IPO under-pricing for the firms with and without VC backing. Also the study had made an attempt to examine the relation between VC reputation and underwriter spread. We can observe two contributions of this study which is: study has documented that the mean and median degree of IPO reduces because of VC backing and this backing also significantly lowers the underwriter spread charged by the investment banks. The other contribution is as large block shareholders, venture capitalists play an important role in certifying the value of a new equity offering. The incremental information which is not signalled by underwriter alone is provided by the quality of their reputation. The study shows that consistent with the certification hypothesis, VC reputation is able to reduce under-pricing of IPO and also the underwriting costs.

Raghuram Rajan and Henri Servaes (1997)

The authors have considered a sample of initial public offerings which was completed between the years 1975 to 1987 to make an observation so that how they related to the well documented IPO anomalies. The results of the study show that higher under-pricing leads to the increased analyst following. When the earnings potential and the long term growth prospects of the recent IPO's is considered analysts are overoptimistic about it and the study could see more firms complete IPO's when analysts are particularly optimistic about the growth prospects of recent IPO's. IPO's have better stock performance in the long run when analysts ascribe low growth potential rather than high growth potential. The results obtained from the study suggests that the anomalies may be partially driven by the over optimism of analyst.

Juseong Kim (1999)

The author has made an examination of capital market imperfections, such as information asymmetry, which increase the cost of external funds compared to that of the internal funds. This phenomenon creates financing constraints which limits the availability of external funds and making the corporate investment excessively sensitive to the cash flow. The study has concentrated on analysing the effect of financing constraints on the investment decisions by comparing the financial behaviour of Korean firms before and after their stocks is newly listed in the stock exchange. The results have suggested that the sensitivity of investment to the cash flow will be higher during the period before initial public offering (IPO) than after IPO. The study has also shown that the effect of financing constraints relaxation by IPO is more prominent in small than in large manufacturing firms.

Reena Aggarwal and Pat Conroy (2000)

The authors have examined the price discovery process of initial public offerings (IPO's) using a unique dataset. The initial quote entered by the lead underwriter in the five minutes of pre-opening window explains a large proportion of initial returns even for hot IPO's. The significant learning and price discovery continues to take place during these initial five minutes with hundreds of quotes being entered. The lead underwriters will observe the quoting behaviour of other market makers, particularly the wholesalers, and accordingly will revise the quotes. The study has shown that there is a strong positive relationship between initial returns and the time of the day when trading starts in an IPO.

Claire E. Crutchley, Jacqueline L. Garner and Beverly B. Marshall (2002)

The authors have made an attempt to investigate the long-term stock performance of the initial public offerings (IPOs). The study examines the stability of the board of directors affected by the past performance and how the subsequent performance of the IPO is affected by changes in board of directors. The study indicates that the IPO firms with poor initial performance experiences greater broad instability and the greater board stability is associated with the improvement in the leave subsequent performance of IPO. The study indicates that the board members leave the firms performing poorly rather than the shareholders replacing the ineffective boards. The continued success of IPO firms is associated with the retaining the boards which experience good initial performance.

INTRODUCTION TO TWITTER IPO

Twitter is an online social networking and micro blogging service that enables users to send and read "tweets", which are text messages limited to 140 characters. Registered users can read and post tweets, but unregistered users can only read them. Users access Twitter through the website interface, SMS, or mobile device app. Twitter Inc. is based in San Francisco and has offices in New York City, Boston, San Antonio and Detroit.
Twitter was created in March 2006 by Jack Dorsey, Evan Williams, Biz Stone and Noah Glass and by July 2006, the site was launched. The service rapidly gained worldwide popularity, with 500 million registered users in 2012, who posted 340 million tweets per day. The service also handled 1.6 billion search queries per day. Twitter is now one of the ten most-visited websites, and has been described as "the SMS of the Internet."
The seven-year-old social network company started offering shares on the New York Stock Exchange (NYSE) at 10:50 a.m. on Thursday, in the most anticipated tech IPO since Face book's in May 2012. The company, which set its initial IPO pricing at $26, saw the share price open at $45.10 due to strong investor demand. The initial surge in price gave the company a valuation above $24 billion when it began trading shares. Twitter seems confident about investor appetite for its stock; it boosted the initial share price by 30 percent in the days leading up to the IPO.

TWITTER IPO

In its first day as a publicly traded company, Twitter blew past everyone's expectations including its own. The seven-year-old social network saw its stock price soar from an initial public offering price of $26 to $44.90, a 73 percent increase. After one day of trading Twitter already has a greater valuation than currently hot tech companies like Netflix and LinkedIn. The high price means Twitter underestimated the value of its own stock and likely left money on the table. The company pocketed $1.8 billion when it priced its IPO at $26 Wednesday night, but clearly could have raised the price even higher. Still, the strong first-day increase makes Twitter's one of the most successful IPOs of the year. Out of 193 public offerings so far this year in US, Twitter's day-one jump was the 14th largest, according to Renaissance Capital, an investment firm that manages IPO funds.
"There's obviously a lot more optimism than even what we were thinking in terms of what the company's worth," says Rick Summer a senior equity analyst at Morningstar (Morningstar, Inc. is a leading provider of independent investment research in North America, Europe, Australia, and Asia). "It's clear that investors are clamoring for technology, they're clamoring for growth."
The $26 rate is what the Twitter IPO's underwriters -- including lead banker Goldman Sachs (GS) -- will use when selling shares to their clients. Those customers are mostly large are institutional investors, such as mutual funds and hedge funds. Shares will be released Wednesday night to those buyers, and the underwriters have the option to buy another 10.5 million shares from Twitter.

Calculation of Initial Returns of Twitter IPO: Twitter went public on Nov. 7, 2013, and ended its first trading day at $44.94 (up 72.84 percent).IPO under-pricing is calculated using the formula:

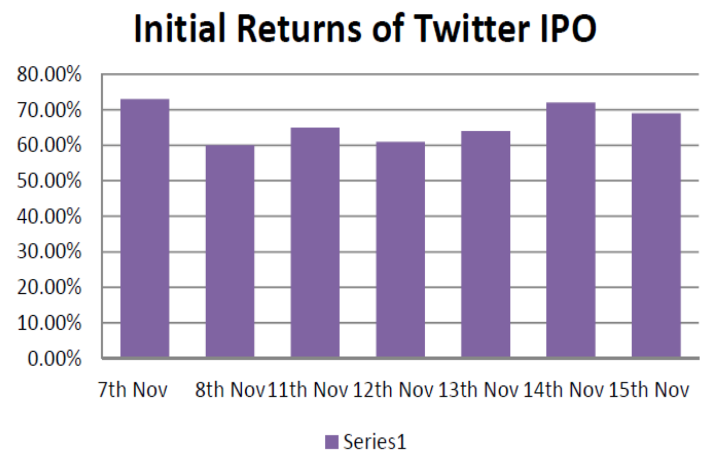
Under pricing = (First day closing price – offer price) / offer price * 100

Closing price and offer price is represented in terms of Dollars ($) because the social networking company (Twitter) is US based company.

The calculations of returns for the initial days after the issue are mentioned below:

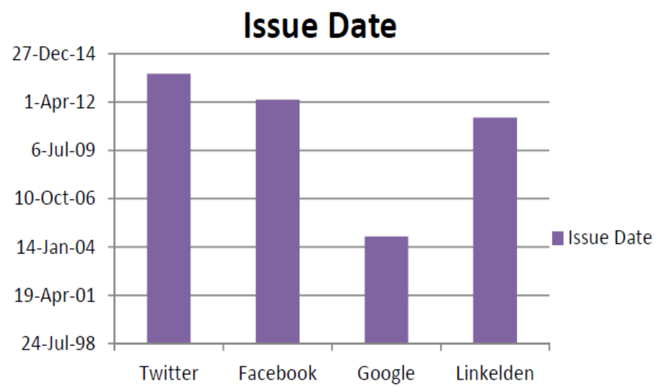
7th Nov = (44.90 – 26) / 26 *100 = 72.6%
8th Nov = (41.65 – 26) / 26 *100 = 60.19%
11th Nov = (42.90 - 26) / 26 * 100 = 65%
12th Nov = (41.90 - 26) / 26 * 100 = 61.15%
13th Nov = (42.60 - 26) / 26 * 100 = 63.84%
14th Nov = (44.69 - 26) / 26 * 100 = 71.88%
15th Nov = (43.98 – 26) / 26 * 100 = 69.15%

FIG. 1



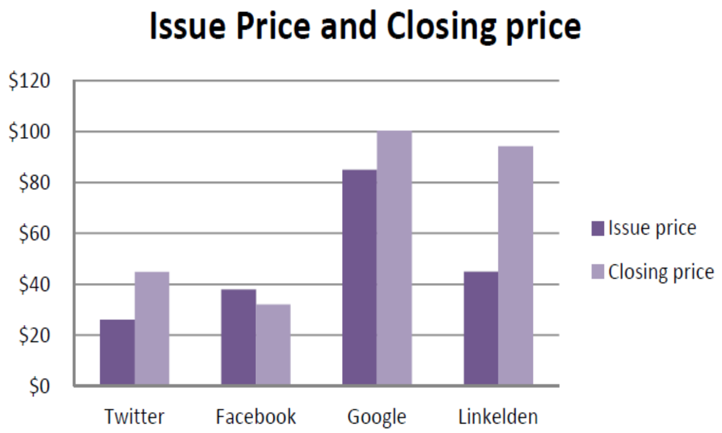
From the above diagram, we can analyse the returns of Twitter IPO from issue date till 15th of Nov and can observe the variations in the returns which represent increase in the price of the share after the issue, where the issue price is $26.

FIG. 2



From the above diagram, we can observe the IPO Listed date of different internet companies along with Twitter IPO.

FIG. 3

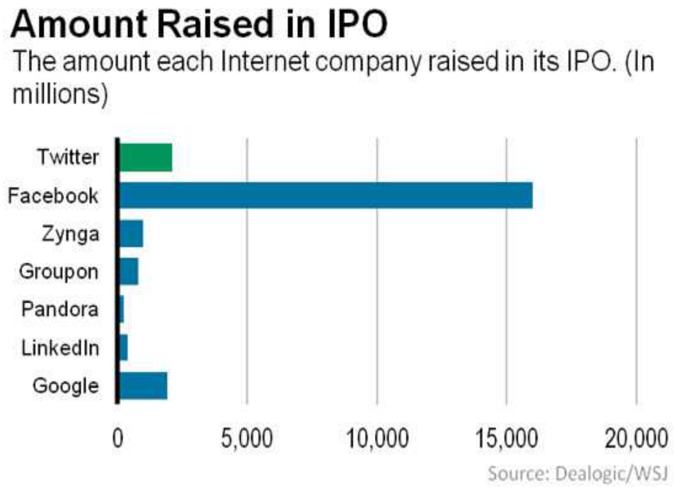


From the above diagram, we can analyse the difference between the issue price and the closing price. Except the Face Book all other companies closing price more than the issue price. This is with regard to first day (listed day) opening and closing price.

TWITTER IPO: COMPARING IT WITH ITS INTERNET RIVALS

The IPO Funds: Twitter trails only Face book in the hall of giant Internet IPOs. The 140 character site raised $1.8 billion in its IPO, while Face book set the standard at $16 billion.

FIG. 4

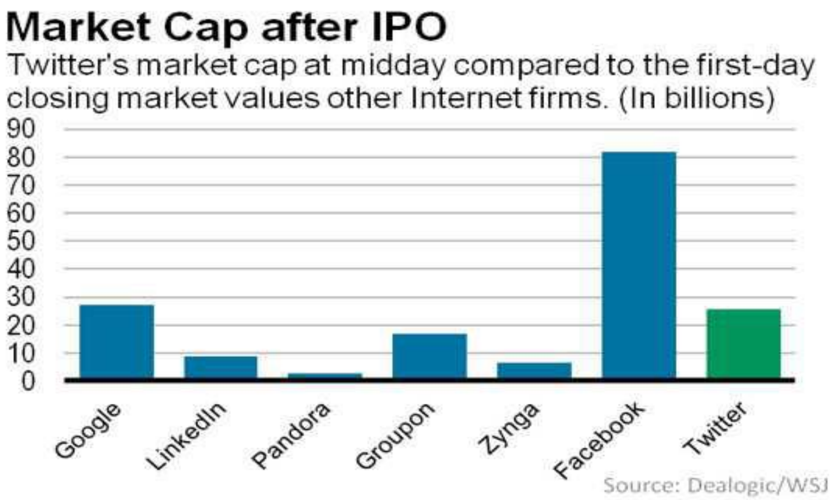


Market Capitalization: At Twitter's $26 IPO price, Twitter was worth $14.4 billion, putting it far behind Face book's $81 billion, and Google's $23 billion, but ahead of Groupon's nearly $13billion.

FIG. 5

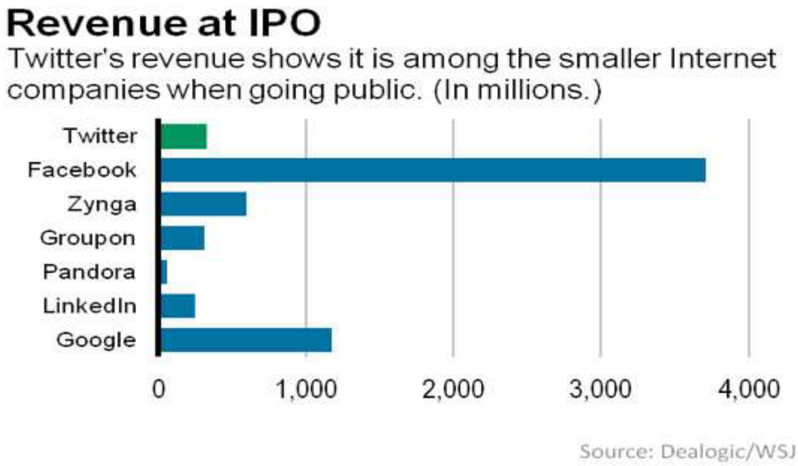
Market Cap at the end of the day: After getting that 73% bump, Twitter, at $25 billion, was much closer to Google which closed at $27.2 billion on its first day.

FIG. 6



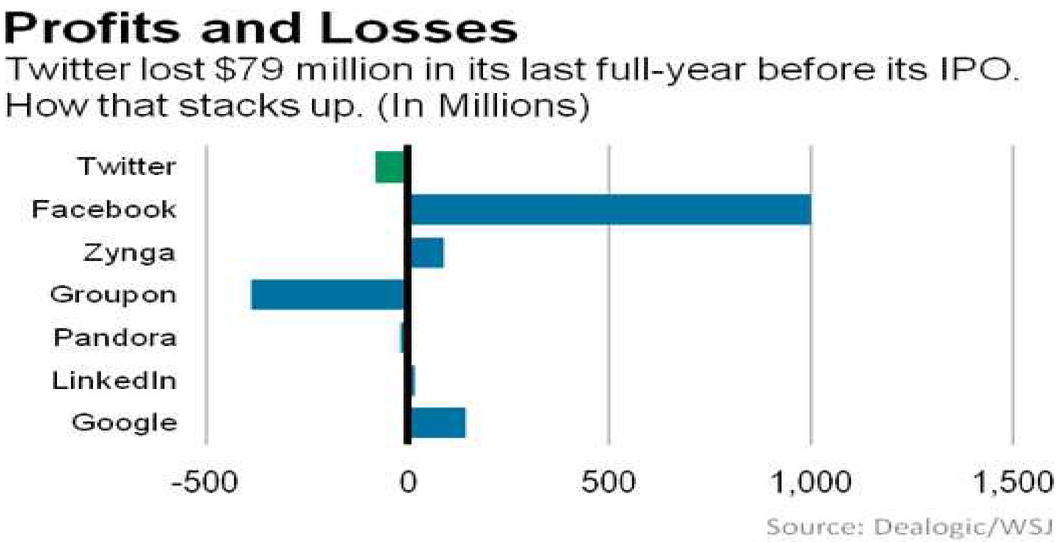
Revenue: Twitter's top line for the last full year before going public ranks toward the bottom of the group. Twitter brought in $317 million for 2012. Still, Twitter's revenue has been growing rapidly, as were the others when they went public, and for the first nine-months of this year already recorded $422.2 million.

FIG. 7



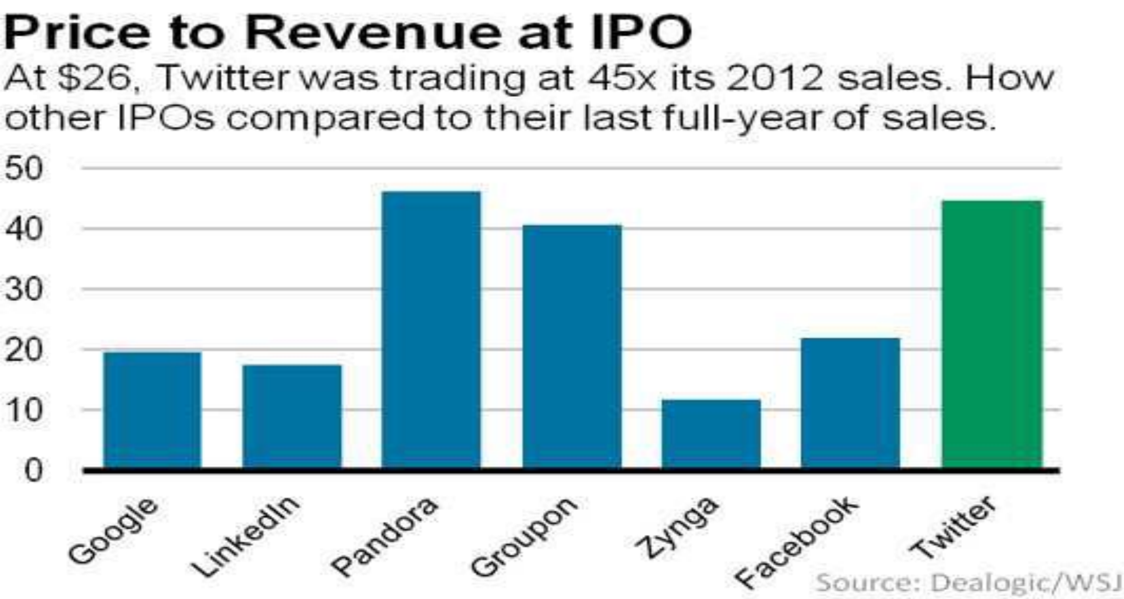
Bottom Line: Twitter lost $79 million in 2012, and losses have continued to pile up in the year (2013) also, in line with Pandora and Groupon which is yet-to-be-profitable at their IPO. Face book, by contrast, was the most mature in terms of earnings, making a $1 billion profit in the last full-year before it went public.

FIG. 8



Price to Revenue: Price to Revenue helps the investors to see how far sales would have to expand to bring it the market value of the company. By this metric, Twitter is expensive at its IPO price of $26 was at 45.7x its 2012 sales. That only slightly cheaper than Pandora, which was at 46.3x and more than double the 21.9x Face book went out at. Zynga was the cheapest at 11.7x.

FIG. 9



CONCLUSION

As per the observation made in the study, many reputed internet companies and also the social networking companies like Google, Face book, LinkedIn have issued the IPO and have raised the capital for the business purpose and the next turn was of the Twitter IPO which went to public on November 7, 2013. By analysing the initial returns it was clear that the Twitter IPO is under-priced, because issue price is $26 which was decided on the previous day of offering and first day closing price is $44.90. Sufficient amount of money is left on the table. Under pricing is obviously a cost to the issuing firm as the value been reduced in financial terms. The performance of Twitter IPO stocks is measured by the returns generated in very short term (i.e. the first and second week of IPO). The reason for under-pricing of Twitter IPO is we can relate it to the Winner's Curse phenomenon (it means the winner tend to overpay) investors have an optimistic view on the company's future performance. So with this positive optimism the investors have bought the stocks at the higher prices.

REFERENCES

1. Eugene F. Brigham, Michhael C. Ehrhardt, Financial Management: text and cases, Cengage Learning India Pvt Ltd, 2010.
2. James C.Van Horne, Sanjay Dhamija, Financial Management and Policy, Published by Dorling Kindersley (India) Pvt Ltd, 2012.
3. Joseph P.Ogden, Frank C.Jen, Philip F. O'Connor, Advanced Corporate Finance: policies and strategies, published by Pearson Education (Singapore) pvt ltd, 2003.
4. Juseong Kim, 1999, 'The Relaxation of Financing Constraints by the Initial Public Offering of Small Manufacturing Firms Author', Small Business Economics, Vol. 12, No. 3 (May, 1999), pp. 191-202.
5. Raghuram Rajan and Henri Servaes, 1997, 'Analyst Following of Initial Public Offerings', The Journal of Finance, Vol. 52, No. 2 (Jun., 1997), pp. 507-529.
6. Reena Aggarwal and Pat Conroy, 2000, 'Price Discovery in Initial Public Offerings and the Role of the Lead Underwriter', The Journal of Finance, Vol. 55, No.6 (Dec., 2000), pp. 2903-2922.
7. Ross Westerfield Jaffe, Corporate Finance, Tata Macgraw-Hill Publishing company Ltd, 2004.
8. Timothy H. Lin, 1996, 'Administration The Certification Role of Large Block Shareholders in Initial Public Offerings: The Case of Venture Capitalists' Quarterly Journal of Business and Economics, Vol. 35, No. 2 (spring, 1996), pp. 55-65.

WEBSITES

9. www.moneybeat-wsj.com
10. www.NASDAQ.com
11. www.NYTimes.com
12. www.TIME.com

THE CONFINE OF EFFICIENT CONTRACT BETWEEN PRINCIPALS AND DISTRIBUTORS PERFECTLY CONTROL MARKETING MIX STRATEGIES: CHANNEL MANAGEMENT PERSPECTIVE OF FAST MOVING CONSUMER GOODS (FMCG) INDUSTRIES IN INDONESIAN

DR. AGUS TRIHATMOKO, R.
RESEARCH SCHOLAR
FACULTY OF ECONOMIC & BUSINESS
UNIVERSITAS SEBELAS MARET
INDONESIA

DR. MUGI HARSONO
RESEARCH SCHOLAR
FACULTY OF ECONOMICS & BUSINESS
UNIVERSITAS SEBELAS MARET
INDONESIA

DR. SALAMAH WAHYUNI
PROFESSOR
FACULTY OF ECONOMICS & BUSINESS
UNIVERSITAS SEBELAS MARET
INDONESIA

DR. TULUS HARYONO
PROFESSOR
FACULTY OF ECONOMICS & BUSINESS
UNIVERSITAS SEBELAS MARET
INDONESIA

ABSTRACT

The interest of marketing research to obtain a deep understanding of relationship marketing since 45 years ago, relatively less of the research put role strategies of marketing mix. This research reveals perspective of relationship marketing within agency theory and channel management structure of fast moving consumer goods (FMCG) industry. The purposes of this research are to identify, describe, and obtain a deep understanding of the confine of efficient contract between principals and distributors towards marketing mix strategies. The research design of this research is qualitative method by phenomenology and constructionism approach. Data collected from two distributors companies which partnering with national and multinational company. Result concludes that environment factors, commercial term, aspects of marketing mix strategies and organizational function directly and indirectly determines relationship development. Essential content about environment, commercial term, marketing mix and organizational function are the prospectus on the policy making in the company, specifically determined legal contract agreement between principal and agent. The contract agreement essentially moves toward to strategies of marketing mix. These findings constructively have essential implication as the proposition in relationship marketing and agency theory in marketing area. Practitioner may take the advantages. This research's advantage for practitioner is to enrich knowledge to improve their channel performance and relationship development with their partner.

KEYWORDS
relationship marketing, marketing mix, efficient contract, agency theory, marketing strategies, channel management, principal and distributor, fast moving consumer goods (FMCG).

INTRODUCTION

Market potency of Fast Moving Consumer Goods (FMCG) product in Indonesia is very huge, indicated by phenomenon of total univers are 2.524.111 stores ("a research company", 2010). FMCG's marketing has important role in countries development (Sarangapani and Mamatha, 2008). Yet, there are limited academic researches for FMCG's marketing. Meanwhile, there are a lot of national and multinational company operates in Indonesia. It is an interesting phenomenon, to investigate how apply FMCG marketing strategy at their channel. Indonesia FMCG's companies apply channel management by conventional approach or widely known as indirect channel (Trihatmoko, Harsono, Wahyuni and Haryono, 2016), with the result that structurally put distributors as the first line (Kotler and Armstrong, 2013; Evans and Berman, 1992). Although this decade, some big companies put their products to modern markets without distributors. The uniqueness of this research is not only to take a look at Indonesia FMCG marketing perspective only but also to explain how crucial marketing mix position in the context of relationship between producer companies as the principal and distributors as main agent. This study of relationship marketing involves marketing strategies, so as substantially mingles transactional marketing mix. The concept of product, price, place and promotion (4Ps) are the paradigm of marketing mix which dominate marketing ideas, researches, and practices since introduced about 40 years ago (Gronross, 1997). Today this paradigm is begining to lose position, relationship marketing is one approach to marketing which eventually has entered the marketing literature (Gronross, 1997). The first research of relationship marketing did by 1970 and appears on marketing literatures since about 1980s (Rao and Perry, 2002; Theron et al. 2008). Gronross's postulate (1997) is correct till today, by 2000 until today the focus of the researchers is about strengthen the construction and interpretation of relationship marketing, as did by Jap and Ganesan (2000); Rao and Perry (2002); Parsons (2002); Zineldin and Philipson (2007); Theron, Terblanche and Boshoff (2008); Sashi (2009); Alvarez, Casielles and Martin (2011); Song, Su, Liu and Wang (2012); Tareq (2012); Mazhari, Madahi and Sukati (2012); Aminu (2012); Roman and Martin (2014) and Trihatmoko et al. (2016). Research based on relationship marketing approach limitedly exploring marketing mix (4Ps). The result of Zineldin and Philipson (2007) concluded some companies take an advantage traditional 4Ps marketing concept, when the others mixed the relationship and transactional marketing mix. Going deeper, Trihatmoko et al. (2016) investigates how the salespeople of distributor FMCG products, apply marketing mix strategies to build the relationship with the customers. Base on previous literatures encourage the researchers to take a look back the position of marketing mix at the context of relationship marketing between company and distributors in FMCG industry as the originality of this research.

IMPORTANCE OF THE STUDY

Study of marketing mix in channel management structures is urgent to do to remind the paradigm of marketing mix as the basic of marketing activities. Specifically, for marketing academics this research will enrich the orientation towards marketing FMCG by relationship marketing approach. Generally, this research encourages researchers to do advanced researches, so as will contribute to advancement of the recent 4Ps marketing mix. This research also provides the advantages for managers and executives of multinational companies who interest build a carrier in Indonesia. Last but not least, for the future entrepreneurs in distributors area will be provided by insights the role of distributors as the main agent of the FMCG companies.

LITERATURE REVIEW

Morgan and Hunt (1994) explain that the relational exchange in relationship marketing grouped as four function: supplier, buyer, internal and lateral partnership. By partnership perspectives between producer companies and distributors is the relationship between principal as suppliers and agent as buyers. Agency theory uses the metaphor of contract to discribe relationships in wich one party delegates work to anothers (Jensen and Meckling, 1976 within Bergen, Duta and Walker, Jr., 1992). The theory describes that efficient contract between principal and agent influenced by uncertainty and moderating factor: environment. Efficient contract is one that brings about the best possible outcome for the principal given the contraints imposed by the situation, rather than one that maximizes the joint utility of both principal and agent (Bergen et al., 1992). The challenge of relationship marketing is to recognize the subtle changes in the business environement and to adapt to them (Zineldin and Philipson, 2007). The environment directly affects the degree of decision-making uncertainty experienced by channel members (Achrol and Stren, 1988). Dwyer and Welsh (1985) proposed model of environmental characteristics impact on channel structure and process, and channel configuration.

Relationship marketing refers to all marketing activities directed toward establising, developing, and maintaining successful relational exchanges (Morgan and Hunt, 1994). Marketing mix is a collection of sub-activities and create relationships with costumers as weel as supplier and dealers, etc. (Zineldin and Philipson, 2007). This literature review indicates that marketing mix variabelities are the contents of efficient contract. The main concern to reveal is how effective marketing mix have been applied for channel management structures, and the problem statement are: (1) how is the legality format of agency contract agreement between principals and distributors? (2) what are the confine of efficient contract and how determine the confine, and why should be confined?

OBJECTIVES

The objectives of this research are to identify, describe, and obtain a deep understanding confine of efficient contract, between principals and distributors in marketing mix strategies policy. This explorative research does to reveal the phenomenon the legality of agencies contract agreement between principals and distributors. The focus of this research is to investigate the agreement legality documents to find out the purposes of marketing mix strategies policy and channel management. Conceptually, the research result proposed by propositions to enlarge the marketing mix and channel management concept.

FRAME WORK

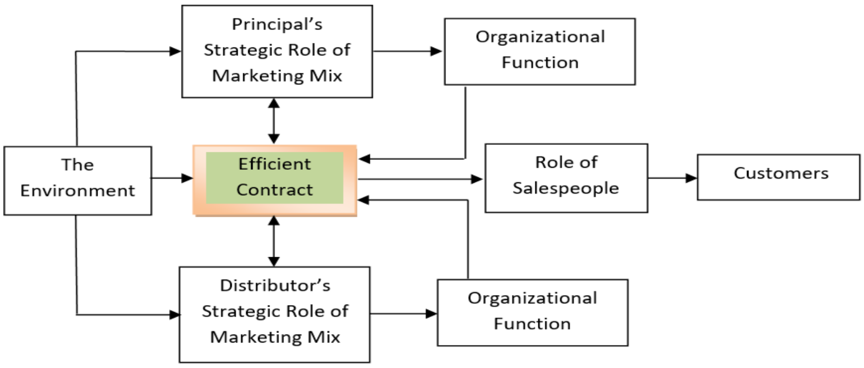
Based on previous literatures perspectives about partnership between principals and agents, conceptually could be understood that: (1) partnership between principals and distributors in FMCG industry uses metaphor agencies contract (Morgan and Hunt, 1994; Jensen and Meckling, 1976); (2) Efficient contract determined by environment condition (Bergen et al., 1992; Achrol and Stren, 1988; Dwyer and Welsh 1985); (3) Principals target is market competitive advantage outcome (Bergen et al., 1992); (4) Distributor is intermediaries on marketing activity which set by principals (Morgan and Hunt, 1994); (5) Distributor is the sub-activity from marketing mix (Zineldin and Philipson, 2007; Trihatmoko et al*.,* 2016). Theoretical indicators (1-5) lead to estimate that efficient contract between principals and distributors included marketing mix strategies, and efficient contract stimulated by environment factors.

Principal might collect more information about the agent's behavior by investisting in monitoring activities and systems, and could the write contract that bases the agent's rewards on information about his or he behavior (Bergen et al., 1992). Partnership between supplier and buyer involve internal partnerships that is employer and functional departement (Morgan and Hunt, 1994). Based on that literatures perspectives could be estimated that efficient contract between principals and distributors controlled by employer as the organizational function principal and distributor.

The result of Trihatmoko et al. (2016) has proposed propositions that the role of salespeople in FMCG distributor companies determine the relationship quality with the customers based on historical implementation of marketing mix strategies. In the channel management concept, the functional distributor that is selling or distributing product to the customers such as wholesaler, retail, institutional, or the other special outlet (Kotler and Armstrong, 2013; Evans and Berman, 1992). The role of salespeople in FMCG distributor company as personal selling function, they do direct communication and interaction with the customer in the selling process (Trihatmoko et al., 2016). Integrated marketing communication (IMC) has become a major way of achive the objective of the company (Mihart, 2012). The principal could write a contract whereby the agent's rewards are ditermined by performance outcome, such sales volume (Bergen et al. 1992). Mihart (2012) explain that IMC works specifically through all of the marketing mix or widely known as "4Ps": product, price, place and marketing communication or promotion". Based on those literatures review estimates that distributor salespeople take their roles refers to efficient contract of marketing mix strategies when offering their product to the customers.

The perspective conceptualization above could be described in efficient contract framework between principals and distributors (Figure 1). This framework is umbrella and a guidance of analysis tools in qualitative research (Fatchan, 2011; Saldana, 2011; Creswell, 2013) that is to identify, describe, and obtain deep understanding the confine of efficient contract between principals and distributors related to marketing mix strategies comprehensively.

FIGURE 1: PROPOSED MODEL OF EFFICIENT CONTRACT BETWEEN PRINCIPALS AND DISTRIBUTORS



METHOD

This research uses qualitative method by phenomenology theoretical design (madhab) that is channel management phenomenon of FMCG product marketing (Proctor, 2005; Creswell, 2009; Jonker and Pennink, 2010; Fatchan, 2011; Saldana, 2011; Creswell, 2013; Gupta and Awasthy, 2015; Taylor, Bogdan and DeVault, 2016). Phenomenology is research strategy approach to identify human experiences of certain phenomenon, in this case the distributors of FMCG experiences on making contract agreement with their principals (Fatchan, 2011; Saldana, 2011; Creswell, 2013). Data interpretation for this research is constructionism/constructivism philosophy that is base on the location of the FMCG business (Fatchan, 2011; Saldana, 2011; Creswell, 2013; Hammersley, 2013; Gupta and Awasthy, 2015). Therefore, unit analysis of this research is distributor companies as main agent of FCMG industry. Data collecting do by observing agreement documents between principals and distributors (Saldana, 2011). The data obtained from executives of distributor companies located in Central Java, Indonesia. The norms of these agreements principally has no difference from the other region in Indonesia, so as the documents from distributors companies located in Central Java could be determined as the representative of agreement pattern for another region in Indonesia.

Distributor agreement documents have been selected from two multinational companies and three national companies in Indonesia. Company names could not be reported in this research because of its legality of the agreement and it is confidential for the companies, so that in data analysis coded by **C1, C2... and C5**. For data validation, we uses quite long processes that are triangulation, member check, presisten observation, audit trial and data interpretation analysis (Fatchan, 2011; Creswell, 2013). We also conduct discussion or open interview with managers and executives of distributor companies as the research participants. Triangulation and presisten observation conducted for build credibility, audit trial and member check conducted for assess data interpretation analysis to find the dependability and conformability (Creswell, 2013).

RESULT & DISCUSSION

LEGALITY OF AGENCIES CONTRACT AGREEMENT

This research on partnership between principals and distributors has revealed agencies contract agreement phenomenon. Initial observation obtains a deep understanding physical form of agreement from five principals companies with two different distributors. The result of initial observation from five agencies agreements produces the norms description of efficient contract between principals and their distributors.

In practice world, agencies agreement named as distributor agreement *(Indonesian: Perjanjian Distributor; Perjanjian Penunjukan Distributor; or Perjanjian Kerjasama Distributor).* Physical form of agreement formatted in law-discussion based on Indonesia's law approaching. Principal referred to as First Party and Distributor referred to as Second Party. Therefore, the parties agree to define the terms and conditions applicable to that agreement, as follows articles *(Indonesian: Pasal)* that manage the confines of relational agreements. Distributor agreement document signed by each representative of the party that is the company's director or president director, who their name legally stated in company's establishment document. For some reasons, an executive or manager may have signed the agreement if they already have mandatory letter from the director. After the agreement has been signed, the agreement will be valid for one year and will be extended. In the case of agreement severance, it depends on one party and will be approved by another party, if there is a quarrel will be conduct discussion or law enforcement. Here we have article specimen (Note: C1.A1.3: Agreement document of company 1, article 1-number 3, and etc).

"... when mediation has been doing.... then the agree-parties to choose permanent and general domicile… as the place to disagreement settlement" (C1.A.18.4).

"... second party shall take the responsibility and be charged in the name of law." (C2.A.16..5).

"... any dispute arising...will be settled by mutual agreement, if..., the parties to chose parmanent domicile at...District Court". (C3.A.19.6).

"This agreement shall be interpreted and construed... of the master agreement with respect to governing law". (C4.A.11.1)

The whole identification and description result on FMCG industry distributor agreements indicate that efficient contract formulated in detail and has legal consequences. Theoretically, this research proposition one, as:

P1: Norms of efficient contract between principals and distributors formulated and regulated grounded of legal environment where the agreement made.

This finding, contributes to agency theory by Jensen and Meckling (1976) related to metaphor of contract to discribe relationships and partnership within relationship marketing by Morgan and Hunt (1994). Specifically, the formation, principals as seller and distributors as buyer in the business to business (B2B) context of FMCG products category.

THE CONFINE OF EFFECIENT CONTRACT

Stage two of observation conducted by exploring one by one of every single article in distributor agreement. The research focus is to produce identity and essence of evironment and marketing mix related with others aspect of business term and organizational functions.

THE ENVIRONMENT

Environment is stimulus factor of relationship development between principals and distributors. The agreement provision describes that environment is the principals and distributors perspective to estimate business prospective that is commercial term. Logically, when among the parties will earn margin, sales volume and others business development beneficial, they will agree to make a contract. Whereas when one party could not support these provision offer by another party, there will no agreement made. Here we have specimens of agreement provision regulating efficient contract to identify environment related with commecial term to build business relational (Note: first party is principal; second party is distributor).

"First party is a company that producing multiple consumer product...as mention in Exhibit..." (C2, C3).

"Second party is the distributor of food and baverage products of first party..." (C5).

"...initial statement within distributor agreement that is first party and second party identities mentioned: NN is a company in this case represented by NN (a director)" (C1-C5).

Understanding the introduction of agreement could be interpreted that both parties has qualification information of each party and discover the competition of categorical product in the market, so as both parties expecting the influence to commercial volume and value of their business. This lead to proposition two, as:

P2.1: Competitive environment of products determine the commercial term to build the relationship.

Next discussion, interpreting P1 that legal agreement is quite clear as the protection of both parties, yet it bring financial risk consequence, so that the next proposition, as:

P2.2: Socio-cultural environment determine commercial term to build relationship.

A director represented the company lead that director and another organizational functions has connectivity among the individual to give business opportunity each other, so that the proposition, as:
P2.3: Internal-political structure environment determine commercial term to build relationship.
Principals of big company in this research stipulate requirement to the distributor in the form of Bank Guarantee as collateral liabilities.
"Second party give the full authority to first party to withdraw the bank guarantee in the condition they could not pay…"(C2.A.3.2.12).
"Second party shall provide an unconditional…., for the benefit of first party..." (C3.A7.1).
"... to guarantee debt re-payment…., second party devolve the bank guarantee….issued by NN Bank..., nominal..." (C5.A.3).
Bank Guarantee issued by bank through credit agreement between distributor and bank to protect the financial condition of principal. The scheme indicates all parties depend on external party that is bank, and the proposition, as:
P2.4: External-economic environment determine commercial term to build relationship.
The principal stipulate requirement to the distributor to provide infrastructure to make them capable of operating distributor business functions.
"second party has the duty to provide proper infrastructure to store and keep the product as the provision of first party" (C1.A.7.1).
"...procurement of infrastructure needs..., those procurement based on the agreement of both party, involving third party" (C2.A.1.6).
"second party shall assist the successful sales and marketing... by providing a sufficent, proffesional and effectiveness organizational structure..." (C3.A.10.1).
Infrastructure is internal resource investment provided by distributor, so that proposition, as:
P2.5: Internal-economic environment determine commercial term to build relationship.
Others perpective of environment that is market competitive, its example in the agreement postulated that coverage area and customers type is about confined by principal.
"Second party is only required deliver product in the certain marketing area... NN District" (C1.A.2.1).
"... outlet is the determined customer by first party...within coverage area..." (C2.A.1.6).
"Second party shall distribute the products in the special territory of NN city...to the exclusion of any others territory" (C3.A.1.3).
The edge of territorial and typical customers "modern or traditional trade" are business prospective in the market, that is proposition, as:
P2.6: Competitive environment of market determine commercial term to build relationship.
The concept of environment related with commercial term to describe that at the initial process both principals and distributors has their own policy to fulfill their duty as postulated in the agreement that is commercial term contents. Up to this stage, the proposition three, as:
P3: Commercial term is dominant factor towards each partner to determine company's policy to build relationship.
The findings related environment factors, commercial term, and relationship development contribute to identify and describe detail structure of agency theory by Jensen and Meckling (1976) and Bergen et al., (1992), Achrol and Stren (1988), Dwyer and Welsh (1985) that efficient contract determined by environmental condition. This result confirms to Morgan and Hunt (1994), Jensen and Meckling (1976) to ensure that partnership between principals and distributors of FMCG industry uses metaphor agencies contract in the process of applying relationship marketing approach, specifically in Indonesia.

COMPANY'S POLICY AND MARKETING MIX
The result of this research identifies that company's policy clearly stated in the agreement document as main rule to associate the relationship implementation between principals and distributors. The director or the other executive acts as company's representative, so as company policy is their responsibility within company strategies role. Company policy domination lies on marketing mix strategies (4Ps) as the distribution and selling channel to the customers, therefore, gives the direct consequences to commercial term.

PRODUCT

"First party product...which may be changed from time to time by first party, including but not limited to the new product,... Second party acknowledges that trade marks, trade names, logos and copyrights remain the sold intelectual property of the principal and..." (C3.A.1.2 and A.17.1).
"First party has the duties to: control the standard quality and product quality the goods that will be distributed and sold by second party… Second party prohibited to do increment and/or change the product in any form…" (C2.A.3.1.1 and A.3.2.10).
"Second party should do the NN distribution system as stipulation:... keep the product image and take the responsible to market return that not caused by first party" (C1.A.7.2).

