



# TSM BUSINESS REVIEW

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Prof. Gautam Ghosh

**Executive Editor** 

Dr. J. Sathyakumar



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# **EDITORIAL**



Last year 2013, was an eventful one for us. It was the Golden Jubilee year of the institute, and also witnessed the maiden issue of TSM Business Review (TBR).

This volume is a collation of research articles and a book review. Keeping quality and high standards at the back of our mind, we have meticulously read

and handpicked the papers. The process may be strenuous for editorial team and authors but, at the end of the day it, is rewarding in terms of quality. Thus, our acceptance rate this time has been 23 %.

The current issue of TBR deals with diverse subjects, such as: research by Rentala on determinants of export performance of 171 Indian industries using panel data; Mukherjee and Ramos- Salazar on role of business etiquette for managers in an international arena. The context of cross-cultural communication of Suganthi's work tries to understand causal relationship between Foreign Institutional Investment (FII) and Indian Stock Market.

We have two papers on marketing area from Rama Moorthy and Inbalakshmi, where the former discusses customer purchase decisions for health insurance products and the later on instant food products. A study on challenges of knowledge management in SME's is dealt by Bhanumathi whereas Selwin's paper talks about impact of decision making on the empowerment of women entrepreneurs, based on a study using 130 respondents from South India. A book reviewed by Stella, authored by Brain E. Becker is on Human Resource that touches upon HR score card.

Finally, I thank all the contributors for their efforts in creating and enriching the contents of this volume.

**Gautam Ghosh** 

# FROM EXECUTIVE EDITOR'S DESK



In the first issue, I wrote about sharing knowledge and quoted the following "Sharing knowledge is not about giving people something, or getting something from them. That is only information sharing. Sharing knowledge occurs when people are genuinely interested in helping one another develop new capabilities for action. It is about creating learning processes", said by Peter Senge of MIT Sloan School of Management and the author of the seminal management book, 'The Fifth Discipline'.

With Internet, console video games and television surrounding us today, the whole idea of sitting down with a book has almost vanished among children as well as elders. Well, I could think of many reasons as to why one must invest time in reading. Reading activates mind, improves our attention span and concentration ability. The more we learn, apart from improvement in comprehension and reading speed, it enhances self esteem and confidence as well. Reading books can be an incredible way to acquire knowledge and will expose us to a whole new realm of limitless possibilities.

This issue has a book reviewed by Stella which informs us about concepts and tools to measure the effectiveness of HR as a function. I welcome more such book reviews across all the management discipline. I would also like to extend my hearty congratulations to authors who have got through the rigorous double blind review process and made it to this issue.

J. Sathyakumar

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# "Excuse us, your manners are missing!": The role of business etiquette in today's era of cross-cultural communication

# Soumen Mukherjee and Leslie Ramos-Salazar

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Corporate analysts argue that in order to gain from the abundance and growth of international venture, the key to global business success depends on effective cross-cultural etiquette and global workforce diversity management. This study provides a constructive evaluation and analysis of the role of business etiquette for managers in an international arena, within the context of cross-cultural communication.

# Interrelationship between FII and stock market and their causal relationship with selected macroeconomic variables in India

# P Suganthi and C Dharshanaa

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This paper explores the causal relationship between Foreign Institutional Investment (FII) and Indian Stock Market. Further, the paper examines whether they individually create impact on certain selected macroeconomic variables and vice versa.

# Impact of pricing elements on customer purchase decision for health insurance product R Rama Moorthy, S A Senthil Kumar and R Haresh 04!

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# Knowledge management challenges and opportunities in Indian small and medium enterprises (SMEs)

# P Bhanumathi and Jayasmita Rath

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Knowledge management is an essential tool for efficiently manage the challenges which occur due to turnover of skilled, experienced, and knowledgeable workers. This paper focus on the importance of knowledge capturing and various field level challenges to acquire knowledge, and also discuss knowledge management issues pertaining to Indian SMEs.

# A study on consumer preference towards instant food products M Inbalakshmi, K Govindarajan, C Vijaya banu and V Vijayanand

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Instant food products play a very significant role in the present day situation where both men and women are employed. Since the demand for instant food products are picking up, number of manufacturers entered into the field of instant food products with different brand names. This paper on consumers' preference towards various instant food products reveal that packing, hygiene, societal influence and influence of advertisement play an important role in forcing the customers to buy the instant food products.

# Do women still have a medieval mindset towards themselves? : A study on the impact of decision making index in empowering woman entrepreneurs

# Sonia Selwin and Shaista Banu Harris

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The role of women in decision making in issues relating to political, social and economic or participation plays a pivotal role in their empowerment. Hence we see that decision making is the key to empowerment. This paper assesses the impact of decision making on the empowerment of women entrepreneurs, based on a study using 130 respondents from 4 States in South India.

# **Book Review...**

The HR Scorecard: Linking people, strategy and performance: Written by Brain E. Becker, Mark A. Huselid; Dave Ulrich; Harvard Business School Press, 2001, 235 pages: \$29.95

P Stella 097

The book presents many helpful concepts and tools to measure the effectiveness on HR as a function, to measure return on investment on talents and talent initiative, to measure the impact of HR on organizational performance and as a basis for business case development of our deliverables.

# Perspective...

Indian Economy: A snapshot Bipasha Maity and Vidya Suresh

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This report is an evaluation of the aspects of India's macroeconomic management since 2010. It proceeds to examine the supply side of the economy followed by demand side contribution to GDP and thereafter examines various indicators that influence economic growth.