PRICE

"Second party shall sell the products in accordance with the price, minimum order requirements and terms structure as determined first party... Changes to price-list may be made from time to time by first party....Second party shall comply with the structure..., shall not change or depart from the aforesaid structure... without the prior written approval from the first party" (C3.A.3.1-3).
"... the outlet price structure set by first party after consult with second party based on marketing strategies and fair profit... first party shall inform the second party by the written document…. Before the change of price enforced… second party shall be bent down to the term of payment policy to the determined outlet of first party" (C2.A.4.1 and A.5.1; A.4.9).
"... selling price determined by first party accordingly determined price list of... First party may change the price without approval of second party..." (C1.A.4.1 and A.4.2).

PLACE

"Second party shall distribute the products in the special territory of NN city... to the exclusion of others territory.... It is the sole right of the first party to ditermine the territory..." (C3.A.1.3).
"Outlet means customers based on first party provision that should be served by second party within the determined" (C2.A.1.1).
"First party considering profit and loss distribution potency, and may change marketing area with the written report to the second party, without any compensation to second party..." (C1.A.2.2).
"... covered channel are wholesaler, provision/retail, semipermanen shop..., general mini market, or another approved channel by NN-first party" (C5.4).

PROMOTION

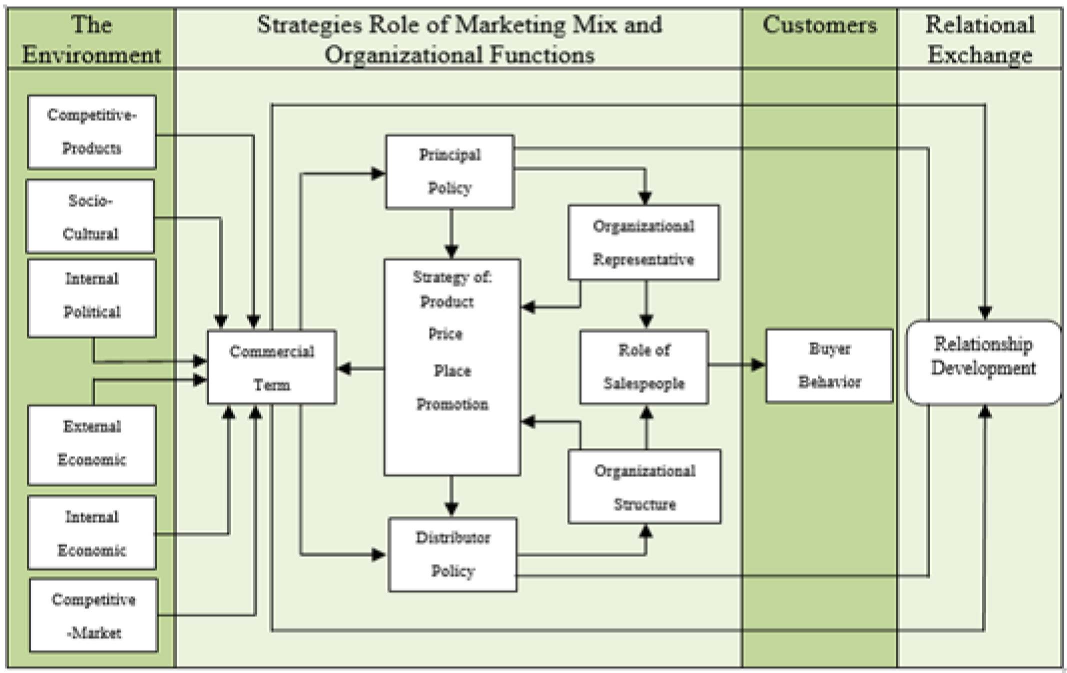
"Second party may only undertake promotional activity for the products after receiving letter of intsruction from the first party. Second party shall not carry out any advertising..."(C3.A.13.1-2).
"Second party shall propose promotion fund, event fund to increase the product selling to the first party and control the promotion and the event that will be held" (C3.A.3.1.5).
"... second party shall not to promote through magazines, newspapers, radio, poster, another images, and another electronic media and shall not use brand or first party logo on their invoice, memo, letterhead, and envelops… related to product without first party permission" (C1.A.8.3 and A.8.4).
Strategic role of product, price, place and promotion in the contract agreement reflect that principal do marketing mix strategies, and distributor as the executor. The proposition four, as:
P4.1: Principal strategic policy of product, price, place and promotion define distributor policy as the guidance implementation.
Marketing mix transaction consequences in this business-to-business scheme is about to provide commercial benefit to the principals and distributors. As mutual benefit explained as: pricing strategies impact company's margin in term of buying-selling price; promotion strategies impact the business volume in the selling increment strategy; marketing territory, product competitive advantages, and its integration to the price structure and promotional program directly affect gross profit and/or company profitabilities. It provides the proposition, as:
P4.2: Marketing mix policies directly impact the commercial term of both principals and distributors.
Proposition three (P3) indicates that commercial term impacts company policy, then lead the proposition, as:

P4.3: The marketing mix strategies result indirectly impact the further company policy, as long as the contract remain valid.
The findings of strategic role of product, price, place and promotion contribute to define the real position of marketing activities in the efficient contract by Morgan and Hunt, 1994, Zineldin and Philipson, 2007; Trihatmoko et al., 2016 postulate that distributors are the intermediaries or sub-activity of determined marketing activities by the principals.

ORGANIZATIONAL FUNCTION & CUSTOMERS

The marketing mix strategies implementation by distributor controlled by organizational function of both parties, as declared in the agreement.
"... following types of reports: Avertese event report, event of special interest... by each party as having responsibility for overseeing collaboration and compliance with the procedure..."(C4.1.11.12).
"Second party undertakes to provide report of sales and inventory movement,... weekly basis. First party will have the right to audit: stock level..., the realisation of the marketing and distribution of the product,..."(C3.A.12.3).
"Second party shall provide..., executive sales team and support sales teams and first party product distribution" (C1.A.7.9).
"... system, planning, sales target and productivity are the distribution system of NN-first party" (C5.A.3).
"Principals put the representatives for the equivalent of area sales supervisor, area sales manager, regional sales manager to do control function and coordination to the marketing activities of distributors. Distributor organizational structure of marketing functions are sales manager, sales supervisor, and sales person (salespeople). Among the organizational function shall collaborate to control and giving the feedback toward marketing activities, such as: trade promotion program, discount price, salespeople training, sales person effectiveness and etc., distributor customer served by sales person consist of wholesaler, retail and other institution or special outlet in modern or traditional trade" (source: researcher's observation).
Those organizational role phenomena identify that each company policies that is put the employees of the company to fully control all marketing activities by salespeople to the customer. Salespeople are organizational individual act as pure executor to achieve the sales and product distribution to the distributor customer. Customer buying decision process or customer buyer behavior depends on role of salespeople within product offering process. Then the proposition five, as:
P5.1: Principal policy on determining the organizational representative and the distributor policy on determining organizational structure.
P5.2: The whole organizational functions cooperatively control the marketing activities and the role of salespeople.
P5.3: The role of salespeople define the selling effectiveness and distribution and/or customer buying decision process "buyer behavior".
The organizational function exploring result contribute to identify the individual who do marketing activities. It is aligning Trihatmoko et al. (2016) and Mihart (2012) that the relationship between salespeople and the customer in the purpose for realizing the "4Ps" marketing mix strategies. The relationship channel structure between principals and intermediaries' customer support the conventional channel management concept by Kotler and Armstrong (2013) and Evans and Berman (1992). Theoretically the role of salespeople parallel with Trihatmoko et al. (2016) and Mihart (2012) that IMC implemented directly by sales person to their customers, except the IMC by advertising through media. The salespeople performance is to achieve target sales volume, so as this finding supports Bergen et al. (1992) postulate that the principal could write a contract whereby the agent's rewards are ditermined by performance outcome. The whole concept of efficient contract determined by proposition "P1-P5", so as can be formatted into the confine of efficient contract construct (Figure 2).

FIGURE 2: THE CONFINE OF EFFICIENT CONTRACT BETWEN PRINCIPALS AND DISTRIBUTORS



CONCLUSION

Figure 2 shows that mayor finding in this research, that are: First, environment factors antecedent relationship development and essential role of strategies of marketing mix determine the success of relationship development. Second, commercial term is central point that determined relationship development. Third, decision among the parties and/or one party towards the limited contract (to extend or stop the contract) since the early process until the implementation of contract agreement indirectly related by situational environment and the effectiveness of marketing mix strategies. Fourth, organizational function directly contributes both in provision by principals and implementation by distributors. Fifth, marketing mix strategies policy defined based on situational environment factor related with commercial business, and all of these postulated within the articles of legal contract agreement.
Based on these major findings, can be concluded that: First, (1) agencies contract agreement between principals and distributors regulated in detail the interest, objectivity, also the right and duty of each party. (2) during the agreement implementation to fulfill interest, objectivity, also the right and duty of each party protected. Second, (1) the confine of efficient contract regulate company's policies, that are internal and external infrastructures, internal organizational function, commercial term, market competition targeting, strategies of marketing activities and the other integrated aspects within the strategic role. (2) policy determination done by commercial progress of marketing mix strategies objective. (3) the confine of efficient contract purposed to avoid miss-understanding within partnership and to protect the risk for each party, also for contract severance. Figure 2 construction illustrate that product, price, place, and promotion have important role to build the relationship between principals and distributors. So that, the last conclusion that since the planning, implementation and evaluation of marketing mix strategies fully controlled by the provision confine of efficient contract.

RECOMMENDATION

This research identifies, describes, and explains phenomenon of efficient contract between principal and agent constructively. **These findings** have essential implication in marketing area as proposition on relationship marketing and agency theory. The research findings indicate that relationship between principals and its main distributor is about strategies: product, price, place and promotion. Established construction from relationship between principals and distributors exploration indicate that policy of the company related with internal and external environment and the role of marketing mix strategies. This concept philosophically implies to marketing theory that is relationship marketing originate from marketing strategies include product, price, place, and promotion. Therefore, theoretical approach study on relationship marketing highly recommended to cite marketing mix strategies as theoretical base of relationship marketing development.

The result indicates that efficient contract's process and realization based on its environment, that imply to commercial term aspects. Therefore, it suggested for strategic decision maker manager more precise when analyzing environment in order to make fair policy to all parties. It also indicates that personal-individual organization is a key person who responsible for all marketing activities. So that, managers highly suggested formulating Key Performance Indicator (KPI) based on progress performance of the marketing activities is to avoid subjectivity of characteristic personal-individual organization. The result reveals that agreement documents have it law consequences. There for, if there is a agreement severance, it is extremely recommended to both of director conduct interpersonal-individual approach cooperatively. The result reveals that salespeople as the executor of all of product, price, place, and promotion policies or programs. Last recommendation is about directors and managers should provide more attention to the salespeople, because your "eggs" are in the basket they bring.

LIMITATIONS AND SCOPE OF FUTHER RESEARCH

The data of this research is about limited on distributor agreement documents of big scale producer companies and main distributors in Indonesia. So that, the future research on small-medium scale producer companies and main distributor could be an interesting research. Going deeper, this research is about limited marketing management perspective, meanwhile within distributor agreement consist of commercial and law aspects. It highly recommended the academics of law and another management area will do further research on different perspective. Channel management research in this research is exclusively focus on FMCG industry, so that it could not be generalized for all industries. It is highly possible another researchers to replicate this research framework for non-FMCG industries channel management.

REFERENCES

1. Achrol R.S. & L.W. Stern, 1988. Environmental Determinants of Decision-Making Uncertainty in Marketing Channels, Journal of Marketing Research. 25 (1): 36-50.
2. Alvarez, L.S., R.V. Casielles and A.M.D. Martin, 2011. Analysis of The Role of Complaint Management in The Context of Relationship Marketing, Journal of Marketing Management. 27 (1/2): 143-164.
3. Aminu, S.A., 2012. Empirical Investigation of The Effect of Relationship Marketing on Bank' Customers Loyalty in Nigeria, Interdisciplinary Journal of Contemporary Research in Business. 4 (6): 1249-1266.
4. Bergen, M., S. Dutta and O.C. Walker, Jr., 1992. Agency Relationships in Marketing: A Review of The Implications and Aplications of Agency and Related Theories, Journal of Marketing. 56 (3): 1-24.
5. Creswell, J.W., 2009. Research Design. Qualitative, Quantitative and Mixed Methods Approaches. SAGE Publication. Achmad Fawaid. 2016. Research Design. *Pendekatan Kualitatif, Kuantitatif dan Mixed.* Edisi Kelima. Pustaka Pelajar Yogyakarta. Indonesia.
6. Creswell, J.W., 2013. Qualitative Inquiry & Research Design: Chossing Among Five Approaches. SAGE Publication. Achmad Lintang Lazuardi. 2015. *Penelitian Kualitatif & Desain Riset: Memilih di antara Lima Pendekatan.* Edisi Pertama. Pustaka Pelajar Yogyakarta. Indonesia.
7. Dwyer, F.R. and M.A. Welsh, 1985. Evenronmental Relationships of The Internal Political Economy of Marketing Channels, Journal of Marketing Research. 22 (4): 397-414.
8. Evans, J.R. and B. Berman, 1992. Marketing. Macmillan Publishing Company, New York, USA.
9. Fatchan, H.A., 2011. *Metode Penelitian Kualitatif* (Qualitative Research Method). Jenggala Pustaka Utama, Surabaya, Indonesia.
10. Gronross, C., 1997. Keynote Paper from Marketing Mix to Relationship Marketing - Towards a Paradigm Shipt in Marketing, Management Decision. 35 (4): 322-339.
11. Gupta R.K. and R. Awasthy, 2015. Qualitative Research in Management. SAGE Publications India Pvt Ltd., New Delhi, India.
12. Hammersly M., 2013. What is Qualitative Research? Bloomsbury Publishing Plc., London, UK.
13. Jap, S.D. and S. Ganesan, 2000. Control Mechanisms and The Relationship Life Cycle: Implications fo Safeguarding Specific Investements and Development Commitment. Journal of Marketing Research. 37 (2): 227-245.
14. Jensen and Meckling, 1976. Theory of the Firm: Managerial Behavior, Agency Costs and Ownership Structure. Journal of Financial Economics. 3 (4): 305-360.
15. Jonker, J. and B. Penning, 2010. The Essence of Research Methodology. Springer, Berlin, Germany.
16. Kotler, P. and G. Armstrong, 2013. Principals of Marketing. Pearson Education Limited, Harlow, England.
17. Mazhari, M.Y., A. Madahi and I. Sakati, 2012. The Effect of Relationship Marketing on Costumers' Loyalty in Iran Sanandaj City Banks, International Journal of Business and Management. 7 (15): 81-87.
18. Mihart, C., 2012. Impact of Integrated Marketing Communication on Consumer Behaviour: Effects on Consumer Decision-Making Process, International Journal of Marketing Studies. 4 (2): 121-129.
19. Morgan, R.M. and S.D. Hunt, 1994. The Commitment-Trust Theory of Relationship Marketing, Journal of Marketing. 58 (3): 20-38.
20. Parsons, A.L., 2002. What Derterminanes Buyer-Seller Relationship Quality? An Investigation from The Buyer's Perspective, Journal of Supply Chain Management. 38 (2): 4-12.
21. Proctor, T., 2005. Essentials Marketing Research. Person Education Limited, Harlow, England.
22. Ramon, S. and P.J Martin, 2014. Does The Hierarchical Position of The Buyer Make a Difference? The Influence of Percieved Adaptive Selling on Customer Sastifaction and Loyalty in a Business-to-Business Context, Journal of Business & Industrial Marketing. 29 (5): 364-373.
23. Rao, S. and C. Perry, 2002. Thinking About Relationship Marketing: Where are Now?, The Journal of Business & Industrial Marketing. 17 (7): 598-614.
24. Saldana J., 2011. Fundamentals of Qualitative Research. Oxford University Press, Inc., New York, USA.
25. Sarangapani, A. and T. Mamatha, 2008. Rural Consumer Behavior with Regard to Selected FMCG Consumption Patterns and Brand Usage: A Study, Journal of Brand Management. 5 (3): 22-61.
26. Sashi, 2009. Buyer Behavior in Business Markets: A Review and Integrative Model, The Journal of Global Business Isues. 3 (2): 129-138.
27. Song, Y., Q. Su, Q. Liu and T. Wang, 2012. Impact of Business Relationship Functions on Relationship Quality and Buyer's Performance, Journal of Business & Industrial Marketing. 27 (4): 286-298.
28. Tareq, 2012. The Impact of Customer Relationship Marketing on Customers Image for Jordanian Five Star Hotels, Economics, Management and Financial Markets. 7 (4): 716-725.
29. Taylor, S.J., R. Bogdan and M.L. DeVault, 2016. Introduction to Qualitative Research Methods. John Wiley & Son, Inc. Canada.
30. Theron, E., N.S. Terblanche and C. Boshoff, 2008. The Antecedents of Relationship Commitment in The Management of Relationships in Business-to-Business (B2B) Financial Services, Journal of Marketing Managmenet. 24 (9/10): 997-1010.
31. Trihatmoko, R.A., M. Harsono, S. Wahyuni and T. Haryono, 2016. Buyer-Seller Relationship Construction in The Business Buyer Behavior: Wholesaler and Distributor Fast Moving Consumer Goods (FMCG) Industry in Indonesian Market Place, International Journal of Research in Commerce & Management. 7(5):24-33.
32. Zineldin, M. and S. Philipson, 2007. Kotler and Borden are not Dead: Myth of Relationship Marketing and Truth of The 4Ps, Journal of Consumer Marketing. 24 (4): 239-241.

AN ANALYSIS OF NON PERFORMING ASSETS OF INDIAN BANKS

OMBIR
ASST. PROFESSOR
UNIVERSITY COLLEGE
KURUKSHETRA UNIVERSITY
KURUKSHETRA

SANJEEV BANSAL
PROFESSOR
DEPARTMENT OF ECONOMICS
KURUKSHETRA UNIVERSITY
KURUKSHETRA

ABSTRACT
The paper analyses the recent trends in non-performing assets (NPAs) of different categories of Indian banks viz., public sector banks, private sector banks and foreign banks. It is found that NPAs of Indian banking industry as a whole are continuously increasing during the period 2008-09 to 2013-14 followed by the global financial crisis. Further, the impact of ownership pattern in deciding the level of NPAs is also investigated against the perception that public sector banks have relatively larger level of NPAs. However, no strong empirical evidence is found in support of this perception. The relationship between profitability, ownership pattern and level of NPAs is also examined. The empirical findings suggest that public sector banks are as good or as bad as their private counterparts, however, foreign banks have relatively higher profitability then domestic public and private banks. It is also found that the higher level of NPAs negatively affect the profitability of a bank.

KEYWORDS
NPAs, banks.

JEL CODES
G21, G28

1. INTRODUCTION
It has been argued by a number of economists that a well-developed financial system enables smooth flow of savings and investments and hence, supports economic growth (see King and Levine, 1993, Goldsmith, 1969). A healthy financial system can help in achieving efficient allocation of resources across time and space by reducing inefficiencies arising out of market frictions and other socio-economic factors. Amongst the various desirable characteristics of a well-functioning financial system, the maintenance of a few non-performing assets (NPA) is an important one. NPAs beyond a certain level are indeed cause for concern for everyone involved because credit is essential for economic growth and NPAs affect the smooth flow of credit. Banks raise resources not just on fresh deposits, but also by recycling the funds received from the borrowers. Thus, when a loan becomes non-performing, it affects recycling of credit and credit creation. Apart from this, NPAs affect profitability as well, since higher NPAs require higher provisioning, which means a large part of the profits needs to be kept aside as provision against bad loans. Therefore, the problem of NPAs is not the concern of the lenders alone but is, indeed, a concern for policy makers as well who are involved in putting economic growth on the fast track. In India due to the social banking motto, the problem of bad loans did not receive priority from policy makers initially. However, with the reform of the financial sector and the adoption of international banking practices the issue of NPAs received due focus. Thus, in India, the concept of NPA came into the reckoning after reforms in the financial sector were introduced on the recommendations of the Report of the Committee on the Financial System (Narasimham, 1991) and an appropriate accounting system was put in place.
Broadly speaking, NPA is defined as an advance where payment of interest or repayment of instalment of principal (in case of term loans) or both remains unpaid for a certain period2. In India, the definition of NPAs has changed over time. According to the Narasimham Committee Report (1991), those assets (advances, bills discounted, overdrafts, cash credit etc.) for which the interest remains due for a period of four quarters (180 days) should be considered as NPAs. Subsequently, this period was reduced, and from March 1995 onwards the assets for which the interest has remained unpaid for 90 days were considered as NPAs. Though the NPA issue has received considerable attention in the post reform period, academic work on the subject is not adequate (Ghosh, 2005, Mor and Sharma, 2003, Rajaraman et al, 1999). This paper attempts to provide an overview of the NPA problem in India concentrating on the various dimensions involved.

2. NPA NORMS
Though the issue of NPA was given more importance after the Narasimham Committee Report (1991) and highlighted its impact on the financial health of the commercial banks and, subsequently, various asset classification norms were introduced, the concept of classifying bank assets based on its quality began during 1985-86. A critical analysis to monitor credit comprehensively and uniformly was introduced in 1985-86 by the RBI by way of the Health Code System in banks. This system, inter alia, provided information regarding the health of individual advances, the quality of the credit portfolio and the extent of advances causing concern in relation to total advances. It was considered that such information would be of immense use to banks for control purposes. The RBI advised all commercial banks (excluding foreign banks, most of which had similar coding system) on November 7, 1985, to introduce the Health Code System indicating the quality (or health) of individual advances under the following eight categories, with a health code assigned to each borrowal account (source: RBI):
1. Satisfactory - conduct is satisfactory; all terms and conditions are complied with; all accounts are in order and safety of the advance is not in doubt.
2. Irregular- the safety of the advance is not suspected, though there may be occasional irregularities, which may be considered as a short term phenomenon.
3. Sick, viable - advances to units that are sick but viable - under nursing and units for which nursing/revival programmes are taken up.
4. Sick: nonviable/sticky - the irregularities continue to persist and there are no immediate prospects of regularisation and the accounts could throw up some of the usual signs of incipient sickness
5. Advances recalled - accounts where the repayment is highly doubtful and nursing is not considered worthwhile and where decision has been taken to recall the advance.
6. Suit filed accounts - accounts where legal action or recovery proceedings have been initiated.
7. Decreed debts - where decrees (verdict) have been obtained.
8. Bad and Doubtful debts - where the recoverability of the bank's dues has become doubtful on account of short-fall in value of security, difficulty in enforcing and realising the securities or inability/unwillingness of the borrowers to repay the bank's dues partly or wholly

Under the above Health Code System, the RBI classified problem loans of each bank into three categories: i) advances classified as bad and doubtful by the bank (Health Code No.8) (ii) advances where suits were filed/decrees obtained (Health Codes No.6 and 7) and (iii) those advances with major undesirable features (Health Codes No.4 and 5). The Narasimham Committee (1991) felt that the classification of assets according to the health codes was not in accordance with international standards. It believed that a policy of income recognition should be objective and based on the record of recovery rather than on subjective considerations. In addition, before the Indian banks complied with the capital adequacy norms, their assets had to be revalued on a more realistic basis of their realisable value. Thus, the Narasimham Committee (1991) believed a system of income recognition and provisioning is fundamental to preserve the strength and stability of the banking system. The international practice is that an asset is treated as non-performing when interest is due for at least two quarters. In respect of such non-performing assets, interest is not recognised on accrual basis but is booked as income only when it is actually received. The committee suggested that a similar practice be followed by banks in financial institutions in India and recommended that interest on NPAs be booked as income on accrual basis. The NPA would be defined as advance, as on the balance sheet date in the following circumstances:

1. In respect of overdraft and cash credits, accounts remain out of order for a period of more than 180 days,
2. In respect of bills purchased and discounted, the bill remains overdue4 and unpaid for a period of more than 180 days,
3. In respect of other accounts, any account to be received remains past due for a period of more than 180 days.

As mentioned earlier, the grace period was reduced and from March 1995 onwards assets for which interest has unpaid for 90 days were considered as NPAs. Provisions need to be made for the NPAs and total NPA (gross) minus the provisions is defined as net NPA.

Besides providing a detailed definition of NPA, the Narasimham Committee (1991) also suggested that for the purpose of provisioning, banks and financial institutions should classify their assets by compressing the health codes into four broad groups; (i) Standard (ii) Sub-standard, (iii) Doubtful and (iv) Loss. Broadly, sub-standard assets would exhibit problems and include assets classified as non-performing for a period not exceeding two years. Doubtful assets are those that remain as such for more than two years and include loans that are overdue for more than two years. Loss assets are accounts where loss has been identified but amounts have not been written off. According to international norms, commercial banks need to keep aside a portion of their income as a provision against bad loans. The amount of the provision depends on the type of NPAs and the time duration. Now Indian banks need to make provisions for all bad loans.

3. NPA RECOVERY MECHANISM

The Government of India felt that the usual recovery measures like issue of notices for enforcement of securities and recovery of dues was a time consuming process. Thus, in order to speed up the recovery of NPAs, the government constituted a committee under the chairmanship of late Shri Tiwari in 1981. The committee examined the ways and means of recovering NPAs and recommended, inter alia, the setting up of 'Special Tribunals' to expedite the recovery process. Later the Narasimham Committee (1991) endorsed this recommendation, and, suggested setting up of the Asset Reconstruction Fund (ARF). It was suggested that the Government of India, if necessary, should establish this fund by special legislation to take over the NPAs from banks and financial institutions at a discount and recover the dues owed by the primary borrowers. Based on the recommendations of the Tiwari and the Narasimham Committees, Debt Recovery Tribunals were established in various parts of the country. An Asset Reconstruction Company was also established. The various measures taken to reduce NPAs include rescheduling and restructuring of banks, corporate debt restructuring and recovery through Lok Adalats, Civil Courts, Debt Recovery Tribunals and compromise settlement. In addition, some legal reforms were introduced to speed up recovery.

1. SARFAESI ACT

The legal mechanism for recovery of default loans was so far cumbersome and time-consuming. Thus, it was felt that banks and financial institutions should be given the power to sell securities to recover dues. In this regard, the Government of India appointed a committee under the chairmanship of Shri T R Andhyarujina, senior Supreme Court advocate and former Solicitor General of India, in 1999 to look into these matters. The Committee submitted four reports. One of them is related to securitisation. Based on the recommendations of the Andhyarujina Committee, The Securitisation and Reconstruction of Financial Assets and Enforcement of Security Interest (SARFAESI) Act, 2002, was passed on December 17, 2002. The act provides enforcement of the security factor without recourse to civil suits. This act was passed with the aim of enabling banks and financial institutions to realise long- term assets, manage the problem of liquidity, reduce asset liability mismatches and improve recovery by taking possession of securities, selling them and reducing NPAs. The ordinance also allows banks and financial institutions to utilise the services of ARCs/SCs for speedy recovery of dues from defaulters and to reduce their NPAs. The ordinance contains provisions that would make it possible for ARCs/SCs to take possession directly of the secured assets and/or the management of the defaulting borrower companies without resorting to the time-consuming process of litigation and without allowing borrowers to take shelter under the provisions of SICA/BIFR. In addition to passing the SARFAESI Act, certain other legal reforms were also introduced to speed up the loan recovery process.

2. OTHER LEGAL REFORMS

One of the important factors responsible for the ever-increasing level of NPAs in the Indian banking industry is the weak legal system. According to an international rating agency called FITCHIBCA, "The Indian legal system is sympathetic towards the borrowers and works against the banks' interest. Despite most of their loans being backed by security, banks are unable to enforce their claims on the collateral when the loans turn non-performing, and therefore, loan recoveries have been insignificant." However, efforts have been made to rectify these problems through the judicial process as well as by enacting laws. In 1999, a standing committee under the aegis of Industrial Development Bank of India (IDBI) was constituted to initiate a co-ordinated approach to the recovery of large NPA accounts and for institutionalising an arrangement between banks and financial institutions for the systematic exchange of information in respect of large borrowers (including defaulters and NPAs). Moreover, as mentioned above, in 2002 the SARFAESI Act was passed and it empowered the creditors to foreclose non-performing loans and the underlying collateral without going through a lengthy judicial or tribunal process (Basu, 2005). All these efforts improved the recovery of NPAs by commercial banks, which in turn has helped in reducing the NPA level. The total worth of NPAs recovered through various channels was around Rs 4,039 crore during 2003-04, which increased many fold to Rs 20,578 crore during 2004- 05.

3. NPA TRENDS

Table 1 shows the trend and pattern of gross NPAs as the percentage of gross advances of four different categories of banks over the period 2002-03 to 2013-14. In 2002-03 all categories of Indian banks have highest gross NPAs as percentage gross advances after that year this ratio declines significantly, however, the pattern of decline is not same for the all categories of banks. For example, public sector banks have highest gross NPAs in 2002-03 and it declines consistently till 2008-09 which indicates the improved loan recovery system and increased management efficiency of public sector banks. But after 2008-09, the share of gross NPAs in gross advances starts to increase consistently. In 2008-09, it is only 2 percent which is lowest as compared to entire study period. In 2013–14, it increases to 4.4 percent which indicates relatively poor loan recovery mechanism and increased number of loan defaulters. As far as old private sector banks are concerned, the share of gross NPAs in their gross advances declines consistently over the entire period of the study which reflects relatively efficient loan recovery system of these banks as compared to the public sector banks. The share of gross NPAs in gross advances of new private sector banks declines consistently till 2005-06 and after that it starts to rise and in 2008-09 it reaches at level of 3.1 percent. But after 2008-09 it declines consistently. As far as foreign banks are concerned, we see a different picture. For these banks, the gross NPA ratio decline continuously during 2002-03 to 2008-09, but after 2008-09, it roughly it increases which reflects the effect of global financial crisis. For the entire banking industry, the share of gross NPA in total advances declines from 2002-03 to 2009-10 and after 2009-10 it starts to increase.

Table 2 shows trend and pattern of gross NPAs as the percentage of total assets of Indian scheduled commercial banks. A look at the table 2 indicates that as far as the share of gross NPA in total assets are concerned; the story is almost similar to that of table 1. For example, the share of NPAs in total assets roughly declines for the old and new private sector bank over the entire period of the study. On the other hand, as far as public sector banks and foreign banks are concerned, the share of gross NPA declines till 2008-09 and it dramatically starts to rise thereafter which shows the poor performance of these banks. It is interesting to note that before the global financial crisis public sector banks and foreign banks are successful in reducing the gross NPA in line with old and new private sector banks. But after the global financial crisis, the old and new private sector banks are still able to keep this momentum. However, this is not true for public sector and foreign banks. Other thing which is very important to note that in the post crisis period, rise in gross NPA of public and foreign banks is greater than the fall in gross NPA of private sector banks. As consequence, gross NPA of the entire banking industry shows rising trend in post crisis period.

Table 3 shows the trend in the share of net NPAs in net advances over the period under consideration. If we divide the entire period of the study into two sub periods viz, pre crises period or period prior to 2008-09 and the post crisis period or period after 2008-09, it can be clearly seen that in the pre-crisis period gross (net) NPAs of all categories of in Indian bank whether these are seen as the percentage of gross (net) advances or as the percentage of total assets, recorded with a continuous decline. But in the post crisis period, the gross (net) NPAs of public sector banks show a rising trend. A number of factors have lent to this increase in NPAs, including investment-related policy logjams in a low-growth, high-inflation (stagflation) environment and poor lending practices of several banks. A surge[1] in lending provided easy access to credit, which drove up prices. However, this was not followed by a concomitant rise in growth.[2]Despite this economic slowdown, the central bank resorted to hiking interest rates to combat inflation. This unusual stagflationary cycle compounded the cost of debt servicing for borrowers. The rising prices not only eroded the disposable income of borrowers, but the economic slump also reduced the market value of assets, impeding the repayment capacity of borrowers.

TABLE 1: GROSS NPA AS THE PERCENTAGE OF GROSS ADVANCES

YEARS	PUBLIC SECTOR BANKS	OLD PRIVATE SECTOR BANKS	NEW PRIVATE SECTOR BANKS	FOREIGN BAKS	ALL BANKS
2002-03	9.4	8.9	7.6	5.3	8.8
2003-04	7.8	7.6	5.0	4.6	7.2
2004-05	5.5	6.0	3.6	2.8	5.2
2005-06	3.6	4.4	1.7	1.9	3.3
2006-07	2.7	3.1	1.9	1.8	2.5
2007-08	2.2	2.3	2.5	1.8	2.3
2008-09	2.0	2.4	3.1	3.8	2.3
2009-10	2.2	2.3	2.9	4.3	2.4
2010-11	2.4	1.9	2.7	2.5	2.5
2011-12	3.3	1.8	2.2	2.7	3.1
2012-13	3.6	1.9	1.8	3.0	3.2
2013-14	4.4	NA	1.8	3.9	3.8
Mean	4.09	3.87	3.07	3.20	3.88
SD	2.36	2.53	1.71	1.17	2.12

Source: RBI

In particular, according to a recent study, conglomerates significantly increased their leverage ratios in 2012 and 2013. It is striking that the 10 corporate groups under examination were heavily involved in the infrastructure sector, the largest contributor of NPAs under industrial credit (Gynedi, 2014). Policy gridlock led to several stalled projects in this sector, which strained revenue generation for corporations. This further transmitted to banks exposed to these corporations and intensified the deterioration in bank asset quality.

The onus, however, does not lie with the government alone. The RBI drew attention to the inadequate credit appraisal processes of banks, where insufficient discipline and oversight was enforced over companies. In one instance, a bank lent several million dollars to a project years after its completion. Further, banks tended to favor certain applicants over others owing to political pressure, while also racking up vast exposures to government lending schemes (Sender, 2013).

TABLE 2: GROSS NPA AS THE PERCENTAGE OF TOTAL ASSETS

YEARS	PUBLIC SECTOR BANKS	OLD PRIVATE SECTOR BANKS	NEW PRIVATE SECTOR BANKS	FOREIGN BAKS	ALL BANKS
2002-03	4.2	4.3	3.8	2.4	4.1
2003-04	3.5	3.6	2.4	2.1	3.3
2004-05	2.7	3.1	1.6	1.4	2.5
2005-06	2.1	2.5	1.0	1.0	1.8
2006-07	1.6	1.8	1.1	0.8	1.5
2007-08	1.3	1.3	1.4	0.8	1.3
2008-09	1.2	1.3	1.7	1.5	1.3
2009-10	1.3	1.3	1.6	1.6	1.4
2010-11	1.4	1.2	1.3	1.0	1.4
2011-12	2.0	1.1	1.1	1.1	1.7
2012-13	2.4	1.2	1.0	1.3	2.0
2013-14	2.9	NA	1.1	1.6	2.4
Mean	2.22	2.06	1.59	1.38	2.06
SD	0.96	1.13	080	0.50	0.88

Source: RBI

TABLE 3: NET NPA AS THE PERCENTAGE OF NET ADVANCE

YEARS	PUBLIC SECTOR BANKS	OLD PRIVATE SECTOR BANKS	NEW PRIVATE SECTOR BANKS	FOREIGN BAKS	ALL BANKS
2002-03	4.5	5.2	1.5	1.7	4.0
2003-04	3.1	3.8	1.7	1.5	2.8
2004-05	2.1	2.7	1.9	0.8	2.0
2005-06	1.3	1.7	0.8	0.8	1.2
2006-07	1.1	1.0	1.0	0.7	1.0
2007-08	1.0	0.7	1.2	0.8	1.0
2008-09	0.9	0.9	1.4	1.8	1.1
2009-10	1.1	0.8	1.1	1.8	1.1
2010-11	1.2	0.5	0.6	0.6	1.1
2011-12	1.5	0.6	0.4	0.6	1.3
2012-13	2.0	0.7	0.4	1.0	1.7
2013-14	2.6	NA	0.7	1.1	2.1
Mean	1.87	1.69	1.06	1.10	1.70
SD	1.08	1.55	0.50	0.47	0.92

Source: RBI

TABLE 4: NET NPAs AS THE PERCENTAGE OF TOTAL ASSETS

YEARS	PUBLIC SECTOR BANKS	OLD PRIVATE SECTOR BANKS	NEW PRIVATE SECTOR BANKS	FOREIGN BAKS	ALL BANKS
2002-03	1.9	2.5	0.7	0.8	1.8
2003-04	1.3	1.8	0.8	0.7	1.2
2004-05	1.0	1.4	0.8	0.4	0.9
2005-06	0.7	0.9	0.4	0.4	0.7
2006-07	0.6	0.6	0.5	0.3	0.6
2007-08	0.6	0.4	0.7	0.3	0.6
2008-09	0.6	0.5	0.8	0.7	0.6
2009-10	0.7	0.5	0.6	0.7	0.6
2010-11	0.7	0.3	0.3	0.3	0.6
2011-12	1.0	0.4	0.2	0.2	0.8
2012-13	1.3	0.5	0.3	0.4	1.0
2013-14	1.6	NA	0.4	0.4	1.3
Mean	1.00	0.89	0.54	0.47	0.84
SD	0.44	0.71	0.22	0.20	0.38

Source: RBI

4. NPA AND OWNERSHIP OF BANKS

A common perception is that public sector banks have higher level of NPAs as compared to the private sector banks. Therefore, ownership pattern of a bank plays of a significant role in deciding the level of NPAs. To verify this hypothesis, we perform independent sample t-test to compare the mean NPAs of the different categories of banks for the period under consideration. For this purpose, public sector banks have taken as a base or reference category. The results are shown in table 5 to table 8. Table 5 shows mean gross NPAs as percentage of gross advances of all categories of banks for the entire study period. The mean Gross NPAs of public sector banks are greater than the mean NPAs of other banks, but this difference is not significant as indicated by the p-values. Table 6 shows the mean gross NPAs as the percentage of total assets. The table shows that foreign banks have significantly lower level of NPAs as compared to public sector banks. However, no significant difference is found between mean NPAs of public sector banks and private sector (old as well as new) banks. Table 7 and table 8 show net NPAs of Indian banks as the percentage of net advances and total assets respectively. Both of the tables show that new private sector banks and foreign banks have significantly lower level of net NPAs whether these are considered as percentage of net advances or as the percentage of total assets. As far as old private sector banks are concerned, they have relatively lower level of Net NPA's as compared to the public sector banks; however, the difference is not significant.

TABLE 5: AVERAGE GROSS NPA AS THE PERCENTAGE OF GROSS ADVANCES; 2002-03 TO 2013-14

Banks	N	Mean	Std. Deviation	t-statistic
Public banks	12	4.0917	2.36353	0.215
Old private banks	11	3.8727	2.52511	(0.832)
Public banks	12	4.0917	2.36353	1.217
New private banks	12	3.0667	1.71217	(0.237)
Public banks	12	4.0917	2.36353	1.172
Foreign banks	12	3.2000	1.16697	(0.254)
Public banks	12	4.0917	2.36353	0.227
All banks	12	3.8833	2.11868	(0.822)

Note: the values in parenthesis indicate p-values

TABLE 6: AVERAGE GROSS NPA AS THE PERCENTAGE OF TOTAL ASSETS; 2002-03 TO 2013-14

Banks	N	Mean	Std. Deviation	t-statistic
Public banks	12	2.2167	0.95996	0.350
Old private banks	11	2.0636	1.13426	(0.730)
Public banks	12	2.2167	0.95996	1.730
New private banks	12	1.5917	0.80279	(0.098)
Public banks	12	2.2167	0.95996	2.671*
Foreign banks	12	1.3833	0.49696	(0.014)
Public banks	12	2.2167	0.95996	0.421
All banks	12	2.0583	0.88159	(0.678)

Note: the values in parenthesis indicate p-value.
**significant at 5 percent level*

TABLE 7: AVERAGE NET NPA AS THE PERCENTAGE OF NET ADVANCES; 2002-03 TO 2013-14

Banks	N	Mean	Std. Deviation	t-statistic
Public banks	12	1.8667	1.07984	0.317
Old private banks	11	1.6909	1.55721	(0.754)
Public banks	12	1.8667	1.07984	2.355*
New private banks	12	1.0583	.49810	(0.028)
Public banks	12	1.8667	1.07984	2.254*
Foreign banks	12	1.1000	.47098	(0.040)
Public banks	12	1.8667	1.07984	0.408
All banks	12	1.7000	.91552	(0.687)

Note: the values in parenthesis indicate p-value.
**significant at 5 percent level*

TABLE 8: AVERAGE NET NPA AS THE PERCENTAGE OF TOTAL ASSETS; 2002-03 TO 2013-14

Banks	N	Mean	Std. Deviation	t-statistic
Public banks	12	1.0000	0.43693	0.448
Old private banks	11	0.8909	0.71057	(0.659)
Public banks	12	1.0000	0.43693	3.248*
New private banks	12	0.5417	0.21933	(0.004)
Public banks	12	1.0000	0.43693	3.840*
Foreign banks	12	0.4667	0.20151	(0.001)
Public banks	12	1.0000	0.43693	0.650
All banks	12	0.8917	0.37769	(0.523)

Note: the values in parenthesis indicate p-value.

**significant at 5 percent level*

In order to cross verify the above hypothesis we run regression analysis using dummy variables and considering gross NPAs as the percentage gross advances and net NPAs as the percentage of net advances as the dependent variables separately and estimate following regression functions.

$$NPA_{it} = \alpha_1 + \alpha_2 D_{2it} + \alpha_3 D_{3it} + \alpha_4 D_{4it} + U_{it}$$

Where NPAit = gross (net) NPAs of ith bank category in year t as the percentage of its gross (net) advances. D2it = 1 if a particular observation belongs to old private sector banks and 0 otherwise. D3it = 1 if a particular observation belongs to new private sector banks and 0 otherwise. Similarly, D 4it = 1 if a particular observation belongs to foreign banks and 0 otherwise. α1 represents the mean level of NPAs of PSBs and α2 α3 and α4 are the deferential coefficients which show that by which extent the mean NPAs levels of other categories of banks differ from the mean NPAs of public sector banks. The results of the above regression analysis are given in table 9.

The results show that the intercept is statistically significant which refers the mean NPAs of the reference category which is public sector banks in our analysis. The coefficients α2, α3 and α4 refer the differential coefficients, that is, by which extent the mean NPAs of the other categories of banks differ from mean NPAs of the public sector banks. Though all the deferential coefficients are negative, but they are statistically insignificant. Therefore, the results of the regression analysis show that the pattern of ownership does not matter in deciding the level of NPAs.

TABLE 9: OWNERSHIP AND NPAs – REGRESSION ANALYSIS

Variables	Model 1	Model 2
Dependent variable	GNPA	NNPA
Constant	4.064*	1.80*
D_2	-.147	-.033
D_3	-.997	-.742
D_4	-.864	-.700
R^2	0.22	0.35

*significant at 5 percent level

5. PROFITABILITY, NPAs AND OWNERSHIP

To find out the magnitude of impact of the level of NPAs and bank ownership on its profitability we run another regression analysis in which ROA is taken as the dependent variable and percentage and net NPAs as the percentage of net advances and ownership as independent variable.

$$ROA_{it} = \alpha_1 + \alpha_2 \; D_{2it} + \alpha_3 \; D_{3it} \; + \beta \; NPA_{it} + U_{it}$$

Where ROAit = is returns on assets for the ith bank group in year t. ROA is taken as a measure of profitability. D 2it = 1 if a particular observation belongs to (old or new) sector private banks (Note: Due to the non-availability of data on ROA for Old and New private sector banks separately we consider them as a single category.) D3it = 1 if a particular observation belongs to foreign banks and 0 otherwise. α1 refers the magnitude of the impact of public sector banks on profitability whereas α2 and α3 are the differential coefficients and β refers the magnitude of the impact of NPAs on the profitability of a bank. The results of this regression analysis are shown in table 10. The effect of public and private sector banks on profitability does not differ significantly. However foreign banks have significantly higher profitability as compared to public and private sector banks. Further the level NPAs has negative impact on the profitability of a bank, since higher NPAs require higher provisioning, which means a large part of the profits needs to be kept aside as provision against bad loans.

TABLE 10: PROFITABILITY, OWNERSHIP AND NPAs – REGRESSION ANALYSIS

Variables	Model 3
Dependent variable	ROA
Constant	1.20*
D_2	0.08
D_3	0.68
NNA	-0.11*
R^2	0.73

*significant at 5 percent level

6. TACKLING RISING NPAs

In order to reduce the NPA ratio, assets are typically recovered or restructured. However, India's lack of a comprehensive bankruptcy law makes asset recovery extremely difficult. As such, borrowers usually resort to legal injunctions—relying on an over-burdened court system to delay the process (Bhoir, 2013). As per RBI report on trend and progress of banking in India 2012-13, only 22 percent of bad loans were retrieved in 2013 compared to 31 percent in 2011. Recognizing the problem, the government initiated an inquiry in to the top 30 NPA accounts of the public sector banks (PSBs), the single largest source of NPAs (public sector banks account for 84.8 percent of total NPAs of Indian banking industry). Additionally, the Finance Ministry dedicated approximately $2 billion to recapitalize these banks, while the RBI designed a new regulatory framework for the early detection and resolution of distressed assets, effective from April1 2014. Along with these steps, the timely implementation of the national company law tribunal aimed at rehabilitating sick companies could play an important role in fast-tracking asset recovery.

In terms of restructuring, several banks attempted to window-dress their NPA accounts using restructured assets. The ratio of restructured assets to total advances in 2012 nearly doubled to 8 percent from 2009. Such heavy reliance on restructuring could have implications on asset quality if a large proportion of these assets turn into bad loans. In order to prevent such an outcome, the central bank tightened restructuring norms, which included raising capital requirements. Further, the comparative lack of asset reconstruction companies (ARCs) in India impedes the process of price discovery between banks and the ARCs. In order to deepen this market to adequately compensate banks, the sale of assets between ARCs must be permitted.

While the above measures are an important first step in addressing the problem of rising NPAs, additional steps must be taken in order to strengthen the institutional architecture behind the process of lending. Public sector banks typically mobilize resources from deposits, but lending to infrastructure projects involves long gestation periods. A deep bond market and financial institutions focused on infrastructure projects are better equipped to deal with this type of investment, and attention needs to be focused on improving them. Out of the nine development financial institutions (i.e. Power Finance Corporation, Indian Railway Finance Corporation, India Infrastructure Finance Company Ltd etc.) two have converted to banks and three others have applied for banking licenses. New institutions need to take their place in order to provide funds for long-term projects. Further, allowing insurance funds to invest in corporate debt, similar to pension fund provisioning, would also help in taking the pressure off of banks to fill this gap. The development of a liquid corporate debt market would facilitate the growth of potentially large investors such as mutual funds and financial institutions.

In terms of borrowers, if India is to stem the rise of NPAs, it is not sufficient simply to pursue recalcitrant borrowers. Officials also need to take punitive action against banks' lending under political pressure. To improve the due diligence process, the central bank is already taking steps toward devising a post-loan-sanction monitoring system that pools and scrutinizes common exposures across banks. This would enable banks to monitor shared borrowers with considerable leverage and keep track of debtors with a poor credit record. Finally, the Credit Information Bureau India Limited (CIBIL) and the three private credit information companies — which keep a credit record of banks' borrowers— need to grow their base of institutions to include non bank financial companies, micro finance institutions, and unregistered sources. This would assist banks in casting a wider net to monitor borrowers and streamline lending to dubious parties. An RBI committee tasked with expanding the use of credit information systems has recently come out with a set of draft recommendations.

4. CONCLUSION AND POLICY IMPLICATION

The present study tries to investigate the recent trends in NPAs of Indian banks from the different angles. It is found that NPAs of Indian banks show a rising trend in 2009 onwards. The reason may be assigned to mismanaged lending practices of banks, a surge in lending and investment-related policy inertia in a low-growth, high-inflation environment. Further, it is also investigated whether there is any impact of a bank ownership pattern on the level of NPAs. At the bank group level, when we compare the public sector banks with private banks in terms of NPAs as a percentage of gross (net) and total assets, we observe that the public sector banks are as good as or as bad as their counterparts in the private sector. However, when compared with the foreign banks they do not fare well. While the results of the regression analysis show that ownership pattern of a bank does not have a significant role in deciding the level of NPAs. Therefore, the study remains inconclusive as far as the relation between ownership pattern and level of NPAs is concerned. At the same time, the relationship between profitability, ownership pattern and NPAs level is also verified. It is found that public and private sector banks do not differ significantly as far as profitability is concerned; however, foreign banks have higher profitability as compared to domestic (public as well as private) banks. It is also found that higher level of NPAs severely affects the profitability of a bank. Further it is suggested that in order to avert the damaging effects of a banking crisis to the rest of the economy, as in the case of the United States, internal processes of banks in India need revision. Not only do poor lending practices need to be checked, the government needs to step up its game in implementing laws to speed up the process of NPA resolution. More importantly, for growth to return to 7–8 percent, it is imperative that the private sector begin investing again, which is unviable without support from healthy banks. A sound banking system is a necessary requirement for the desired growth trajectory. The Reserve Bank of India is actively working to avoid a wider crisis, and the next government must be prepared to put its energies into this effort.

REFERENCES

1. Bardhan, P (1989). "The Economic Theory of Agrarian Institutions." Oxford, NY: Claredon Press.
2. Battese, G E and T J Coelli (1995). "A Model for Technical Inefficiency Effects in a Stochastic Frontier Production Function for Panel Data." Empirical Economics, 20 (2): 325-32.
3. Bell, C and T N Srinivasan (1989). "Some Aspects of Linked Products and Credit Market Contracts Among Risk Neutral Agents." In Pranab K Bardhan (ed), The Economic Theory of Agrarian Institutions. Oxford: Oxford University Press.
4. Bhoir, Anita (2013). "Recovery of Bad Loans Still Struggles." Economic Times, August 28.
5. Bonin J P and Yiping H (2001). "Dealing with Bad Loans of the Chinese Banks." Working paper No. 357. http://www.wdi.umich.edu/files/Publications/WorkingPapers/wp357.pdf
6. Chaitanya V Krishna (2004). "Causes of Non-Performing Assets in Public Sector Banks." Economic Research, 17 (1): 16-30.
7. Chakravarty, S (1985). "Report of the Committee to Review the Working of the Monetary System." Mumbai: Reserve Bank of India.
8. Das Abhiman (2002). "Risk and Productivity Change of Public Sector Banks". Economic and Political Weekly, 37 (5): 437-48.
9. Gang, I N (1995). "Small Firms in India: A Discussion of Some Issues." In Mookherjee D (eds), Indian Industry: Policies and Performance. New Delhi: Oxford University Press.
10. Ghosh, S (2005). "Does Leverage Influence Bank's Non-Performing Loan?: Evidences from India." Applied Economic Letters, 12 (15): 913-18.
11. Goldsmith, Raymond W (1969). "Financial Structure and Development." Yale University Press.
12. Narasimham, M (1998). "Report of the Committee on Banking Sector Reform". Mumbai: Reserve Bank of India.
13. Rajaraman I, S Bhaoumik and N Bhatia (1999). "NPA Variations Across Indian Commercial Banks: Some Findings". Economic and Political Weekly, 34 (3/4): 161-68.
14. Rajeev, Meenakshi (2008). "Small Scale Industries Sector in India." In Prof Nelson Ndubisi (ed), SME Development and Practices in Asia Pacific RIM. Malaysia: Arah Publishers. Reserve Bank of India (Various Issues). Statistical Tables Relating to Banks in India.
15. Rajeev, Meenakshi and H P Mahesh (2007). "Assets as Liabilities: Non Performing Assets in Commercial Banks of India." Research Monitor, Global Development Network, 3: 17-19.
16. Rajeev, Meenakshi and Shamistha Deb (2007a). "Banking on Baniyas for Credit." Economic Political Weekly, 42 (4): 280-83,
17. Rajeev, Meenakshi and Sharmistha Dev (2007b). "Capitalising on Credit: The Extracting Baniya as Symbiotic Entrepreneur." In Amandio F C da Silva (eds), Social Banking: Perspectives and Experiences. Hyderabad: The ICFAI University Press.
18. Sen Sunanda and S K Ghosh (2005). "Basel Norms, Indian Banking Sector and Impact on Credit to SMEs and the Poor". Economic and Political Weekly, 14 (12): 1167-80.
19. Sender, Henny (2013). "Bad Loan behind much of India's Corporate Woes." Financial Times, December 19.

FINO’S TECHNOLOGICAL SOLUTIONS FOR THE YESHASVINI COOPERATIVE FARMERS HEALTH CARE SCHEME

DR. G. KOTRESHWAR
PROFESSOR
DEPARTMENT OF STUDIES IN COMMERCE
UNIVERSITY OF MYSORE
MYSURU

V.GURUSIDDARAJU
RESEARCH SCHOLAR
DEPARTMENT OF STUDIES IN COMMERCE
UNIVERSITY OF MYSORE
MYSURU

ABSTRACT
FINO (Financial Information Network & Operations Ltd) is a payments technology solutions provider to banks, financial institutions and Micro Finance Institutions. Some of the technological solutions provided by FINO can be adopted by Yeshasvini Cooperative Farmers Health Care Trust for betterment of patents.

KEYWORDS
health insurance, technological solutions.

1. INTRODUCTION
FINO PayTech is a payments technology solutions provider to banks, financial institutions and Micro Finance Institutions. Together with its extensive service delivery network of 30000 transaction points facilitates access to financial services to the unbanked and un-served segments of the population. It services over 28 million active banking customers spread across urban and rural areas in the country providing a range of financial services viz savings, remittance, insurance, credit etc. It is one of the recipients of in-principle approval from RBI to start a payments bank. (About FINO: http://www.finopaytech.com/)

2. FINO’s TECHNOLOGICAL PROSPECTIVE
FINO PayTech's cutting-edge technological solution has become a game changer in India's health micro-insurance sector. The solution empowers insurance companies to reach out to customers at the bottom of the pyramid and cater to their particular financial needs, while at the same time maintain financial viability as well.

As a key enabler and facilitator of financial inclusion, FINO PayTech has unlocked a whopping INR 45 billion potential micro-insurance market for health insurance companies. This has triggered a sea change in their delivery system by providing them with the required geographical coverage, scalable technology platform and excellent processing capabilities.

FINO PayTech has facilitated standardisation of the delivery platform, back-end database management system and data maintenance format. This has effectively resolved the issues earlier faced in government schemes that were plagued by design and implementation challenges, which therefore could not successfully reach out to the un-served and underserved markets.

Leveraging its experience in the micro-finance sector and applying it in the micro-insurance sphere, FINO PayTech has created a model that is efficient, scalable, sustainable, cost-effective, interoperable and profitable.

FINO PayTech has been a leading player in the field of designing and developing relevant technologies for the rural market. The technology solutions developed in-house by FINO PayTech are robust, cost-effective, and can be fully customised in line with the specific requirements of the clients and the industry. In addition, they are suitable to operate in a typical rural environment having setbacks like irregular power supply and connectivity problems. This ensures uninterrupted business continuity.

In past eight years, we have not only perfected our ultra-light CBS and cashless payment system of hospital claims of the RSBY, but we have also come up with a higher number of varied offerings. We have achieved this by sensing the exact pulse of the market.

Our solutions are aimed at BFSI, Government departments, and enterprises that require cash management solutions.

Equipped with expertise in various technologies (Biometric, Mobile, System Integration, etc.), FINO PayTech offers:

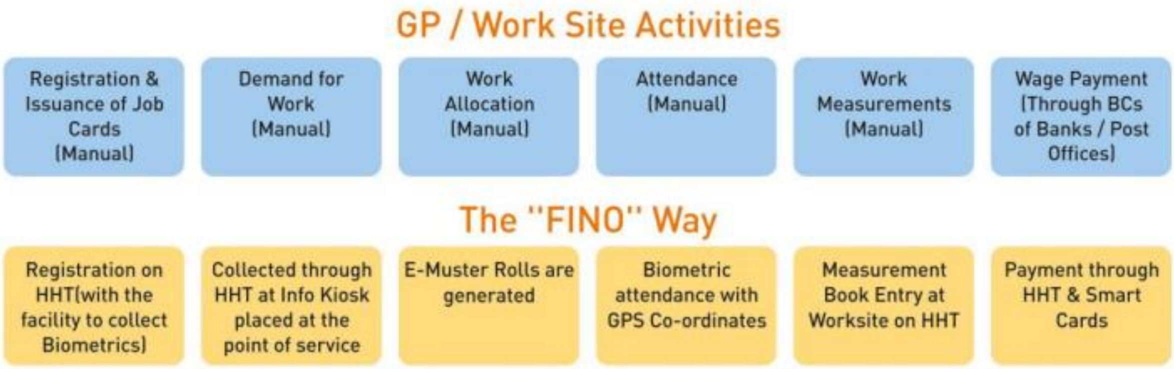
(a) **Micro ATM**
(b) **Kiosk Banking**
(c) **Financial Inclusion Gateway**
(d) **MFI solutions**
(e) **E-Parichay**
(f) **Rashtriya Swasthya Bima Yojana (RSBY)** is a cashless national health insurance welfare scheme introduced by the Government of India. The objective of this scheme is to protect Below Poverty Line (BPL) households from the financial liabilities arising from health setbacks involving hospitalisation.
(g) **Customer Acquisition System**
(h) **Mobile/ Kit Based Enrolment**
(i) **Card Personalization Bureau**
(j) **Hardware Solutions**
(k) **Operations Solutions**
(l) **Field Force Monitoring System**
(m) **Transactions Processing System**
(n) **Mahatma Gandhi National Rural Employment Guarantee Scheme** (MGNREGS) FINO PayTech's first foray into the government sector was with the Mahatma Gandhi National Rural Employment Guarantee Scheme (MGNREGS), which epitomised the convergence of the banking segment with the government domain. FINO PayTech stepped in to deploy a workable, scalable and robust solution, which met with immediate success.

The FINO PayTech card functions as a pan-India card that can be used to make domestic payments across 50,000+ villages in the country.

Further, the usage of biometric technology has largely reduced the possibilities and instances of misuse and malpractices as far as payments to citizens are concerned. It has also expedited the process, ensuring that beneficiaries receive payments quicker and with minimal hassles.

FINO PayTech is the largest agency in the country distributing MGNREGS and Social Security Pensions (SSP) benefits. The company has enabled these government benefits to reach out to a large segment of the bottom of pyramid population deep into unchartered territories, thus bringing a sea change in the lives of millions.

FIG. 1



Source: http://www.finopaytech.com/

3. YESHASVINI SCHEME

"Yeshasvini Cooperative Farmers Health Care Scheme" (Yeshasvini Scheme) was introduced by the State Government to the Co-operative farmers of Karnataka. Then the Hon'ble Chief Minister of Karnataka Sri S.M.Krishna inaugurated the scheme on 14th of November 2002 and the scheme was operationalised with effect from 1st June 2003. Karnataka has become role model state with the introduction of 'Yeshasvini Self Funded Health Care Scheme'.

The concept of "rural health care scheme" was initiated by Dr. Devi Prasad Shetty of Narayana Hrudayalaya, Bangalore, and with suitable modifications by Sri A Ramaswamy, then the Principal Secretary to Government of Karnataka, Co-operation Department and band of officers of Co-operation Department with the financial assistance of Government of Karnataka Yeshasvini Health Care Scheme was implemented through network hospitals to provide cost effective quality healthcare facilities to the Co-operative farmers spread across the state of Karnataka.

The Yeshasvini Cooperative Farmers Health Care Trust was registered under the Indian Trust Act 1882. The Hon'ble Chief Minister of Karnataka is Chief Patron and Hon'ble Minister for Cooperation is Patron. The Government of Karnataka provides matching contribution to the Trust for implementation of the scheme.

SELF FUNDED SCHEME

- Yeshasvini is one of the largest Self Funded Healthcare Scheme in the country.
- Offering a low priced product for a wide range of surgical cover, nearly 823 defined surgical procedures to the farmer cooperators and his family members.
- It is a contributory scheme wherein the beneficiaries contribute a small amount of money every year to avail any possible surgery during the period.
- The beneficiaries are offered cashless treatment subject to conditions of the scheme at the Network Hospitals spread across the State of Karnataka.

SALIENT FEATURES

- To avail the benefit of Yeshasvini Scheme, a person should be a member of Rural Co-operative Society of the State.
- All family members of the main member are eligible to avail the benefit of the scheme though they are not members of a rural co-operative society.
- Each beneficiary is required to pay prescribed rate of annual contribution every year. Presently [2013-14] member contribution is Rs.210/-.
- The period of each enrollment commences from July and closes by October every year.
- The scheme is open to all rural co-operative society members, members of self help group/Sthree Shakti Group having financial transaction with the Cooperative Society/Banks, members of Weavers, Beedi Workers and Fisherman Cooperative Societies.
- The higher age limit fixed is 75 years for availing benefit under the scheme.
- The Scheme Commences from 1st of August and ends 31st of July every year.
- The Scheme covers entire state of Karnataka particularly Rural Areas excluding Corporation and Urban cities.

4. SOLUTIONS

The following are the Technological Solutions used at FINO (Financial Information Network & Operations Ltd) that can be adopted by Yeshasvini Cooperative Farmers Health Care Scheme for betterment of patents.

- Card data import from card management system
- PIN value generation
- Preparation of visual data for embossing on plastic surface
- Preparation of data for encoding on magnetic stripe
- Export data for personalization machine
- Member Management System Functionality
- Web-based system to manage the life cycle of agents, along with supervisory hierarchy
- Enrolment, card issuance, terminal assignment to agents, and link with customer service areas
- Assignment of transaction risk parameters (like cash acceptance limits) and tracking at multiple hierarchical levels
- Blacklisting/de-activation/re-activation of agents
- Alert/intimation to members on defined triggers
- Application Software: Web Application (.Net platform)
- Terminal Management System functionality
- Enables the transaction device to be remotely loaded or updated with applications
- Maintenance downloads (To get software files)
- Diagnostics (The transaction device sends diagnostics files for specific investigation)
- Take over (TMS operator can control the transaction device)
- MIS Reporting Services
- Transactions Applications Service Provider Solutions
- Core Banking System - Interface
- Interface with various channels such as ATM, MDM, POS, Mobile Phone, IVR, Branch
- Single view of the customer across all products

- Product Support: CASA, Loan, RD, OD
- A lightweight CBS, tailor-made for the specific needs of the Microfinance sector Product-level configurable parameters, enabling quick launch of new product variants
- Batch mode supported for processing offline transactions
- Real-time processing for online transactions
- Web-based reporting
- Integration with FINO "Mitra" (Mobile Information and Transaction System) for downloads of loan/RD applications
- An enrolment station typically consists of a laptop connected to a web camera, finger print scanner and a signature pad (optional). The other alternative is a mobile phone which has a camera and is connected to a finger print scanner that facilitates the following:

1. Capturing demographic data, photographs, bio-metric data (finger print) and signature
2. Supports over-the-counter card/install card issuance for instant fulfillment
3. Data transfer to backend through FTP or CD media.

5. CONCLUSION

Technology is consistently cited as one of the greatest challenges faced by MFI's around the world. While efficient use of technology can help reduce costs, improve efficiency, and increase outreach, many MFI's still find it difficult to harness the potential and avoid the pitfalls.

REFERENCES

1. Arora, D. and Nanada L. (2010), "Towards Alternative Health Financing", RSBY Working Paper series, #4,October 2010. Ministry of Labour and Employment, Government of India, New Delhi (www.rsby.gov.in).
2. Palacios, Robert J, Das, Jishnu Sun, Changqing.(2011)."*India's health insurance scheme for the poor : evidence from the early experience of the Rashtriya Swasthya Bima Yojana"* xiv, 280 p. ISBN:9789381482056

REPORTS

3. Henry K. Bagazonzya, Zaid Safdar, A.K.M. Abdullah, Cecile Thioro Niang, and Aneeka Rahman.(2010). *Linking Up and Reaching Out in Bangladesh, Information and Communications Technology for Microfinance*
4. THE USE OF TECHNOLOGY IN MICROFINANCE by IT & Innovation Working Group
5. The World Bank Report

WEBSITES

6. cgap.org/blog/india%E2%80%99s-doorstep-banking-fino-starts-something-new
7. emn@european-microfinance.org
8. finopaytech.com/
9. knowledge.wharton.upenn.edu/article/fino-shows-a-low-cost-way-out-of-indias-microfinance-mess/
10. yeshasvini.kar.nic.in/

PERFORMANCE OF FISH WORKERS COOPERATIVE SOCIETIES

A. NALINI
GUEST LECTURER
P.G.& RESEARCH DEPARTMENT OF COMMERCE
THIRU.VI.KA. GOVERNMENT ARTS COLLEGE
TIRUVARUR

DR. P. ASOKAN
ASSOCIATE PROFESSOR
P.G.& RESEAECH DEPARTMENT OF COMMERCE,
THIRU.VI.KA. GOVERNMENT ARTS COLLEGE
TIRUVARUR

ABSTRACT

Fish workers can be defined as individual enhanced in fishing and related activities such as fish processing and trade and rely as their main livelihood activity. Specifically, fish workers can be distinguished into two sub-groups, namely, fishers and fish traders. The fish workers living along the coastline of the Tamilnadu and particularly along the coastline in Nagappattinam district have tradition of fishing which dates back to several centuries. The centuries of living by the sea have equipped them with rare talents needed for fishing. The sea is only a natural extension of their life. The productivity of traditional fish workers is comparatively low. Socio-economic condition of fishermen community has to be improved to a large extent. The social outlook of the majority of the fishermen has not changed perceptibly. They are still under the old beliefs and ideals, which are initial to their growth, therefore every effort, should be made to instill progressive ideals in the minds of fishermen especially.

KEYWORDS

fish workers, co-operative societies.

INTRODUCTION

Fishing communities comprise of both fish workers and their households. Fish workers can be defined as individual enhanced in fishing and related activities such as fish processing and trade and rely as their main livelihood activity. Specifically, fish workers can be distinguished into two sub-groups, namely, fishers and fish traders. Fishers generally include individuals who are directly engaged in fishing (for example, vessel owners, managers, operators and crew members). On the other hand, fish traders include those who buy and sell and/or processed fish.

STATEMENT OF THE PROBLEM

The fish workers living along the coastline of the Tamilnadu and particularly along the coastline in Nagappattinam district have tradition of fishing which dates back to several centuries. The centuries of living by the sea have equipped them with rare talents needed for fishing. The sea is only a natural extension of their life. The productivity of traditional fish workers is comparatively low. Several factors contributed to the low productivity, to mention a few, the financial constraints, lack of mechanized sea-faring boats, lack of marketing processing facilities etc. But there is enormous scope for developing fishing industry in Nagapattinam District. Such a development will provide gainful employment to both fish workers and non-fish workers help in the socio-economic development and non-Government agencies have been involved in the development of fisheries and fishermen of Nagappattinam district for quite some time. But, there is no visible improvement or telltale signs of improvement in the socio-economic condition of fishermen. So, this study is undertaken to document the socio-economic conditions as well as the problems faced by the fishermen. Further this study seeks to analyze the working of cooperatives, Government organizations and non-govermental organizations, which are involved in the development of fish workers.

OBJECTIVES OF THE STUDY

1. To study socio-economic conditions of fish workers in the Nagappattinam District.
2. To evaluate the performance of fish worker's cooperative societies in Tamil Nadu.
3. To study the role of Central and State Governments as well as Non-Governmental Organizations in the promotion of fish workers in Nagappattinam District.
4. To make suggestions and to improve the welfare of the fishermen to increase fish production.

METHODOLOGY

Survey method is to be adopted for the study. Data for the study is to be collected from both primary and secondary sources. The primary data will be collected from the 300 members selected from 10 coastal villages in Nagappattinam District of Tamil Nadu State. The secondary data will be collected from the apex level federation of Fishery Cooperatives, Directorate of Fisheries, district level Fishery Cooperative federation and from 10 selected Fishery Cooperative Societies and 4 Non-Governmental Organizations of Nagappattinam District of Tamil Nadu State.

TOOLS

Questionnaires for the respondents will be constructed on the basis of a pilot study conducted in the study area. The questions will be reframed in certain cases and some questions relating to their socio-economic conditions is to be added and certain questions which are found unnecessary will be deleted. The questionnaires were tested for their validity and reliability before their application.

Interviews will be conducted with the help of questionnaires among the members of the selected cooperatives and also managerial personnel of the societies to get firsthand knowledge relating to the various problems of fish workers, welfare schemes, economic conditions of fish workers, problems of cooperative societies etc. Collected Data are analyzed with the help of standard statistical tools. Average, percentage, index numbers and growth rates etc. were used to analyze quantitative data.

SAMPLING

In the first stage two villages each of the 5 coastal taluks, were selected giving due weightage to fishing population of these villages.

In the second stage 30 fish workers will be selected from each fishing village making it a total 300 sample respondents. As the pilot study as well as Marine Fisherfolk Census (TN) revealed considerable uniformity in the socio-economic background of the fish workers in the Nagappattinam district the sample size of 300 is to be considered adequate.

COOPERATIVE OPERATIONS

The fish collected from the sea would have to be assembled, graded, pooled to the extent possible stored and transported to the appropriate markets quickly and at reasonable cost. Active participation in the selling operations through auctions should ensure remunerative prices to the participating fishermen. Normally, the service charges of cooperative on account of storage transport commission etc. should be lower than those offered by the basis of increased scale of operations. If the society is able to meet the initial financial needs and problems of members in disposing of fish and fish products remunerative price in appropriate markets and in the most suitable forms their localities can be arranged without much resistance because the returns by way of prices, bonus etc. would be much larger than they would have got through the private agencies. The success of private agencies had been mainly on account of their arrangement at the market level which in value high level of exploitation on the side of economic returns of fishermen. A comparative structure aim at closing these loopholes by organized marketing for better pricing and at reasonable costs for their members.

The Cooperative must insist on the regulation of fish markets where suitable conditions for fair price evolution largely through auctions and regulations of marketing formalities and practices in which the cooperatives themselves can participate for giving better prices to their members. Better prices can be also secured by entering into long-term contracts with the organized institutions (e.g large processing factories) if cooperative are not available. There can also be sub-contracting arrangement between a cooperative and its members.

SUGGESTIONS

Socio-economic condition of fishermen community has to be improved to a large extent. The social outlook of the majority of the fishermen has not changed perceptibly. They are still under the old beliefs and ideals, which are initial to their growth, therefore every effort, should be made to instill progressive ideals in the minds of fishermen especially.

Another neglected aspect in fisheries sector economy is their education literacy rates are very high in this village. This coupled with the arresting education at the primary level seems to the stumbling block of the further development. This village people have only the middle school and have not got even library facilities.

Housing condition of the most of the fishermen households is really sympathetic. Most of them live in thatched houses, which do not stand at the time of storm, wind and cyclone, which created considerable damage to the fishermen households. Though the scheme of colonization of fishermen is operated in the villages, housing plan given does not seem to be adequate to construct houses. Therefore, it is suggested that they should implement a comprehensive scheme providing adequate financial assistance to construct pucca houses for fishermen.

The size of the family also seems to be large which too affect the standard of living fishermen. Therefore, efforts should be made to spread the message of family planning to these families.

REFERENCES

1. Deva Raja, T. S.: “An Analysis of working of District Central Co-operative Bank”, The Maharashtra Co-operative Quarterly, Vol. LXXXIII, No. 2, OCT-DEC, 2006.
2. Dr. S. Nakkiran and Dr. A. John Winfred “Co-operative Banking in India”. Rainbow publications, Coimbatore, 1988.
3. James Mathew: “Strengthening Cooperatives: An Analysis”, Southern economist, Vol. 45 September 15,2006.
4. Kutumba Rao, M.: “Management of Central Cooperative Banks” Ashish publishing House, New Delhi 1985.
5. Sankhyan, C. L.: “The performance of central co-operative Bank”, Co-operative perspective, Vol. 30, No. 4, April-June, 2006.
6. Sivasubramaniam. A. P.: “The Theory and practice of Co-operative Banking, Arul Selvi publication, Tirunelveli, 1980.

A STUDY ON ASSOCIATION AND CAUSALITY RELATIONSHIP BETWEEN NSE EQUITY SPOT AND DERIVATIVE MARKETS

SATYANARAYANA KOILADA
ASST. PROFESSOR
DEPARTMENT OF MANAGEMENT STUDIES
DADI INSTITUTE OF ENGINEERING AND TECHNOLOGY
ANAKAPALLE

ABSTRACT
Financial derivative market plays an important role in driving the market stability, liquidity and depth at spot market through F&O product trade. Many studies attempted to understand the relationship between spot and derivative markets through stock prices at both markets. Trade volumes data has greater power to quantify the market activity rather than price data alone and this study considered daily trade volumes data across two markets for analysis. This study selected four years of EOD trade volumes of both spot and derivative markets for assessing the association and causality using ARDL bound test and Toda-Yamamoto methodology under Augmented VAR system. ARDL bound test resulted in strong long run co-integration relationship between two markets with significant and negative co-integration coefficient of -0.13 and Toda-Yamamoto method of granger causality concluded the bi-directional causality suggesting both markets trade activity respond each other and adjust very quickly within a day trade since the daily data tested for the study.

KEYWORDS
ARDL bound test, augmented VAR, error correction model, granger causality, Toda-Yamamoto methodology.

INTRODUCTION
NSE has become a prominent player in providing financial derivatives in India with a strong and well matured market mechanism with sophisticated technology. Financial derivative market plays an important role in driving the market stability, liquidity and depth at spot market through F&O product trade. Intensive research has been done in assessing the relationship between equity spot and derivative markets at NSE and provided implications for development of these markets. Yet the observed results are inconclusive as the methodologies are time varying and data also providing signals that are not consistent. Further these previous studies are aimed to understand the relationship between derivatives and equity market trade for specific securities via security prices to assess the cause and effect relation between the markets.

This paper is aimed at understanding the properties of the market trade data of both spot and F&O markets and to identify the underlying relationship between well-argued cash and F&O markets at NSE. The long run association between two markets observed through co-integration study and the causality relationship under VAR environment. Many studies attempted to identify the relationship between the two markets by analysing price data. Trade volumes data has greater power to quantify the market activity rather than price data alone and this study considered daily trade volumes data across two markets for analysis.

This study seeks the strength of long run association between two markets and provides the long run model for forecasting. Further it provides the basis for applying appropriate tool in identifying causality relation as it is the precondition to identify long run association (co-integration) to decide upon VAR or VECM technique for causality test.

LITERATURE REVIEW
Many studies attempted to understand the relationship between spot and derivative markets through stock prices at both markets. Kwaller, Koch and Koch (1987) found that the S&P 500 futures market lead its spot market by 1 minute and spot market leads the futures over 20 minutes. Ghosh (1993) found the co integration to assess the price discovery in S&P 500 futures and its spot market and concluded that the futures are superior in price discovery. Tse (1995) used VECM model for assessing NIKKI 225 futures and its spot market relation and found the unidirectional causality from futures to spot market.

Raju and Karande (2003) examined NSE Nifty and its futures using co-integration and error correction models and found that bidirectional causality exists. Similarly, Sah and Kumar (2006) deployed co integration and error correction model on daily data series from 2000 to 2005 and concluded bidirectional causality. Mukarjee and Mishra (2006) employed cross correlation and error correction model on intraday data and found similar result of bi directional causality.

Theoretically it is assumed that the both markets to be co-integrated in long run. The lead lag relationship between the markets can be assessed using granger causality test under VAR environment for which the data to be studied must be stationary and the variables must be integrated of same order. Further it is necessary to identify whether the variables are co-integrated together or not to identify and apply appropriate tool for analysing causality. Basing on the result from the co-integration test, we must proceed with vector autoregressive model (VAR) or vector error correction model (VECM) to assess causality relationship.

VAR or VECM model uses WALD test for checking causality which hold the estimates accurate only when the data is stationary. Thus it is necessary to have data series stationary at same order of integration. If it fails to satisfy this precondition, then testing VAR or VECM model for causality leads to wrong estimates and becomes inconclusive.

METHODOLOGY AND ANALYSIS
Daily trade volumes for past four years i.e. from 2012 to 2015 for both markets are taken for studying the long run association and causality test. The data was adjusted for outliers and accounted for 1000 observations approximately after adjustment made. Since the FO daily trade volumes declines as near month expiry date approaches, it exhibits cyclical trend. FO trade volumes are non-stationary at level but it is trend stationary (see table I.A). Trade volumes from spot market exhibit stationary trend over the observation period.

To proceed with co-integration test, we must check the data stationary and order of integration. Augmented dickey-fuller test (ADF) applied to test the data series stationary for both the time series CASH VOLUMES and FO VOLUMES. Table I.A & Table I.B exhibits that the CASH market volumes are stationary at level but FO VOLUMES are not. This leaves us johansen co-integration test inappropriate for testing co-integration as both the series are not integrated of same order.

TABLE I.A

Null Hypothesis: **FOVOLUME** has a unit root				
Exogenous: Constant				
Lag Length: 21 (Automatic - based on AIC, maxlag=21)				
			t-Statistic	Prob.*
Augmented Dickey-Fuller test statistic			-1.72478	0.4184
Test critical values:	1% level		-3.43704	
	5% level		-2.86438	
	10% level		-2.56834	
*MacKinnon (1996) one-sided p-values.				

TABLE I.B

Null Hypothesis: **CASHVOLUME** has a unit root				
Exogenous: Constant				
Lag Length: 8 (Automatic - based on AIC, maxlag=21)				
			t-Statistic	Prob.*
Augmented Dickey-Fuller test statistic			-4.45983	0.0002
Test critical values:	1% level		-3.43684	
	5% level		-2.86429	
	10% level		-2.56829	
*MacKinnon (1996) one-sided p-values.				

The ARDL Bounds test for co integration was coined by Pesaran and Shin (1998). This method gives stable results than Johansen co integration test for variables that are not integrated of same order. Further this method is not requiring the unit root test for variables for stationarity as long as they are not I(2). It can handle the series of variables that are I(0) and I(1) in nature and thus it is more dynamic than the Johansen-Juselius technique for co integration which requires all series to be integrated of the same order.

ARDL model and bound test is appropriate and can be applied to data series that are not integrated of same order to test the co-integration. But the precondition for proceeding to ARDL model and bound test is that the series of data must not I(2). Again ADF test applied to both the series at first difference (I(1)) to test for stationary and obtained result (see tables I.C & I.D) that both the series are stationary at I(1) which suggest the rejection of hypothesis that they are I(2). This indicates that we can proceed with ARDL model bound test.

TABLE I.C

Null Hypothesis: **D(FOVOLUME)** has a unit root				
Exogenous: Constant				
Lag Length: 20 (Automatic - based on AIC, maxlag=21)				
			t-Statistic	Prob.*
Augmented Dickey-Fuller test statistic			-13.6244	0
Test critical values:	1% level		-3.43704	
	5% level		-2.86438	
	10% level		-2.56834	
*MacKinnon (1996) one-sided p-values.				

TABLE I.D

Null Hypothesis: **D(CASHVOLUME)** has a unit root				
Exogenous: Constant				
Lag Length: 13 (Automatic - based on AIC, maxlag=21)				
			t-Statistic	Prob.*
Augmented Dickey-Fuller test statistic			-12.1385	0
Test critical values:	1% level		-3.43688	
	5% level		-2.86431	
	10% level		-2.5683	
*MacKinnon (1996) one-sided p-values.				

To select the best fit model of autoregressive distributive lag (ARDL) model, we choose Akaike information criteria (AIC) in order to identify lag length for the model. This resulted in ARDL (4,4) model which has R-square value of 70.26%.

TABLE II.A: ARDL MODEL ESTIMATION FOR CASH VOLUMES AND FO VOLUMES

Dependent Variable: CASHVOLUME				
Method: ARDL				
Sample (adjusted): 1/06/2012 12/31/2015				
Included observations: 975 after adjustments				
Maximum dependent lags: 4 (Automatic selection)				
Model selection method: Akaike info criterion (AIC)				
Dynamic regressors (4 lags, automatic): FOVOLUME				
Fixed regressors: C				
Number of models evalulated: 20				
Selected Model: ARDL(4, 4)				
Variable	**Coefficient**	**Std. Error**	**t-Statistic**	**Prob.***
CASHVOLUME(-1)	0.601928	0.032918	18.28581	0
CASHVOLUME(-2)	0.134779	0.038263	3.522455	0.0004
CASHVOLUME(-3)	0.079554	0.038088	2.088697	0.037
CASHVOLUME(-4)	0.053348	0.032727	1.630123	0.1034
FOVOLUME	20.81368	1.546356	13.45983	0
FOVOLUME(-1)	-7.43823	1.98623	-3.7449	0.0002
FOVOLUME(-2)	-8.13067	2.006235	-4.0527	0.0001
FOVOLUME(-3)	-2.80049	2.000192	-1.40011	0.1618
FOVOLUME(-4)	3.314502	1.664713	1.991035	0.0468
C	65075308	16405567	3.96666	0.0001
R-squared	***0.702599***	Mean dependent var		7.79E+08
Adjusted R-squared	0.699825	S.D. dependent var		2.33E+08
S.E. of regression	1.28E+08	Akaike info criterion		40.18118
Sum squared resid	1.58E+19	Schwarz criterion		40.23125
Log likelihood	-19578.3	Hannan-Quinn criter.		40.20023
F-statistic	253.3085	Durbin-Watson stat		2.002936
Prob(F-statistic)	0			
*Note: p-values and any subsequent tests do not account for model selection				

To test the validity of the model one must check the error term for serial correlation of the model. Q Statistic analysis made in order to identify the serial correlation in the model and obtained results shown in the table II.B suggesting no serial correlation in the error term from the model. It indicates the estimated parameters are valid and unbiased and can be used for estimation model.