Article ISSN: 2348-3784

# Determinants of Export Performance: New Evidence from Indian Industries

# Satyanarayana Rentala, Byram Anand and Majid Shaban

#### Abstract

Exploring determinants of export performance is one of the most extensively investigated areas of international business. Researchers in India and abroad have investigated different firm characteristics that influence export performance of firms. The focus of this paper is to examine the determinants of export performance of Indian industries using panel data. The study presents an analysis of 171 Indian firms belonging to fourteen different industries listed in the CMIE-Prowess database for the period 2005-2012. The study highlights the differences in the export performance of high, medium-high, medium-low and low technology intensive industries based on OECD (Organisation for Economic Co-operation and Development) technology classification of industries. The analysis is presented using multiple regression method with export intensity as the dependent variable and seven other firm characteristics (research & development intensity, size of the firm, advertising intensity, capital intensity, profitability intensity, debt-equity ratio and technology) as independent variables. Advertising intensity and capital intensity are found to have a significant impact on export performance of firms in seven industries each. Debt-equity exhibited a significant impact on export performance in six industries. Technology and size of the firm have shown an influence on five industries while research & development intensity, and profitability intensity had a significant impact on export performance of three industries each.

**Key Words:** Determinants, Export performance, Export intensity, Indian industries, OECD technology classification

# 1. Introduction

It has been more than two decades since India has initiated liberalisation policies in 1991 to facilitate the growth of Indian firms by providing a platform to explore the global markets. As per WTO data for the year ending 2012, India's export share in global trade is 1.60 per cent and import share is 2.63 per cent (in merchandise trade). India's export share is 3.23 per cent and import share is 3.07 per cent in commercial services trade at the end of 2012.

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In 2012, India's rank in merchandise trade exports is 19 and rank in import is 10. India's rank in commercial services exports is 7 and rank in imports is 7. Table 1 presents the data on Indian economy's exports and imports in terms of the main commodity break-up analysis. It can be observed that more than 60 per cent of India's exports come from manufacturing sector while more than 40 per cent of India's imports are attributed to fuel imports.

Table 1: Break-down of Indian economy's total exports and imports

Main commodity group	% Share of exports	% Share of imports
Agricultural Products	14.4	5.2
Fuels and Mining Products	21.9	42.9
Manufacturing	61.2	38.5
Others	2.5	13.4
Total	100	100

Source: World Trade Organization;

http://stat.wto.org/CountryProfile/WSDBCountryPFView.aspx?Language=E&Country=INCOUNTRY + Country + Count

The analysis of Indian top 20 categories of exports is presented in Table 2. It can be noted that India's major manufacturing export categories include Petroleum products; Gems and jewellery, Transport equipments, Machinery and instruments and drugs & pharmaceuticals. These five export categories alone represent 50.7 per cent of India's total exports. India's total exports have shown a growth of 10.5 per cent in August 2013 and the top twenty export categories contribute to 80.9 per cent of India's total exports. Considering the significance of India' exports to the overall growth of the Indian economy, it becomes imperative to understand the various determinants affecting India's export performance. Hence, the primary objective of this research is to explore the various determinants of export performance in the context of Indian industries. Kumar & Siddharthan (1993) have earlier investigated the export performance determinants among 13 Indian manufacturing industries. This paper follows a similar approach but extends the research by covering 14 Indian industries using a representative sample from the BSE-500 classification of Indian industries. Thus, unlike the earlier researchers (Kumar & Siddharthan, 1993) this research covers not only the manufacturing industries but also services industries like information technology which was earlier not researched. This research approach is novel in several ways. Firstly, it includes more number of industries in comparison to earlier studies. Secondly, it captures both manufacturing and service industries. Thirdly, the data covered in this research is for a sufficiently long period of eight years more than any of the earlier similar studies. The other notable and novel contribution in this research is that it uses the OECD (Organisation for Economic Co-operation and Development) Technology Intensity classification which was not used by the earlier researchers in similar studies. Kumar & Siddharthan (1993) used UNCTAD (United Nations Conference on Trade and Development) technology classification and

classified the industries into high-technology, medium-technology and low-technology industries. This paper classifies the various Indian industries into four categories: High-technology; Medium-high technology; Medium-low technology and Low-technology as per OECD classification of industries. Finally, this research employs a representative sample of Indian industries using the BSE-500 classification which was an approach not followed by the earlier research studies in the context of exploring determinants of export performance of Indian industries.

Table 2: Indian exports: Top 20 categories (Values in Rs. Thousand Crores)

D 1	6.1	Apr-Aug	Apr-Aug	%	%
Rank	Category	2012	2013	Growth	Share
1	Petroleum: Crude and Products	120.2	147.9	23.1	20.4
2	Gems and Jewellery	98.4	97.7	-0.7	13.5
3	Transport Equipments	45.8	48.9	6.8	6.8
4	Machinery and Instruments	33.7	37.2	10.3	5.1
5	Drugs, Pharma. and Fine Chem.	31.9	35.5	11.2	4.9
6	Other Commodities	19.8	27.0	36.2	3.7
7	Manufactures of Metals	23.2	22.2	-4.4	3.1
8	RMG Cotton incl. Accessories	18.7	21.0	12.6	2.9
9	Cotton Yarn, Fabrics	15.3	20.2	32.4	2.8
10	Electronic Goods	18.6	18.1	-2.7	2.5
11	Plastic and Linoleum Products	13.5	15.6	15.7	2.2
12	Inorganic/Organic/Agro	12.2	14.4	18.0	2.0
13	Primary and Semi-Finished Iron & Steel	10.1	12.5	23.9	1.7
14	Rice-Basmati	7.7	12.4	61.9	1.7
15	Manmade Yarn, Fabrics	10.7	11.7	8.6	1.6
16	Dyes / Intermediates and Coal Tar Chemicals	8.9	10.4	16.9	1.4
17	Marine Products	6.5	9.8	49.6	1.4
18	Meat and Preparations	6.1	9.1	49.4	1.3
19	RMG Manmade Fibers	5.6	7.3	31.7	1.0
20	Rice (Other than Basmati)	5.3	6.8	28.0	0.9
	Total	723.9	654.9	10.5	80.9

Source: DGCIS (Directorate General of Commercial Intelligence and Statistics), Kolkatta

 $http://www.dgciskol.nic.in/data\_information.asp;\ accessed\ on\ 2^{nd}\ September\ 2013;\ \%\ Share\ as\ per\ 2013\ Values$ 

The rest of this paper is structured as follows: Section 2 gives an overview of the theoretical framework and literature review of the most significant and relevant studies in the Indian and global context. Section 3 presents the methodology and data used for the study along with a descriptive note on the dependent and independent variables used

for the research. Section 4 outlines the key findings of the research along with a discussion. Section 5, the concluding section, presents a summary of the study along with a few directions for future research.