TABLE II.B: SERIAL CORRELATION TEST FOR RESIDUALS FROM ARDL MODEL

<table>
<tr><td colspan="7">Sample: 1/02/2012 12/31/2015</td></tr>
<tr><td colspan="7">Included observations: 975</td></tr>
<tr><td colspan="6">Q-statistic probabilities adjusted for 4 dynamic regressors</td><td></td></tr>
<tr><td>Autocorrelation</td><td colspan="2">Partial Correlation</td><td>AC</td><td>PAC</td><td>Q-Stat</td><td>Prob*</td></tr>
<tr><td>| |</td><td>| |</td><td>1</td><td>-0.001</td><td>-0.001</td><td>0.0005</td><td>0.983</td></tr>
<tr><td>| |</td><td>| |</td><td>2</td><td>0.001</td><td>0.001</td><td>0.0022</td><td>0.999</td></tr>
<tr><td>| |</td><td>| |</td><td>3</td><td>-0.001</td><td>-0.001</td><td>0.0033</td><td>1</td></tr>
<tr><td>| |</td><td>| |</td><td>4</td><td>-0.027</td><td>-0.027</td><td>0.7282</td><td>0.948</td></tr>
<tr><td>| |</td><td>| |</td><td>5</td><td>-0.004</td><td>-0.004</td><td>0.7417</td><td>0.981</td></tr>
<tr><td>| |</td><td>| |</td><td>6</td><td>-0.015</td><td>-0.015</td><td>0.9645</td><td>0.987</td></tr>
<tr><td>| |</td><td>| |</td><td>7</td><td>-0.063</td><td>-0.064</td><td>4.9315</td><td>0.668</td></tr>
<tr><td>| |</td><td>| |</td><td>8</td><td>-0.033</td><td>-0.034</td><td>6.005</td><td>0.647</td></tr>
<tr><td>| |</td><td>| |</td><td>9</td><td>0.06</td><td>0.06</td><td>9.5025</td><td>0.392</td></tr>
<tr><td>| |</td><td>| |</td><td>10</td><td>0.034</td><td>0.034</td><td>10.664</td><td>0.384</td></tr>
<tr><td>| |</td><td>| |</td><td>11</td><td>0.003</td><td>-0.001</td><td>10.671</td><td>0.471</td></tr>
<tr><td>| |</td><td>| |</td><td>12</td><td>0.021</td><td>0.019</td><td>11.124</td><td>0.518</td></tr>
<tr><td>| |</td><td>| |</td><td>13</td><td>0.016</td><td>0.018</td><td>11.386</td><td>0.579</td></tr>
<tr><td>| |</td><td>| |</td><td>14</td><td>0.032</td><td>0.029</td><td>12.39</td><td>0.575</td></tr>
<tr><td>| |</td><td>| |</td><td>15</td><td>0.018</td><td>0.016</td><td>12.709</td><td>0.625</td></tr>
<tr><td>| |</td><td>| |</td><td>16</td><td>-0.014</td><td>-0.006</td><td>12.916</td><td>0.679</td></tr>
<tr><td>| |</td><td>| |</td><td>17</td><td>0.045</td><td>0.055</td><td>14.968</td><td>0.598</td></tr>
<tr><td>| |</td><td>| |</td><td>18</td><td>0.021</td><td>0.023</td><td>15.404</td><td>0.634</td></tr>
<tr><td>|* |</td><td>|* |</td><td>19</td><td>0.121</td><td>0.123</td><td>30.011</td><td>0.052</td></tr>
<tr><td>| |</td><td>| |</td><td>20</td><td>0.007</td><td>0.012</td><td>30.066</td><td>0.069</td></tr>
<tr><td>| |</td><td>| |</td><td>21</td><td>0.03</td><td>0.037</td><td>30.967</td><td>0.074</td></tr>
<tr><td>| |</td><td>| |</td><td>22</td><td>-0.007</td><td>-0.004</td><td>31.021</td><td>0.096</td></tr>
<tr><td>| |</td><td>| |</td><td>23</td><td>-0.006</td><td>-0.002</td><td>31.062</td><td>0.121</td></tr>
<tr><td>| |</td><td>| |</td><td>24</td><td>0.007</td><td>0.011</td><td>31.106</td><td>0.151</td></tr>
<tr><td>| |</td><td>| |</td><td>25</td><td>0.01</td><td>0.022</td><td>31.215</td><td>0.182</td></tr>
<tr><td>| |</td><td>| |</td><td>26</td><td>-0.005</td><td>0.006</td><td>31.237</td><td>0.22</td></tr>
<tr><td>| |</td><td>| |</td><td>27</td><td>0.046</td><td>0.051</td><td>33.393</td><td>0.184</td></tr>
<tr><td>| |</td><td>| |</td><td>28</td><td>0.018</td><td>0.008</td><td>33.721</td><td>0.21</td></tr>
<tr><td>| |</td><td>| |</td><td>29</td><td>0.012</td><td>0.004</td><td>33.87</td><td>0.244</td></tr>
<tr><td>| |</td><td>| |</td><td>30</td><td>0.002</td><td>-0.006</td><td>33.873</td><td>0.286</td></tr>
<tr><td>| |</td><td>| |</td><td>31</td><td>0.019</td><td>0.013</td><td>34.238</td><td>0.315</td></tr>
<tr><td>| |</td><td>| |</td><td>32</td><td>-0.03</td><td>-0.035</td><td>35.157</td><td>0.321</td></tr>
<tr><td>| |</td><td>| |</td><td>33</td><td>0.027</td><td>0.021</td><td>35.921</td><td>0.333</td></tr>
<tr><td>| |</td><td>| |</td><td>34</td><td>0.026</td><td>0.023</td><td>36.589</td><td>0.349</td></tr>
<tr><td>| |</td><td>| |</td><td>35</td><td>-0.049</td><td>-0.046</td><td>39.029</td><td>0.293</td></tr>
<tr><td>| |</td><td>| |</td><td>36</td><td>0.019</td><td>0</td><td>39.404</td><td>0.32</td></tr>
<tr><td colspan="7">*Probabilities may not be valid for this equation specification.</td></tr>
</table>

Further bound test conducted for identifying the co-integration between the markets and obtained F statistic of 23.39 which is much higher than the upper bound value of 7.34 at 1% significant level. This suggests the rejection of null hypothesis that CASH and FO market volumes are not co-integrated. Further the long run co-integration coefficient is significant and negative i.e. -0.13 suggest that the volumes of two markets adjust one to each other quickly. As there is long run relationship between CASH and FO markets, we can proceed to test the causality relationship using granger causality test under VECM environment. Since the variables are not integrated of same order, it may not be appropriate to test causality using granger test as explained earlier in this article. This problem can be addressed using the Toda- Yamamoto methodology of Granger causality test under augmented VAR in which the model is altered to test the granger causality so that Wald test results are valid and unbiased.

TABLE II.C: BOUND TEST FOR IDENTIFYING COINTEGRATION OF CASH AND FO MARKETS

ARDL Bounds Test		
Sample: 1/06/2012 12/31/2015		
Included observations: 975		
Null Hypothesis: No long-run relationships exist		
Test Statistic	Value	k
F-statistic	***23.39216***	1
Critical Value Bounds		
Significance	I0 Bound	I1 Bound
10%	4.04	4.78
5%	4.94	5.73
2.50%	5.77	6.68
1%	6.84	7.84

TABLE II.D: LONG RUN FORM OF COINTEGRATION OF CASH AND FO VOLUMES

ARDL Cointegrating And Long Run Form				
Dependent Variable: CASHVOLUME				
Selected Model: ARDL(4, 4)				
Date: 05/05/16 Time: 10:55				
Sample: 1/02/2012 12/31/2015				
Included observations: 975				
Cointegrating Form				
Variable	Coefficient	Std. Error	t-Statistic	Prob.
D(CASHVOLUME(-1))	-0.26768	0.035066	-7.63356	0
D(CASHVOLUME(-2))	-0.1329	0.035124	-3.78384	0.0002
D(CASHVOLUME(-3))	-0.05335	0.032727	-1.63012	0.1034
D(FOVOLUME)	20.81368	1.546356	13.45983	0
D(FOVOLUME(-1))	8.130671	2.006235	4.052702	0.0001
D(FOVOLUME(-2))	2.800489	2.000192	1.40011	0.1618
D(FOVOLUME(-3))	-3.3145	1.664713	-1.99104	0.0468
CointEq(-1)	***-0.13039***	0.020646	-6.31562	0
Cointeq = CASHVOLUME - (44.1657*FOVOLUME + 499079330.1139)				
Long Run Coefficients				
Variable	Coefficient	Std. Error	t-Statistic	Prob.
FOVOLUME	44.16567	10.59079	4.170196	0
C	4.99E+08	74485805	6.700328	0

Toda & Yamamoto (1995) developed the method for testing granger causality for a set of variables that are not integrated of same order irrespective of their co integration. Granger causality requires having variables integrated of same order to test causality under VAR and VECM subjected to co integration among variables. This TY method of causality does not require the variables integrated of same order and thus it is robust to the results of unit root tests for variables.

This test estimates a VAR equation with the lag length of S+M where "S" is the order of the well specified VAR model and "M" is the maximum order of integration of all the variables. Then a Modified Wald statistic is then computed testing whether the first "S" coefficients of each equation in VAR for each lagged variable in the system is significantly different from zero or not. This Modified WALD statistic follows the normal chi-square distribution with degree of freedom equal to the number of excluded lagged variables.

Since the above results from ARDL bound test of co integration confirming the long run association between cash and FO markets, there must be at least one way of causality exist between cash and FO markets and we proceed to test the direction of causality under the Toda-Yamamoto method of granger causality under augmented VAR environment.

TABLE III.A: LAG STRUCTURE IDENTIFICATION FOR VAR SYSTEM

VAR Lag Order Selection Criteria						
Endogenous variables: CASHVOLUME FOVOLUME						
Exogenous variables: C						
Date: 05/05/16 Time: 11:15						
Sample: 1/02/2012 12/31/2015						
Included observations: 967						
Lag	LogL	LR	FPE	AIC	SC	HQ
0	-36009.3	NA	7.61E+29	74.48054	74.49062	74.48438
1	-35175.5	1662.482	1.37E+29	72.76424	72.79449	72.77576
2	-35113.5	123.3737	1.21E+29	72.64427	72.69468*	72.66346
3	-35101.6	23.63983	1.19E+29	72.62792	72.69849	72.65478
4	-35093.3	16.53313	1.18e+29*	**72.61893***	72.70966	72.65347*
5	-35090.8	4.887544	1.19E+29	72.62209	72.73299	72.66431
6	-35089.2	3.08632	1.19E+29	72.62713	72.75819	72.67702
7	-35086.6	5.214553	1.20E+29	72.62993	72.78114	72.68749
8	-35079.2	14.47010*	1.19E+29	72.62297	72.79435	72.68821
* indicates lag order selected by the criterion						
LR: sequential modified LR test statistic (each test at 5% level)						
FPE: Final prediction error						
AIC: Akaike information criterion						
SC: Schwarz information criterion						
HQ: Hannan-Quinn information criterion						

System identified the following model of VAR with right lag length of 4 i.e. "S" (see table III.A) using Akaike information criteria (AIC). Thus well specified VAR for "S" no of lags is written as:

CASHVOLUME = C(1)*CASHVOLUME(-1) + C(2)*CASHVOLUME(-2) + C(3)*CASHVOLUME(-3) + C(4)*CASHVOLUME(-4) + C(5)*FOVOLUME(-1) + C(6)*FOVOLUME(-2) + C(7)*FOVOLUME(-3) + C(8)*FOVOLUME(-4) + C(9)

FOVOLUME = C(10)*CASHVOLUME(-1) + C(11)*CASHVOLUME(-2) + C(12)*CASHVOLUME(-3) + C(13)*CASHVOLUME(-4) + C(14)*FOVOLUME(-1) + C(15)*FOVOLUME(-2) + C(16)*FOVOLUME(-3) + C(17)*FOVOLUME(-4) + C(18)

After making adjustment for lag length of VAR system using Toda-Yamamoto method, the augmented VAR system can be specified for lag length of S+M i.e. 4+1=5 lags and estimated as follows

CASHVOLUME = C(1)*CASHVOLUME(-1) + C(2)*CASHVOLUME(-2) + C(3)*CASHVOLUME(-3) + C(4)*CASHVOLUME(-4) + C(5)*FOVOLUME(-1) + C(6)*FOVOLUME(-2) + C(7)*FOVOLUME(-3) + C(8)*FOVOLUME(-4) + C(9)+ ***C(10)*CASHVOLUME(-5)+ C(11)*FOVOLUME(-5)***……………Equation(1)

FOVOLUME = C(10)*CASHVOLUME(-1) + C(11)*CASHVOLUME(-2) + C(12)*CASHVOLUME(-3) + C(13)*CASHVOLUME(-4) + C(14)*FOVOLUME(-1) + C(15)*FOVOLUME(-2) + C(16)*FOVOLUME(-3) + C(17)*FOVOLUME(-4) + C(18)+***C(19)*FOVOLUME(-5)+ C(20)*CASHVOLUME(-5)***…………Equation(2)

TABLE III.B: TESTING FOR GRANGER NON CAUSALITY FROM FO VOLUMES TO CASH VOLUMES

Dependent Variable: CASHVOLUME				
Method: Least Squares (Gauss-Newton / Marquardt steps)				
Sample (adjusted): 1/09/2012 12/31/2015				
Included observations: 974 after adjustments				
CASHVOLUME = C(1)*CASHVOLUME(-1) + C(2)*CASHVOLUME(-2) + C(3)				
*CASHVOLUME(-3) + C(4)*CASHVOLUME(-4) + C(5)*FOVOLUME(-1) +				
C(6)*FOVOLUME(-2) + C(7)*FOVOLUME(-3) + C(8)*FOVOLUME(-4) +				
C(9)+ C(10)*CASHVOLUME(-5)+ C(11)*FOVOLUME(-5)				
	Coefficient	Std. Error	t-Statistic	Prob.
C(1)	0.494176	0.035115	14.07316	0
C(2)	0.185269	0.041696	4.443349	0
C(3)	0.088699	0.042006	2.111582	0.035
C(4)	0.061027	0.041646	1.465371	0.1431
C(5)	6.373884	1.852766	3.440198	0.0006
C(6)	-6.36583	2.187314	-2.910341	0.0037
C(7)	-1.83757	2.207109	-0.83257	0.4053
C(8)	3.559741	2.184066	1.629869	0.1035
C(9)	90886354	18042872	5.037244	0
C(10)	0.040855	0.035748	1.142871	0.2534
C(11)	-0.01424	1.819885	-0.007825	0.9938
R-squared	0.646644	Mean dependent var		7.80E+08
Adjusted R-squared	0.642974	S.D. dependent var		2.33E+08
S.E. of regression	1.39E+08	Akaike info criterion		40.35604
Sum squared resid	1.87E+19	Schwarz criterion		40.41117
Log likelihood	-19642.4	Hannan-Quinn criter.		40.37702
F-statistic	176.2295	Durbin-Watson stat		1.994028
Prob(F-statistic)	0			

TABLE III.B1: WALD TEST FOR COEFFICIENTS FROM GRANGER EQUATION-1

Wald Test:			
Equation: Untitled			
Test Statistic	Value	Df	Probability
F-statistic	4.161715	(4, 963)	***0.0024***
Chi-square	16.64686	4	0.0023
Null Hypothesis: C(5)=C(6)=C(7)=C(8)=0			
Null Hypothesis Summary:			
Normalized Restriction (= 0)		Value	Std. Err.
C(5)		6.373884	1.852766
C(6)		-6.36583	2.187314
C(7)		-1.83757	2.207109
C(8)		3.559741	2.184066
Restrictions are linear in coefficients.			

Table III.B1 shows that WALD test statistic for c(5)=c(6)=c(7)=c(8)=0 significant and rejects the null hypothesis of non-causality from FO market to CASH market confirming that the lag values of FO volumes has combine effect on cash volumes confirming the granger causality from FO market volumes to CASH market volumes.

TABLE III.C: TESTING FOR GRANGER NON CAUSALITY FROM CASH VOLUMES TO FO VOLUMES

Dependent Variable: FOVOLUME				
Method: Least Squares (Gauss-Newton / Marquardt steps)				
Sample (adjusted): 1/09/2012 12/31/2015				
Included observations: 973 after adjustments				
FOVOLUME = C(10)*CASHVOLUME(-1) + C(11)*CASHVOLUME(-2) + C(12)				
*CASHVOLUME(-3) + C(13)*CASHVOLUME(-4) + C(14)*FOVOLUME(				
-1) + C(15)*FOVOLUME(-2) + C(16)*FOVOLUME(-3) + C(17)				
*FOVOLUME(-4) + C(18)+C(19)*FOVOLUME(-5)+ C(20)				
*CASHVOLUME(-5)				
	Coefficient	Std. Error	t-Statistic	Prob.
C(10)	-0.005106	0.00067	-7.623594	0
C(11)	0.002549	0.000795	3.205907	0.0014
C(12)	0.000677	0.000801	0.844515	0.3986
C(13)	0.001154	0.000794	1.45314	0.1465
C(14)	0.667981	0.035335	18.90436	0
C(15)	0.083086	0.041715	1.991748	0.0467
C(16)	0.045288	0.042093	1.075907	0.2822
C(17)	-0.031146	0.041653	-0.747758	0.4548
C(18)	1342247	344152.9	3.900148	0.0001
C(19)	0.046979	0.034709	1.353501	0.1762
C(20)	0.000568	0.000682	0.833445	0.4048
aR-squared	0.546603	Mean dependent var		6411493
Adjusted R-squared	0.54189	S.D. dependent var		3930276
S.E. of regression	2660161	Akaike info criterion		32.43691
Sum squared resid	6.81E+15	Schwarz criterion		32.49209
Log likelihood	-15769.56	Hannan-Quinn criter.		32.45791
F-statistic	115.9762	Durbin-Watson stat		1.986597
Prob(F-statistic)	0			

TABLE III.C1: WALD TEST FOR COEFFICIENTS FROM GRANGER EQUATION-II

Wald Test:			
Equation: Untitled			
Test Statistic	Value	df	Probability
F-statistic	14.86348	(4, 962)	0
Chi-square	59.4539	4	0
Null Hypothesis: C(10)=C(11)=C(12)=C(13)=0			
Null Hypothesis Summary:			
Normalized Restriction (= 0)		Value	Std. Err.
C(10)		-0.00511	0.00067
C(11)		0.002549	0.000795
C(12)		0.000677	0.000801
C(13)		0.001154	0.000794
Restrictions are linear in coefficients.			

Further table III.C1 show that WALD test statistic for c(10)=c(11)=c(12)=c(13)=0 significant and rejects the null hypothesis of non-causality from CASH market to FO market confirming that the lag values of CASH volumes has combine effect on FO volumes. From the above analysis it is concluded that bi-directional causality exist and both markets are co integrated in long run and cause one each other within the day trade significantly.

REFERENCES

1. Clarke, J. A. and S. Mirza (2006), "A comparison of some common methods for detecting Granger noncausality", Journal of Statistical Computation and Simulation, 76, 207-231.
2. Ghosh, A. (1993), "Hedging with stock index futures: Estimation and forecasting with error correction model", Journal of Futures Markets, 13, 743-752.
3. Granger, C. W. J., 1979, "Seasonality: Causation, interpretation, and implications. (With discussion.)", In A. Zellner (ed.), Seasonal Analysis of Economic Time Series. NBER, Washington DC, 33-56.
4. Karmakar, M. (2009), "Price discoveries and volatility spillovers in S & P CNX nifty futures and its underlying index CNX nifty", *Vikalpa*, *34*(2), 41-55.
5. Kawaller, I. G., Koch, P. D., & Koch, T. W. (1987), "The temporal price relationship between S&P 500 futures and the S&P 500 index", Journal of Finance, 1309-1329.
6. Mukherjee, K.N and Mishra, R.K. (2006), "Lead-Lag Relationship between Equities and Stock Index Futures Market and its Variation around Information Release: Empirical Evidence from India", *NSE Research Paper*, National Stock Exchange, India.
7. P. Srinivasan and K. Shyam Bhat (2009), "Spot and Futures Markets of Selected Commercial Banks in India: What Causes What?", International Research Journal of Finance and Economics, issue 31,28-40.
8. Raju, M. T. and Karande, K. (2003), "Price Discovery and Volatility on NSE Futures Market", *SEBI Bulletin*, 1(3), 5-15.
9. Sah, A. N. and Kumar, A. A. (2006), "Price Discovery in Cash and Futures Market: The Case of S&P Nifty and Nifty Futures", *The ICFAI Journal of Applied Finance*, 12(4), 55-63.
10. Toda, H. Y. and T. Yamamoto (1995), " Statistical inferences in vector autoregressions with possibly integrated processes", *Journal of Econometrics*, 66, 225-250.
11. Toda, H. Y., & Yamamoto, T. (1995), "Statistical inference in vector autoregressions with possibly integrated processes", Journal of econometrics, 66(1-2), 225-250.
12. Tse Y. K. (1995), "The Lead-lag relationship between spot index and futures price of the NIKKEI stock average", Journal of Forecasting, 14(7), 553-563.
13. Zapata, H. O. and A. N. Rambaldi (1997), " Monte Carlo evidence on cointegration and causation", Oxford Bulletin of Economics and Statistics, 59, 285-298.

DIVIDEND POLICY AND ITS IMPACT ON STOCK PRICE: A CASE STUDY ON SENSEX COMPANIES

BHAGYA LAKSHMI.K
ASST. PROFESSOR & RESEARCH SCHOLAR
DEPARTMENT OF MBA
VTU PG CENTRE
MYSORE

DR. N. BABITHA THIMMAIAH
ASST. PROFESSOR
DEPARTMENT OF BUSINESS ADMINISTRATION
VTU PG CENTRE
MYSORE

ABSTRACT

Dividends are the part of the firm's earnings which is distributed among shareholders, various studies have been conducted to test how stock price and stock market reacts in response to decision taken by the management with relation to dividend payment. The purpose of this study is to examine the relationship between dividend policy and share price volatility focused on sensex companies in order to measure these relationships we have considered two most important measurement of dividend policy I.e. Dividend Payout Ratio and Dividend Yield. The time period is considered for the study is 5 years from 2011-2015. Descriptive statistics, correlation and regression models were used to perform the data analysis. The primarily regression model was expanded by adding control variables including size, earning volatility, growth and leverage. The empirical study proved that there is a negative relationship between dividend policies on share price volatility and there is a positive relationship between dividend yield and with other control variables.

KEYWORDS

share price volatility, dividend yield, dividend payout ratio, leverage and firm size.

INTRODUCTION

Dividend policy is an important financing decision that involves with the payment to shareholders in return on their investment. Every organization has its own dividend payment pattern or dividend policy. It is a financial indicator; hence the demand of the firm's share should be to some extent dependent on the firm's dividend policy.

Dividend policy is the most widely debatable and widely researched topic in the field of finance, but yet it is an unresolved problem. The dividend decision is the most important decision that the managers have to take. This aims to shareholder's wealth maximization hence the companies have to balance between dividend payout ratio Khan et al (2011)

There are three conflicting theories examined the relationship between dividend and stock price Linter (1959) and Gordon (1963) indicated that there is a positive relationship between dividend policy and stock price. MM (1961) in his theory Indicated negative relationship and Tax preference theory also indicated negative relationship between dividend and stock price. Hence many study indicated dividend is a puzzle.

The most well-known study on dividend irrelevance theory was developed by MM (1961). His study has become benchmark to other researcher in developing various models pertaining to dividend values and the policies that guided the managers in setting up company payout policies. MM stated that firm value is independent on dividend policy he also argued that value is driven only by future earnings and risk of its investments. In reality investors will be paying high taxes on dividends instead of capital gain. The investor will be taxable once the shares are sold. A company that pay no dividends will be more attractive since it's avoids excess payment of taxes (Blake 1986) for this reason companies will be tempted to eliminate dividend policy. Recently as we could see even well performing companies are reluctant to increase dividend payments but contrarily at the same time some company's despite of experienced decrease in net income have announced constant or increase their dividend payment rather than cut down them. The purpose of this study is to test the hypothesis that the payout of a dividend does in fact have a negative correlation with the stock's price volatility and that it has the most significant correlation when compared to other variable. This negative correlation would convey that the higher the percentage payout, the less the stock price volatility will be. The regression will also test my hypotheses that certain selected variables also have their respective effects on price volatility and the significance of their correlation will also be found.

OBJECTIVES OF THE STUDY

The main objective of the study is

1. To examine the relationship between dividend yield and stock price volatility
2. To examine the relationship between dividend payout ratio and stock price volatility

HYPOTHESIS FOR THE STUDY

In the background of the study, the following hypothesis was developed:

1. H0: There is no significant association between stock price volatility and dividend yield

H1: There is a significant association between stock price volatility and dividend yield

2. H0: There is no significant association between stock price volatility and dividend payout ratio

H1: There is a significant association between stock price volatility and dividend payout ratio

RESEARCH METHODOLOGY

In the background of the objective of the study and hypothesis for the study, the following research design has followed: a) Sources of information b) Selection of Sample Companies c) Period covered for the study d) Selection of Variables e) Statistical tool used

A) SOURCES OF INFORMATION

This research use financial accounting data downloaded from data stream from the sensex companies listed in stock exchange. This study is based on purely secondary source of information were dividend payout ratio, dividend yield, Stock Price, Size, Growth and Earning volatility information were sourced from annual reports and websites.

B) SELECTION OF SAMPLE COMPANIES

The empirical study mainly focused on SENSEX companies that consists of 30 companies listed in BSE.

C) PERIOD COVERED FOR THE STUDY

The time period considered for the study is from 2011-2015

D) SELECTION OF VARIABLES

To test the relationship few variables has been considered. In the present study stock price or share price taken as a dependent variable and Dividend Yield and Dividend payout ratio taken as independent variable along with this size, growth, leverage and earning volatility control variables are taken as independent variable

MEASUREMENT OF VARIABLES

Stock Price volatility (Dependent Variable): SPV is calculated by firstly, the annual range of stock price is divided by average of the highest and lowest price for each year.

Dividend yield (DY) (Independent Variable): Dividend per share divided by average closing share price

Dividend Payout Ratio (DPR) (Independent Variable): Dividend per share divided by earning per share we followed as per previous research like Hussainey, Khaled, & Mgbame, Chijoke Oscar, & Chijoke-Mgbame, Aruoriwo M (2011). Size: It's a control variable measured by Total asset

Growth: It's a control variable measured by Asset turnover ratio

Leverage: it's measured by debt to equity ratio as suggested by most of the previous research

Earning Volatility: Is measured with EBIT

In order to prove the hypotheses model was developed as suggested by most of the previous research like Nazir, Mian Sajid, & Nawaz, Muhammad Musarat, & Anwar, Wasseem, & Ahmed, Farhan (2010). Allen, F., Bernardo, A., & Welch,I. (1998)

Model 1: In this model the actual dependent variable Stock price volatility was regarded with two separate variables, dividend yield and dividend payout ratio, this provides some sort of crude test in the relationship between stock price volatility and dividend policy, Using regression model

SPV= A1+ADY2+ADPR3+ €

A1= Constant, ADY2= Dividend yield, ADPR3= Dividend payout ratio and € = error term

Model 2: In this model control variables and DY and DPR are regressed to examine the close relationship between DY and DPR

SPV= A1+ADY2+ADPR3+AS4+AG5+AL6+AEV7+ €

A1= Constant, ADY2= Dividend yield, ADPR3= Dividend payout ratio, AS4= Size, AG5=Growth, AL6= Leverage, AEV7= Earnings Volatility and € = error term

E) STATISTICAL TOOL USED

Descriptive statistics, correlation and regression models were used to perform the data analysis. The primarily regression model was expanded by adding control variables including size, earning volatility, growth and leverage recommended by (Baskin 1989).

REVIEW OF LITERATURE

The study done by Farroq, Saoud, & Agnaou (2012), took the above idea a step further. In this study they, not only observed the effects of dividend policy in an emerging market, but they also looked at the differing affects in diverse market conditions. More specifically, they observed the effects of dividend policy on stock price volatility both, in a period of market growth and market stability.

In a study conducted by Hussainey, Mgbame, Chijoke-Mgbame, & Aruoriwo (2011), the objective was to find the relationship and affects that dividend policy had on a given stock's volatility in the developed economy of England. During the study they also ran regressions between certain factors that could affect the volatility such as size and leverage. In their study they discovered that both the payout ratio and dividend yield had significant negative relationships to stock volatility. Further, a negative relationship was found between size and volatility and a positive relationship between leverage and volatility. They cited that through their finding they show that the larger a company was (in assets), the less volatile the stock tended to be. They also pointed out a trend that as financial leverage (debt carried on the balance sheet) increased, the volatility of the stock price tended to increase as well. This study made it evident that other variables would need to be controlled if someone was to attempt to get a true correlation between dividend policy and stock price volatility.

The recent studies that have been conducted have cited Baskin (1989), it is appropriate that his work be mentioned first. What Baskin set out to accomplish was to, not only figure out if dividend yield was a proxy for price volatility, but whether or not dividend yield had a direct effect on the volatility of a common stock's price when other related factors were controlled. Baskin concluded his study by acknowledging that dividend yield among other factors certainly had a defined correlation with the volatility of a given stock price, but could not conclude that dividend yield had a direct cause and effect relationship with price volatility.

Another study was done by Allen & Rachim (1996), which looked at a similar relationship but used the Australia stock exchange as their target market. In their study they found, similar to Hussainey, Mgbame, Chijoke-Mgbame, & Aruoriwo's (2011) findings, that a firm's financial leverage had a large positive correlation to price volatility. In addition to this, they also found that earnings volatility, or the change in quarterly earnings per share had a substantial positive correlation. They cited that this finding was not surprising but sensible in the least. Allen & Rachim went on to find a significant negative correlation between dividend yield and price volatility. A&R pointed out that, because of the high similarity between dividend yield and payout ratio, the decision was made to drop the dividend yield as a variable and focus towards the payout ratio.

Many studies have been conducted to know about the impact of volatility and dividend policy hence based on the above studies has also been considered to develop and hypothesis and to prove the hypothesis. Dividend policy is a puzzle hence need more research to solve these puzzle

RESULTS AND FINDINGS

TABLE 1: DESCRIPTIVE STATISTICS

	Mean	Std. Deviation
PV	.50	.28
DY	1.4	1.82
DPR	32	31.6
SIZE	1.02	143
GROWTH	75	63.
LEVERAGE	1.16	2.75
EV	31	25.

(Source: Annual Report)

Table 1 above describes the results of descriptive statistics for all the dependent variable and independent variable overall in the model. The mean value of price volatility (PV) is .50 with a Standard deviation of 0.28 as stated in Table 1, which means it remains low volatile from 2011-2015. Among the independent variable the mean of earning volatility (EV) is 31 and Standard deviation is 25 which indicates high earning volatility, Growth has the highest mean of 75 and highest Standard deviation of 63 among all the variables. While the dividend payout ratio (DPR) Mean is 32 and Standard deviation is 31.6 respectively, on the other hand the Mean and Standard deviation of dividend yield (DY) is 1.4 and 1.82 respectively. Last variable in the proposed study is size and leverage was its mean and standard deviation is 1.02 and 143, leverage 1.16 and 2.75. The Correlation results are presented in Table 1.1.

TABLE 1.1: CORRELATION

	PV	DY	DPR	SIZE	GROWTH	LEVERAGE	EV
PV	1						
DY	.532**	1					
DPR	-.022	.239**	1				
SIZE	.092	.017	-.183*	1			
GROWTH	-.145	-.018	.255**	-.395**	1		
LEVERAGE	.149	.078	-.098	.337**	-.404**	1	
EV	.026	-.084	-.253**	.246**	-.064	-.041	1

(, **, Indicates that correlation is significant @ 0.5 and 0.1)*

The above Table 1.1 shows the correlation between all the variables. It is clear from the above analysis that price volatility and dividend has strong correlation (r = 0.532) at the same time growth and price volatility is negatively correlated which means that the increase in one variable leads to decrease in the other variable. Dividend yield and dividend payout ratio is showing low degree positive correlation

(r = 0.239), size and dividend payout ratio (r = -0.18) indicated low degree negatively correlation, growth and dividend payout ratio is (r = 0.255) indicating low degree positively degree correlation. All the remaining variables are indicating weak or medium correlation with each other.

TABLE 1.2: MODEL SUMMARY

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.558[a]	.312	.283	.2431101

(Table. 1.2 Predictors: (Constant), EV, LEVERAGE, DY, DPR, SIZE, GROWTH)

The value of R^2 shows that the independent variable causes 31% variability in dependent variable which means that the independent variable chosen for the study have low impact on dependent variable; more number of determinants should be taken into consideration to know the impact on other control variables.

TABLE 1.3: ANOVA

Model	Sum of Squares	DF	Mean Square	F	Sig.
Regression	3.827	6	.638	10.791	.000[a]
Residual	8.452	143	.059	-	-
Total	12.278	149	-	-	-

For the analysis PV is considered as dependent variable and independent variable are dividend yield, dividend payout ratio, size, growth, leverage and earning volatility. The sum of square regressed is 3.827, degree of freedom is 6; mean square is 0.638 and f value is 10.791. The residual sum of square is 8.452, degree of freedom is 143 and mean square is 0.059. The significance of both the variable is 0.000 which is clear that, there is no significant association between stock price volatility and dividend yield and also there is no significant association between stock price volatility and dividend payout ratio.

TABLE 1.4: RESULTS OF MULTIPLE REGRESSION MODEL

Model	Coefficients	Standard Error	t-stat	Sig.
(Constant)	.380	.032	11.752	.000
DY	.088	.011	8.055	.000
DPR	-.001	.001	-2.232	.027

(Table.1.4 Results of regression based on SPV= A1+ADY2+ADPR3+ €)

The above Table.1.4 represents results of regression based on equation. In this stage Price volatility is regressed on DY and DPR. The results of this regression show that SPV and DY have no significant association. It is exactly as hypothesizes. The association between SPV and DPR is negative but it is not significant

In the next stage, regression model was expanded by adding controls variables and regression is regressed based on equation. There is no significant association between SPV and DY it remains constant. Moreover, there is negative association between SPV and DPR but it is not significant. As Table 1.5 shows, there is also a significant negative association between SPV and Size. On the other hand, the remaining variables have less impact on SPV

TABLE 1.5

Model	Coefficients	Standard Error	t-stat	Sig.
(Constant)	.376	.056	6.742	.000
DY	.086	.011	7.799	.000
DPR	-.001	.001	-1.569	.119
SIZE	-2.487	.000	-.016	.988
GROWTH	.000	.000	-.938	.350
LEVERAGE	.007	.008	.838	.404
EV	.000	.001	.561	.576

(Table.1.5 Results of regression based on SPV= A1+ADY2+ADPR3+AS4+AG5+AL6+AEV7+ €)

CONCLUSION

The objective of the study is to examine the impact of firms' dividend policy and dividend payout ratio on the share price of the sensex companies. The study covers the period for 5 years from 2011-2015. The empirical study suggests there is no significant association between a SPV and DY. It is exactly as hypothesizes. The association between SPV and DPR is negative but it is not significant, there is a negative relationship between the payout ratio of a firm and the volatility of its stock price and a weak positive relationship between dividend yield and the volatility of stock price. This is consistent with the findings of Allen and Rachim (1996). But the payout ratio is contrary to the findings of Baskin (1989). The results generally suggest that the high rate of payout ratio leads to lower volatility in the share price. The DPR is a main determinant of volatility. Among the control variables, Size had a very low positive relationship with price volatility, suggesting that the larger the firm, the less the stock volatile. The growth, leverage and earning volatility has less impact towards volatility. The time period considered for the study is 5 years and study is limited to sensex companies (30 companies) hence this can be added as the limitation of the study. Further research could be done to increase the time span which will incorporate other variables.

REFERENCES

1. Allen, F., and Rachim. R. (1996), "Dividend Policy and stock Price volatility: Australian evidence". Applied Financial Economics, 6 (2), 175-188.
2. Allen, F., Bernardo, A., & Welch, I. (1998). "A Theory of Dividends based on tax clienteles". Yale School of Management.
3. Al-Malkawi, H. (2007), "Determinants of Corporate Dividend Policy in Jordan: An Application of the TobitModel". Journal of Economic & Administrative Sciences Vol. 23, No. 2, December 2007(44-70).

4. AL-Malkawi, H., Rafferty, M. and Pillai, R. (2010), "Dividend policy: A review of theories and empirical evidence". International Bulletin of Business Administration, ISSN: 1451-243X Issue 9 (2010).
5. Baskin, Jonathan (1989). Dividend policy and the volatility of common stocks. Journal of Portfolio Management, Vol. 15 Issue 3
6. Black, Fischer, & Scholes, Myron (2002). The Effects of Dividend Yield and Dividend Policy on Common Stock Prices and Returns. Journal of Financial Economics, 1(1), pp1-22
7. Chen, C., & Wu, C. (1999). The dynamics of dividends, earnings and prices: evidence and implications for dividend smoothing and signaling. Journal of Empirical Finance, 6(1), 29-58.
8. Chen, Z., Cheung, Y.-L., Stouraitis, A., & Wong, A. W. (2005). Ownership concentration, firm performance, and dividend policy in Hong Kong. Pacific-Basin Finance Journal, 13(4), 431-449.
9. Gordon, M. J. (1959). Dividends, earnings, and stock prices. The Review of Economics and Statistics, 41(2), 99-105.
10. Hussainey, Khaled, & Mgbame, Chijoke Oscar, & Chijoke-Mgbame, Aruoriwo M (2011). Dividend policy and share price volatility: UK evidence. Journal of Risk Finance, Vol. 12 Issue 1
11. Miller, M.H. and Modigliani, F. (1961), Dividend policy, growth and the valuation of shares, The Journal of Business, Vol. 34, pp. 411-33
12. Nazir, Mian Sajid, & Nawaz, Muhammad Musarat, & Anwar, Wasseem, & Ahmed, Farhan (2010). Determinants of Stock Price Volatility in Karachi Stock Exchange: The Mediating Role of Corporate Dividend Policy. International Research Journal of Finance & Economics, Issue 55, p100-107
13. O_Farooq, S Saoud, S Agnaou (2012) Dividend Policy as a Signaling Mechanism under Different Market Conditions: Evidence from the Casablanca Stock Exchange International Research Journal of Finance and Economics 83, 187-198

IMPACT OF GLOBALIZATION ON THE EXTERNAL SECTOR OF INDIAN ECONOMY

IBRAHIM CHOLAKKAL
ASST. PROFESSOR
P.G. DEPARTMENT OF ECONOMICS
E.M.E.A COLLEGE OF ARTS & SCIENCE
KONDOTTI

ABSTRACT
The integration of domestic economies with the world economy by reducing the hindrances in the free flow of goods and services was improved the economic growth and reduced the poverty especially in the developing countries like India and China. This paper has set two objectives as to make a general overview of the impact of globalization and to examine the nature of external sector of Indian economy during the pre-reform, reform and post reform periods. This paper is based on the secondary data, which has compiled from Indian Economic Survey 2010. As far as the first objective is considered, the consumer gets more sovereign, but the producer has to face competition from global market and those who are fittest will survive. As far as the second objective is considered, in exports, there was an improvement in the rate of change of exports from pre reform period to the reform period. Therefore, it may be considered as positive impacts of globalization. But at the same time a rise in imports from pre reform period to the reform period is a sign of negative impacts of globalization. In such a situation the Kaldor – Hicks compensation criterion can be adopted as a measure of social welfare. Therefore, as per the compensation criterion, the impact of globalization is favourable (on external economy), if the gain in exports is more enough to compensate to those who make loses due to imports.

KEYWORDS
globalization, export, import, global village, foreign direct investment.

INTRODUCTION
Indian economy had experienced some major policy changes in the early 1990s. The new economic reforms of 1990s are popularly known as Liberalization, Privatization and Globalization (LPG). The LPG model reforms were with an aim to make Indian economy as a fastest growing economy and globally competitive. Globalization has its history dates back to the travel of Columbus and Vas coda Gama (1492-1498). Globalization in its present form has advocated by GATT and executed by WTO.

Globalization is the process of integrating the domestic economy with the world economy. The process of integration is through removing the obstacles in the free flow of goods and services, technology, capital and even labour or human capital. In the most general sense, globalization refers to a process, which ensures unfettered cross-national flows of capital, technology and commodities (Petras 1999). It is supposing that the liberalization in trade and investment will minimize the role of the state and provides the key role to the market. Sachs (1985) opined that the export-oriented countries, unlike their inward oriented counterparts were able to increase their share in world trade leading to higher output growth.

Globalization aims at deriving maximum benefit from a country's specialization. Therefore, It is nothing but the new version of the "Theory of Comparative Cost Advantage" propagated by classical economists. That is producing the products, which have least comparative cost and make it available in the world market. Therefore, the ultimate aim of globalization is to look up on the world as a 'global' village. The Parameters of Globalization are:

i. Reduction of trade barriers so as to permit free flow of goods across national frontiers.
ii. Creation of environment in which free flow of capital can be take place among nations-states
iii. Creation of environment, permitting free flow of technology and
iv. Free movement of labour across the national frontier.

THE ADVOCATES OF GLOBALIZATION ARE DEFENDING THE RIVALS WITH THE FOLLOWING ARGUMENTS
i. Globalization will promote foreign direct investment and foreign portfolio investment and thus, it enables the developing countries to raise capital even without own resources.
ii. Globalization enables developing countries to make use of technology of developed countries without the cost for research and development
iii. Globalization widens the access of developing countries to export their products in the developed countries. Simultaneously, it enables the consumers of developing countries to obtain quality consumer durables at relatively much lower prices.
iv. Globalization introduces faster diffusion of knowledge and thus enables developing countries to raise their level of production and productivity.
v. Globalization reduces costs of transport and communication. It also reduces tariffs and thus enlarges the share of foreign trade as a percentage of GDP
vi. More than that it is considered as the engine of growth, technical advancement, raising productivity, enlarging employment and bringing about poverty reduction along with modernization.

OBJECTIVES OF THE PAPER
1. To make a general overview of the impact of globalization
2. To examine the state of external sector of Indian economy during the pre-reform, reform and post reform period

METHODOLOGY
This paper is based on the secondary data, which has compiled from Indian Economic Survey 2010, and the collected data has been classified and analyzed in a systematic manner. The data of external sector were analysed in way by considering three decades. The first decade is from 1980-81 to 1989-90 (Pre reform period). The second decade is from 1990-91 to 1999-2000 (Reform period) and the third decade is from 2000-2001 to 2009-2010 (Post reform period). For analysis, the statistical tools like Ratios, percentages and Averages were used.