### 2. Theoretical Framework and Literature Review

Many researchers have analyzed the export performance determinants of firms not only in developed economies but also in the emerging economies like India. Many studies have examined the various determinants of export performance with the help of the resource-based view (RBV) put forth by Barney (1991). RBV theory posits that a firm's internal resources help the firm in achieving a competitive advantage in the markets it competes. Some of the internal firm resources examined by various researchers include size of the firm, age, research and development (R&D) competencies, capital structures, advertising resources and technological capabilities among others. In this section, a few of the most pertinent Indian and global empirical studies that have used the previously mentioned internal resources of firms have been discussed as mentioned below.

Aggarwal (2002) presented an evidence of export performance of 916 MNEs operating in 33 different Indian manufacturing industries. The study classified the manufacturing industries in India based on OECD classification of technology-intensive industries. The dependent variable in the study was export intensity and the independent variables are: firm size, technology imports, R&D expenditures, skills of employees and import of raw materials. The results indicated that R&D expenditure had a significant impact on export intensity only in medium-high technology industries but not in the other industries.

Bhaduri & Ray (2004) examined the effect of technological capabilities on export competitiveness of Indian pharmaceutical (n=72) and electronics firms (n=52). The results indicated that in case of pharmaceutical and electronics industries, firm size and R&D expenditures had a positive and significant impact on export performance. Firm age had no significant on export performance in pharmaceutical industry while it exhibited a negative impact on the electronics industry.

Bhat & Narayanan (2009) investigated the role of technical competencies and firm size on export performance of 121 firms belonging to Indian chemical industry. Export intensity was considered to be the dependent variable while R&D intensity, import of capital goods intensity, import of raw materials, size of the firm, age of the firm, advertising intensity, choice of technology (measured as wages and salaries divided by gross fixed assets) and outsourcing intensity were used as independent variables. The results indicated that R&D expenditures, size of the firm, import of raw materials, choice of technology and advertising intensity had a favorable impact on export performance. Age of the firm did not show any significance on the export performance.

Chadha (2009) examined the export performance of 131 healthcare firms in India during the period 1989-2004. Export sales were considered to be the dependent variable and the independent variables were: technology (measured as number of foreign patent rights);

sales and profitability. The results indicated that export sales were positively and significantly impacted by technology (investments in R&D), sales and profits of the pharmaceutical firms in India.

Ganguli (2007) analysed the export performance of 165 firms in Indian iron and steel industry. The study attempted to determine the association of export intensity of the firms with structural factors of the firm like age, size and capital intensity. The study also analysed the association of export performance of the firms with an economic performance indicator: Return on Assets (ROA). The study found no significant relationship of export performance with size and age of the firms in the iron and steel industry but found a significant relationship with capital intensity of the firms. The study also reported no significant relationship of export intensity of the firms with the economic performance indicator, ROA.

Jauhari (2007) presented an analysis of the export intensities of 164 firms belonging to Indian electronics industry. The independent variables considered for the analysis are: size of the firm (measured by log sales); Research and Development (R&D intensity); Advertisement Intensity; Capital Imports of the firms; Imports of Spares and Stores; Payment of Loyalty; Capital Labour Ratio; Capital Output Ratio; and FDI (foreign equity in the firm). The study concluded that among all the independent variables, export intensity has a significant relationship with only size of the firm, capital output ratio and FDI.

Kumar & Saqib (1996) studied the impact of in-house R&D activity of firms on export orientation of 291 Indian manufacturing firms. The study found a positive and significant effect of R&D intensity on export performance of the firms.

Kumar & Siddharthan (1993) analysed the export behaviour of 640 Indian firms across 13 different industries. The 13 industries have been categorised into three categories as per UNCTAD (1987) classification using relative technology intensity. The three categories are high technology, medium technology and low technology industries. The dependent variable used in this study was export intensity and the following independent variables were employed: R&D expenditure intensity, technology payments abroad to sales ratio, size (measured as net sales of the firm), Advertising intensity, gross fixed assets to sales ratio, profit before tax to sales ratio and total value of imports to sales ratio. The main conclusions indicate that R&D expenditure intensity showed a positive and significant association in four industries (transportation equipment, man-made fibers, paper and rubber product industries). Technology imports variable was positive and significant only with paper products, rubber products, non-electrical machinery and electrical machinery industries. Firm size was found to be positive and significant with seven industries (textiles, cement, paper, man-made fibers, rubber tyres, electrical and non-electrical machinery industries). Advertising intensity was found to be significant with a positive sign in case of five industries (fabricated metal products, paper, transportation equipment, rubber products and pharmaceutical industries). Capital intensity was positive and significant in only two industries (electrical and pharmaceutical industries). Profitability (measured as profit before tax to sales ratio) was found to be positive and significant with only four industries (cement, transportation equipment, non-electrical equipment and pharmaceuticals).

Lall (1983) explored the impact of R&D expenditures by top 100 manufacturing firms in India. The independent variables considered in this study were: size, age, foreign equity, foreign licensing agreements, royalties paid for technology, export intensity, percentage of wages paid to high-level managers & technical personnel and average wages paid to employees. The results indicated a positive and significant association of all the variables with R&D expenditures excepting export intensity and wages paid.

Lall (1986) studied the relationship between export performance (measured as export intensity) and technological development among leading Indian engineering (n=100) and chemical firms (n=45). The independent variables considered were: size; age; subsidies for exports; advertising expenditure; HPE (highly paid employees); royalty; licenses; R&D expenditure and FS (foreign equity). For engineering firms, the study found a significant and positive relationship with size, subsidies and licenses but a significant and negative relationship with R&D expenditure. Subsidies; advertising expenditure and foreign equity were positively and significantly associated in the chemical firms but size of the firms found no significant association unlike engineering firms. But in chemical firms, R&D expenditure was positively and significantly associated with export intensity.

Lall & Kumar (1981) analysed the export performance of the 100 largest firms belonging to Indian engineering industry. The dependent variables considered in the study are export intensity, export sales and export growth. Firm size, profitability (profit before tax), and technological activity (R&D) are the independent variables employed in this study. The study reported a negative association of export performance with profitability and technological activity but a positive association with firm size.

Majumdar (2010) investigated the impact of innovation (measured as R&D expenditures) on export intensities of 112 Indian information technology and software firms. Export intensity was the dependent variable and the following were the independent variables: R&D expenditure; capital intensity, size, profitability, margins, imports, capital, cash, leverage (debt-equity ratio) and foreign borrowings as a percentage of total debt. The results indicated that R&D expenditure exhibited a significant and positive impact on export performance of Indian IT firms.

Pradhan (2007) examined the export intensity of Indian manufacturing firms (n=3951 firms) using a range of independent variables: Age of the firm, size of the firm, outward FDI by the firm, R&D intensity, technology imports (royalties and technical fees remitted

abroad), capital goods imports, raw material imports, advertising and sales promotion expenses and labour productivity. The study also included a few of industry - specific dummy variables to estimate the inter-industry differences in the export behavior among twenty three industry sectors. The study concluded that all the variables excepting age of the firm, technology imports and advertising expenses have a shown a significant and positive relationship with export intensity of the firms.

Pradhan (2011) in a study on the relation between R&D expenditures and export orientation of small, medium and large Indian firms (n=5237 firms) found that there is a positive and significant link between R&D investments and export performance among all the small, medium and large Indian firms.

Raut (2003) studied the effect of firm size, R&D expenditures and competitiveness on export performance of 415 Indian private firms by classifying them into technologically-light and technologically-heavy industries. The results indicated that R&D expenditures increased the firms' likelihood to export across all the firms. Firm size had no impact on the technologically-light industries but exhibited a negative and significant association with firms in the heavy industry.

Sanyal (2004) investigated the impact of R&D investments on bilateral trade patterns among the OECD countries. The results indicated that innovative outcomes with R&D investments had a positive and significant effect on the bi-lateral trade performance of OECD nations. The study also concluded that the impact of R&D investments on export performance is significantly higher among the high-technology industries.

Siddharthan & Nollen (2004) examined the relationship between firm size and export performance among firms in Indian information technology industry. The firms were classified as MNE affiliates, licensees and domestic firms. Export intensity was used as the dependent variable and the independent variables employed for the study were: technology imports, FDI (foreign equity in firms), import of capital goods, import of raw materials, capital output ratio and size of the firm. The results concluded that FDI and technology imports had a positive and significant relationship with export intensity among MNEs while capital imports and size of the firm exhibited a significant but negative relationship. In the licensee firms, capital output showed a positive and significant relationship with export intensity while technology imports showed a significant but negative relationship. Among the domestic firms, import of raw materials, size of the firm and capital output have shown a positive and significant relationship with export intensity while capital imports has shown a significant but negative relationship.

Singh (2009) investigated the export performance of 3542 Indian firms using export sales as dependent variable. The independent variables employed in the study are domestic sales, R&D expenditure, advertising expenditure, group affiliation, world GDP, exchange

rate and age of the firms. The study concluded that domestic sales positively affect export sales of the firms and that they are interdependent on each other. R&D expenditure exhibited a positive and significant relationship while advertising expenditure has shown a negative relationship.

It needs to be noted that though there have been a few studies on determinants of export performance in the Indian context, this paper tries to present a new evidence by considering the data for a different and more current time-period. Based on a comprehensive review of the previous empirical studies, the next section describes the methodology, data and the variables used for the study.

# 3. Methodology, Data and Variables

In this section the methodology used for the study, the data considered and the variables employed are presented as follows:

# 3.1 Methodology of the Study

In line with the classification used by Kumar & Siddharthan (1993), this research has employed the OECD classification (1997) which segments various industries into four different categories based on their technology intensities. This classification was not available for earlier researchers and hence they used UNCTAD (1987) classification of industries that divided various Indian industries into three categories. Hence, in this study, all the 14 industries included in the sample were divided into four categories namely: High-technology industries (Information technology and healthcare); Medium high-technology industries (Transportation, Capital goods, Diversified and consumer durables); Medium low-technology industries (Oil & gas, Metal & metal products, Housing-related, Chemicals and agriculture) and Low-technology industries (FMCG, Textiles and miscellaneous firms). This research uses multiple regression approach to explore and present a new evidence for the export performance determinants of Indian industries.

The regression equation is represented as follows:

 $Expint = \alpha + \beta_1 RDint + \beta_2 Sales + \beta_3 Advint + \beta_4 Capint + \beta_5 PBTint + \beta_6 DE + \beta_7 Tech + \epsilon$ 

### 3.2 Data

The data for this research is considered from the CMIE (Centre for Monitoring Indian Economy)-Prowess Database which provides the information regarding various firms across twenty different Indian industries. Taking the data availability into consideration, firm-level data for 171 firms belonging to 14 different industries were considered for this research. The initial sample set of firms constitute 73.6 per cent (368 firms) of all BSE-500 firms. The final sample size considered for the study account for 34.2 per cent of all the BSE-500 firms. The final sample set is highly representative since the combined export sales of these sample firms constitute nearly 70 per cent of all the firms (based on

authors' calculations) listed in the BSE-500 classification of industries. The research undertaken in this study gives an opportunity to understand the phenomenon of export performance determinants across all major Indian industries and highlights the interindustry differences of determinants of export performance in a single study.

Out of the twenty different industries as per BSE-500 classification, six industry categories could not be considered for the study due to data unavailability. The categories are media, tourism, finance, power, telecommunications and the firms placed in 'Others' category. Firms belonging to financial sector could not be considered for the study since they do not have any export component. Finally, the data includes firms belonging to 14 different industries categories. They are information technology, FMCG, oil & gas, transportation, metal & metal products, healthcare, capital goods, housing related, chemical, diversified firms, textiles, agriculture, consumer durables and miscellaneous categories. The period considered for the research was from 2005-2012. This period is appropriate since it captures the performance of Indian organizations post-WTO era after India became a signatory to WTO starting from 1st January, 2005.