GENERAL OVERVIEW OF IMPACT OF GLOBALIZATION
POSITIVE IMPACTS
- **IMPROVE THE EFFICIENCY IN PRODUCTION OF COMMODITIES**

Due to competition from domestic and world economy, the existing lazy industrial units have improved their efficiency in order to survive the world competition.
- **REDUCE THE RELATIVE PRICES COMMODITIES IN THE DOMESTIC MARKET**

Due to the availability of advanced technology to all, it reduces the capital-output ratio and increases the labour productivity leads to reduction in the relative prices of commodities in domestic market
- **CONSUMER SOVEREIGNTY**

The consumer gets more power to choose the best one out of the alternatives. Therefore, the producing sectors will compete to provide the goods and services in accordance with the desire of consumers.

- **RESTRUCTURE THE PRODUCTIVE SYSTEM OF THE COUNTRY**

In order to survive the competition, a capital scarce country need not produce capital-intensive goods but can specialise in labour intensive goods. Similarly, capital abundant countries can specialise in capital intensive technology of production

- **FOREIGN CAPITAL INFLOWS AND OUTFLOWS IN THE FORM OF FDI AND FPI**

Due to the relaxation in trade barriers, foreign capital will be attracted to the country so that it can useful to utilize the domestic natural resources and human resources more effectively than in the state of inadequacy of capital

- **IMPROVE THE QUALITY OF THE PRODUCTS**

With the entry of foreign competition, the domestic industries will be compelled to increase the quality of products in order to survive in the global market.

- **GREATER EMPLOYMENT OPPORTUNITIES**

With expansion of domestic as well as foreign market and free movement of labours across the national frontiers will open a wide opportunity before the labours.

- **IMPROVE THE EFFICIENCY OF BANKING, FINANCE AND OTHER SERVICE SECTOR**

The entry of new foreign and private banks will increase the level of competition and hence it will lead to reduce the rate of interest for loans.

- **GOODS AND PEOPLE ARE CAN BE TRANSPORTED WITH MORE EASINESS AND SPEED**

The goods like consumer durables, capital goods, medicines, cinema etc. produced in the world can be accessible in the domestic market.

- **IMPROVE THE FOREIGN TRADE**

The norms of globalization will open up foreign trade in the form of exports and imports. Therefore, import substitution and export promotion will be helped the economy to develop

- **PROMOTE BALANCED REGIONAL DEVELOPMENT**

By providing the basic infrastructure in the remotest region in eve of globalization, the development of backward states would help to achieve the goal of balanced regional development and lead to reduction in regional disparities.

NEGATIVE IMPACTS

- Unhealthy competition returns the old jungle law ‘survival of the fittest’
- Cultural degradation: globalization homogenizes our world and destroys cultural heritage and its diversity
- Imports of hazardous commodities
- Weakens cottage and small scale enterprises
- Global inequality
- Over exploitation of Environment and Natural Resources
- Dismay the dignity of labour
- Increase the workload
- Elimination of surplus labour (Voluntary retirement, Golden handshake etc)
- Reduction of employee’s welfare schemes (Curtailments of Pension, PF, HRA, DA, ESI etc)
- Reduce employment opportunities
- No work no pay norms
- Weaken trade unions
- Concession Bargaining instead of collective bargaining
- Inequality and Poverty: cheap imports lead to closure of large number of small enterprises which will increase the inequality and poverty
- Jobless growth

GLOBALIZATION AND EXTERNAL SECTOR OF INDIAN ECONOMY

Globalization advocated the acceptance of the new strategy of liberalization and globalization on the plea that India will be able to access foreign markets more effectively. The exports value rose from Rs. 6711 crores in 1980-81 to Rs. 32553 crores in 1990-91 and to Rs. 845534 crores in 2009-10. But the trend of imports, they increased from Rs. 12549 Crore in 1980-81 to Rs. 43198 Crore in 1990-91 and to Rs. 1363736 crores in 2009 to 2010. For the sake analysis the time period has been classified in to three as Pre-reform period (1980-81 to 1989-90), reform period (1990-91 to 1999-2000) and Post reform period (2000-01 to 2009-10)
The nature of India’s external sector in pre reform period can be seen from the following table 1.

TABLE 1: EXPORT, IMPORT AND TRADE BALANCE (RS. CRORE) DURING THE PRE REFORM PERIOD (1980-81 TO 1989-90)

Year	Export	Import	Trade Balance	Rate of Change Export (%)	Rate of Change in Imports (%)
1980-81	6711	12549	-5838	4.6	37.3
1981-82	7806	13608	-5802	16.3	8.4
1982-83	8803	14293	-5490	12.8	5
1983-84	9771	15831	-6060	11	10.8
1984-85	11744	17134	-5390	20.2	8.2
1985-86	10895	19658	-8763	-7.2	14.7
1986-87	12452	20096	-7644	14.3	2.2
1987-88	15674	22244	-6570	25.9	10.7
1988-89	20232	28235	-8003	29.1	26.9
1989-90	27658	35328	-7670	36.7	25.1
Total	**131746**	**198976**	**-67230**	**163.7**	**149.3**
Average	**13174.6**	**19897.6**	**-6723**	**16.37**	**14.93**

Source: Compiled from Government of India, Economic Survey 2010-11

In the pre reform period, the average export value is of Rs. 13174.6 crore, the average import value is of Rs. 19897.6 crore and the average trade balance is of Rs -6723 crore. The average rate of change of export during the pre-reform period is of Rs. 16.37 and the average rate of change in imports is Rs. 14.93.
The nature of India’s external sector in the reform period can be analysed from the following table 2:

TABLE 2: EXPORT, IMPORT AND TRADE BALANCE (RS. CRORE) DURING THE REFORM PERIOD (1990-91 TO 1999- 2000)

Year	Export	Import	Trade Balance	Rate of Change Export (%)	Rate of Change Import (%)
1990-91	32553	43198	-10645	17.7	22.3
1991-92	44041	47851	-3810	35.3	10.8
1992-93	53688	63375	-9687	21.9	32.4
1993-94	69751	73101	-3350	29.9	15.3
1994-95	82674	89971	-7297	18.5	23.1
1995-96	106353	122678	-16325	28.6	36.4
1996-97	118817	138920	-20103	11.7	13.2
1997-98	130100	154176	-24076	9.5	11
1998-99	139752	178332	-38580	7.4	15.7
1999-2000	159561	215236	-55675	14.2	20.7
Total	**937290**	**1126838**	**-189548**	**194.7**	**200.9**
Average	**93729**	**112683.8**	**-18954.8**	**19.47**	**20.09**

Source: Compiled from Government of India, Economic Survey 2010-11

During the reform period, the average export value is of Rs. 93729 crores, the average import value is of Rs. 112683.8 crore and the average trade balance is of Rs -18954.8 crore. The average rate of change of export during the reform period is of Rs. 19.47 and the average rate of change in imports is Rs. 20.09

The nature of India's external sector during the post reform period can be analysed from the following table 3:

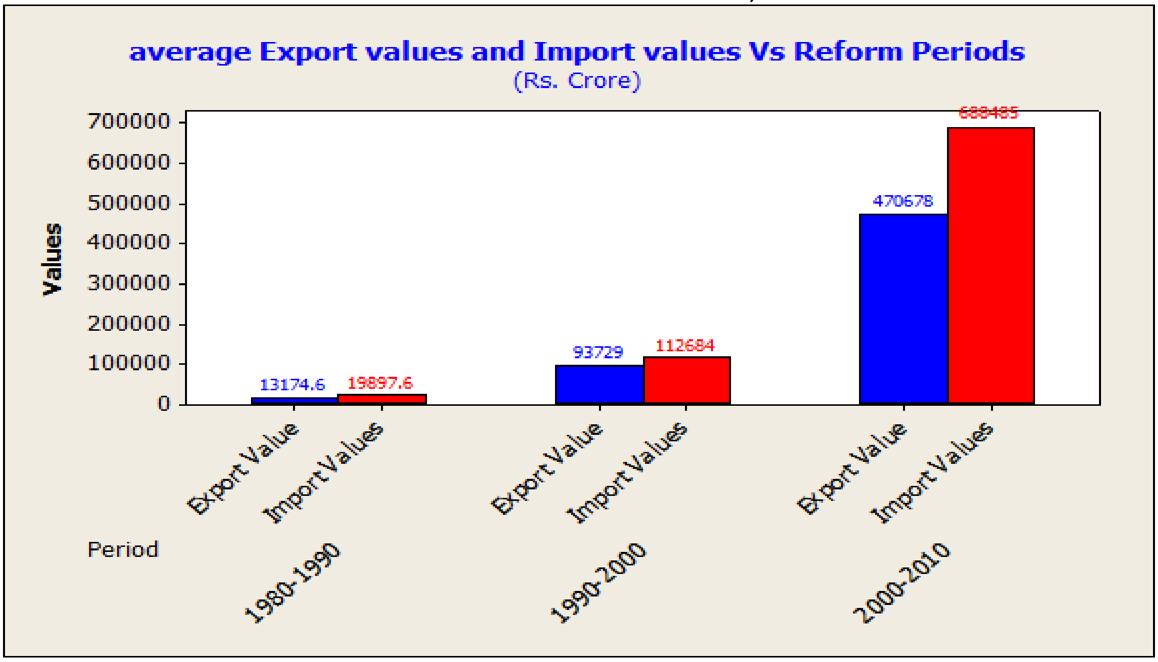
TABLE 3: EXPORT, IMPORT AND TRADE BALANCE (RS. CRORE) DURING THE POST REFORM PERIOD (2000-01 TO 2009-10)

Year	Export	Import	Trade Balance	Rate of Change Export(%)	Rate of Change Import (%)
2000-01	203571	230873	-27302	27.6	7.3
2001-02	209018	245200	-36182	2.7	6.2
2002-03	255137	297206	-42069	22.1	21.2
2003-04	293367	359108	-65741	15	20.8
2004-05	375340	501065	-125725	27.9	39.5
2005-06	456418	660409	-203991	21.6	31.8
2006-07	571779	840506	-268727	25.3	27.3
2007-08	655864	1012312	-356448	14.7	20.4
2008-09	840755	1374436	-533680	28.2	35.8
2009-10	845534	1363736	-518202	0.6	-0.8
Total	**4706783**	**6884851**	**-2178067**	**185.1**	**209.5**
Average	**470678.3**	**688485.1**	**-217807**	**18.51**	**20.95**

Source: Compiled from Government of India, Economic Survey 2010-11

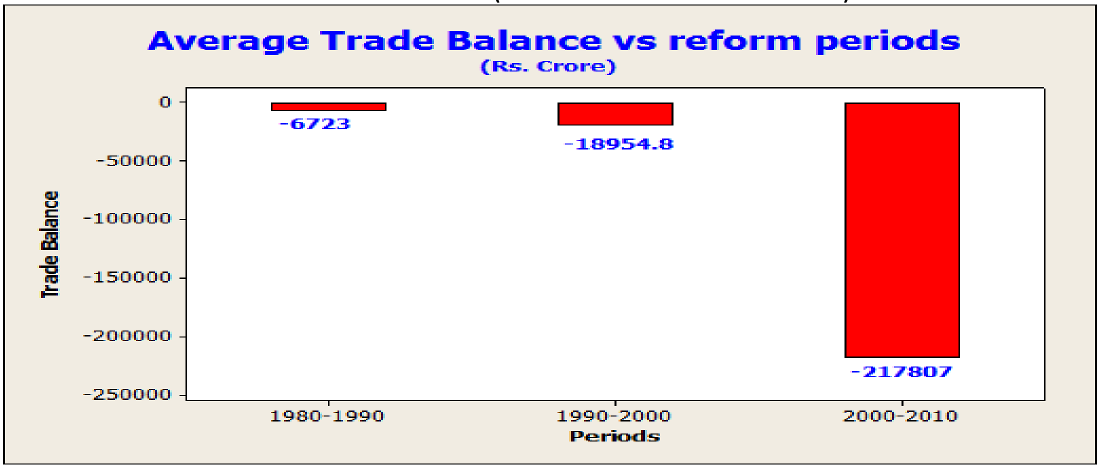
During the post reform period, the average export value is of Rs. 470678.3 crore, the average import value is of Rs. 688485.1 crore and the average trade balance is of Rs -217807 crore. The average rate of change of export during the post reform period is of Rs. 18.51 and the average rate of change in imports is Rs. 20.95.
The average export value and average import value during the pre-reform period, reform period and post-reform period is depicted in the following figure 1:

FIGURE 1: EXTERNAL SECTOR OF INDIAN ECONOMY DURING THE PRE REFORM, REFORM AND POST REFORM PERIODS



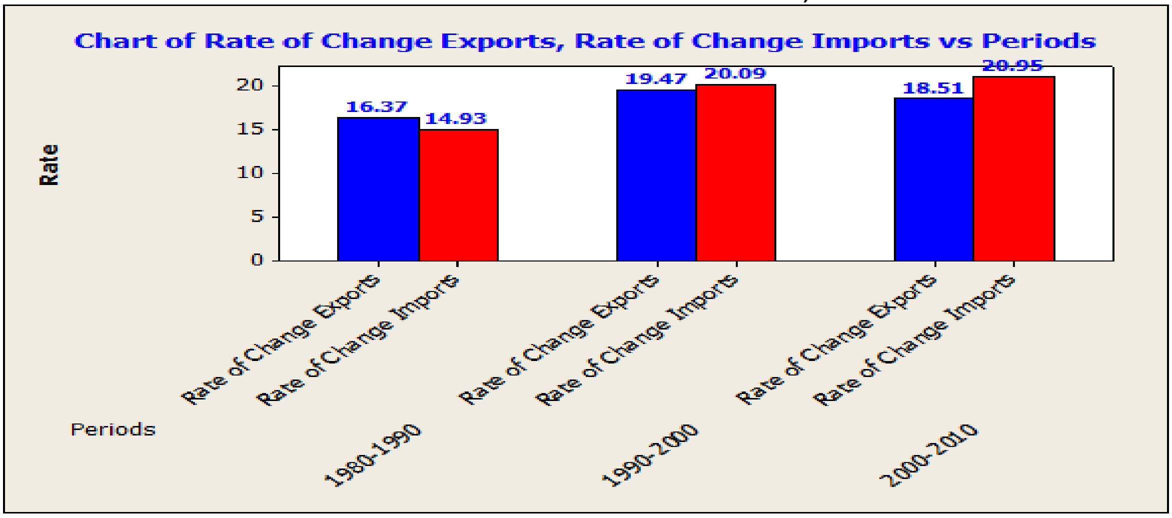
The average trade balance during the pre-reform, reform and post-reform periods is depicted in following figure 2.

FIGURE 2: TRADE BALANCE (EXPORT VALUE MINUS IMPORT VALUE)



The average rate of change of exports and imports during pre-reform, reform and post-reform periods is depicted in the following figure 3:

FIGURE 3: AVERAGE RATE OF CHANGE OF EXPORTS AND IMPORTS DURING PRE REFORM, REFORM AND POST REFORM PERIODS



SUMMARY

The impact of globalization is said to be positive if it makes an improvement in export and a reduction in the import. While considering the rate of change of export and import in India during the pre-reform, reform and post reform periods, the export make an improvement in the reform period (19.41%) than the pre reform period (16.37%), but make a slight fall 18.5% during the post reform period.

The rate of change of import was increased from 14.93% during the pre-reform period to 20.09% during the reform period and to 20.95% during the post reform period. Therefore, when considering the export, there was an improvement in the rate of change of export from pre reform period to the reform period is may be considered as positive impact. But at the same time a rise in import from pre reform period to the reform period is a sign of negative impact of globalization.

CONCLUSION

Any policy change will make both positive and negative impacts on the society. In such a case the Pareto criterion is not possible to attain because it is impossible to make any one better-off without making someone worse-off (Koutsoyiannis 1979). In such a situation the Kaldor –Hicks compensation criterion can be adopted as a measure of social welfare if those who benefit from the change would be compensate those who hurt, and still be left with some net gain (Koutsoyiannis 1979). Therefore, as per the compensation criterion, the impact of globalization is favourable (in the case of external sector), if the gain in exports is enough to compensate to those who make loses due to imports.

REFERENCES

1. Ajithan. M. B 2008., *"Impact of Globalization on the Village Industries in Kerala: A Study with special reference to Handloom Industry in Eranakulam District"*, PhD Thesis Mahatma Gandhi University, Kerala-India.
2. *Economic Survey 2008-09*, Government of India, Ministry of Finance Department of Economic Affairs, Economic Division- March 2010, Oxford university Press
3. *Economic Survey 2010-11*, Government of India, Ministry of Finance Department of Economic affairs, Economic Division-March 2012, Oxford university Press
4. Koutsoyiannis, A., 1979, *Modern Microeconomics*, Second Edition, Macmillan Press Ltd, Houndmills, Basingstoke, Hampshire RG21 6Xs and London.
5. Krishna A Goyal 2006, *"Impact of Globalization on Developing Countries with special Reference to India"*, International Research Journal of Finance and Economics, ISSN 1450- 2887, Issue 5 (2006)
6. Petras J. 1999, *"Globalization: A Critical Analysis"*, Journal of Contemporary Asis, Vol 29, No.1. pp 3-37.
7. Pratheep, P.S.,2010, *Globalization, Identity and Culture: Tribal Issues in India,* Catholicate College (Mahatma Gandhi University) LSCAC 2010 Proceedings.
8. Reserve Bank of India Annual Report, 2004-05
9. Rodrik, D., 1992, *"Limits to Trade Policy Reform in Developing Countries"* Journal of Economic and Perspectives, Vol. 6, No. 1
10. Ruddar Datt & Sundharam K.P.M., 2006, *Indian Economy,* 52nd Edition, S. Chand &Company Ltd. Ram Nagar, New Delhi.
11. Sachs. J., 1985, "*External debt and macroeconomic performance in Latin America and East Asia"*, Brooking Papers on Economic Activity, 2:565-573.
12. Sonia, Rajeev Kansal, 2009, *Globalization and its impact on small industries in India,* PCMA Journal of Business, Vol.1, No.2 (June 2009) pp. 135-146, ISSN.0974-997

A STUDY ON GROWTH AND INSTABILITY IN INDIA'S BANANA CULTIVATION AND EXPORT

DR. R. GANESAN
ASST. PROFESSOR
POST GRADUATE & RESEARCH DEPARTMENT OF ECONOMICS
ARULMIGU PALANIANDAVAR COLLEGE OF ARTS & CULTURE
PALANI

ABSTRACT
Agriculture is considered as one of the oldest and most important of all the economic activities of human beings since Stone Age. Horticulture is one of the branches of agriculture. It includes the cultivation of fruits, vegetables, nuts, seeds, herbs, mushrooms, flowers, ornamental trees and plants. Production of fruits is a significant entity with the overall horticulture industry. Banana is one among the very popular fruit grown in about 120 countries. At the global perspective India is the largest banana producing country in the world followed by China and Philippines. In this context an attempt is made in this paper to study the growth and instability in India's banana cultivation and export during the post-WTO period i.e., from 1995 to 2012. It is concluded that the growth rates of area and yield of banana is much low in India. To improve the growth, area under irrigation must be increased and watershed development programmes must also be improved. Farmers should be encouraged to use appropriate amounts of inputs like chemical fertilizers, pesticides and water. Banana is quite perishable in nature. So that refrigerated storage facilities must be provided all over the country. The instability in banana cultivation and export is much high in India. Varieties resistant to insects, pests and climate stress are the major factors for reducing variability in area, production, yield and export. The share of banana export in total exports and total banana production is quite small. Since India is largest producer of banana in the world, she has a huge potential in banana exports. Producers and exporters should reap these opportunities.

KEYWORDS
banana, export, horticulture crops, compound growth rate, instability index.

INTRODUCTION
Agriculture is considered as one of the oldest and most important of all the economic activities of human beings since Stone Age. It is a foundation of all social, cultural and economic condition of mankind. In ancient times the farming was not only a process of food production or a source of income, but it was essentially a way of life. Now-a-days agriculture has become the world's most important industry. It promotes economic development of the country. The economic history of many developed countries of the world like the United Kingdom, the United States of America, Germany, Egypt, Japan, etc., demonstrates that agricultural development helped and smoothen the process of industrial development. At the global perspective India is the largest banana producing country in the world followed by China and Philippines.

Horticulture is one of the branches of agriculture. It includes the cultivation of fruits, vegetables, nuts, seeds, herbs, mushrooms, flowers, ornamental trees and plants. Production of fruits is a significant entity with the overall horticulture industry. Banana is one among the very popular fruit grown in about 120 countries. It is well known for its low price and high nutritive value. It is consumed in fresh or cooked form both as ripe and raw fruit. Banana is a rich source of carbohydrate and is rich in vitamins particularly vitamin B. It is also a good source of potassium, phosphorus, calcium and magnesium. The fruit is easy to digest, free from fat and cholesterol. Banana powder is used as the first baby food. It helps in reducing risk of heart diseases when used regularly and is recommended for patients suffering from high blood pressure, arthritis, ulcer, gastroenteritis and kidney disorders.

Processed products, such as chips, banana puree, jam, jelly, juice, wine and halwa can be made from the fruit. The tender stem, which bears the inflorescence is extracted by removing the leaf sheaths of the harvested pseudostem and used as vegetable. Plantains or cooking bananas are rich in starch and have a chemical composition similar to that of potato.

Banana fibre is used to make items like bags, pots and wall hangers. Rope and good quality paper can be prepared from banana waste. Banana leaves are used as healthy and hygienic eating plates.

BANANA PRODUCTION IN THE WORLD
Banana is being cultivated throughout the warm tropical regions of the world. Banana and plantains are grown in about 120 countries. The following table shows the major Banana producing countries in the world during 2012-13.

TABLE 1: MAJOR BANANA PRODUCING COUNTRIES IN THE WORLD DURING 2012-13

Countries	Area (in '000 Ha)	Production (in '000 Tones)	Productivity (in Tones/Ha)	% age share in World Production
India	776.0	26509.5	34.16	24.38
China	400.0	10550.0	26.38	10.34
Philippines	454.2	9226.0	20.31	9.05
Ecuador	210.9	7012.2	33.25	6.88
Brazil	481.1	6902.2	14.35	6.77
Indonesia	105.0	6189.1	58.94	6.07
Angola	115.7	2991.5	25.84	2.93
Guatemala	66.0	2700.0	40.91	2.65
Tanzania	442.2	2524.7	5.71	2.48
Mexico	72.6	2203.9	30.35	2.16
Costa Rica	41.4	2136.4	51.57	2.09
Colombia	79.3	1982.7	25.00	1.94
Others	1763.1	22704.6	12.88	22.26
World Total	5007.5	103632.7	20.70	100.0

Source: Food and Agriculture Organization of the United Nations, http://faostat.fao.org.

At the global perspective India is the largest banana producing country in the world followed by China and Philippines. India's share in the world banana production is about 24 per cent followed by China at 10 per cent and Philippines at 9 per cent. Besides these three countries, the other major banana producing countries are Ecuador, Brazil, Indonesia, Angola, Guatemala, Tanzania, Mexico, Costa Rica and Colombia. Even though banana is grown in about 120 countries, the above stated 12 countries contributed more than 75 per cent of the world banana production.

HORTICULTURE CROPS IN INDIA

Agricultural is the largest and most important sector in India. It provides food to huge population, raw materials to agro-based industries, employment opportunities to a very large proportion of rural population, capital for its own development and surplus for national economic development. Agriculture sector in India employs about 50 per cent of the work force, contributes nearly 15 per cent of GDP. India is the second largest producer of agricultural products in the world: more than 215 million tonnes of foodgrains, 74.87 million tonnes of fruits, 121 million tonnes of milk, 63029 million nos. of eggs, 417 million livestock, and 8.29 million tonnes of fish and fish products.

Horticulture is one of the main agricultural practices in India. The Horticulture (fruits including nuts, vegetables including potato, tuber crops, mushroom, ornamental plants including cut flowers, spices, plantation crops and medicinal and aromatic plants) has become key drivers for economic development in many of the states in the country and it contributes 30.4 per cent to GDP of agriculture. The country has been bestowed with wide range of climate and physio-geographical conditions and as such is most suitable for growing various kinds of horticultural crops. India's horticulture production has increased by 25.4 per cent in the last five years. This has placed India among the foremost countries in horticulture production, just behind China. During 2012-13, its contribution in the world production of fruits & vegetables was 11 % & 10% respectively. Vegetables, fruits, plantation crops and spices contributed to 60.3 per cent, 30.2 per cent, 6.3 per cent and 2.1 per cent of total horticulture production, respectively, in 2012-13. India is the largest producer, consumer and exporter of spices.

India is also the largest producer of fruits and nuts like mango, banana, papaya, coconut, areca nut and cashew nut in the world. Among fruits, banana and mango accounted for more than half (55 per cent) of total fruit production during 2012-13, with production of banana being almost double of that of mangoes.

BANANA PRODUCTION IN INDIA

Banana is the most important fruit crop in India, throughout the year. It is one of the oldest fruits known to mankind and is one of the first cultivated plants. Banana is considered as 4th important food crop. India produces large quantities of banana and there is very good demand for both fruits and processed banana in the world market.

POPULAR BANANA VARIETIES IN INDIA

Since different languages are spoken in different regions, more synonyms and local names are prevalent for banana in India. According to Indian Council of Agricultural Research about 200 varieties of banana are grown in India. The important varieties cultivated by the farmers Robusta, Red banana, Poovan, Rasthali, Nendran, Monthan, Karpuravalli, Sakkai, Peyan, Matti, Moris, and Mysore are among the important ones grown in India and it includes 14 varieties of tissue culture of banana cultivation.

BANANA PRODUCING STATES IN INDIA

India's total production of banana comes largely from few states. The following table shows the state wise area, production and productivity of banana in India during 2012-13 and the percentage share of states in total area and production of banana.

TABLE 2: STATE-WISE AREA, PRODUCTION AND PRODUCTIVITY OF BANANA IN INDIA DURING 2012-13

States	Area (in '000 Ha)	Production (in '000 Tones)	Productivity (in Tones/Ha)	% age share in Area	% age share in Production
Tamil Nadu	111.36	5136.20	46.12	14.35	19.38
Gujarat	70.58	4523.49	64.09	9.10	17.06
Maharashtra	82.00	3600.00	43.90	10.57	13.58
Andhra Pradesh	92.65	3242.80	35.00	11.94	12.23
Karnataka	97.40	2529.60	25.97	12.55	9.54
Bihar	33.06	1702.41	51.49	4.26	6.42
Madhya Pradesh	25.76	1701.00	66.03	3.32	6.42
West Bengal	44.70	1077.80	24.11	5.76	4.07
Assam	51.51	837.02	16.25	6.64	3.16
Odisha	27.49	521.31	18.96	3.54	1.97
Others	139.49	1637.47	11.74	17.98	6.18
Total	776.0	26509.5	34.16	100.0	100.0

Source: Ministry of Agriculture, Government of India.

In India, the top 10 states contributing 93 per cent of the total banana production and around 82 per cent of total area under cultivation of banana. Tamil Nadu led in Banana production (19.38 per cent), followed by Gujarat (17.06 per cent), Maharashtra (13.58 per cent), Andhra Pradesh (12.23 per cent) and Karnataka (9.54 per cent). There is a wide variation in the yield of the crop across states. Gujarat and Madhya Pradesh have yield in excess of 60 tones per hectare whereas Maharashtra, Tamil Nadu and Bihar have yield rate between 40 and 60 tones per hectare.

In this context an attempt is made in this paper to study the production and export performance of Banana at all India level during the post-WTO period i.e., from 1995 to 2012.

OBJECTIVES

i. To estimate the growth rate of area, production, yield and export of Banana cultivated in India.
ii. To measure instability in area, production, yield and Export of Banana cultivated in India.
iii. To know the major importing countries of Indian Banana.
iv. To suggest some policy measures to improve the growth and control the instability in banana production and export.

METHODOLOGY

The methodology used in the paper is discussed in the following parts of this section. It includes sources of data, period of study and analytical techniques used in this paper.

SOURCES OF DATA

The present analysis was based on secondary data relating to the area, production, yield and export of Banana cultivated in India. The data was obtained from the websites of Agricultural & Processed Food Products Export Development Authority, New Delhi, Ministry of Agriculture, Ministry of Commerce & Industry, Govt. of India and Food and Agriculture Organization of the United Nations. The collected secondary data were formatted by using electronic spreadsheets (MS-Excel 2007). SPSS-16 (Statistical Package for Social Sciences) software was used for the data analysis.

PERIOD OF THE STUDY

The study utilizes time series data with respect to area, production, yield and export of Banana cultivated in India from the year 1995 to 2012.

ANALYTICAL TECHNIQUES

The collected data were systematically analyzed through the following techniques.

COMPOUND GROWTH RATE

To study the growth performance of area, production, yield and export of Banana cultivated in India for the period 1995 to 2012, the following semi log transformation model was used:

$$y = \beta_0 (1+g)^t e^u \tag{1}$$

Where,

y = Area (or) Production (or) Yield (or) Export of Banana cultivated in India,
t = Time period (years)
β_0 = a parameter,
g = a parameter that is the compound rate of the growth of y
u = the disturbance term

If we now take the logs of both sides of (1), we have

Log y = log β_0 + t log (1+g) + u
If we let y^* = log y
β_0^* = log β_0
β_1^* = log (1+g)
we obtain y^* = $\beta_0^* + \beta_1^* t + u_t$

This tells us that a compound rate of growth implies a linear relationship, not between y and t, but rather between log y and t.

CGR= [Antilog β_1^*-1] x 100

INSTABILITY

To measure the instability in area, production, yield and export of Banana cultivated in India, the coefficient of variations (CV) was worked out.

CV which is defined as

$$CV = \frac{\text{Standard deviation}}{\text{Mean}} \times 100$$

Apart from these two techniques simple percentage was also calculated to know the share of different states and countries.

ANALYSIS AND DISCUSSION

Area, production, yield and export of Banana cultivated in India during 1995 to 2012 are given in the following table. The compound growth rate and instability index are also computed and presented in this Table.

TABLE 3: AREA, PRODUCTION, YIELD AND EXPORT OF BANANA IN INDIA (1995 to 2012)

Year	Area Harvested (in '000 Ha)	Production (in '000 tonnes)	Yield (in tonnes/Ha)	Export Quantity (tonnes)
1995	428	10182	23.79	1744
1996	438	10299	23.51	303
1997	447	13340	29.84	7018
1998	460	15100	32.83	8111
1999	490	16810	34.31	6290
2000	469.7	14137.3	30.10	8629
2001	466.2	14209.9	30.48	8100
2002	475.3	13304.4	27.99	8656
2003	498.6	13856.6	27.79	10877
2004	589.6	16744.5	28.40	12572
2005	569.5	18887.8	33.17	14411
2006	604.2	20997.8	34.75	11476
2007	658	23823	36.21	16662
2008	709	26217	36.98	30402
2009	770.3	26469.5	34.36	54273
2010	830	29780	35.88	60813
2011	796.5	28455.1	35.73	45582
2012	721.79	24869.49	34.46	50004
CGR	**3.71**	**6.00**	**2.20**	**24.36**
CV	**24.09**	**36.65**	**15.07**	**107.29**

Source: Food and Agriculture Organization of the United Nations, http://faostat.fao.org

It is clear from the data presented in the above table that there has been a steady increase in area from 2005 till 2010-11 by about 30-60 thousand hectares per year. In 2011 the area under banana cultivation shrink by more than 30 thousand hectares and the same was further reduced by more than 70 thousand hectares in 2012. India produces 10182 thousand tones of banana in 1995 and 29780 thousand tones in 2010. India's banana production decreased to 24869.49 thousand tones in 2012. The average yield in the country is about 33 tones, which is very good and much higher than the world standard. It is also clear that the banana exports touched a peak level of 60813 tonnes in the 2010.

During the study period, the area under banana cultivation in India is growing at compound growth rate of 3.71 per cent and the banana production is witnessed a growth of 6.00 per cent. The growth rate of yield is much slower than area and production, which registered as 2.20 per cent. Even though the share of banana exports in total exports and total banana production is quite small in India, the growth rate was much high (24.36 per cent) during the study period.

Considering the values of coefficient of variation, the export instability was much higher (107.29 per cent), followed by production (36.65 per cent) and area (24.09 per cent). The coefficient of variation of yield was 15.07 per cent which is comparably more stable than the other indicators.

EXPORT OF BANANA FROM INDIA

Banana is exported from India mainly to Middle East Asian countries. The direction of banana export from India during 2011 and 2012 is presented in the following table.

TABLE 4: EXPORT OF BANANA FROM INDIA DURING 2011 AND 2012

Country	2011		2012	
	(in Tonnes)	% age Share	(in Tonnes)	% age Share
UAE	15133.61	33.20	14801.70	29.60
Nepal	9765.99	21.43	11206.14	22.41
Pakistan	-	-	5202.35	10.40
Saudi Arabia	5013.96	11.00	4403.46	8.81
Oman	2228.15	4.89	3924.69	7.85
Qatar	2053.14	4.50	2809.15	5.62
Bahrain	2436.68	5.35	2566.36	5.13
Kuwait	3195.59	7.01	2219.51	4.44
Iran	4126.12	9.05	790.36	1.58
Maldives	912.55	2.00	644.59	1.29
Others	716.05	1.57	1435.30	2.87
Total	45581.84	100.00	50003.61	100.00

Source: APEDA, New Delhi, www.apeda.gov.in

The total banana exports from India have gone up from 45581 tones in 2011 to 50003 tones in 2012. In 2011, five main importers of Indian banana are UAE (33.2 per cent), Nepal (21.43 per cent), Saudi Arabia (11 per cent), Iran (9.05 per cent) and Kuwait (7.01 per cent). In 2012-13, the share of UAE, Saudi Arabia, Kuwait and Iran declined to 29.6 per cent, 8.81 per cent, 4.44 per cent and 1.58 per cent respectively. Banana exports to Nepal, Oman and Qatar have considerably increased in 2012. A major portion of banana (10.4 per cent) has exported to Pakistan in 2012.

CONCLUSION AND POLICY IMPLICATIONS

It is concluded from the analysis that the growth rates of area and yield of banana is much low in India. To improve the growth, area under irrigation must be increased and watershed development programmes must also be improved. Farmers should be encouraged to use appropriate amounts of inputs like chemical fertilizers, pesticides and water. Banana is quite perishable in nature. So that refrigerated storage facilities must be provided all over the country.

The instability in banana cultivation and export is much high in India. Varieties resistant to insects, pests and climate stress are the major factors for reducing variability in area, production, yield and export. The share of banana export in total exports and total banana production is quite small. Since India is largest producer of banana in the world, she has a huge potential in banana exports. Producers and exporters should reap these opportunities.

REFERENCES

1. Bairwa, Kailash Chand, Rajesh Sharma and Taresh Kumar, (2012), "Economics of Growth and Instability: Fruit Crops of India", Rajasthan Journal of Extension Education, Vol. 20, pp: 128-132.
2. Hosali, Roopa. Kadli Vinayaka, Sameer Lokapur and Ravi Gurikar, (2014), "Variability in Area and Yield of Banana in Karnataka: An Overview", International Journal of Green and Herbal Chemistry, Vol. 3, No. 4, pp: 1457-1464.
3. Jayaverman, K., (2004), "Growth in Production and Export of Banana", Agricultural Situation in India, April 2004, Vol. 3, No. 11, pp: 25-26.
4. Nilutpal Chutia and Borah Ritopan, (2014), "Production of Banana and Pineapple in Assam: Status and Challenges", Asian Journal of Research in Social Sciences and Humanities, Vol. 4, No. 9, pp: 140-152.
5. Singh, R.P. and Nimmy Rani (2013), "To Study Growth Rate of Area, Production and Productivity of Fruit Crops in Jharkhand", Journal of Economic & Social Development, Vol. 9, No. 1, pp: 52-60.
6. Thulasiram R. and T. Alagumani, (2015), "Growth, Instability and Structural Changes in Banana Exports from India", Life Sciences Leaflets, Vol. 70, pp: 67-74.
7. Vinayaka, Kadli, Sameer lokapur, Ravi Gurikar and Roopa Hosali, (2014), "Growth and Instability Analysis of fruits crops in India - An Economic Analysis", Journal of Environmental Science, Computer Science and Engineering & Technology, Vol. 3, No. 4, pp: 1808-1813.

ROLE OF ASHA WORKERS IN RURAL DEVELOPMENT WITH REFERENCE TO KOTTAYAM DISTRICT

TISSY ERUTHICKAL
ASST. PROFESSOR
BASELIUS COLLEGE
KOTTAYAM

ABSTRACT

Earlier there were no such health care activities for the needs and wants of the rural people. These health care activities were formed when the government realized the fact that majority of the rural people died because of improper medical treatment. The birth rate decreased because he woman did not get proper care and treatment while they were pregnant. In order to create awareness among the rural people about this problem and this problem and to help them Accredited Social Health Activist [ASHA] was formed. Now a day's Accredited Social Health Activist [ASHA] is becoming popular among rural population with its Reproductive and Child Health [RCH] activities and other health care programs. Therefore, an attempt is made to study the role of Accredited Social Health Activist [ASHA] in improving the health needs of rural population. The study is carried out in order to determine the effectiveness of the plan and to create more awareness among the public about ASHA plans.

KEYWORDS

ASHA workers, NRHM, ANC, PNC, immunization schedule, anganwadi Institutions.

INTRODUCTION

The National Rural Health Mission (NRHM) was launched on 12th April 2005 with an objective to provide effective health care to the rural population with emphasis on poor women & children. One of the key components of the NRHM is to provide every village in the country with a trained female community health activist i.e. Accredited Social Health Activist (ASHA). ASHA is a health activist in the community, who will create awareness on health and its determinants and mobilize the community towards local health planning and increased utilization and accountability of the existing health services. The ASHA is expected to be an interface between the community and the public health system. NRHM is envisaged as a horizontal program with emphasis on initiatives and planning at local level. 3,4 ASHA being the grass root level worker the success of NRHM depends on how efficiently is ASHA able to perform but the efficiency of ASHA or efficiency of performance of ASHA depends on their awareness & perception about their roles & responsibilities in health care provision

ORIGIN OF THE RESEARCH PROBLEM

Earlier there were no such health care activities for the needs and wants of the rural people. These health care activities were formed when the government realized the fact that majority of the rural people died because of improper medical treatment. The people in those areas did not know how to take treatment if they are affected by disease like Malaria, Chikungunia, and Cholera. And they didn't have an easy access to the hospitals. The birth rate decreased because he woman did not get proper care and treatment while they were pregnant.

In order to create awareness among the rural people about these problems Accredited Social Health Activist [ASHA] was formed. ASHA works as an interface between community and the public health system. Now a day's Accredited Social Health Activist [ASHA] is becoming popular among rural population with its health care programmes. Therefore, an attempt is made to study the role of Accredited Social Health Activist [ASHA] in improving the health needs of rural population.

OBJECTIVES

The main objective of the study is to determine the health awareness among rural population. The specific objectives of the study include the following

1. To know the health development of rural population through the implementation of ASHA.
2. To know the role of ASHA in maintaining financial inclusion.

HYPOTHESIS

1. There is no significant relationship between number of home visit and savings of money for meeting contingencies

METHODOLOGY OF THE STUDY

The study about role of Accredited Social Health Activist [ASHA] in improving health needs is both analytical and descriptive. The following methodology was used for this study.

Data used – both primary and secondary data was used. Primary data was collected from 150 respondents of through structured interview schedule from Kottayam District using multi stage sampling technique. The Kottayam District consists of 5 taluk, from each taluk one panchayat is selected at random. Thereafter from each panchayat a sample of 30 respondents is selected. Secondary data for the purpose of study was collected from published sources such as books, journals, and internet.

LIMITATIONS

A study of this nature of course faces limitations and entails constraints and snags. Physical constraints, to a great extent, have compelled the researcher to reduce the size of the research canvas. So too has been the question of time constraints. The impending deadline has compelled the researcher to rush through many stages of the research. The hesitation of the respondents to divulge factual information regarding some of their personal state of affairs has affected the reliability of the data in some respects. In spite of all these constraints, the researcher feels that modest but sincere and serious attempt has been made in this study to make it meaningful one.

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.

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 office, the village Health Committee and the Gram Sabha.

DATA ANALYSIS AND INTERPRETATION

This Chapter deals with the Analysis and interpretation of the Data Collected. As has been stated earlier, in this study 150 sample respondents are selected from 5 taluks of Kottayam district. Their responses collected and tabulated with the help of statistical tables. Appropriate statistical measures are computed using various statistical tools for analyzing and interpreted data and reaching and meaningful conclusions.

TABLE 1: GENDER WISE CLASSIFICATION

Gender	No. of respondents	percentage
Male	90	60
Female	60	40
Total	150	100

Source: Primary data

Interpretation: From the above table it is clear that the respondents covered under the survey are grouped according to their gender. Out of the 150 respondents, 90(60%) are male and 60(40%) are female. In this study, majority of the respondents are male.

TABLE 2: AGE WISE CLASSIFICATION

Age	No. of respondents	percentage
Below 18	1	1
18-30	10	6
31-45	64	43
46-60	51	34
Above 61	24	16
Total	150	100

Source: Primary data

Interpretation: The above table shows age wise classification of respondents. It shows that 43% are in the age group 31 to 45, 34% are in the age group 46 to 60. Out of 150 respondents 16% are from age group above 61.6% are in the age group 18 to 30 and 1% are from age group below 18.