# 3.3 Dependent and Independent Variables

In line with many of the earlier studies as mentioned in the literature review section, the present research used export intensity as the dependent variable. Many independent variables have been used by previous empirical studies to study the determinants of export performance in the Indian scenario. This study has chosen seven appropriate independent variables based on a comprehensive examination of earlier studies. The operational definitions of the dependent and independent variables are presented in Table 3.

Variables Operational Definition of Variables S. No. 1 Dependent Variable **Export Intensity** Export Sales/Total Sales **Independent Variables R&D** Intensity R&D Expenditure/Total Sales 1 2 Total sales of the firm Size 3 **Advertising Intensity** Advertising Expenditure/Total Sales Capital Intensity Net Fixed Assets/Total Sales 4 5 **Profitability Intensity** Profit Before Tax/Total Sales 6 Leverage (Debt Equity Ratio) Debt/Equity 7 Technology (Salary & Wages)/Net Fixed Assets

Table 3: Dependent and independent variables

# 4. Key Findings and Discussion

Table 4 presents the descriptive statistics for the dependent and independent variables. It can be observed that the information technology (IT) industry has the highest export intensity of 0.64 among all the fourteen industries considered for the study. The data has been checked for multicollinearity issues and autocorrelation and it was found that there is no multicollinearity when the variance inflation factor (VIF) values were analyzed. Serious autocorrelation among the variables does not exist as per the values reported by the Durbin-Watson test.

Table 4: Descriptive Statistics (Sample Size = 171 firms; No. of Industries = 14)

Industry		Exp	RD	Sales	Advint	Cap	PBT	DE	Tech
High technology									
IT (11)	Mean	0.64	0.01	51263.6	0.00	0.31	0.36	0.19	1.89
	SD	0.38	0.01	82593.5	0.00	0.34	0.93	0.30	1.06
Healthcare (30)	Mean	0.38	0.05	14599.1	0.02	0.38	0.27	0.63	0.67
	SD	0.30	0.15	13964.1	0.03	0.29	1.30	1.32	1.45
Medium high technology									
Transportation (20)	Mean	0.16	0.01	69305.6	0.01	0.24	0.10	0.75	0.26
	SD	0.18	0.01	99805.0	0.01	0.15	0.06	2.35	0.22
Capital goods (19)	Mean	0.18	0.01	53600.2	0.00	0.22	0.13	0.31	0.55
	SD	0.17	0.01	95339.4	0.01	0.21	0.06	0.51	0.45
Diversified (5)	Mean	0.08	0.00	29662.0	0.00	0.27	0.09	0.36	0.70
	SD	0.08	0.00	25291.9	0.01	0.20	0.06	0.33	0.86
Consumer durables (5)	Mean	0.07	0.00	20954.7	0.03	0.11	0.06	5.24	0.61
	SD	0.05	0.00	17007.0	0.02	0.05	0.04	25.6	0.21
		Medi	ım lov	v technology	,				
Oil & gas (9)	Mean	0.58	0.00	926898.1	0.01	0.41	0.10	1.17	0.11
	SD	2.34	0.00	1013553.8	0.01	0.48	0.13	1.34	0.18
Metal (12)	Mean	0.27	0.00	117079.2	0.00	0.51	0.25	0.78	0.15
	SD	0.20	0.00	126076.5	0.00	0.26	0.17	0.96	0.20
Housing-related (9)	Mean	0.05	0.00	27901.2	0.01	0.59	0.12	1.12	0.23
	SD	0.05	0.00	22093.4	0.01	0.31	0.09	0.97	0.44
Chemicals (9)	Mean	0.11	0.00	18808.8	0.02	0.29	0.12	0.41	0.28
	SD	0.11	0.00	14900.8	0.02	0.26	0.06	0.51	0.14
Agriculture (13)	Mean	0.13	0.00	24032.7	0.01	0.36	0.12	0.87	0.17
	SD	0.15	0.00	20758.2	0.01	0.18	0.11	0.77	0.13
Low technology									
FMCG(18)	Mean	0.09	0.00	36853.9	0.06	0.30	0.14	0.41	0.34
	SD	0.13	0.00	63495.9	0.06	0.46	0.06	0.90	0.18
Textile (4)	Mean	0.19	0.00	36577.5	0.02	0.55	0.13	0.87	0.14
	SD	0.12	0.00	31564.7	0.02	0.17	0.11	0.52	0.09
Misc (7)	Mean	0.15	0.00	10638.4	0.01	0.61	0.12	0.84	0.90
	SD	0.21	0.00	7260.2	0.03	0.45	0.09	1.07	1.93

Table 5 presents the results for high-technology and medium high-technology industries. Among the two high-technology industries (Information technology and healthcare) it can be observed that information technology industry has exhibited a significant but negative relationship with only advertising intensity and debt-equity and not with the other independent variables. On the other hand, healthcare industry has shown a significant and positive relationship with R&D intensity, size of the firm and capital intensity but has shown a significant and negative relation with advertising intensity and technology variables. Healthcare industry did not exhibit any significant relationship with profitability intensity and leverage (measured as debt-equity) variables.

Among the four industries (Transportation, Capital goods, Diversified and Consumer durables) in the medium high-technology classification, transportation industry has shown a positive and significant effect with only capital intensity and profitability intensity variables and exhibited a negative relationship with technology variable. The capital goods industry has shown a positive and significant relation with only profitability and debt-equity variables but a negatively significant relation with R&D intensity, advertising intensity and technology variables. The firms belonging to the diversified category have shown a significant and positive relation with only advertising intensity and capital intensity but a negatively significant relation with profitability. On the other hand, the fourth industry in this category, consumer durables has shown a positive and significant relationship with only capital intensity and technology variables and exhibited no relationship with any of the remaining independent variables.

Table 5: Regression results for high-technology and medium high-technology industries

Industry	Constant	Rdint	Sales	Advint	Capint	PBTint	DE	Tech	Adj. R <sup>2</sup>	F-stat
	High technology									
Information technology	0.618**	-2.007	0.000	-49.677**	0.158	-0.063	-0.385**	0.097	0.256	5.286
	(-4.052)	(-0.554)	(-0.471)	(-3.243)	(-0.867)	(-1.405)	(-3.039)	(-1.503)		
Healthcare	0.299**	0.259*	0.000**	-3.118**	0.166*	0.014	0.016	-0.035**	0.33	17.817
	(-7.697)	(-2.089)	(-3.994)	(-4.745)	(-2.4)	(-1.178)	(-1.257)	(-2.800)		
		Medium high technology								
Transportation	0.001	-4.169	0.000	1.533	0.343**	1.422**	0.006	-0.161*	0.324	11.871
	(-0.013)	(-1.881)	(-1.313)	(-1.014)	(-3.922)	(-6.163)	(-1.206)	(-2.387)		
Capital Goods	0.128**	-1.979*	0.000	-7.299*	0.042	0.868**	0.112**	-0.113**	0.453	18.863
	(-3.129)	(-1.996)	(-1.579)	(-3.430)	(-0.506)	(-4.306)	(-3.604)	(-3.476)		
Diversified	0.075*	-1.32	0.000	6.413**	0.215**	-0.416**	-0.077	-0.012	0.765	19.127
	(-2.372)	(-0.821)	(-0.158)	(-5.122)	(-4.391)	(-3.892)	(-1.918)	(-0.856)		
Consumer durables	-0.148**	2.545	0.000	-0.153	1.104**	0.276	0.000	0.146**	0.692	13.514
	(-4.076)	(-1.885)	(-1.740)	(-0.544)	(-6.214)	(-1.605)	(-1.785)	(-4.105)		

Note: t-values reported in parentheses; \* and \*\* indicate statistical significance at the 5%, and 1 % levels, respectively

Table 6 gives an account of the results of the regression analysis for medium-low technology and low-technology industries. Among the five industries (Oil & gas, Metal & metal products, housing-related, chemicals and miscellaneous categories) in the medium-low technology industries, oil & gas industry has exhibited no significant relationship with any of the independent variables. Among the other industries, metal & metal products industry has exhibited a positive and significant relation with only size and showed a significant but negative relationship with capital intensity and technology variables. Firms from the housing-related industry have shown a positive and significant relationship with only size and technology variables. Firms belonging to the chemicals industry have shown a negative and significant relationship with only advertising intensity and capital intensity variables. Agriculture firms, the other industry in this category, exhibited a significant and positive relationship with R&D intensity, size and debt-equity variables.

When we examine the results from the low-technology industries, firms from the FMCG industry have shown a positive and significant relation with capital intensity but a negative relationship with advertising intensity. The firms in the textile industry have shown a positive and significant relationship with size but a negative relation with advertising intensity. Finally, the firms from the miscellaneous industry category failed to show any significant relationship with all the independent variables except debt-equity variable where a positive relationship is observed.

Considering the fact that the OECD classification is done based on the R&D intensities of various industries, it is interesting to note that the results of this research throw up some interesting findings. R&D intensity, one of the variables used in this research, was expected to show a positive impact on export performance of many industries. It is surprising to note that information technology industry which was classified under the high-technology category (along with healthcare industry) failed to show a significant impact of R&D intensity on export performance. In fact, among all the 14 industries considered for this research, R&D intensity had a significant impact on export performance only in case of three industries: healthcare (high-technology); capital goods (medium high-technology) and agriculture (medium low-technology). In the case of capital goods industry, R&D intensity has shown a significant but negative impact on export performance while it exhibited a positive impact in case of firms belonging to the healthcare and agriculture industries. In comparison to the results of the earlier study by Kumar & Siddharthan (1993), R&D expenditure intensity showed a positive and significant association in four industries (transportation equipment, man-made fibers, paper and rubber products industries). This implies that the industries like healthcare have improved their R&D expenditures in the past twenty years keeping in view the changing patents laws in India owing to WTO regulations. R&D expenditure was shown to have a positive and significant impact on export performance in various studies reported by earlier researchers. Aggarwal (2002), Bhaduri & Ray (2004), Bhat & Narayanan (2009), Chadha (2009), Kumar & Saqib (1996), Lall (1986), Lall & Kumar (1981),

Majumdar (2010), Pradhan (2011) Raut (2003), Sanyal (2004), Siddharthan & Nollen (2004) and Singh (2009) reported a positive and significant impact of R&D expenditures on export performance of Indian irms belonging to various industries. Only one study by Jauhari (2007) did not find any significant influence of R&D expenditure on export performance of Indian electronics firms.

Among the other variables, size of the firm, which is considered to be one of the most influential variables on export performance showed mixed results. Only in five industry categories did size exhibit a significant impact on export performance: healthcare; capital goods (negative relationship), metal and metal products, agriculture and textiles. In contrast to the results of this research, in the study by Kumar & Siddharthan (1993), firm size was found to be positive and significant in seven industries (textiles, cement, paper, man-made fibers, rubber tyres, electrical and non-electrical machinery industries). Earlier studies by Bhaduri & Ray (2004), Bhat & Narayanayan (2009), Chadha (2009), Jauhari (2007), Lall (1986), Lall & Kumar (1981), Pradhan (2007), Siddharthan & Nollen (2004) and Singh (2009) reported a significant impact of the size of the firm on export intensity of the firms. Only two studies by Ganguli (2007) and Raut (2003) failed to report a significant impact of size of the firm on export performance.