TABLE 3: VISIT OF ASHA WORKERS

Visit	No. of respondents	percentage
Yes	149	99
No	1	1
Total	150	100

Source: Primary data

Interpretation: From the above table it is clear that 99% of the respondents houses are visited by ASHA workers and only 1% of the respondents comments that house visit is not conducted by ASHA workers

TABLE 4: TYPE OF VISIT OF ASHA WORKERS

Frequency	No. of respondents	percentage
Once	93	62
Twice	46	31
Thrice	5	3
More than that	6	4
Total	150	100

Source: Primary data

Interpretation: The above table shows the frequency of visit of ASHA workers among the houses. It is evident that 62% of the respondent's houses are visited only once, 31% of the respondents houses are visited twice. 3% of the respondents' houses are visited thrice and only 6 respondents opined that ASHA workers visited more than thrice.

TABLE 5: ASSISTANCE PROVIDED BY ASHA WORKERS

Diseases	No. of respondents	percentage
Fever	99	66
Diarrhea	22	15
Delivery	30	20
Others	28	19
Total	150	100

Source: Primary data

Interpretation: the above table shows the types of diseases assisted by ASHA workers. 66% of the respondents opined that ASHA workers assisted them in fever, 20% of the respondents opined that ASHA workers assisted them in delivery, 19% of the respondents opined that ASHA workers provide assistance in other diseases and remaining 15% of the respondents gets assistance for diarrhoea from ASHA workers.

TABLE 6: OPINION ABOUT ASHA WORKERS

	Factors	very good(5)	Good(4)	Neutral(3)	Bad(2)	very bad(1)
1	minor health injuries/first aid	39	79	23	8	1
2	Nutrition	66	66	13	5	0
3	Sanitation	69	68	11	1	1
4	minor health problems	39	64	37	8	2
5	ANC	8	40	76	21	5
6	Delivery	42	54	44	6	4
7	PNC	12	27	82	26	3
8	Immunisation schedule of new born babies	93	36	17	1	3
9	Prevention from sexually transmitted diseases	20	44	58	20	8

Source: Primary data

Interpretation: All the nine options have been considered for analysis and composite index number have been calculated. It is clear from the above table that 'immunisation schedule of new born babies' is the most preferable service provided by ASHA workers, which scored 665 points. The services regarding 'sanitation' and 'nutrition' come second and third with 653 points and 643 points. 'Minor health injuries/first aid' comes fourth with 597 points, while 'minor health problems' and 'delivery' come fifth and sixth with 580 points and 574 points. 'Prevention from sexually transmitted diseases' and 'ANC' come seventh and eighth with 498 points and 475 points. The least preferable service of SHA worker is 'PNC' comes ninth with 469 points.

TABLE 7: GROUP MEETING IN THEIR LOCALITIES

Response	No. of respondents	Percentage
Yes	78	52
No	72	48
Total	150	100

Source: Primary data

Interpretation: From the above table it is clear that 52% of the respondents opined that ASHA workers conducting Group meetings in their localities regarding the health problems. And remaining 48% of the respondents opined that ASHA workers does not conducting any group meetings in their localities.

TABLE 8: SERVICES RENDERED BY ASHA WORKERS

Services	No. of respondents	percentage
Minor health injuries	38	7
Nutrition	98	18
Sanitation	118	22
Minor health problems	54	10
ANC	20	4
Delivery	76	14
PNC	12	2
Immunization schedule of new born babies	106	20
Prevention from sexually transmitted diseases	13	3
Total	535	100

Source: Primary data

Interpretation: The table 3.16 shows the services received by the community from the ASHA workers. Out of 150 respondents 22% of the respondents got services about sanitation, 20% about immunisation schedule of new born babies, 18% about nutrition, 14% about delivery, 10% about minor health problems, 7% gets information about minor health injuries, 4% about ante natal check-up (ANC), 3% about prevention from sexually transmitted diseases and remaining 2% about post-natalcheck-up (PNC).

TABLE 9 (A): EFFECTIVENESS OF ASHA WORKERS

Statement	Excellent	Good	Average	Below average	Poor
The dedication of ASHA workers in your locality	40	71	36	3	0
Publicity measures of ASHA	31	52	59	8	0
Health development through ASHA workers	26	82	37	5	0

TABLE 9 (B): EFFECTIVENESS OF ASHA WORKERS

Statement	Excellent (4)	Good (3)	Average (2)	Below average (1)	Weighted total	Weighted average
The dedication of ASHA workers in your locality	160	213	72	3	448	2.98
Publicity measures of ASHA	124	156	118	8	406	2.70
Health development through ASHA workers	104	246	74	5	429	2.86

Source: Primary data

Interpretation: The 9 (A) and 9 (B) shows the degree of agreement by the respondents about the statement related to their effectiveness to the society. Likert's scaling technique is used to quantify the degree of agreement. All the 150 respondents have opinion about the statement.

a) Dedication of ASHA workers in your locality: Out of 150 respondents 71 pinioned good to the statement. The computed value of Likert's scaling technique is 448 and score in the 4 point scale is 2.98. Since the score is 2.98 it is concluded that respondents are pinioned as good.
b) Publicity measure of ASHA: 39.33% of the respondents pinioned that publicity measures of ASHA is average. The computed value as per the scaling technique is 406, which lies between 350(150 x 3) and 600 (150 x 4). The average value as per the scale is computed to be 2.70. Hence the rating of the respondents lies between Good and Average.
c) Health development through ASHA workers: Out of 150 respondents 82 opinioned good to the statement. The computed value of Likert's scaling technique is 429 and score in the 4 point scale is 2.86. it is suggested that health development through ASHA worker is good.

TABLE 10: SAVING OF MONEY FOR MEETING CONTINGENCIES

Savings	No. of respondents	Percentage
Yes	78	52
No	72	48
Total	150	100

Source: Primary data

Interpretation: The above table shows the ability of respondents to save money for meeting contingencies related to health, by providing services through ASHA workers. It is clear that 52% of the respondents are saving money for meeting contingencies and remaining 48% of the respondents are not saving money for meeting contingencies after the service of ASHA workers.

TABLE 11: TYPE OF HOME VISIT OF ASHA WORKERS AND SAVING OF MONEY FOR MEETING CONTINGENCIES

Frequency of home visit	Savings (yes)	Savings (no)	Total
Once	33	60	93
Twice	35	11	46
Thrice	5	0	5
More than thrice	6	0	6
Total	79	71	150

Source: Primary data

H_0- there is no significant relationship between type of visit of ASHA workers and savings of money for meeting contingencies
H_1-there is a significant relationship between type of visit of ASHA workers and savings of money for meeting contingencies

RESULT OF THE TEST

TABLE 12

Test statistics	Level of significance	Degree of freedom	Calculated value	Table value	Accept/Reject
X2	5%	3	29.47	7.81	Reject

Interpretation: The above test result shows the computed value of chi square is more than the table value of chi square at 5% level of significance, hence the null hypothesis is rejected which implies that there is a significant relationship between type of visit of ASHA workers and savings of money for meeting contingencies

FINDINGS

On the basis of extensive analyses of data collected, classified and tabulated using statistical tables and processed using various statistical tools and put to hypothesis testing using chi-square test. The following findings have been arrived regarding the role of ASHA workers in Rural Development

- 60% of the respondents are male.
- Majority of respondents belongs to the age group of 31-45.
- 99% of the respondent's homes are visited by ASHA workers.
- Most of the respondent's homes are visited only once by ASHA workers.
- 66% opined that ASHA assisted them in Fever
- Majority of the respondents says that ASHA'S service has neutral effect in Ante Natal Checkup [ANC].
- 93% opined that ASHA'S service for Immunization schedule for newborns is very effective.
- 58% opined that ASHA'S service has neutral effect in the prevention of sexually transmitted diseases.
- 52% opined that ASHA conducted group discussions.
- 71% opined that ASHA is good in work
- 52% opined that ASHA conducted group discussions.
- 71% opined that ASHA is good in work.
- Result of the study concluded that there is a significant relationship between type of visit of ASHA workers and savings of money for meeting contingencies.

SUGGESTIONS

- ASHA should conduct more medical camps and seminars to make people more aware.
- Number of training programs for ASHA should be increased.
- Compensation provided to ASHA must increase so that more people will come forward to uplift the rural society.

CONCLUSION

With the introduction of ASHA there has been an evident development in the health of rural people. ASHA has been successful with its activities like immunization schedule of new born babies, sanitation and various health care programs. The rural peoples are more aware about health like nutrition, Basic sanitation and hygienic practices with the commencement of ASHA. The activities of ASHA are supporting the rural peoples, so that there would be an upliftment among the rural society which in turn helps in the improvement of our nation. **"The soul of our nation lies in the village"** The various activities root from the rural areas. Keeping in mind these facts ASHA was developed and is successful in its endeavors so long it will remain successful in the future in its activities of women and child empowerment.

REFERENCES

1. Dr. R. N. Tripathi, Rural Development, P. P. S. Publishing House, New Delhi (2011).
2. John W. Best, James V. Khan, Research in Education, Pearson Prentice Hall, New Delhi. (2006).
3. K. B. Gupta, Faizia Siddiqui, IftikharAlam, Rural Management, CBS Publishers, New Delhi (2014).
4. K. K. Tiwari, Rural Planning and Development, DND Publications, Jaipur (2012).
5. K. Shekhar, National Rural Health Mission in India, Bookleaf Publishers, New Delhi (2013).
6. Thanvilasasan, Poverty Alleviation and Rural Development, Abhijeet Publications, New Delhi (2012).

WEBSITES

7. http://www.mohfw.nic.in/eag/accredited_social_health_activis.htm
8. http://health.nic.in/NRHM/asha.htm

ROLE OF MECHANIZATION IN AGRICULTURAL IN THE PRESENT SOCIO-ECONOMIC SITUATIONS: A CASE STUDY OF ANDHRA PRADESH

H. RAMANJINEYULU
RESEARCH SCHOLAR
DEPARTMENT OF RURAL DEVELOPMENT
ACHARYA NAGARJUNA UNIVERSITY
GUNTUR

DR. K. SOMASEKHAR
ASST. PROFESSOR
DEPARTMENT OF RURAL DEVELOPMENT
ACHARYA NAGARJUNA UNIVERSITY
GUNTUR

ABSTRACT
Cultural operations for sugarcane production are arduous especially planting, irrigation and harvesting. In the recent past, labour scarcity coupled with high labour wage rate greatly affected the irrigation and harvesting of the crop in time. The objective of present research is studying the position of the role of mechanization in agricultural in the present socio-economic situation. It has reduced sugarcane area from 3.91 lakh ha 2006–2007 to 3.14 lakh ha in 2009–2010 at Andhra Pradesh. Modern sugarcane machinery and labour saving devices were introduced at large scale to reduce the dependency of labour, and complete the farm operation in time. Mechanical operations proved that it was superior to manual operations. It reduced cost of production and enable efficient utilization of resources with better work output. For e.g. Furrow method of irrigation requires about 320 man-hour as against drip irrigation requires of only 30 man-hours. Manual harvesting required about 1,000 an hour with the cost of Rs 55,000 to harvest 100 t/ha (Rs 550/tonne) against Rs 32,500/ha (Rs 325/t) with the labour engagement of 12 man-hours/ha. Now it is inevitable to use modern sugarcane machinery, which is now available in the-country like sugarcane planters weeding machinery and imported harvesters. Although their initial cost is very high but advantages accrued in their use are much more. There is an enormous need to use drip irrigation and mechanical harvesters to mitigate acute labour scarcity.

KEYWORDS
mechanised farming, agricultural, food security, production, scarcity.

INTRODUCTION
Andhra Pradesh is endowed with fertile soils and favourable climate, two factors ideal for agriculture. But more than two-thirds of Andhra Pradesh's populations do not have enough food to eat. A huge contradiction! That is why Government has started numerous interventions to transform the millions of Andhra Pradesh households from subsistence agriculture currently to commercial or large scale farming through agricultural modernisation- to increase farm output- and agricultural transformation to create the value chain and agribusiness.

STATUS OF FARM MECHANIZATION IN INDIA
Even though farm mechanisation shows an increasing trend, there are wide ranging disparities in the levels of mechanisation across states. Northern States such as Punjab, Haryana, and Uttar Pradesh have achieved a faster growth in mechanization over various Plans. The sale of other implements and machines like combine harvesters, threshers and other power-operated equipment have been increasing almost throughout the country. The pace of mechanization in North-Eastern States has not been satisfactory due to constraints such as hilly topography, socio-economic conditions and high cost of transport, lack of institutional financing and lack of farm machinery manufacturing industries Mechanization in Western and Southern states of the country viz., Gujarat, Maharashtra, Rajasthan and certain areas of Tamil Nadu, Andhra Pradesh etc., has increased with the increase in area under irrigation and also with the growing awareness among farmer.

MECHANIZATION IN ANDHRA PRADESH
Machines for conducting agricultural operations, replacing the traditional methods which involve human and animal labour. Agricultural mechanisation is recognized in enhancing production together with irrigation, biological and chemical inputs of high yielding seed varieties, fertilizers and pesticides among others. Mechanization is important for profitable and competitive agriculture. In Andhra Pradesh, the need for mechanisation of agriculture is growing fast and the urgency is growing even faster. A machines deal with Planting, tending and harvesting a crop requires both a significant amount of power and a suitable range of tools and equipment. Mechanised farming increases the acreage for farming which translates into higher farm yields. Most farmers in developing countries such as Uganda experience a greater annual expenditure on farm power inputs than on fertilizer, seeds or agrochemicals. "A tractor can plough seven to ten hectares in one day which no single human being can do. This means increased production. The crops are also planted in rows, which enables farmers to calculate their yields," Without mechanization it is not possible to maintain multiple cropping patterns, which need quick land preparation, planting, weeding, harvesting and processing. In Andhra Pradesh agriculture is characterized by overwhelmingly small holdings due to high population density. As of 2010, Andhra Pradesh's rural population stood at 86.7 per cent, according to a World Bank report published in 2012. Nearly two-thirds of Andhra Pradesh's population lives in rural areas. These are held back by inherent challenges such as land fragmentation, poverty and inadequate knowledge about use of agricultural machinery. These hazards have curtailed the move to mechanized agriculture. For instance, Andhra Pradesh farms range from 1 to 1,000 acres with the majority in the range of 5 to 100 acres. This smallness of acreage is not ideal for mechanised farming, which requires large tracts of land in order to exploit its optimal capacity.

Bagheri and Moazzen (2009) investigated agricultural mechanization challenges in Andhra Pradesh. They found that an important part of challenges belonged to human resources. Therefore, development of human resources is the most effective way to solve many challenges. To improve the situation of agricultural mechanization in Andhra Pradesh, government carries out many attempts. Nevertheless, current situation of agricultural mechanization is not acceptable. Previous researches indicated that some challenges hinder the development of mechanization in Andhra Pradesh and it is necessary to be known. So, the main objective of this research is to find out and then prioritize agricultural mechanization challenges in national level.

Olaoye and Rotimi (2010) Agricultural mechanization constitutes the centre stage power source for boasting agricultural production. The application of machines in agricultural production minimizes the burdens and drudgery of manual farm labour, and increases farmers' income production in Sub-Saharan Africa. Analyzed effective factors on agricultural mechanization in Andhra Pradesh. Information was collected through a questionnaire survey, covering 120 farm households, and group discussion and key informant interviews. In both instances of farm mechanization, the degree of commercialization is the most influential factor, indicating the significant role of mechanization in agricultural commercialization.

OBJECTIVES AND METHODOLOGY

Though the paper aims at studying the position of the role of mechanization in agricultural in the present socio-economic situations, it confines itself to the rural scene only. The role of mechanization in agricultural working in and around the urban areas and semi-urban areas are not covered in the present study. Covering all the role of mechanization in agricultural working in the selected villages is also an unwieldy task and hence the present research is restricted for studying the cases of only a limited number of the role of mechanization in agricultural.

RESULTS & DISCUSSIONS

It is of utmost importance to examine whether the use of machines has been economical or not. On the basis of a study covering 203 farmers having 218 tractors in different districts of Punjab it was brought out that the total use of the tractor, which on an average came out 397 hours per annum is much less than the possible extent of 1000 hours. The cost per cent hour turned out to be very high due to high fixed cost, during 1961-66 whereas, Gurdaspur district attained the maximum growth of 135.54% during 1966-72. Tractor density, which was quite low being 1.31% prior to Green Revolution, moved up to 18.03% in 1976-77. The growth in production, imports and sales of tractors in Indian agriculture over the period 1960-61 and 1987-88. The study revealed that tractorization had proceeded much faster in states such as Punjab and Haryana, which have gone through green revolution while many other states had not made much progress. Andhra Pradesh found that there had been substantial increase in the population of tractors in the state of Madhya Pradesh and the number, which was 1,311 in 1956-57, increased to 3,544 in 1969-70. District-wise analysis showed that tractor population recorded significant increase in almost all the districts, and seven districts accounted for more than 50% of the total tractor population in the state during 1969-70. Krishna district recorded the maximum growth rate and in terms of gross cropped area, the number of tractors per 10,000 acres of gross cultivated land increased steadily from 0.30 in 1956-57 to 0.70 in 1969-70. The district-wise distributions of tractors for the year 1987-88 were also examined by the study. The study revealed that tractor population in different districts was quite skewed and it varied between 37.73 and 84.61 per thousand hectares of cultivated land in Gurdaspur and Ludhiana districts respectively. Singh (1992) revealed that number of tractors in Punjab increased from 10,636 in 1965-66 to 2, 75,000 in 1990-91. Ropar district attained the maximum growth rate. The tractor density in the state increased from 10 per cent thousand hectares in 1971-72 to about 60 per thousand hectares in 1988-89. The inter-district tractor concentration revealed that the intensity of tractor population was largely correlated with the availability of irrigation facilities and the districts with more intensity of irrigation had higher concentration of tractors. Rank correlation analysis indicated that agricultural productivity and irrigation were important determinants of tractorization. The farm mechanization is dependent mainly upon the size of operational holding, land topography, availability of credit facilities and per hectare profitability which in turn is affected by per ha yield, cropping intensity, market prices etc. For the country as a whole, there were 63.47 tractors per thousand of cultivated hectares or 45.91 per thousand of cropped hectares in 1999-2000. The intensity of tractors in the hilly areas such as Sikkim, Tripura, Mizoram, and Arunachal Pradesh, Assam was low because of operational problems of farm machinery and low crop yields.

CONCLUSION AND FINDINGS OF FARM MECHANISATION

The results of this study indicated that the small size of farms and traditional forms of gardens, severe and long process for paying credit loans, financial weakness of agricultural beneficiaries, and weakness of agricultural mechanization programs because of their low feasibility and adaptability and slow trend of beneficiaries in accepting new technologies were determined as the most important challenges facing agricultural mechanization development in Iran. The results of factor analysis indicated that 69.1 % of the variances in the challenges of agricultural mechanization could be classified in seven groups of programming, technical, infrastructural, managerial, economical, research and extension, and content area. It is necessary to mention that the most important challenges include: inefficiency of subside payment methods for buying agricultural machinery, large number of time-worn agricultural machinery, incomplete collection of agricultural equipment's for power generator machinery (tractor), slow trend of beneficiaries in accepting new technologies, financial weakness of agricultural beneficiaries, inefficiency of agricultural extension and education methods, and weakness of agricultural machinery producers and operators in protecting their guild benefits.

REFERENCES

1. Alam, A. 1999. Small Farm Mechanization in Rice. Paper presented at Rice Group Meeting, PDR, Hyderabad, 12 April, pp 1-25
2. Alam, A. and De, D. 2000. Energy Management in Agriculture. Paper, Souvenir, International Conference on NRM for Sustainable Agric, New Delhi, 14-18 Feb, pp 1-14
3. Alam, A. Energy Use Scenario in Indian Agriculture. Invited Paper, Int'l Conf on NRM for Sustainable Agric, New Delhi, 14-18 Feb, pp 1-29.
4. Asian Productivity Organisation (1983), Farm Mechanization in Asia, APO, Tokyo.
5. Bagheri, N., and S.A.A. Moazzen. 2009. Optimum strategy for agricultural mechanization development in Iran. International agricultural mechanization index and analysis of agricultural productivity of farm settlements in Southwest Nigeria. Agricultural Engineering International: CIGR Journal, 12(1): 125-134.
6. Balasankari, P.K. and Salokhe, V.M. 1999. A case study of tractor utilization by farmers, Coimbatore district, India. Agricultural Mechanization in Asia, Africa and Latin America 30(3), 14-18.
7. Brar, S.S. 1998. Dynamics of agricultural production pattern under varying input output price in Punjab. Unpublished Ph.D. (Agril. Economics) thesis, PAU, Ludhiana.
8. Dhillon, B.S. and Sidhu, D.S. 1987. Economics of custom hiring of agricultural machinery in Punjab – a few case studies. Agricultural Engineering Today, 11(2) 15-19.
9. Lekhi, R.K. and Singh, Joginder, "Agricultural Economics", Kalyani Publishers, New Delhi, July 2002.

TABLES

TABLE 1: TREND OF MACHINERY POPULATION IN ANDHRA PRADESH IN AGRICULTURE (Number in millions)

Machinery	1950-51	1960-61	1970-71	1980-81	1990-91	2000-01	2011-12
Tractor	0.001	0.01	0.08	0.228	1.233	2.641	3.322
Power tiller	0.000	0.000	0.017	0.08	0.095	0.118	1.032
Combine harvesters	0.000	0.000	0.000	0.000	0.003	0.006	0.009
Electric Pump	0.02	0.1	1.029	4.33	8.91	12.514	16.916
Diesel Pump	0.083	0.23	1.546	3.101	4.659	5.94	7.068
Power sprayer/ Duster	0.000	0.000	0.045	0.124	0.2	0.311	1.003

Source: Primary Data

TABLE 2: GROWTH OF MECHANICAL POWER OPERATED AGRICULTURAL MACHINERY IN ANDHRA PRADESH (Number in thousands)

Implement	1950-51	1960-61	1970-71	1980-81	1990-91	2000-01	2011-12
Combine (Tractor)	2.1	4.1	8.0	9.5	12.6	19.3	26.7
Harvester (self-propelled)	3.1	2	4.2	9.6	16.8	19.3	27.9
M.B & disc. Plough	253	426	655	1256	2400	3614	4126
Disc. Harrow	261	556	1203	1930	2630	3678	4563
Cultivator	462	826	1623	2346	2923	3123	3462
Seed Drill/seed fert. drill	156	326	632	1245	2456	2963	3124
Planter	61	126	246	456	841	1679	3623
Leveller	261	465	845	1623	3125	4563	6548
Potato digger	3.1	6.3	126	248	326	426	654
Total threshers	910	1810	2403	3578	4123	5621	6789
Sugarcane crusher	256	623	896	1145	1432	1556	1781

Source: Primary Data

TABLE 3: TOTAL MAJOR FARM EQUIPMENT IN ANDHRA PRADESH DURING PERIOD 1950-2012 (Number of Units)

Farm Equipment	Number of Units
Tractor	1125341
Thresher	96256
Trailer	1235647
Seed Fertileser Drill	856123
Disc Harrow	725634
Leveler	465789

Source: Primary Data

TABLE 4: MACHINERY SHARE OF NATIONAL INCOME IN ANDHRA PRADESH

Company	**Products**	**Tractor sales as a % of total**	**Market Share in Tractors**
Mahindra & Mahindra Ltd	Utility vehicle, LCV, Three wheelers, Tractors	15%	34%
TAFE Ltd	Tractors & Farm Machines	36%	18%
International Tractors Ltd	Tractors	56%	15%
New Holland	Tractors	65%	16%
John Deere	Tractors	56%	9%
Others	Tractors & Farm Machines	24%	6%

Source: Primary Data

TABLE 5: THE AGRICULTURE EQUIPMENT MARKET SHARE IN ANDHRA PRADESH

Year	**Agriculture Equipment Market Share in Andhra Pradesh**
1950-51	1.6
1960-61	1.9
1970-71	2.1
1980-81	3.9
1990-91	4.6
2000-01	6.8
2011-12	10.9

Source: Primary Data

CRITICAL ANALYSIS OF THE RIGHT TO FAIR TRIAL

RIDDHIMA MUNSHI
STUDENT
BARODA SCHOOL OF LEGAL STUDIES
THE MAHARAJA SAYAJIRAO UNIVERSITY OF BARODA
VADODARA

DR. SANJAY SOLANKI
ASST. PROFESSOR
BARODA SCHOOL OF LEGAL STUDIES
THE MAHARAJA SAYAJIRAO UNIVERSITY OF BARODA
VADODARA

ABSTRACT
The study finds out that as private individuals living in a democracy we are allowed to be what we are and act as we wish within the limits of the law. That is the beauty of a constitutional democracy. But being a judge is a high and honourable calling. As an adjudicator of the law, a judge has to be something more than his or her natural self. A judge has to leave behind the private person, with preferences and with prejudices, and become a fair and neutral umpire. He or she has to become a guardian of the law; the guardian of people's rights; the guardian of justice; the guardian of fairness and equity. That is a heavy responsibility. For rights to be effectively realized, judges, prosecutors and lawyers have an essential role to play. The police and prosecutorial authorities have a duty under the law to protect these rights, as do the judges, who must at all times be alert to any sign that these have not been respected. It is only when these rights are strictly adhered to and any breaches checked at the earliest stages, that a judicial system is created where it functions for the ultimate purpose of administering justice fairly and efficiently.

KEYWORDS
right to fair trial, constitutional democracy.

INTRODUCTION
Judges are only human and come with all the failings of other human beings. Personal predilections and preferences, socialized behaviour, political beliefs and egos all factor into their behaviour as judges along with the pressures of a very imperfect system.
Fair trial is not a favour afforded to the supplicant at law but a bundle of legally enforceable rights guaranteed by the state to its citizens, for whom the state itself exists. The application of fair trial norms to every single instance and at every stage of the criminal law is recognized both internationally and nationally in India, as a fundamental right. These rights, constitutionally guaranteed, compel and cast a legal duty on the judge to ensure that they are respected realized and never violated.
The scope of this study is based on the basic principles of natural justice. It is said that principles of natural justice are of very ancient origin and was known to Greek and Romans. The word 'Natural Justice' manifests justice according to one's own conscience. It is derived from the Roman Concept 'jus naturale' and 'Lex naturale' which meant principle of natural law, natural justice, eternal law, natural equity or good conscience.

REVIEW OF LITERATURE
This paper outlines the nature and objective of study. It lists out the importance of the study and hypothesis formulated for the paper.

NEED/IMPORTANCE OF THE STUDY
The paper emphasis the critical role and obligation of a judicial officer to ensure a trial is completely fair at all its stages. It draws attention to the constant need for judges to reflect on endemic and occasional prejudices, whether conscious or subliminal, that can or may impact judicial decisions. It assists judicial officers to recognize the existence of such prejudices and deal with them, lest inattention or inadvertence lead to unfair results.

OBJECTIVES
The object of this paper is to critically analyze the right to fair trial. It is a key role of any government is to maintain law and order on behalf of the whole society; to hold people to account for crimes they have committed and to ensure that justice is done and seen to be done. But this carries with it a grave responsibility, because convicting someone of a criminal offence and potentially taking away a person's liberty is one of the most serious steps any government can take against an individual. This step can only be justified after the person has been given a Fair Trial. The Right to a Fair Trial is one of the cornerstones of a just society.

HYPOTHESIS
1. Whether right to be presumed innocent is available?
2. Whether right to equality before law and equal treatment by law available?
3. Whether right to remain silent available?
4. Whether right to consult a legal counsel available?

RESEARCH METHODOLOGY
The scope of the study is very wide. In the present study the authors have mostly relied upon the statutory provisions of the Act, National and International conventions and case laws. Various judgments relating to Fair Trial have been critically analyzed. Judgments of High Courts, Supreme Court, have been referred. The use of the most modern media i.e. Internet is also explored several times in order to get more information about the topic and to accomplish this study.

BASIC CONCEPTS
The concept of fair trial is based on the basic ideology that State and its agencies have the duty to bring the offenders before the law.
1) Audi alteram partem (**or audiatur et altera pars**)
It is a Latin phrase meaning "listen to the other side", or "let the other side be heard as well". It is the principle that no person should be judged without a fair hearing in which each party is given the opportunity to respond to the evidence against them.

2) Nemo judex in causa sua (or nemo judex in sua causa)

It is a Latin phrase that means, literally, no-one should be a judge in his own cause. It is a principle of natural justice that no person can judge a case in which they have an interest.

RIGHT TO BE PRESUMED INNOCENT

Criminal procedure is built around the principle of "innocent until proven guilty" and is designed to protect this right. When it is said that a defendant to a criminal charge is presumed to be innocent, what is really meant is that the burden of proving his guilt lies on the prosecution." This means that it is the duty of the accuser to show not merely the general probability of guilt in the circumstances, but requires him to prove every element of the offence beyond reasonable doubt.

The Apex Court in P.N. Krishna Lal v Government of Kerala[1] clarified that the principle of presumption of innocence is entrenched in the Indian Constitution, the Universal Declaration of Human Rights and the Civil and Political Rights Convention, to which India is a member, guarantee fundamental freedom and liberty to an accused person. The procedure prescribed for trial must also stand the test of the rights guaranteed by those fundamental human rights.

Section 101 of the Indian Evidence Act further reinforces this right, by providing that whoever desires a court to give judgment as to any legal right or liability dependent on the existence of facts which he asserts, must prove those facts.[2]

To protect this right to be presumed innocent, Section 161(2) of the Code of Criminal Procedure permits persons questioned by the police to refrain from answering questions which might expose them to criminal penalty.

RIGHT TO EQUALITY BEFORE LAW AND EQUAL TREATMENT BY THE LAW

Article 14 of the Constitution states: "The State shall not deny to any person equality before the law or the equal protection of the laws within the territory of India." Article 15 lays down the principle of non-discrimination according to which: "The State shall not discriminate against any citizen on grounds only of religion, race, caste, sex, place of birth or any of them."

Mrs. Maneka Gandhi v Union of India (UOI) and Anr.[3]

Mrs. Gandhi had her passport impounded by the Indian Passport Authority pursuant to the Passports Act, 1967. However, in contravention of the Act, the Authority did not provide Mrs. Gandhi with any reason why her passport was impounded, nor did the state permit her a hearing to challenge the decision.

Although the Court disposed the matter without passing any formal judgment due to the Attorney General's subsequent independent efforts to remedy the matter, the Court's opinion noted that the Passport Authority's conduct violated Articles 14 and 21 of the Constitution.

RIGHT TO REMAIN SILENT

Article 20(3) of the Constitution protects the right of the accused to remain silent by providing that: "No person accused of any offence shall be compelled to be a witness against himself."

Section 161(2) of the Code of Criminal Procedure leaves no room for doubt when it states that an accused is bound to answer all questions of a state official truthfully except "questions the answers to which would have a tendency to expose him to a criminal charge or to a penalty or forfeiture".

The Code of Criminal Procedure, Section 313 further protects the right to silence. It says: "the accused shall not render himself liable to punishment by refusing to answer such questions, or by giving false answers to them."

Nandini Satpathy v P.L. Dani[4]

Ms Nandini Satpathy was accused of embezzling funds while serving as Chief Minister of Orissa. She was made to present herself before the Deputy Superintendent of Police (Vigilance) and provide answers to written questions. She refused to answer the questionnaire on the grounds that it was a violation of her fundamental right against self-incrimination.

The Supreme Court held that Ms Satpathy had to answer all questions that did not materially incriminate her. For questions she refused to answer, she was required to provide, without disclosing details, her reasons for fearing that answering such questions would result in self-incrimination.

NULLUM CRIMEN SINE LEGE: PRINCIPLE OF NON-RETROACTIVITY

Article 20(1) of the Constitution states: "No person shall be convicted of any offence except for violation of a law in force at the time of the commission of the Act charged as an offence, nor be subjected to a penalty greater than that which might have been inflicted under the law in force at the time of the commission of the offence."

G.P. Nayyar v State (Delhi Administration)[5]

Two public officials were tried in 1973 for criminal conspiracy and illegal gratification under the Prevention of Corruption Act, 1947, for allegedly accepting bribes from 1955 to 1961. The accused appealed to the Supreme Court claiming that the burden of proof applied to their trial mandating that the court presume the accused guilty unless proved otherwise was in violation of Article 20(1), as in 1964 the legislature had repealed the relevant statute which applied this standard. The Supreme Court denied the appeal, explaining that repealed statutes remain applicable to crimes committed before the statute's repeal. Also, here, the repealed statute was revived by a subsequent statute in 1967, thus further allowing for application of the rule even during the repeal period for acts committed before the repeal.

RIGHT TO FREEDOM FROM ARBITRARY ARREST & DETENTION

Freedom from arbitrary arrest and detention means that no one may be deprived of his or her personal liberty except through means that are "fair, just and reasonable". The state cannot take away life or personal liberty by the mere enactment of a law.

Article 21 of the Indian Constitution guarantees that "no person shall be deprived of his life or his personal liberty except according to procedure established by law".[6]

Article 22 specifies the protections to which each arrested person is entitled by law, namely the right to be informed of the grounds for his/her arrest as soon as possible after being taken into custody;[7] the right to consult and be represented by a legal practitioner of choice;[8] and the right to be produced before a Magistrate within twenty- four hours of arrest and not to be detained beyond twenty-four hours without the approval of a Magistrate.[9]

Joginder Kumar v State of UP[10]

Joginder Kumar, a young lawyer was detained for five days without due process of law in an undisclosed location. Rejecting the police version that Joginder Kumar was cooperating with them out of his own free will, the Court said: "The law of arrest is one of balancing individual rights, liberties and privileges on the one hand and individual duties, obligations and responsibilities on the other; on weighing and balancing the rights of the single individual and those of individuals collectively….". Stressing the importance of balancing the interests of society with the liberties of the individual, the Supreme Court of India held that a police officer "must be able to justify the arrest apart from his power to do so". It went on to declare that "a person is not liable to arrest merely on the suspicion of complicity in an offence.

The Universal Declaration of Human Rights (UDHR) asserts that "no one shall be subjected to arbitrary arrest, detention, or exile".[11] Article 9(1) of the International Covenant on Civil and Political Rights (ICCPR) reads as follows: "Everyone has the right to liberty and security of person. No one shall be subjected to arbitrary arrest or detention. No one shall be deprived of his liberty except on such grounds and in accordance with such procedure as are established by law." Further to this, Article 9(2) of the ICCPR provides that: "Anyone who is arrested shall be informed, at the time of arrest, of the reasons for his arrest and shall be promptly informed of any charges against him."[12]

RIGHT TO A LAWYER OF CHOICE

The right to legal counsel which necessarily includes the right to communicate with counsel is one of the most essential elements of a fair trial. A suspect/accused without counsel is often unaware of all his rights and will therefore often be more compliant with the investigative authorities. The Constitution provides every arrested person with the right to consult and be defended by a legal practitioner of his choice.[13]

RIGHT TO FREEDOM FROM TORTURE

In Indian law, torture is a violation of fundamental rights, a crime, and a civil wrong. As such, it attracts imprisonment, liability to compensate the victim, and contempt proceedings. In what has now become famously known as the D.K. Basu[14] case, the Supreme Court characterized torture as one of "the worst kind of crimes in a civilized society". Court stated: "Using any form of torture for extracting any kind of information would neither be right nor just nor fair and, therefore, would be impermissible, being offensive to Article 21."[15]

Nilabati Behera v State of Orissa[16]

Nilabati Behera's 22-year-old son, Suman Behera, was taken into police custody in connection with the investigation of a theft. The next afternoon, Suman Behera was found dead on a railway track with multiple injuries to his body. Mrs. Behera filed a writ petition under the constitutional Article 32, alleging that her son died as a result of injuries inflicted while in police custody and requested that she be monetarily compensated for the death of her son. The police defence asserted that Suman Behera had escaped from police custody the night before and was run over by a passing train during his escape. The Court ultimately held that his death was not a result of a train accident. On the contrary, Suma Behara had succumbed to injuries most likely inflicted by police-administered lathi blows. The Court then explained that the state was liable for compensation in these cases where police conduct during custodial detention results in the deprivation of a fundamental right, in this case, right to life in Article 21. Ms Behera was awarded Rs 150,000 from the State of Orissa and the sate was also ordered to pay the Supreme Court Legal Services Committee Rs. 10,000.

RIGHT TO RESPECT FOR ONE'S PRIVATE LIFE

The right to privacy is now established in India, but as part of Article 21, and not as an independent right in itself. The Constitution does not grant in express terms any right to privacy.

Kharak Singh v State of Uttar Pradesh,[17] the Uttar Pradesh (UP) Police Regulations regarding domiciliary visits were in question and the majority of the Judges held that though the Constitution did not refer to the right to privacy expressly, it could still be traced from the right to "life" in Article 21. According to the majority, Clause 236 of the relevant regulations in UP, was bad in law; it offended Article 21 in that there was no law permitting interference by such visits. The majority did not question whether these visits violated the "right to privacy". But, the minority view while concurring that the fundamental right to privacy was part of the right to liberty in Article 21, part of the right to freedom of speech and expression in Article 19(1)(a), and also of the right to movement in Article 19(1)(d), held that the Regulations permitting surveillance violated the fundamental right of privacy. In effect, all the seven learned Judges held that the "right to privacy" was part of the right to "life" in Article 21.

Article 17 of the ICCPR states: "No one shall be subjected to arbitrary or unlawful interference with his privacy, family, home or correspondence, nor to unlawful attacks on his honour and reputation."

RIGHT TO BE TRIED BY A COMPETENT, INDEPENDENT & IMPARTIAL COURT

A Court is a place where justice is administered. The independence of the judiciary is one of the pillars of the rule of law. Independence is essential for the protection of fair trial standards. The principle of an independent judiciary requires that a judge can make every decision without the intervention of the government, parliament or administration. Court decisions can be only reviewed by higher courts. The impartiality and independence of the courts may be guaranteed by ensuring that a judge hearing a case has no relationship with either party that may affect the decision-making process. Judges are required to view both parties in a fair and equal manner making an objective decision based solely on the facts and evidence of the case.

Article 50 of the Constitution ensures that "the State shall take steps to separate the judiciary from the executive in the public services of the State".

RIGHT TO FREE LEGAL AID

The state is obliged to provide free legal aid to a prisoner who is indigent or otherwise disabled from securing legal assistance where the ends of justice call for such service. The due process rights guaranteed to all individuals in Article 21 of the Constitution require that an individual has access to free legal counsel if he cannot afford it. [18]

NE BIS IN IDEM: PROHIBITION OF DOUBLE JEOPARDY

The principle of double jeopardy or ne bis in idem, whereby nobody can be tried or punished twice for the same offence protects against three distinct abuses:

1. A second prosecution for the same offence after final acquittal.
2. A second prosecution for the same offence after final conviction.
3. Multiple punishments for the same offence.

The principle of double jeopardy is safeguarded under Article 20(2) of the Constitution which prohibits prosecuting or punishing a person for the same offence more than once.[19] Section 300 of the Criminal Procedure Code states that a person acquitted or convicted by a competent court may not be tried again for the same offence.[20]

RIGHT TO BE TRIED WITHOUT UNDUE DELAY

A fair trial implies a speedy trial and no procedure can be reasonable, fair or just, if it extends for an unreasonably long time. Quick justice is recognized as implicit in the spectrum of Article 21 of the Constitution and is now regarded as a sine qua non of Article 21.[21]

The design of investigation and trial proceedings laid out in the Criminal Procedure Code also reaffirms that the requirement of swiftness and promptitude applies to all stages of the criminal process – investigation, inquiry, trial, appeal, revision and retrial.

RIGHT TO BE NOTIFIED OF CHARGES/FRAMING OF CHARGE

Section 207 of the Code of Criminal Procedure dictates that in any criminal proceedings instituted on the basis of a police report, the Magistrate must freely furnish to the accused:

1. A copy of the police report.
2. A copy of the first information report.
3. The statements of any prosecution witnesses.
4. Any recorded confessions or statements.
5. Any other documents forwarded to the magistrate by the police.

State of Orissa v Debendra Nath Padhi[22]

The issue before the Apex Court was: Can the trial court while framing the charges consider material filed by the accused? In the case of Satish Mehra v Delhi Administration and Anr.[23], the Apex Court concluded that if the accused succeeded in producing reliable material at the stage of taking cognizance or framing charges, which might fatally affect even the very sustainability of the case, it would be unjust to suggest that no such material should be looked into by the court at that stage. This decision was challenged by the state on the grounds that observations in the Satish Mehra case amounted to upsetting well-settled legal propositions and making nugatory amendments in the Code of Criminal Procedure and would result in conducting a mini trial at the stage of framing the charges. The matter was referred to a larger bench. The Court made the following observations:

1. At the stage of framing charge, the court is not to see whether there is sufficient ground for conviction of the accused or whether the trial is sure to end in his conviction. Strong suspicion, at the initial stage of framing of charge, is sufficient to frame the charge.
2. Permitting the accused to adduce his defence at the stage of framing of charge and for examination would result in a mini trial at this stage. This is against the criminal jurisprudence and would defeat the object of the Code.
3. The expression "hearing the submissions of the accused" cannot mean opportunity to file material to be granted to the accused. Thereby amending the settled law, the Court held that at the stage of framing charges hearing the submissions of the accused has to be confined to the material produced by the police.