Advertising intensity, which is generally expected to influence the performance of firms positively, exhibited a significant and negative relationship with six industries and has shown a positive impact on export performance only in case of diversified firms. This is surprising and can possibly be explained by the fact that the firms considered in the study do not report the advertising expenditure related to export activities separately and hence it may be difficult to assess the influence of advertising expenditure only on export performance. Not with standing this difficulty, it would still be expected that advertising expenditure positively influences export performance. Contrary to general belief, the results of this research give an overall negative influence of advertising expenditure on export performance of firms. In the study by Kumar & Siddharthan (1993), advertising intensity was found to be significant with a positive sign in case of five industries (fabricated metal products, paper, transportation equipment, rubber products and pharmaceutical industries). Among the other previous studies, Bhat & Narayanan (2009) reported a positive influence of advertising expenditure on export performance, Lall (1986) and Singh (2009) reported negative relationship while Jauhari (2007) and Pradhan (2007) reported no significant impact of advertising intensity on export performance of firms.

In case of capital intensity, it is found that this variable has a positive and significant impact on export performance in six industries: Healthcare; Transportation; Diversified; Consumer durables; Metal and metal products and FMCG. Capital intensity was positive and significant in only two industries (electrical and pharmaceutical industries) in the study reported by Kumar & Siddharthan (1993). Ganguli (2007) also reported a positive and significant relation between capital intensity and export performance among firms in Indian iron and steel industry.

Among the remaining three variables, it is observed that profitability has shown a significant and positive influence on export performance in case of only two industries namely transportation and capital goods while it exhibited a significant but negative influence on export performance in case of diversified firms. Profitability (measured as profit before tax to sales ratio) was found to be positive and significant with only four industries (cement, transportation equipment, non-electrical equipment and pharmaceuticals) as reported by the study done by Kumar & Siddharthan (1993).

Debt-equity variable which indicates the risk-bearing ability of the firms has shown a positive and significant effect on export performance in case of information technology, capital goods, chemicals, agriculture, FMCG and miscellaneous industry categories. Majumdar (2010) did not refer to the impact of this variable on export performance. Lastly, technology variable has shown a significant and positive influence on export performance in case of consumer durables and housing-related industries but exhibited a negatively significant impact on export performance in case of healthcare, transportation, capital goods and metal & metal product industries. The results are in accordance with the results of the study reported by Bhat and Narayanan (2009) on export performance of firms in Indian chemical industry.

Table 6: Regression results medium low-technology and low-technology industries

Industry	Constant	Rdint	Sales	Advint	Capint	PBTint	DE	Tech	Adj. R <sup>2</sup>	F-stat
	Medium low technology									
Oil & Gas	1.479	48.309	0.000	-25.158	0.422	-5.993	0.022	0.907	0.039	1.411
	(-1.817)	(-0.148)	(-1.677)	(-0.374)	(-0.504)	(-1.878)	(-0.084)	(-0.175)		
Metal	0.639**	-14.657	0.000**	119.301	-0.418**	0.128	-0.020	-0.673**	0.586	20.212
	(-9.744)	(-0.434)	(-3.496)	(-1.779)	(-6.503)	(-1.190)	(-1.040)	(-7.839)		
Housing-related	0.031	-6.817	0.000*	0.696	-0.031	-0.08	0.011	0.058**	0.45	9.305
	(-1.466)	(-0.952)	(-2.249)	(-0.983)	(-1.386)	(-1.219)	(-1.542)	(-3.862)		
Chemicals	0.212**	0.026	0.000	-3.906**	-0.165*	-0.016	0.097**	-0.050	0.461	9.691
	(-2.873)	(-0.005)	(-1.003)	(-5.145)	(-2.016)	(-0.083)	(-3.677)	(-0.333)		
Agriculture	0.140	12.451**	0.000**	-1.174	-0.069	0.011	0.066**	-0.048	0.253	5.991
	(-1.854)	(-3.191)	(-3.279)	(-0.923)	(-0.603)	(-0.088)	(-3.558)	(-0.274)		
	Low technology									
FMCG	0.020	4.483	0.000	-0.401*	0.122**	0.275	0.028*	0.012	0.255	8.007
	(-0.494)	(-0.826)	(-0.525)	(-1.996)	(-5.217)	(-1.69)	(-2.273)	(-0.154)		
Textile	0.199	9.189	0.000*	-4.875*	0.145	-0.051	-0.024	0.471	0.566	6.776
	(-1.639)	(-0.894)	(-2.496)	(-2.359)	(-0.787)	(-0.211)	(-0.414)	(-1.021)		
Miscellaneous	0.099	-11.978	0.000	-1.235	-0.093	0.543	0.152**	-0.002	0.582	11.931
	(-1.299)	(-0.882)	(-1.450)	(-1.425)	(-1.479)	(-1.583)	(-6.129)	(-0.107)		

Note: t-values reported in parentheses; \* and \*\* indicate statistical significance at the 5%, and 1 % levels, respectively

### 5. Conclusions and Future Research Directions

Two decades ago, Kumar & Siddharthan (1993) have examined the determinants of export performance in the context of Indian industries. Indian economy has witnessed a lot changes due to the liberalization policies over the past twenty years. The findings of this research when compared to the findings of the earlier studies, have given interesting and varied insights. This can be attributed to the fact that many industries in India have undergone sea changes in the past two decades of post-liberalised India. Many earlier studies have analyzed the export performance of Indian industries at different points of time. This research is an attempt to understand the impact of changing dynamics of industries when Indian firms are trying to capture the global markets. Hence, the study of export performance phenomenon of Indian firms assumes importance.

It can be concluded from the analysis that research and development intensity has shown a significant impact on export performance in agriculture, healthcare and capital goods industries. Size of the firm (measured as sales) has exhibited a significant impact on export performance in metal, agriculture, textiles and healthcare industries. Advertising intensity has shown a significant impact on the dependent variable in case of chemicals, FMCG, textiles, information technology, healthcare, capital goods and diversified industries. Capital intensity exhibited a significant influence on export performance in case of metal, chemicals, FMCG, healthcare, transportation, diversified and consumer durables industries. Profitability (measured as profit before tax divided/sales) has shown an impact on export performance in case of transportation, capital goods and diversified industries. Leverage (measured as debt-equity ratio) has shown significance with export intensity in case of chemicals, agriculture, FMCG, miscellaneous, information technology and capital goods industries. Lastly, technology variable (sales and wages divided by net fixed assets) has exhibited a significant impact on export performance in case of only metal and housing-related industries.