Article 14(3)(a) of the ICCPR guarantees anyone charged with a criminal offence the right to be promptly informed in detail of the nature and cause of the charges against him in a language that he understands.[24]

RIGHT TO A PUBLIC HEARING

Any criminal court that is either inquiring into or trying an offence is an open court to which the general public can have access, to the extent that the courtroom can conveniently contain them.[25]

RIGHT TO BE PRESENT AT ONE'S TRIAL

The presence of an accused during his trial is an absolute right. Section 273 of the Code of Criminal Procedure which says: "Except as otherwise expressly provided, all evidence taken in the course of trial or other proceeding shall be taken in the presence of the accused or, when his personal attendance is dispensed with, in the presence of his pleader."

Where a judge has proceeded with hearings in the absence of the accused and recorded witness evidence even after seemingly receiving agreement from the defence counsel, it was held by the Madhya Pradesh High Court that the trial was defective. The death reference was not confirmed and a retrial was ordered.[26]

With the introduction of video linking the Supreme Court has held that evidence recorded via video in the presence of the accused or his pleader fully meets the requirements of Section 273.[27]

RIGHT TO FREE ASSISTANCE OF AN INTERPRETER

All rights to an adequate defence are useless even if the accused is present, if he lacks the ability to understand the charges brought against him, follow the proceedings or communicate his own defence and challenge properly because he does not understand the proceedings or cannot understand the language.

As far as language is concerned, Section 279 of the Code requires that "whenever any evidence is given in a language not understood by the accused, and he is present in court in person, it shall be interpreted to him in open court in a language understood by him."

In addition, Section 318 of the Criminal Procedure Code recognizes that there may be categories of persons who "cannot be made to understand the proceedings". However, in such cases the Section allows the judge to proceed with the trial even if the accused cannot understand the proceedings, but, if such proceedings result in conviction, the judge must forward the proceedings to the High Court along with a report of the circumstances of the case, and the High Court will then pass such order as it thinks fit.

These provisions are of course intended to "safeguard" defendants' interests.[28] Denial of the right to an interpreter violates Article 21 of the Constitution and requires a re-trial.

Similar to the domestic right, Article 14(3)(f) of the ICCPR mandates that a criminal defendant is entitled to "the free assistance of an interpreter if he cannot understand or speak the language used in court".[29]

SUGGESTIONS

1. The government needs to fast track judicial reforms and the process of appointing judges needs to be sped up on priority.
2. Expansion of mobile courts. This will help take the process of law into the interiors and actually to people's doorsteps. Today, poor people from rural areas have to travel to the district or state capital to attend their ongoing legal cases. The extensive use of mobile courts will go a long way in easing people's burden.
3. The quality of support staff, especially in lower courts, needs to be improved through better training. This has to be accompanied by superior training to investigating agencies like the police on how the legal system works. Most people suffer from unfair judgments on account of shoddy investigation by the police.
4. With high illiteracy still plaguing India, lack of awareness of one's fundamental rights is one of the major reasons people are still getting exploited. This is further compounded by the complete lack of knowledge on how our legal system works. With technology and multimedia, it is now possible to educate people on their rights and on where and how to seek good legal advice. In fact, a lot of legal advice can be made available online so that a large section of people can take informed decisions on legal action.
5. The law-makers introduce the use of 'simple English' in legal application and pronouncements. The current use of complicated and outdated British English must be done away with immediately.
6. As the population continues to grow and pace of development increases, so will the number of litigations. The judicial system has to respond rapidly to ensure justice is delivered quickly and fairly to all, as 'Justice delayed is Justice denied'.

CONCLUSION

As private individuals living in a democracy we are allowed to be what we are and act as we wish within the limits of the law. That is the beauty of a constitutional democracy.

But being a judge is a high and honourable calling. As an adjudicator of the law, a judge has to be something more than his or her natural self. A judge has to leave behind the private person, with preferences and with prejudices, and become a fair and neutral umpire. He or she has to become a guardian of the law; the guardian of people's rights; the guardian of justice; the guardian of fairness and equity. That is a heavy responsibility.

For rights to be effectively realized, judges, prosecutors and lawyers have an essential role to play. The police and prosecutorial authorities have a duty under the law to protect these rights, as do the judges, who must at all times be alert to any sign that these have not been respected. It is only when these rights are strictly adhered to and any breaches checked at the earliest stages, that a judicial system is created where it functions for the ultimate purpose of administering justice fairly and efficiently.

LIMITATIONS

The research was extensively long having a huge data which was bit difficult to comprehend in a limited time frame. However, all the relevant cases with landmark judgments dealing with the subject are reflected in the paper.

REFERENCES

1. 1995 Supp(2) SCC 187, para. 23

2. The Indian Evidence Act, 1872, Section 101.
3. (1978) 1 SCC 248, para. 56.
4. AIR 1978 SC 1025.
5. AIR 1979 SC 602.
6. Constitution of India, Article 21.
7. Constitution of India, Art 22(1).
8. Ibid.
9. Constitution of India, Art 22(2). The twenty-four hour period does not include the time spent travelling from the place of arrest to Magistrate's Court.
10. AIR 1994 SC 1349.
11. The Universal Declaration of Human Rights, Articles 3,9; 10 December, 1948, G.A. Res.217 (A)(lll).
12. ICCPR, *supra*note 47, Article 9(2).
13. Constitution of India, Article 22(1).
14. AIR 1997 SC 610, para 18.
15. Ibid., para. 34.
16. 1993 SCC 746.
17. Ibid.
18. Constitution of India, Article 21.
19. "No person shall be prosecuted and punished for the same offence more than once." Constitution of India, Article 20(2).
20. Code of Criminal Procedure, 1973, Section 300(1).
21. Abdul Rehman Antulay and Ors. v R.S. Nayak and Anr. (1992) 1 SCC 225.
22. (2005) 1 SCC 56.
23. (1996) 9 SCC 766.
24. ICCPR, supra note 47, Article 14(3)(d).
25. Code of Criminal Procedure, 1973, Section 327(1).
26. State of Madhya Pradesh v Budhram 1996 CrLJ 46 (MP).
27. State of Maharashtra v Praful B Desai AIR 2003 SC 2053.
28. K.M. Subramani v State of AP 2003 CriLJ 3526, para. 8.
29. "No one shall be held guilty of any criminal offence on account of any act or omission which did not constitute a criminal offence, under national or international law, at the time when it was committed. Nor shall a heavier penalty be imposed than that was applicable at the time when criminal offence was committed. If, subsequent to the commission of the offence, provision is made by law for the imposition of lighter penalty, the offender shall benefit thereby." ICCPR, Article 14(3)(f), 16 December 1966, G.A. Res. 2200A (XXI).

DYNAMIC CAUSALITY RELATIONSHIP BETWEEN FDI INFLOWS, TRADE BALANCE, AND ECONOMIC GROWTH IN WORLDWIDE SELECTED TOP 25 HOST COUNTRIES DURING POST LIBERALIZATION REGIME: A QUANTITATIVE APPROACH

SARMITA GUHA RAY
QUANTITATIVE RESEARCHER (FINANCIAL ECONOMICS) & FACULTY
DEPARTMENT OF BUSINESS MANAGEMENT
UNIVERSITY OF CALCUTTA (ALIPORE CAMPUS)
KOLKATA

ABSTRACT

Worldwide, though the function of FDI, both in developed and developing countries, as a catalyst of economic growth has been studied comprehensively in the post liberalization period, there is no systematic study carried out to examine the causal relationship between FDI inflows, trade balance and economic growth of the top host countries at present. Therefore, this paper investigates this issue by examining the causal relationship between FDI inflows, trade balance and GDP in selected 25 top host countries where FDI inflows increases over time since 1990.The findings from Pair-wise Granger Causality tests provide little support that unidirectional causality is present between FDI and GDP in 10 countries out of 25 countries namely UK, Australia, France, Brazil, India, Chile, Switzerland, Italy, Srilanka, and Cyprus and in 4 countries bi-directional causal relationship is present between namely China, Canada, Macao, and Pakistan. In order to study the causal relationship between FDI and Trade balance, only in 7 countries unidirectional causal relationship is present, of them China, Spain, France, India, Sweden, Macao, and Pakistan. In general, however, the country –specific macroeconomic factors seem to be playing a comprehensively significant role in determining the function of FDI worldwide.

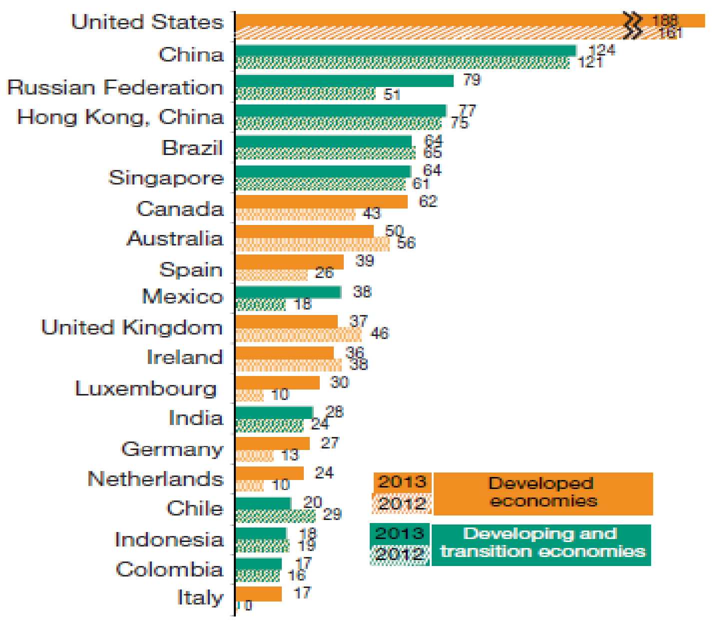
KEYWORDS

FDI inflows, trade balance, economic growth, post liberalization regime.

INTRODUCTION

In general, foreign direct Investment (FDI) inflows have a positive impact on host country's economic and financial activities as well as growth and developmental efforts through inflow of valuable technology and innovations along with the efforts of the domestic firm which can help the financial system gain momentum. Through export and import, international trade plays a crucial role as an engine of economic growth by facilitating more efficient gross domestic production(GDP) of goods and services, by shifting production to foreign countries that have comparative advantage in producing them. Depending in upon certain parameters such as level of human capital, gross capital formation, domestic investment along with FDI, infrastructural development of the host country, macro-economic stabilization and trade policies initiated by the government of the host country, the impact of FDI inflow on trade vs., economic growth of the host country differs worldwide. Most of the countries had adopted protectionist import substitution policies After the World War II and were experiencing declining growth rate by the 1970s, only a small number of East Asian countries adopted international trade as part of their overall economic developmental policies. But at present, in the post liberalization era, the import substitution policies are replaced by strategies based on export –led industrialization with technological innovations worldwide especially in the Developing Asia which remains the world's largest Recipient region of FDI inflows (UNCTAD, WIR, 2014) and top FDI recipient's countries (Figure 1).Remarkable significant reforms are noticed both in developed and developing country among the top FDI recipient's countries in the post liberalization period, which focused on liberalization, transparency, openness and globalization with special focus on export friendly business environment and simplified measures encouraging the exports and economic growth.

FIGURE 1: FDI INFLOWS TOP 20 HOST ECONOMIES, 2012-13 (Billions of dollars)



Source: UNCTAD FDI-TNC-GVC Information system, FDI/TNC database (www.unctad.org/fdistatistics)

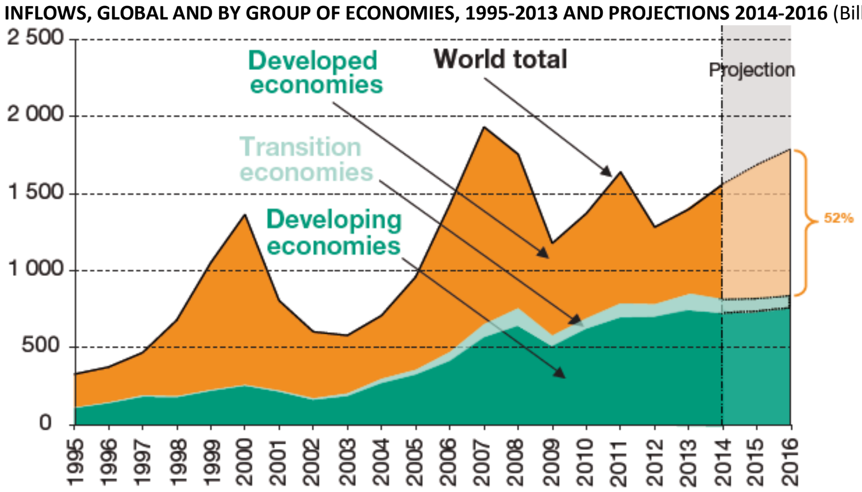
Conventional theories of FDI suggests that competitive advantage in the form of ownership, location and internationalization, allows firms to gain monopolistic and oligopolistic power in the market and develop their businesses internationally through investments, mergers and acquisitions (Dunning, 2000).According to Caves (1990) acquisition of a foreign competitor enables the acquirer to bring a more miscellaneous stock of explicit assets under its control and therefore grab more opportunities. A variety of studies have argued that multinational companies (MNCs) internationalize businesses mainly to acquire indescribable assets and analogous resources which they do not acquire and which are indispensable to build up a competitive advantage for continued existence in more competitive environments (Wang and Boateng, 2007: Anlakh, 2007). According to Feldstein (2000), unconstrained capital flows may also tender various advantages. First, international capital flows decrease the risk of the owners of capital by allowing them to expand their lending and investment. Second, the global amalgamation of capital markets can contribute to the spread of best practices in accounting standards, corporate governance and legal ethnicity. Third, the global mobility of capital restricts the ability of governments to practice terrible politics.

Global trends of FDI have comprehensively changed since the 1980s. In fact, total FDI sticks around the world, increased more than 25 times in the previous three decades (i.e., from US$ 700 billion in 1980 to US$ 17.7 trillion in 2009). The first rank in both inward and outward FDI flows has been maintained by the United States. In terms of inward FDI flows, the top 10 ranked countries in 2009 were US, China, France, Hong Kong, UK, Russia, Germany, Saudi Arabia, India, and Belgium. And in terms of outward FDI flows for the same year, were US, France, Japan, Germany, Hong Kong, China, Russia, Italy, Canada, and Norway. Worldwide FDI flows improved reasonably to $1.24 trillion in the year 2010, but were still 15% below their pre-crisis standard. According to World Investment Report (WIR), 2011, this is in distinguished to global industrial output and trade which back to pre-crisis levels. Owing to an increase in FDI flows to developing countries by 10%, in the year 2010, on the other hand, FDI flows to developed countries constricted further in the same year (7% compared to 2009).Statistic information point out that the value and share of the primary and services sector declined. This image is moderately dissimilar as compared with the pre-crisis level (2005-07).Statistics shows that the manufacturing sector is 10% below its pre-crisis levels; services are less than half, while primary sector has improved. Many eminent economists suggest that uneven regional distribution is the outcome of FDI flows. As did flows to South Asia, flows to least developed countries, Africa, non-coastal developing countries and small island developing states all knock down. Whereas major emerging regions, as for example, Latin America, East and South East Asia experienced well-built growth in FDI inflows.

In 2010, (WIR 2011), the developed countries accounted for less than half of global FDI flows, with shares falling from 57% in 2008 to 51% in 2009 and 47% in 2010. On the other hand, the share of transition and developing countries climbed from 43% in 2008 to 53% in 2010. In the same year, the Caribbean and Latin American county engrossed 10% of global FDI. World Investment Report reveals the fact that the major FDI recipients among the developed countries were the United States, France, Belgium, and the United Kingdom. Among the developing countries the largest recipients were the BRIC countries and they are: Brazil, the Russian Federation, India and China (Figure 1, 2).

According to World Investment Prospect Survey (2010-2012), since the end of 2008, with other economic behaviour, foreign direct investment (FDI) flows have undergone spectacular changes when the current economic and financial crisis strikes home for the first time. The atypical degree of the current crisis has raised major concerns about the propensity and aptitude of transnational corporations (TNCs) to carry on investing and growing overseas. As witnessed in 2009, the causes for a drop in FDI flows are undecided profits, condensed access to financial resources, declining market opportunities, as well as the apparent risk of a possible deterioration of the global economic recession. Not only that, the declining FDI also raises concerns among host countries particularly the developing countries who depends on international investments to finance their growth and employment generation.

FIGURE 2: FDI INFLOWS, GLOBAL AND BY GROUP OF ECONOMIES, 1995-2013 AND PROJECTIONS 2014-2016 (Billions of dollars)



Source: UNCTAD, WIR, 2014

OBJECTIVES OF THIS STUDY

To examine if there has been any causal relationship (unidirectional or bi-directional) between the variables FDI, Trade balance and GDP of the selected top 25 host countries during post liberalization regime i.e. from 1990 to 2013 and analyze the economic implications of such causal relationship. In our study we consider top 25 host countries according to the volume of inflows from 'above$100 Billion' to 'below $ 1 billion' category (Table 1).

REVIEW OF LITERATURE

This section reviews the empirical studies on the relation between FDI and economic growth, which facilitates identification of issues related to the impact of FDI on economic growth. FDI is an important vehicle for the transfer of technology and knowledge and it has been demonstrated that it can have a long-run effect on growth by generating increasing return in production *via* positive externalities and productive spillovers. Thus, FDI can lead to a higher growth by incorporating new inputs and techniques (*Feenstra* and *Markusen*, 1992). A study by *Kashibhatla* and *Sawhney* (1996) in the USA supports a unidirectional causality from GNP to FDI and not the reverse causation. *Hu* and *Khan* (1997) attribute the spectacular growth rate of the Chinese economy during 1982 to 1994 to the productivity gains largely due to market-oriented reforms, especially the expansion of the non-state sector, as well as China's "open-door policy", which brought about a dramatic expansion in foreign trade and FDI. *Basu* (2002) have tried to find out the short-run dynamics of FDI and growth. *Choe*, (2003) and *Mullen* and *Williams* (2005) have concluded that FDI has a positive effect on economic growth. *Borensztein et al.* (1998), *Alfaro et al.* (2004), and *Alfaro et al.* (2008) have concluded that FDI will promote economic growth only when certain economic conditions are met in the host country, such as a threshold level of human capital. *Carkovic* and *Levine* (2005) have argued that FDI does not have any significant impact on economic growth in the host country, while *Mencingen* (2003) has found that inward FDI is negatively related to economic growth.

Ahmad and *Harnhirun* (1996) examined causality between exports and economic growth for five countries of the Association of Southeast Asian Nations (ASEAN). *Dutt* and *Ghosh* (1996) studied causality between exports and economic growth for a relatively large sample of countries using the error correction model (ECM) for the countries in which they found cointegration. Then Vector Error Correction (VEC) model was estimated, and tests for Granger causality were performed. According to *Goldberg* and *Klein* (1998) direct investment may encourage export promotion, import substitution, or greater trade in intermediate inputs, especially between parent and affiliate producers. *Blomstrom*, *Globerman* and *Kokko* (2000) argue along the same lines that the beneficial impact of FDI is only enhanced in an environment characterized by an open trade, investment regime and macroeconomic stability where FDI can play a key role in improving the capacity of the host country to respond to the opportunities offered by global economic integration. Empirical research by *Chakraborty* and *Basu* (2002) examined FDI and Trade function as engines of growth, where they concluded that as trade and FDI liberalization policies began in India in the late 1980s and were widened in the 1990s, these policy liberalizations have increased growth in India significantly. *Love* and *Chandra* (2004) confirmed these results and further suggested that trade and economic growth exhibits a feedback relationship. For China, *Tian et al*. (2004) pointed out that provinces with a higher FDI ratio (ratio of FDI to GDP) have experienced rapid economic growth. He concluded that FDI should be encouraged in the less developed economies to accelerate technological change and economic growth The interrelated relationship between volume of trade and FDI inflow, and interpreting the importance of these activities towards economic growth has always been considered as an important topic for discussion since the era of import liberalization policies to the era of openness and economic growth, however the empirical work on the relationship is relatively limited. Many of the studies conducted so far do not discuss the issue of causality between the three variables and the existing literature on the Indian position in the subject matter proves to be inadequate.

TABLE 1: FDI INFLOWS OF THE TOP 25 HOST COUNTRY (Billion dollars)

Unit	FDI Inflows(Billion dollars)	Name of the Country
Unit 1	Above $100 billion	United States(Developed)
Unit 2	Above $50 billion	United Kingdom(Developed)
	($50 bn-$99 bn)	Australia(Developed)
		China (Eact & South-East Asia)
		Singapore(East & South-East Asia)
Unit 3	Above $ 10 Billion	Canada(Developed)
	($ 10 bn-$ 49 bn)	Spain(Developed)
		France(Developed)
		Sweden(Developed)
		Indonesia(East& South east Asia)
		Malaysia (East & South-east Asia)
		Brazil (Latin America & The Caribbean)
		India (South-East Asia)
		Chile (Latin America & The Caribbean)
		Columbia(Latin America& The Caribbean)
Unit 4	Above $ 1 billion	Germany(Developed)
	($ 1 bn- $ 9 bn)	Italy(Developed)
		Switzerland(Developed)
		Japan(Developed)
		Macao (East & South-East Asia)
Unit 5	Below $ 1 billion	Netherlands (Developed)
	($ 0.1 bn-$ 0.9 bn)	Malta (Developed)
		Pakistan(South-East Asia)
		Srilanka (South-East Asia)
		Cypras (developed)

Source: UNCTAD, World Investment Report, 2013-14.

Pacheco-López (2005) has found that there exists a bi-directional causality between FDI and exports and FDI and imports in Mexico. It is also interesting to note that some studies have concluded that positive association between inward FDI and exports is unfounded, indicating that foreign firms are not likely to stimulate exports (*Alici* and *Ucal*, 2003; *Sharma*, 2003; *Zheng et al*., 2004). *Aizenman* and *Noy* (2005) observe that it is common to expect bi-directional linkages between FDI and trade in goods. However, it is difficult to indicate whether inflows and outflows of FDI have different effects on trade in different types of goods. They have suggested that there is a strong relationship between FDI flows and trade, especially in manufacturing goods. *Wong* and *Tang* (2007) have examined the causality between FDI and exports using the electronics exports data of Malaysia.

The majority of the above-mentioned empirical studies have applied causality tests based on time series data to examine the nature of any causal relationship between FDI and exports. Some studies have not considered the endogenous nature of the export process and are subject to simultaneous bias (*Hood* and *Young*, 1979). Several are cross-country studies have assumed a common economic structure and similar production technology across countries, which may in fact not be true (*Hejazi* and *Safarian*, 2001; *Liu et al*., 2001). Lack of comparability in terms of time and country has been an obstacle to the meaningful conclusion with respect to the available empirical studies, although a majority of such studies indicate a one-way causal relationship between inward FDI and the host country's export performance.

Liu et al. (2002) examined the presence of long run relationship among FDI, growth and exports in China during 1981-1997. They find the existence of bidirectional causality among them. *Wang* (2002) examined the nexus between FDI and economic growth in the sample of 12 Asian countries over the period 1987-1997. He suggests that FDI in the manufacturing sector has a significant positive impact on economic growth and attributes this positive contribution to FDI's spillover effects. *Campos and Kinoshita* (2002) explored the effects of FDI on economic growth for 25 Central and Eastern European and former Soviet Union economies. They find that FDI had a significant positive effect on the economic growth of each selected country. *De Gregorio* (1992) finds similar results for Latin American economies and *Blomstrom et al*. (1992) finds similar results from 78 developing countries. *Hsiao* and *Shen* (2003) find a feedback association between FDI and economic growth in China. *Choe* (2003) finds a bi-directional causality between FDI and growth for a sample of 80 countries over the period 1971-1995, but suggest that the effect is more apparent from economic growth to FDI. *Chowdhury* and *Marvrotas* (2005) examined the causal association between FDI and growth from Chile, Malaysia and Thailand. They find the unidirectional causality from economic growth to FDI in Chile and a two-way causation between the two from other two countries. *Duasa* (2007) detects no causality between FDI and economic growth in Malaysia, but suggested that FDI does contribute to stability of growth. The above earlier findings give the evidence that the nexus between foreign direct investment and economic growth is far from straightforward *Vu* and *Noy*, 2009). It varies from country to country and even within a country with different time periods.

RESEARCH METHODOLOGY AND DATA

This exploratory study will be empirical in nature and make use of secondary data to be collected from the publications of World Bank, IMF, UNCTAD, and research journals, periodicals and different websites. This empirical study intends to cover the period since 1990. The period of study is 1990-91 to 2012-13. To examine the causal relationship between the variables FDI, GDP and Trade balance of the 25 countries we uses UNCTAD data warehouse from 1990- 2013. Apart from the use of descriptive statistical measures, some specific statistical and econometric tools have been used for analysis and interpretation of data, keeping the specific objectives of the study in mind.

Empirical Analysis: The techniques to be used to analyse the causal relationship between the variables FDI inflows, Trade balance and GDP, **Pair-wise Granger Causality Test** is used. A specific type of relation was pointed out by Granger (1969) and is known as Granger-causality. Granger called a variable y_{2t} causal for a variable y_{1t} if the information in past and present values of y_{2t} is helpful for improving the forecasts of y_{1t}. Suppose that y_{1t} and y_{2t} are generated by a bivariate vector autoregressive VAR(p) process,

$$\begin{pmatrix} \boldsymbol{y_{1t}} \\ \boldsymbol{y_{2t}} \end{pmatrix} = \sum_{i=1}^{p} \begin{bmatrix} \boldsymbol{a_{11,i}} & \boldsymbol{a_{12,i}} \\ \boldsymbol{a_{21,i}} & \boldsymbol{a_{22,i}} \end{bmatrix} \begin{pmatrix} \boldsymbol{y_{1,t-i}} \\ \boldsymbol{y_{2,t-i}} \end{pmatrix} + \boldsymbol{u_t} \qquad \textbf{(1)}$$

Then y_{2t} is not Granger-causal for y_{1t} if and only if $\alpha_{12,i}$ =0, i=1,2,….,p. In other words, y_{2t} is not Granger-causal for y_{1t} if the former variable does not appear in the y_{1t} equation of the model. This result holds for both stationary and integrated processes.

To examine the causal relationship between the variables FDI, GDP and Trade balance of the 25 countries we uses UNCTAD data warehouse from 1990- 2013(Results: Table 2). From the table,column 5, unidirectional causality is present between FDI and GDP in 10 countries out of 25 countries namely UK, Australia, France, Brazil, India, Chile, Italy, Switzerland, Srilanka, and Cyprus and in 4 countries bi-directional causal relationship is present between FDI and GDP namely China, Canada, Macao, and Pakistan.For causal relationship between FDI and Trade balance (TB), in 7 countries unidirectional causal relationship is present, of them China, Spain, France, India, Sweden, Macao, and Pakistan.

TABLE 2: GRANGER CAUSALITY TEST FOR FDI, GDP AND TRADE BALANCE I.E., CAUSALITY RELATIONSHIP BETWEEN FDI AND GDP AND TB (Trade Balance)

Country	Null Hypothesis	Obs.	F-Statistic	Prob.
USA	GDP does not Granger Cause FDI	18	1.37474	0.3380
	FDI does not Granger Cause GDP	18	1.17258	0.4083
	TRADE BALANCE does not Granger Cause FDI	18	1.74916	0.2419
	FDI does not Granger Cause TRADE BALANCE	18	0.28560	0.9067
UK	GDP does not Granger Cause FDI	18	7.02747	0.0118*
	FDI does not Granger Cause GDP	18	0.81277	0.5760
	TRADE BALANCE does not Granger Cause FDI	18	0.61427	0.6941
	FDI does not Granger Cause TRADE BALANCE	18	0.26430	0.9190
Australia	GDP does not Granger Cause FDI	18	2.66702	0.1167
	FDI does not Granger Cause GDP	18	4.67503	0.0339*
	TRADE BALANCE does not Granger Cause FDI	18	0.68468	0.6503
	FDI does not Granger Cause TRADE BALANCE	18	1.02829	0.4684
China	GDP does not Granger Cause FDI	18	4.49756	0.0373*
	FDI does not Granger Cause GDP	18	14.8179	0.0013*
	TRADE BALANCE does not Granger Cause FDI	18	0.84961	0.5560
	FDI does not Granger Cause TRADE BALANCE	18	14.8904	0.0013*
Singapore	GDP does not Granger Cause FDI	18	0.85126	0.5551
	FDI does not Granger Cause GDP	18	1.07796	0.4467
	TRADE BALANCE does not Granger Cause FDI	18	1.86153	0.2197
	FDI does not Granger Cause TRADE BALANCE	18	0.45886	0.7959
Canada	GDP does not Granger Cause FDI	18	3.17230	0.0821**
	FDI does not Granger Cause GDP	18	8.09015	0.0080*
	TRADE BALANCE does not Granger Cause FDI	18	2.02849	0.1911
	FDI does not Granger Cause TRADE BALANCE	18	0.94820	0.5058
Spain	GDP does not Granger Cause FDI	18	0.73212	0.6219
	FDI does not Granger Cause GDP	18	1.69277	0.2540
	TRADE BALANCE does not Granger Cause FDI	18	1.83541	0.2246
	FDI does not Granger Cause TRADE BALANCE	18	7.46324	0.0100*
France	GDP does not Granger Cause FDI	18	1.45902	0.3129
	FDI does not Granger Cause GDP	18	3.12987	0.0845**
	TRADE BALANCE does not Granger Cause FDI	18	2.93540	0.0964**
	FDI does not Granger Cause TRADE BALANCE	18	1.36095	0.3423
Sweden	GDP does not Granger Cause FDI	18	1.13508	0.4231
	FDI does not Granger Cause GDP	18	1.36056	0.3424
	TRADE BALANCE does not Granger Cause FDI	18	5.03695	0.0282*
	FDI does not Granger Cause TRADE BALANCE	18	0.43984	0.8085
Indonesia	GDP does not Granger Cause FDI	18	1.23756	0.3840
	FDI does not Granger Cause GDP	18	0.86599	0.5474
	TRADE BALANCE does not Granger Cause FDI	18	1.30063	0.3620
	FDI does not Granger Cause TRADE BALANCE	18	1.62537	0.2695
Malaysia	GDP does not Granger Cause FDI	18	1.77039	0.2375
	FDI does not Granger Cause GDP	18	1.04681	0.4602
	TRADE BALANCE does not Granger Cause FDI	18	0.48010	0.7818
	FDI does not Granger Cause TRADE BALANCE	18	0.28373	0.9078
Brazil	GDP does not Granger Cause FDI	18	3.37765	0.0718**
	FDI does not Granger Cause GDP	18	1.63579	0.2671
	TRADE BALANCE does not Granger Cause FDI	18	1.88513	0.2154
	FDI does not Granger Cause TRADE BALANCE	18	2.70488	0.1135
India	GDP does not Granger Cause FDI	18	6.07592	0.0242*
	FDI does not Granger Cause GDP	18	1.40835	0.3410
	TRADE BALANCE does not Granger Cause FDI	18	0.53265	0.7469
	FDI does not Granger Cause TRADE BALANCE	18	17.5009	0.0016*
Chile	GDP does not Granger Cause FDI	18	9.81212	0.0046*
	FDI does not Granger Cause GDP	18	2.06752	0.1851
	TRADE BALANCE does not Granger Cause FDI	18	1.60551	0.2743
	FDI does not Granger Cause TRADE BALANCE	18	1.26689	0.3736
Colombia	GDP does not Granger Cause FDI	18	1.89686	0.2132
	FDI does not Granger Cause GDP	18	0.19983	0.9525
	TRADE BALANCE does not Granger Cause FDI	18	0.16274	0.9686
	FDI does not Granger Cause TRADE BALANCE	18	1.66716	0.2598
Germany	GDP does not Granger Cause FDI	18	0.67026	0.6591
	FDI does not Granger Cause GDP	18	2.06445	0.1856
	TRADE BALANCE does not Granger Cause FDI	18	0.48593	0.7779
	FDI does not Granger Cause TRADE BALANCE	18	2.06077	0.1862

Italy	GDP does not Granger Cause FDI	18	0.89662	0.5315
	FDI does not Granger Cause GDP	18	4.14047	0.0454*
	TRADE BALANCE does not Granger Cause FDI	18	0.34304	0.8716
	FDI does not Granger Cause TRADE BALANCE	18	1.88016	0.2163
Switzerland	GDP does not Granger Cause FDI	18	0.61535	0.6935
	FDI does not Granger Cause GDP	18	4.08032	0.0470*
	TRADE BALANCE does not Granger Cause FDI	18	0.39987	0.8349
	FDI does not Granger Cause TRADE BALANCE	18	0.54518	0.7388
Japan	GDP does not Granger Cause FDI	18	0.36582	0.8571
	FDI does not Granger Cause GDP	18	2.39086	0.1434
	TRADE BALANCE does not Granger Cause FDI	18	0.72278	0.6274
	FDI does not Granger Cause TRADE BALANCE	18	0.38549	0.8443
Macao	GDP does not Granger Cause FDI	18	8.78647	0.0063*
	FDI does not Granger Cause GDP	18	8.47195	0.0070*
	TRADE BALANCE does not Granger Cause FDI	18	3.03126	0.0903**
	FDI does not Granger Cause TRADE BALANCE	18	1.26931	0.3728
Netherland	GDP does not Granger Cause FDI	18	0.97555	0.4927
	FDI does not Granger Cause GDP	18	1.39666	0.3312
	TRADE BALANCE does not Granger Cause FDI	18	0.55372	0.7332
	FDI does not Granger Cause TRADE BALANCE	18	0.62740	0.6858
Malta	GDP does not Granger Cause FDI	18	2.04679	0.1883
	FDI does not Granger Cause GDP	18	1.69721	0.2530
	TRADE BALANCE does not Granger Cause FDI	17	1.38865	0.3468
	FDI does not Granger Cause TRADE BALANCE	17	0.91043	0.5311
Pakistan	GDP does not Granger Cause FDI	18	4.77538	0.0322*
	FDI does not Granger Cause GDP	18	6.04779	0.0176*
	TRADE BALANCE does not Granger Cause FDI	18	2.35122	0.1478
	FDI does not Granger Cause TRADE BALANCE	18	2.92706	0.0970**
Srilanka	GDP does not Granger Cause FDI	18	3.16210	0.0827**
	FDI does not Granger Cause GDP	18	1.07703	0.4471
	TRADE BALANCE does not Granger Cause FDI	18	0.52023	0.7552
	FDI does not Granger Cause TRADE BALANCE	18	0.96177	0.4993
Cyprus	GDP does not Granger Cause FDI	18	1.56204	0.2851
	FDI does not Granger Cause GDP	18	9.71980	0.0047*
	TRADE BALANCE does not Granger Cause FDI	18	0.51291	0.7600
	FDI does not Granger Cause TRADE BALANCE	18	1.50353	0.3005

Note:

- * Significant at 5% levels
- ** significant at 10% levels

CONCLUSION

From the p-value, we can say that the **hypothesis 'FDI causes GDP'** is significant in 5 cases (i.e. UK, Brazil, India, Chile, Srilanka), **'GDP causes FDI'** is significant in 5 cases (i.e. Australia, France, Italy, Switzerland, and Cyprus) and **'GDP causes FDI, FDI causes GDP'** is significant in 4 cases (i.e., China, Canada, Macao, Pakistan). From the p-value, we can say that the **hypothesis 'FDI causes TB(trade balance)'** is significant in 4 cases(i.e. China, Spain, India, Pakistan), **'TB causes FDI'** is significant in 3 cases(i.e. France, Sweden, Macao).From this result, we can say that FDI has no effect on GDP in most of the countries except some developed countries. But GDP has effect of on FDI in developing countries and also FDI has effect on TB (trade balance) in developed and developing countries.

POLICY RECOMMENDATION

As a country becomes more open to the rest of the world, there exists a greater chance for more export and less FDI inflow into the country. This is possible because export and FDI are two different and alternatives modes of foreign market operation. If trade openness squeezes, then it attracts foreign investors to open their subsidiaries in the reporting country the results also illustrate that FDI explains most of its forecast error variance. That means if there is a hike in the inflow of FDI in the current period, then credit should go to them who were responsible for the increment of inflow in the previous periods. In general, however, the country –specific macroeconomic factors seem to be playing a comprehensively significant role in determining FDI.

REFERENCES

1. Ahmad, J. and Harnhirun, S. (1996), Cointegration and Causality between Exports and Economic growth: Evidence from the ASEAN countries, *Canadian Journal of Economics*, 29(2): 413 – 416.
2. Alfaro, L., Chanda, A., Kalemli-Ozean, S. and Sayek, S. (2004), FDI and Economic Growth: The Role of Local Financial Markets, *Journal of International Economics*, 64, 89-112.
3. Alfaro, L., Kalemli-Ozean, S. and Volosovych, V. (2008), Why doesn't Capital Flow from Rich to Poor Countries? An empirical Investigation, *The Review of Economics and Statistics*, 90, 347-368.
4. Barro, R. and Sala-i-Martin, X. (1999), *Economic Growth*, MIT Press, Cambridge Borensztein, E., De Gregorio, J. and Lee, J-W. (1998), How does foreign direct investment affect economic growth?, *Journal of International Economics*, 45, 115-135.
5. Blomstrom, M., Globerman, S. and Kokko, A. (2000), The Determinants of Host Country Spillovers from Foreign Direct Investment, Centre for Economic Policy Research (CEPR), Discussion Paper No.2350.
6. Bornschier, V. (1980), Multinational Corporation and Economic Growth: A Cross National Test of the Decapitalisation Thesis, *Journal of Development Economics*, 7, 115-135.
7. Carkovic, M. and Ross, L. (2002), Does Foreign Direct Investment Accelerate Economic Growth?, University of Minnesota (*siteresources.worldbank.org/INTFR/Resources/fdi.pdf).*
8. Chakraborty, C. and Basu, P. (2002), Foreign Direct Investment and growth in India: A Cointegration Approach, *Applied Economics*, 34(9), 1061-1073.
9. Chen, T.J. and Tang, D.P. (1990), Export Performance and Productivity Growth: The Case of Taiwan, *Economic Development and Cultural Change*, 38, 577-585.
10. Chenery, H. B. and Strout, A.M. (1960), Foreign Assistance and Economic Development, *American Economic Review*, 56, 679-733.

11. Cheng, L.K. and Yum, K.K. (2000), What are the Determinants of the Location of Foreign Direct Investment? The Chinese Experience, *Journal of International Economics*, 51, 379-400.
12. Choe, Jong II (2003), Do Foreign Direct Investment and Gross Domestic Investment Promote Economic Growth, Review *of Development Economics*, 7(1), 44-57.
13. CSO (2000-01 to 2013-14), *Selected Socio-Economic Statistics of India*, Government of India, New Delhi.
14. Dutt, S.D and Ghosh, D. (1996), The Export Growth Economic Growth Nexus: A Causality Analysis, *The Journal of Developing Areas*, 30(2):167-182.
15. *Economic Survey* (2000-01 to 2013-14), Government of India, New Delhi.
16. Feenstra, R.C. and Markusen, J.R. (1992), *Accounting for Growth with New Inputs*, NBER Working Paper No. 4114, National Bureau of Economic Research, Cambridge, MA.
17. Ferrari, A. and Dhingra, I. S. (2009), *India's Investment Climate – Voices of India's Business*, The World Bank, Washington DC.
18. Goldberg, S and Klein, W. (1998), Foreign Direct Investment Trade and Real Exchange Rate Linkages in Developing Countries in Reuven Glick (Ed.) Managing Capital Flows and Exchange Rates: Lessons from the Pacifi c Basin, Cambridge University Press: 73-100.
19. Granger, C.W.J. (1969), Investigating Causal Relations by Econometric models and cross-spectral methods, *Econometrica* 37:424-438.
20. Griffin, K.B. (1970), Foreign Capital, Domestic Savings and Development, *Oxford Bulletin of Economics and Statistics*, 32, 99-112.
21. Grossman, G. and Helpman, E. (1991), *Innovation and Growth in the Global Economy*, MIT Press, Cambridge MA.
22. Hsiao, Mei-Chu W. (1987), Tests of Causality and Exogeneity between Exports and Economic Growth: The Case of Asian NICs, *Journal of Economic Development*, 12(2), 143-159.
23. Hu, Z.F. and Khan, M.S. (1997), *Why is China Growing So Fast?*, IMF Staff Papers, 44 (1), 103-131.
24. Jackson, S. and Markowski, S. (1995), The Attractiveness of Countries to Foreign Direct Investment: Implications for the Asia-Pacific Region, *Journal of World Trade*, 29, 159-179.
25. Kashibhatla, K. and Sawhney, B. (1996), FDI and Economic Growth in the U.S; Evidence from Cointegration and Granger Causality Test, *Rivista Internaziorial di Sceinze Economiche e Commercial*, 43, 411-420 (English version).
26. Kokko, A. (1994), Technology, Market Characteristics, and Spillovers, *Journal of Development Economics*, 43, 279-293.
27. Lim, C.C. and Maison, A. (2000), *Contribution of Private Foreign Investments in the Malaysian Manufacturing Sector 1977-95*, Faculty of Economics and Management's Working Paper, Universiti Putra Malaysia, Malaysia.
28. Liu et al, (2002), Relationship between economic growth, foreign direct investment and trade: evidence from china, *Applied economics* 34:1433-1440.
29. Love, J. and Chandra, R. (2004), Testing Export- Led Growth in India, Pakistan, and Sri Lanka Using a Multivariate Framework, The Manchester School, 72 (4): 483-496.
30. Mencingen, J. (2003), Does Foreign Direct Investment Always Enhance Economic Growth?, *Kyklos*, 56, 491-508.
31. Mullen, J.K. and Williams, M. (2005), Foreign Direct Investment and Regional Economic Performance, *Kyklos*, 58, 265-282.
32. Sherma, K. (2000), Export Growth in India: Has FDI Played A Role?, *Economic Growth Centre Discussion Paper*, No. 816, Yale University, Yale Station, New Haven, Connecticut.
33. Singer, H. (1950), The Distribution of Gains between Investing and Borrowing countries, *American Economic Review*, XL, 473-485.
34. The World Bank (1999), *Global Development Finance: Summary and Analysis*, The World Bank, Washington DC.
35. The World Bank (2001.2004, 2005, 2007, 2008), *World Investment Report*, The World Bank, Washington DC.
36. The World Bank (2009), (2012) and, (2013) *World Bank Report*, The World Bank, Washington DC.
37. Tian, Xiaowen, Shuanglin Lin, and Vai Io Lo (2004), Foreign Direct Investment and Economic Performance in Transition Economies: Evidence from China, *Post-Communist Economies*, 16(4):497-510.
38. UNCTAD, World Investment Report, 2009,2011,2012,2013 and 2014.
39. Weisskof, T.E. (1972), The Impact of Foreign Capital Inflow on Domestic Savings in Underdeveloped countries, *Journal of International Economics*, 2, 25-38.
40. Zhang, K.H.L. (2001), Does Foreign Direct Investment Promote Economic Growth? Evidence from East Asia and Latin America, Contemporary *Economic Policy*, 19, 175-185.

WORKING CONDITIONS OF THE UNORGANISED SECTOR IN KERALA: REFERENCE TO SALES WOMEN IN THE TEXTILE SHOPS

FREEDA V SIMON
RESEARCH SCHOLAR
DEPARTMENT OF APPLIED ECONOMICS
COCHIN UNIVERSITY OF SCIENCE AND TECHNOLOGY
COCHIN

ABSTRACT
The study is based on sales women in the textile shops. An attempt has been made in the paper to understand the wage pattern, working hours, working conditions, facilities and break timing at work place. For this 150 sales women from the textile shops of Thiruvananthapuram city were purposefully selected for administering interview schedule. The findings show that majority of the sales women in the textile shops are satisfied with the facilities at their workplace but are not satisfied with the working hours and the break time.

KEYWORDS
sales women, textile shops, unorganised workers.

INTRODUCTION
The operation of an economy depends to a great extent on the employment of people, i.e., on the purchase, sale and performance of labour services. In fact, labour is the source of all 'wealth' and 'backbone' of a nation. The labour force participation rate is a measure of the proportion of a country's working population that engages actively in the labour market either by working or looking for work. The major sectors of the economy have shown declining trend of employment elasticities over time. Much of the employment activities, which have come to be known as informal sector, supplies jobs, income, products and services to an enormous segment of the population. The potential of the job creation in this sector is immense. This has been most effective means of improving the economic condition of poor, as cost of employment generation in these activities has been very low.

The term 'unorganised labour' has been defined as those workers who have not been able to organise themselves in pursuit of their common interests due to certain constraints like casual nature of employment, ignorance and illiteracy, small and scattered size of establishments, etc. Unorganised workers consists of those working in the unorganised enterprises or households, excluding regular workers with social security benefits, and the workers in the formal sector without any employment/ social security benefits provided by the employers.

The employees with informal jobs generally do not enjoy employment security (no protection against arbitrary dismissal), work security (no protection against accidents and illness at the work place) and social security (maternity and health care benefits, pensions, etc.) and therefore any one or more of these characteristics can be used for identifying informal employment.

CATEGORIES OF UNORGANISED WORKERS
1. WAGE WORKERS IN THE UNORGANISED SECTOR
Wage workers are persons employed for remuneration as unorganised workers, directly by employers or through agencies or contractors. Wage workers include casual and temporary workers, migrant workers, or those employed by households including domestic workers. Wage workers also include regular workers in the unorganised sector.
2. SELF-EMPLOYMENT IN THE UNORGANISED SECTOR
These are persons who operate farm or non-farm enterprises or engage in a profession or trade, either on own account, individually or with partners, or as home-based workers. Own account workers also include unpaid family workers.
3. UNPROTECTED WAGE WORKERS IN THE ORGANISED SECTOR
Unprotected workers in the organised sector are mainly in the categories of regular, casual and contract workers who remain unprotected because of non-compliance of the provisions of the existing laws. This is a growing segment in the organised sector.
4. REGULAR UNORGANISED WORKERS
Regular unorganised workers refers to those self-employed workers in the unorganised sector and unprotected wage workers in the organised sector who works for others in return for salary or wages on a regular basis.

REVIEW OF LITERATURE
Leela Gulati (1983) in her paper presented a macro level picture of work participation by women in India as a whole as well as Kerala state and also to the extent to which working women are concentrated in unorganised sector of the economy of India and Kerala. In the second part of the paper she offered insights gained on the basis of micro level studies of the working women in Kerala drawn from different occupational categories, putting together the main stands of observation. And she also emphasis that women who work in the unorganised sector come from household where the parents are in casual wage labour and also tend to get married to men who are in this sector.

Eapen (2001) described the broad magnitudes of the informal sectors in Kerala focusing on some of its characteristics. Even though statics reveal the increase in women's employment is more in the nature of casual and irregular, contractual labor. Moreover, through women's earnings contribute substantially to the household this is more often than not denigrated. Women, especially in the lower class and the lower castes, not only have to cope with physical hardship that impact their health, they continue to be paid much lower wages than men in the same category.

Geetha K.T. (2010) conducted study on Women in Informal Sector-A Case Study. This study was focused on different types of socio-economic problems of female workers in urban informal sector. The study was based on primary data collected. An interview schedule was administered to 100 female workers working in various activities in the informal sector in urban areas. Findings revealed that females in informal sector were overburdened with work and exploited. It was recommended that at the policymaker level, required policy should be prepared and appropriate steps should be taken to improve working and living condition of female workers in this sector.

Martin Patrick (2012) provided an overview of the size, structure and other dynamics of unorganised labour in Ernakulam district, he found that unorganised labourers themselves are fragmented almost always not organised into unions. They suffer from access to imperfect information and not fully aware of their limited rights. This led to bad conditions of work like long hours of work, hazardous nature of work, absence of safety conditions and above all poor wage rates. The 93 per cent of India's work force, working as informal workers, has not been benefited even by inclusive growth, the objective of the Eleventh Plan. Lack of reliable data about the unorganised labour stands in the way of the development of this neglected category. Thus the urgent need is to develop a data bank about the unorganised labour.

Das Kabita, Das.B.K, Mohanty Subhransubala (2012) conducted a study on Social Security in Informal Sector. The aim of this paper was to know the degree of social security of the working women in the informal sector in Odisha. Keeping in view the objective of the study, a sample survey was conducted in districts like Keonjhar, Mayurbhanj and Cuttack. Accordingly, 100 women from each district were randomly selected and supplied with structured questionnaire pertaining to their availability of social security measures taken by the Govt. of Odisha. Available data suggested that social security in the organised sector was steadily shrinking but the major concern was for informal sector which imposes a heavy cost on society in terms of jobs, income and health care.

Vandana Dave (2012) conducted a study on Women Workers in Unorganised Sector. The study focused on female construction workers, agriculture workers and domestic workers. The objective of this study was to know the socio-economic, working and living conditions of workers. The multistage stratified random sampling technique was applied, data was collected from 350 female workers from urban and rural areas of 3 districts of Haryana namely Panipat, Kaithal and Kurukshetra. Workers faced problems like disparity in wages where female workers were paid less. Working hours were not fixed and harassment at work place was common.

Usha P E, focused on the determinants and consequences of women's work in the unorganised sector. The study revealed that women in the textile sales sector are working with very low wages even lower than the minimum fixed wage. They are not getting any service benefits such as increment, leave, pension, P F and insurance.

IMPORTANCE OF THE STUDY

Majority of the women workers are working in the unorganised sector. The growth of unorganised sector is very high in Kerala. With the growth in the tertiary sector, the growth of unorganised labour market is also high. Many of these workers are working under poor working conditions without any employment security and social security and are under paid. Most of them working in this field are working as sales women and a good number of them are working in the textiles too. It's in this context the author proposes to enquire into working conditions of sales women in the textile sales sector of Thiruvananthapuram city in Kerala.

OBJECTIVES

1. To understand the working conditions of sales women in the textile shops.
2. To identify the problems of women workers in the textile shops.

RESEARCH METHODOLOGY

The study is based on both primary and secondary data. Primary data were collected from 150 sales women in the textile shops in Thiruvananthapuram city by using interview schedules. Secondary data have been collected from various books, reports, journals and online resources.

FINDINGS

The volume of saleswomen is at a high number compared to that of women workers in the construction and other unorganised sector. The reason behind this female participation in sales is the easy accessibility to work, no special skills is required and even less hardship. One of the concerns revealed through the study is the inequality faced by women workers in terms of wages, working hours, break timing compared to that of male workers in the sales sector. Also what is noticed is their work demands them to stand for the entire day and is not provided with any chair. Their voices are never raised as this would have an adverse impact on their job. In some textile shops very poor salary is been paid to sales women. Fearing that their employers would sack them from the job, these women seldom speak out. On the offset it is observed that workers of certain shops are satisfied with the facilities provided by their employers like food, accommodation, quarterly bonus and transportation.

TABLE 1: OPINION OF SALES WOMEN IN THE TEXTILE SHOPS

OPINION	Highly Satisfied		Satisfied		No Opinion		Dissatisfied		Highly Dissatisfied	
	F	%	F	%	F	%	F	%	F	%
Wages	0	0	80	53	4	3	27	18	39	26
Working Hours	7	5	38	25	0	0	47	31	58	39
Facilities at Work Place	15	10	78	52	6	4	30	20	21	14
Break Time	0	0	20	13	6	4	68	46	56	37

Source: Primary Data

Table 1 show that 39% of the respondents are highly dissatisfied with the working hours. This is because they are forced to work for almost 12 hours wherein the defined working hours is 9 hours which includes an hour of break. 46% of the respondents are dissatisfied with the break time. This issue revolves around the flexibility to utilize their allotted breaks as and when required rather it's a pre-scheduled slot allotted for the employees.

53% of the respondents are satisfied with the wages. Recent study shows the sales women enjoy quarterly bonus in addition to their wages. 52% of the respondents are satisfied with the facilities provided by their employers. Which comprise food, transport and accommodation facilities.

CONCLUSION

This study here sheds light on the rampant rights violations faced by women in the unorganised sector. There were certain schemes and Acts formulated by both the Central and State governments to support and protect the workers in the unorganised sector. But the failure to implement these schemes full proof has nullified the prime purpose of its introduction. The outcome of the study suggests that the majority of the sales women in the textile shops showcased satisfying trend with respect to wage and the facilities provided at the work place. On the other hand, a dissatisfying trend on working conditions with long working hours without adequate rest.

REFERENCES

1. Dave Vandana (2012) Women Workers in Unorganised Sector, Women's Link, Volume 18, No.3, July-September 2012, pgs 9-12.
2. Deshpande, Sudha, (1996): Changing Structure of Employment in India, The Indian Journal of Labour Economics, Vol. 39, No.4.
3. Eapen, Mridul (2001) 'Women in informal sector in Kerala need for re-examination', Economic and Political Weekly, June 30.
4. Geetha K.T. (2010), Women in Informal Sector-A Case Study, IJBEMR, Volume- 1,Issue-2, December 2010, pgs 23-26.
5. Gulati. Leela (1983): 'Women in the unorganized sector with special reference to Kerala', Working Paper No. 172, Centre for Development Studies, Thiruvananthapuram.
6. Kabita Das, B.K Das, Subhransubala Mohanty (2012), Social Security in Informal Sector: A Myth, Odisha Review, Sept.2012,pgs 60-61
7. Patrick, Martin (2012): 'A study on unorganised labourers in Ernakulam district', Kerala labour movement, Ernakulam.
8. Usha, P E, 'Determinants and consequences of women's work in the unorganised sector: A case study with reference to the women in the textile sales sector of Trivandrum corporation area', Kerala research programme on local level development, Centre for Development Studies, Thiruvananthapuram.

WEBSITES

9. http://s3.amazonaws.com/academia.edu.documents/33239128/26.pdf?AWSAcces
10. http://www.ilo.org/wcmsp5/groups/public/---asia/---ro-bangkok/---sro-new_delhi/documents/genericdocument/wcms_232565.pdf
11. http://www.isidelhi.org.in/wl/article/2012-03.pdf
12. http://www.roiw.org/2011/s1/s123-s134.pdf
13. http://www.visva-bharati.ac.in/InstitutionsCentresSchools/Contents/cjmc-report-080413.pdf
14. http://www.wscpedia.org/index.php?option=com_content&view=article&id=177%3Awomen-workers-in-unorganized-sector-problems-and-prospects&catid=17%3Acompleted-projects&Itemid=29

INTRA-GENERATIONAL RELATIONSHIPS AMONG THE AGED PENSIONERS OF BHUBANESWAR, ODISHA

AMITA MOHAPATRA
RESEARCH SCHOLAR
DEPARTMENT OF SOCIOLOGY
SAMBALPUR UNIVERSITY
JYOTI VIHAR

ABSTRACT

The present study focuses on the relationship between the intra-generational old aged pensioners of Bhubaneswar, Odisha through analyzing their socio-economic status and health related issues to measure their wellbeing. The study used 150 sample of Bhubaneswar, Odisha by using stratified sampling method where the lists of pensioners are collected from the District Treasury Office and Nationalized banks. Hence, the present study used survey method for data collection. The data was collected from aged-pensioners of Bhubaneswar, Odisha region. The reason for choosing Bhubaneswar is that, the number of aged-pensioners is higher in this state. The study adopted diagnostic research design. After data collection, the study made different statistical tests include chi-square test, correlation, regression, etc. The study findings show that the most of the aged-pensioners getting support from her son and daughter-in-law. Further those people are getting emotional support from sisters and brothers. Also, the aged -pensioners shared more social support, monetary support and physical assistance to their brothers compared to their sisters. The majority of the aged- pensioners visited their brothers (72%) and sisters (65.3) occasionally. The frequency distribution clearly indicates that a maximum number of aged-pensioners had the excellent relationship with their brothers who had the residence within 20 Kms distance; while with sisters have within 50 Kms distance. The study concluded that there is a significant association between aged-pensioners' relationship with siblings and siblings' residence distance. The study recommends that future researchers should focus on other states of India.

KEYWORDS

Odisha region, aged-pensioners, intra-generational relationship.

INTRODUCTION

The evolving demographic phenomenon in a global pattern is the rise in population of the aged group. The world statistics report in the year 2000 depicted 8.2 % of the total population belonged to 60 years and above, whereas the trend is projected to burgeon in 2050 by contributing to 21.1% of the total population(Raju, 2011). Asian continent contributes to 53% of the total aged population in the world which reveals the fact that India and China. Almost 100 million people in India are 60 years and above which has been forecasted to upsurge to 323 million by the year 2050 which could contribute to 20% of the entire population(The Economic Times, 2012). According to census statistics 2011(Census India, 2011), it is evident that 9.3 % population of Odisha are of people aged 60 years and above, out of which aged people in rural India.

Old age citizens in India are facing several problems related to gender aging, economic status, dependency factors, health issues, disability problems, family relationships, fear of losing dear ones and other security issues regarding society (Jamuna, 2000). The transformation occurring in the contemporary society has brought in various social problems such as changes in lifestyles, economic well-being, shrinkage of family structure from joint families to nuclear families. The transformation of work culture regarding urbanization and globalization has also played its part in affecting the traditional values and beliefs of people(Raju, 2011). The need for caring has arisen amongst the elderly in the recent years because of the rising conflicts with the younger generation. Caregivers are essential for elderly people who can be either sibling, intra-generational people or other inter-generational people(Prasad and Rani, 2007). The present study focuses on the relationship between the intra-generational old aged-pensioners of Bhubaneswar Odisha through analyzing their socio-economic status and health related issues to measure their wellbeing.

THE INTERGENERATIONAL RELATIONSHIP AMONG AGED-PENSIONERS IN INDIAN FAMILIES

Researchers in recent times have shown increased interest to study in aging families. The reason could be due to the fast growth of aging population and more concerns towards care and support system available throughout the world. Moreover, the structural and compositional change in families might have repercussion on the senior citizens. The structure of multigenerational families has gone for a change with an increase in life expectancy. Again, the aspect of joint survivorship within the generation and across it is the reason behind availing increased periods of support exchanges and better connections over the life span. However, relationships in aging families have also gone for a change due to reduced fertility, more divorce cases, remarriage, and stepfamily formation. Here the spousal and sibling relationship matter. There is a need to analyze implications of more diversity in kinship structures, where the concern is to provide support and care giving to aged family members as there has been reduced family commitment. There are efforts to provide holistic support to the aging families. However, empirical research in this area requires categorizing in terms of relation, between parents and adult children, grandparents and grandchildren, husbands and wives, including siblings (Silverstein and Giarrusso, 2010).

PAST STUDIES ON INTRA-GENERATIONAL RELATIONS

Past decade has witnessed numerous studies providing attention towards aging-related problems and their relationship issues in the family which has increased in a complex manner. Conflicts on handling aged people are increasing among families who insist on providing proper care to senior citizens. The family is the supporting system which emphasizes on offering care and attention to both aged people and children. The early works of family relationships have much-discussed issues for younger children, older age groups, and adult offsprings. The modification in the household structures has altered the patterns of fertility, birth, and death which have provided a deeper insight into intergenerational structures of the family in a vertical pattern. Whereas the intra-generational relationships are shrinking in a horizontal pattern due to the nuclear family structures adopted. The vertical pattern of relationships is becoming more complex and high to maintain durability than the earlier cases. The drastic changes in the behavior of younger generation are the major issue related to vertical structure. An asymmetry is witnessed across intergenerational relationships. In the earlier days, old age people survived by their children and grandchildren whereas, in this scenario, it is evident that present generation does not have surviving grandparents due to high mortality index. Many people had lost their parents even before becoming adults (Uhlenberg, 1996). Harper (2005) insists that shift in family relationships and modernization has resulted in an increase of generations but at the same time decreased the relatives.

The environments in which the families and relationships are prevailing are responsible for their interdependencies upon each other. Caregiving to elder people by the family members is inevitable as the lifetime has doubled since before (Wolff and Kasper, 2006). There are various aspects related to caregiving such as offering personal care, helping in household works, preparing and serving meals, financial support, taking them for shopping, medical assistance, supporting their day-to-day activities, supervising their services and offering companionship to prevent their loneliness (Roberto and Jarrott, 2008). The early literature works depicted that women were providing better care to elder people than men(Silverstein et al., 2006). The meta-analysis of prior studies identified the active female caregivers who offering better care, personal assistance to elderly people and faced heavy burden than male. Women offered extended hours of care to provide support and were prone to massive depression state in handling aged people(Pinquart and Sörensen, 2006). Caregiving women struggle to maintain their labor-force participation to perform their duties in a full-fledged manner. The dilemma of maintaining this balance becomes a stress factor to women, and men do not much support these women. It is noteworthy to mention that caregivers even working for full-time not able to give proper care. Thus, there is an element risk attached to the recipients as their meets are not satisfied entirely(Scharlach et al., 2007). Those who receive care also make a difference to overall caregiving procedures. It was identified from the meta-analysis that caregivers to dementia victims went through more stress and both physical and mental burnout than recipients without dementia and caregivers (Pinquart and Sörensen, 2003).

Without working as, a team of family and friends, care giving to the needy might not be adequate to fulfill the requisite needs. Facilitating care giving also involves hierarchical structure, where the prime care provider coordinates with the subordinate caregivers. Research carried out in this regard indicates that there is a fine network of caregiver and primary providers, which results in better outcome. A study conducted at the national level among the personnel of care networks and primary caregivers revealed that there was a change in composition, i.e. rotation for every two years. As a result, the aspect of a rotating basis, it reduced the stress and physical burden of the caregiver (Szinovacz and Davey, 2007).

The extensive literature majorly analyzes the spouse caregivers of elderly people in comparison with other care giving persons in the family, especially their adult children. The earlier research has validated that depression symptoms have increased in aged people due to the transition in the pattern of caregiving. This depression is witnessed amongst both spouse and adult caregivers (Marks et al., 2002). Whereas, the researchers revealed that variations in the responses of care giving were based on their relationship existing among the recipients and the caregivers. At certain extents, adult children found the existence of greater emotional bonding with aged people regarding care giving than the caregiving by their spouses(Raschick and Ingersoll-Dayton, 2004). This fact suggests that variation of relationship across different families' result in either positive or negative relationship with the recipients and caregivers.

Prior evidence reveals the fact that grandparents are expecting a greater level of care and attention from their grandchild which either affects or supports their physical and mental health depending upon their existence of relationship(Hughes et al., 2007). Grand children caring their grandparents suffer from emotional stress and behavioral problems compared to parental caregivers. The situation is not surprising as the difference exists in offering care giving to parental and grandparent levels(Musil et al., 2002).Grandparents who provide caregiving as well suffer from family stress and strain, poor relationships with intergeneration members of the family which result in imbalance off physical and mental health (Musil et al., 2006). The role of caregiver itself has been cited as an excited state, especially for offering care to grandparents(Landry-Meyer and Newman, 2004).

METHODS

RESEARCH DESIGN

The present study aimed to analyze the intra-generational relationship of aged-pensioners of Bhubaneswar, Odisha. To understand the relationship of those aged-pensioners, the study adopted conclusive research design, where the researcher had taken diagnostic research design to understanding how the intra-generational relationship among aged-pensioners in Indian families. This design allows understanding the nature and dimensions of the problem and enabling the researcher to analyze the problem which in turn leads to an identification of appropriate remedial actions. Further, the design also allowsdetermining the problems faced by the aged-pensioners due to relationship gap with brothers and their sisters. Thereby, it allows developing the possible policy measures to secure the aged-pensioners. Therefore, the diagnostic research design adopted in this study was justified.

SAMPLING

The present study used a stratified purposive sampling method to select respondents. Odisha has 30 districts while the study selected Bhubaneswar, the capital city, using stratified purposive sampling method, where the list of pensioners are collected from the District Treasury Office and Nationalized banks. Snowball sampling is an approach for locating information-rich key informants. Since the objective is to identify the aged-pensioners based on the classes of service, caste and other socio-economic variables of Bhubaneswar, Odisha, the snowball technique was justified.

DATA COLLECTION

There are two types of data collection method. Primary data was collected from the aged-pensioners with the help of interview schedule. This is an interview made with a detailed, consistent schedule. The same questions are put to all the respondents and in the same order. In the schedule, usually a set of questions are asked and filled by an interviewer in a face- to-face situation with another. According to Goode and Hatt (1968),the schedule is the name usually applied to a set of questions which are asked and filled by an interviewer, in the face to face situation with another. As per Creswell (2001), questionnaires are considered as the most cost-efficient data collection tool that enables in gathering large volumes of data at a short span of time. A questionnaire has developed comprising of simple, rigid, open-ended and close-ended questionnaires.

MODE OF QUESTIONNAIRE

Both open and closed ended questionnaire are included in the survey questionnaire. The first section of questionnaire covers the general background of the respondents include name, age, sex, marital status, religion, mother tongue, caste, religion, present occupation, income, education, income from the present occupation, assets possessed and membership in organizations. Secondly, the section covers family particulars; educational institutions attended, parents' background, brothers or sisters' background, service particulars, personal liability fulfilled during the service period, perk during the service period, financial position of respondents, nature of service and quality of time spent with family. Further sections covered daily routine activities and other queries make based on health status, social visits, food habits, leisure time activities, intra and the intergenerational relationship of respondents.

FINDINGS

SOCIO-ECONOMIC STATUSES OF RESPONDENTS

TABLE 1: FREQUENCY DISTRIBUTION OF SOCIO-ECONOMIC STATUS OF RESPONDENTS

Socio-Economic Status	Frequency (n)	Percent (%)
Gender		
Male	139	92.7
Female	11	7.3
Total	150	100.0
Education		
Intermediate	19	12.7
Graduation	80	53.3
PG	40	26.7
Other	11	7.3
Total	150	100.0
Present occupation		
NA	105	70.0
Private	9	6.0
Retired	33	22.0
Social worker	3	2.0
Total	150	100.0
Source of income		
Pension	150	100.0
Total	150	100.0

The socio-economic statuses viz., education, occupation, and income of respondents are presented in Table 1. This study contains around 93 percent of aged male pensioners and 7 percent of aged female pensioners. When considered the education status, the majority of the respondents completed graduation (53%) followed by, 27 percent completed post-graduation, and 13 percent completed intermediate level. Also, all the respondents' source of income was a pension. Hence, the most of the respondents did not work anywhere after their retirement while 6 percent worked in the private organization and 2 percent worked as a social worker.

AGED-PENSIONERS' RELATIONSHIP WITH SPOUSE

TABLE 2: AGED-PENSIONERS' RELATIONSHIP WITH THEIR SPOUSE

Stay Together	Frequency (n)	Percent (%)
With spouse, if alive do you stay together? (Yes)	128	85.3
Without spouse	22	14.7
Total	150	100.0
Amount give to spouse		
2000	11	7.3
2400	18	12.0
3000	78	52.0
4000	21	14.0
Frequency of giving amount		
Occasionally	79	61.7
Regularly	49	38.3
Total	128	100.0
During stays the same place	Yes,/Reg.	No/Occ.
Do you stay in the same room	102	0
Do you eat together	84	0
Do you go for walk together	30	63
Do you perform puja together	22	71
Do you visit the doctor together	30	63
Do you go for marketing together	19	92
Change of relationship with spouse after retirement		
Enough time to talk	18	12.0
No	44	29.3
Yes	66	44.0

Table 2 presents the relationship of aged-pensioners with their spouse. The findings indicate that the majority of the aged-pensioners (n=128) lived along with their spouse. When considered the amount render to a spouse, 52 percent of aged-pensioners provided 3000 rupees to their spouse to spend for personal followed by, 14 percent gave rupees 4000, 12 percent gave rupees 2400 and so on. Also, 62 percent of aged-pensioners gave the money to spouse occasionally while 38 percent gave the money regularly. Also, 102 aged-pensioners stayed along with their spouse in the same room. Among the 102 aged-pensioners, 84 ate together with their spouse, 22 did puja together, and 30 visited the doctor together, and only 19 respondents went for marketing together. Out of 150 respondents, 66 respondents realized the change of relationship with their spouse, after retirement.

TABLE 3: AGED-PENSIONERS' SOCIO-ECONOMIC STATUSES AND USUAL BEHAVIOR ALONG WITH THEIR SPOUSE

SES	Eat together		Walk together		Puja together		Doctor together		Marketing	
	Reg.	Occ.	Reg.	Occ.	Reg.	Occ.	Reg.	Occ.	Reg.	Occ.
Education										
Intermediate	10	-	10	-	-	10	-	10	-	10
Graduation	42	-	10	41	22	29	20	31	11	50
PG	32	-	10	22	-	32	10	22	8	32
Occupation										
Private	-	-	-	9	-	9	9	-	-	9
Social worker	-	-	-	-	-	-	-	-	3	-
Retired	33	-	-	33	11	22	11	22	-	33
NA	51	-	30	21	11	40	10	41	16	50
Income										
10001-30000	83	-	30	62	21	71	30	62	10	92
30001-50000	1	-	-	1	1	-	-	1	9	-

Where SES-Socio-Economic Status, Reg.- Regularly, Occ.-Occasionally

Table 3 shows that the majority of the aged-pensioners who are graduates and retired regularly ate along with their spouse. However, they walked evening and visited the doctor occasionally with their spouse. Also, the most of the aged-pensioners who are post-graduates and retired did puja and went marketing together with a spouse. Furthermore, the findings reveal that aged-pensioners who receive a pension amount 10001-30000 did walk evening, puja, visit doctor and marketing along with their spouse.

TABLE 4: FACTORS AFFECTING FREQUENCY OF GIVING AMOUNT TO SPOUSE

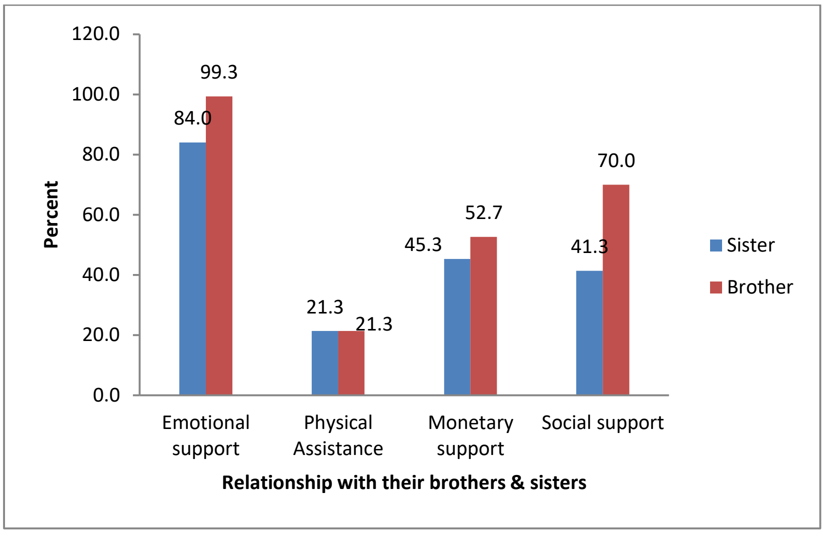
Independent variables	Beta	S.E.	p-value
Education (Intermediate)	-21.371	12710.133	.999
Education (Graduation)	-1.691	.524	**.001****
Occupation (Private)	-19.679	13397.657	.999
Occupation (Retired)	1.775	.520	**.001****
Occupation (Social worker)	-.204	28153.779	1.000
Pension (<10000)	63.573	24396.482	.998
Pension (10001-30000)	21.167	15941.883	.999
Constant	-20.999	15941.883	.999

Dependent Variable: Frequency of giving amount (1-Regularly)

Cox & Snell R^2: 0.413 & Nagelkerke R^2: 0.561

Table 4 shows the factors affecting the frequency of giving the amount to the spouse. The statistical model constructed by the frequency of giving the amount to spouse regularly as a dependent variable and socio-economic status of aged-pensioners as independent variables. In the model, the set of independent variables could explain 41 (Cox & Snell R^2: 0.413) to 56 (Nagelkerke R^2: 0.561) percent of variations in the dependent variable. The level of significance values ($p<0.05$) clearly can note that aged-pensioners' education (graduation) and occupation (retired) significantly predicted the frequency of giving the amount to the spouse. Hence, it would lead to conclude the graduate aged-pensioners who are not involved in any work after the retirement rendered the money to their spouse regularly.

FIGURE 1: RELATIONSHIP WITH THEIR BROTHERS AND SISTERS



Aged-pensioners' relationship with their brothers and sisters are demonstrated in figure 1. The findings illustrate that a maximum number of aged-pensioners shared emotional support to their brothers and sisters. Also, the aged-pensioners shared more social support, monetary support and physical assistance to their brothers compared to their sisters.

FIGURE 2 A & B: FREQUENCY OF CONTACT

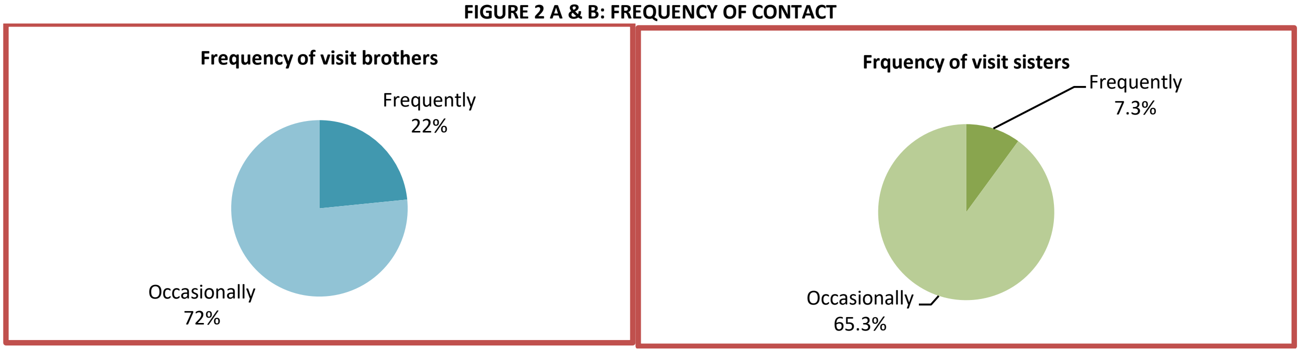


Figure 2 A & B shows the frequency of aged pensioners visit their brothers and sisters. From the analysis, it is observed that the majority of the aged-pensioners visited their brothers (72%) and sisters (65.3) occasionally while a few number of aged-pensioners visited frequently (brothers (22%) & sisters (7.3%).

TABLE 5: ASSOCIATION BETWEEN AGED-PENSIONERS' RELATIONSHIP WITH SIBLINGS AND SIBLINGS' RESIDENCE DISTANCE

Brothers residence distance from respondents (in KM)	**Brothers' relation**		**Chi-square (p-value)**
	Good	**V. Good**	
	n (%)		
Below 20KM	18 (26.1)	29 (40.3)	21.373 (0.001**)
21-40	11 (15.9)	11 (15.3)	
41-60	30 (43.5)	11 (15.3)	
61-80	0 (0)	10 (13.8)	
Above 80	10 (14.5)	11 (15.3)	
Sisters residence distance from respondents (in KM)	**Sisters' relation**		**Chi-square (p-value)**
	Good	**V Good**	
	n (%)		
Below 50	39 (67.2)	29 (56.9)	22.313 (0.001**)
51-100	10 (17.2)	0 (0)	
101-200	9 (15.5)	11 (21.6)	
Above 201	0 (0)	11 (21.6)	

Table 5 presents the association between aged-pensioners' relationship with siblings and siblings' residence distance using chi-square test. The frequency distribution clearly indicates that a maximum number of aged-pensioners had the very good relationship with their brothers who had the residence within 20 Kms distance while 26 percent had a good relationship with their brothers. Likewise, around 43 percent of aged-pensioners possessed the good relationship with their brothers who had the residence distance from 41 to 60 Kms while 15 percent of aged-pensioners had very good relationship with their brothers.

Similarly, when considered the aged-pensioners' relationship with their sisters, the most of the aged-pensioners had the good relationship with their sisters who had the residence within 50 Kms distance while 60 percent had an excellent relationship with their sisters. Also, the significance values revealed that there was a significant association between aged-pensioners' relationship with siblings and siblings' residence distance.

DISCUSSION AND CONCLUSION

The study findings show that majority of the respondents are aged-male pensioners who have completed education status, the majority of the respondents completed graduation. Also, Pension was the source of income for all the respondents. Hence, the most of the respondents did not work anywhere after their retirement. The findings indicate that the majority of the aged-pensioners lived along with their spouse. When considered the amount render to a spouse, 52 percent of aged-pensioners provided 3000 rupees to their spouse to spend for personal. Also, 53 percent of aged-pensioners gave the money to spouse occasionally. Also, 102 aged-pensioners stayed along with their spouse in the same room. Out of 150 respondents, 66 respondents realized the change of relationship with their spouse, after retirement. The majority of the aged-pensioners who are graduates and retired regularly ate along with their spouse. However, they walked evening and visited the doctor occasionally with their spouse. In addition, the most of the aged-pensioners who are post-graduates and retired did puja and went marketing together with a spouse. Furthermore, the findings reveal that aged-pensioners who receive a pension amount 10001-30000 did walk evening, puja, visit doctor and marketing along with their spouse.

The factors affecting the frequency of giving the amount to the spouse. The findings illustrate that a maximum number of aged-pensioners shared emotional support with their brothers and sisters. Also, the aged-pensioners shared more social support, monetary support and physical assistance to their brothers compared to their sisters. From the analysis, it is observed that the majority of the aged-pensioners visited their brothers (72%) and sisters (65.3) occasionally. The association between aged-pensioners' relationship with siblings and siblings' residence distance is computed using chi-square test. The frequency distribution clearly indicates that a maximum number of aged-pensioners had the excellent relationship with their brothers who had the residence within 20KM distance. Similarly, when considered the aged-pensioners' relationship with their sisters, the most of the aged-pensioners had the good relationship with their sisters who had the residence within 50KM distance. In addition, the significance values revealed that there was a significant association between aged-pensioners' relationship with siblings and siblings' residence distance.

REFERENCES

1. Census India. (2011), *Chapter-2: Population Composition*, available at: http://www.censusindia.gov.in/vital_statistics/SRS_Report/9Chap 2 - 2011.pdf.
2. Creswell, J.W. (2001), *Qualitative Inquire and Research Design*, 1st ed., Sage Publications, Thousand Oaks, CA.
3. Goode, W.J.,and Hatt, P.K. (1968), *Methods in Social Research*, McGraw-Hill, New York.
4. Harper, S. (2005), "Grandparenthood", in Johnson, M.L. (Ed.), *In The Cambridge Handbook of Age and Ageing*, Cambridge University Press, Cambridge, pp. 422–428.
5. Hughes, M.E., Waite, L.J., LaPierre, T. a and Luo, Y. (2007), "All in the family: the impact of caring for grandchildren on grandparents' health.", *The Journals of Gerontology. Series B, Psychological Sciences and Social Sciences*, Vol. 62 No. 2, pp. S108–S119.
6. Jamuna, D. (2000), "Ageing in India: Some key issues", *Ageing International*, Vol. 25 No. 4, pp. 16–31.
7. Landry-Meyer, L. and Newman, B.M. (2004), "An Exploration of the Grandparent Caregiver Role", *Journal of Family Issues*, Vol. 25 No. 8, pp. 1005–1025.
8. Marks, N.F., Lambert, J.D. and Choi, H. (2002), "Transitions to Caregiving, Gender, and Psychological Well-Being: A Prospective U.S. National Study", *Journal of Marriage and Family*, Vol. 64 No. 3, pp. 657–667.
9. Musil, C.M., Warner, C.B., Zauszniewski, J.A., Jeanblanc, A.B. and Kercher, K. (2006), "Grandmothers, caregiving, and family functioning", *Journals Of Gerontology Series B-Psychological Sciences And Social Sciences*, Vol. 61 No. 2, pp. S89–S98.
10. Musil, C.M., Youngblut, J.M., Ahn, S. and Curry, V.L. (2002), "Parenting Stress: A Comparison of Grandmother Caretakers and Mothers.", *Journal of Mental Health and Aging*, Vol. 8 No. 3, pp. 197–210.
11. Pinquart, M. and Sörensen, S. (2003), "Differences between caregivers and noncaregivers in psychological health and physical health: a meta-analysis.", *Psychology and Aging*, Vol. 18 No. 2, pp. 250–267.
12. Pinquart, M. and Sörensen, S. (2006), "Gender differences in caregiver stressors, social resources, and health: an updated meta-analysis.", *The Journals of Gerontology. Series B, Psychological Sciences and Social Sciences*, Vol. 61 No. 1, pp. P33–P45.
13. Prasad, D. and Rani, N.I. (2007), "Older Persons, and Caregiver Burden and Satisfaction in Rural Family Context", *Indian Journal of Gerontology*, Vol. 21 No. 2, pp. 216–232.
14. Raju, S.S. (2011), *Studies On Agening in India*, No. 2, Delhi, available at: http://www.isec.ac.in/BKPAI Working paper 2.pdf.
15. Raschick, M. and Ingersoll-Dayton, B. (2004), "The Costs and Rewards of Caregiving among Aging Spouses and Adult Children", *Family Relations*, Vol. 53 No. 3, pp. 317–325.
16. Roberto, K.A. and Jarrott, S.E. (2008), "Family Caregivers of Older Adults: A Life Span Perspective", *Family Relations*, Vol. 57 No. 1, pp. 100–111.
17. Scharlach, A.E., Gustavson, K. and Dal Santo, T.S. (2007), "Assistance received by employed caregivers and their care recipients: who helps care recipients when caregivers work full time?", *The Gerontologist*, Vol. 47 No. 6, pp. 752–762.
18. Silverstein, M., Gans, D. and Yang, F.M. (2006), "Intergenerational Support to Aging Parents: The Role of Norms and Needs", *Journal of Family Issues*, Vol. 27 No. 8, pp. 1068–1084.
19. Silverstein, M. and Giarrusso, R. (2010), "Aging and Family Life: A Decade Review", *Journal of Marriage and Family*, Vol. 72 No. 5, pp. 1039–1058.
20. Szinovacz, M.E. and Davey, A. (2007), "Changes in adult child caregiver networks.", *The Gerontologist*, Vol. 47 No. 3, pp. 280–295.
21. The Economic Times. (2012), "Elderly to constitute 20 percent of India's population by 2050: Report", *The Economic Times*, New Delhi, 1 October, available at: http://articles.economictimes.indiatimes.com/2012-10-01/news/34198051_1_centenarians-elder-persons-india-and-china.
22. Uhlenberg, P. (1996), "Mortality decline in the Twentieth Century and supply of kin over the life course", *Gerontologist*, Vol. 36 No. 5, pp. 681–685.
23. Wolff, J.L. and Kasper, J.D. (2006), "Caregivers of frail elders: updating a national profile.", *The Gerontologist*, Vol. 46 No. 3, pp. 344–356.

REQUEST FOR FEEDBACK

Dear Readers

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

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

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

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

Looking forward to an appropriate consideration.

With sincere regards

Thanking you profoundly

Academically yours

Sd/-
Co-ordinator

DISCLAIMER

ABOUT THE JOURNAL

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

Our Other Journals