The findings of this research highlight the impact of various firm characteristics on the export performance and establish the relative importance of these characteristics across different industries. The findings of this study can be a provide guidance to export practitioners in fine tuning their export strategies. The study also opens up future directions of research for scholars interested in advancing the field of international business. Earlier studies have focused only on a few industries like pharmaceuticals, electronics, chemicals and information technology industries. There is further scope for research on individual industries like oil and gas, media, power, tourism and telecom industries which could not be covered in this research. While there are a few multi-industry studies reported earlier, it is worthwhile to explore the determinants of export performance of some industries which were not covered by the previous researchers. This will facilitate a better understanding of the intra-industry and inter-industry variations to assess the impact of various firm characteristics on export performance of firms in various Indian industries.

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# "Excuse Us, Your Manners Are Missing!" The Role of Business Etiquette in Today's Era of Cross- Cultural Communication

Dr. Soumen Mukherjee and Dr. Leslie Ramos-Salazar

#### Abstract

Nowadays, transnational businesses are exploring opportunities around the world and at the same time trying to be receptive towards cultural differences. Recent studies indicate that while some corporations vie successfully in the global marketplace, others have failed to sustain their competitive advantage because of cultural imperialism or due to paucity of knowledge of their managers on international assignment. Corporate analysts argue that in order to gain from the abundance and growth of international venture, the key to global business success depends on effective cross-cultural etiquette and global workforce diversity management.

Other significant studies emphasized that managers worldwide should be trained in interpersonal relationship and group communication competence, and should be equipped with cross-cultural negotiation skills that can maintain universal competitiveness. Increasingly, corporations recognize the value of preparing global managers, because business objectives are not being achieved primarily because of deficiencies in cross-cultural etiquette. Against this background, this study provides a constructive evaluation and analysis of the role of business etiquette for managers in an international arena, within the context of cross-cultural communication.

**Key Words** Cross - cultural communication; Global marketplace; Managers; Business - etiquette; Inter-personal relationship

#### 1. Introduction

Knowledge about unfamiliar societies and values often offers people a new perception on their own culture. Sometimes, it is intricate to intermingle with others because of the prejudices one has about other cultures. That is why one has to be prepared, when dealing internationally, to meet situations that may contradict the general stereotypes about nations and communities. Undoubtedly, the business segment is much more vociferous nowadays on the issues related to intercultural communication. Trade with business partners or clientele across cultures and those working in an international brand heaves challenges and demands innovative stances and expertise.

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Inter-cultural communication in the offices and during business transactions unwrap certain situations where impending misapprehension about both verbal and nonverbal communiqué may appear to be a common nomenclature. The manner in which human resources interrelate and communicate with one another involves how well dissimilar group members exert mutually for a competent global assignment. Adequate understanding of business etiquette and manners in the workplace help the assorted people improve communication and formal relationships to a greater extent. Devoid of the correct approach, cultural differences greatly diminish efficacy in the premature stages of a liaison. However, the vigorous comprehension of the business etiquette is followed globally, and its conscious effort to acquire new dexterity would definitely emancipate unsullied source of viable gain.

# 1.1 Objectives

- To explore the role of business etiquette in today's organizations across various cultures.
- To review the cultural misunderstandings in business contexts in today's era.
- To provide the best possible business etiquette practices in diverse cultures.
- To appreciate the values and expectations of different cultures.

# 1.2 Intercultural Communication

In an era of globalization, we are progressively networking with people from many dissimilar ethnicities. Although modern technology has made it easier for us to communicate with people from anywhere in the world, such exchanges can be tricky if we do not know how to deal with people from varied cultures. Culture is made up of the collective ideals and postulations of a particular group of people. The influence of culture on business is noticeable and significant. To understand these impacts, we need to comprehend culture itself first. Marketing researchers term culture as that which gives people a sense of who they are, of belonging, of how they should behave, and of what they should be doing. Thus, it endows with a learned, common, and organized set of signs, regulations, and standards that express and validate human behavior (Harris & Moran, 1987).

In the study of marketing and consumer behavior, the notion of culture has normally been negligible. As a matter of fact, marketers and consumers have overlooked the profundity and magnitude of the idea and its position in scrutinizing human behavior (Douglas & Craig, 1995; Griffith & Ryans, 1995). Since these principles and theories are shared, it is most of the time undemanding to take them for granted and trust that they are relatively customary. Hence, it provides the masses with a wrong perception that the manners in which they conduct themselves are correct and accurate for all and sundry. As Paige (1993), has pointed out, cultures have an inner logic and rationality, and hence their own validity.

However, in order to facilitate communication between cultures it is necessary to understand human reality as socially constructed (Berger & Luckman, 1967). In an age of rapid and effortless communication; we are evermore working and learning along with people from diverse customs and linguistic milieu. This can frequently entail us to act and think in dissimilar ways and to defy our conventional mentality. If we can understand this elementary reality, then we can begin to realize that different groups may have dissimilar values, different way of commune, disparate mores, conventions and hypothesis for arriving at a conclusion. While these may clash with our own perception and attitude, it does not inevitably mean that they are substandard, out-of the-place or backdated.

# 1.3 Intercultural Misunderstandings in Business Contexts

It is often difficult for speakers of other languages to deduce the inner meanings from the words being expressed verbally. Besides, it is not easy for mono-lingual speakers to recognize this predicament in the real sense of the term. People from different cultures use verbal communication to accomplish their routine activities in varied manner. A person who says, "Give me a coffee" is seen as discourteous by an English speaker in the UK, but for an Indian English speaker, it is moderately normal. Let us take into consideration, Fred E. Jandt's (2001; 2012) illustrations on some of the palpable gaffes, few celebrities and corporate houses have made when interacting (trying to) with diverse lingos and ethnicity:

# Jandt, 2001, Intercultural Communication: An Introduction

- In Australia, President Bush flashed a backhanded peace sign in motorcades. Many in Australia interpret that gesture as obscene.
- When Braniff translated a slogan touting its upholstery, "Fly in Leather," it came out in Spanish as "Fly Naked."
- In Germany, a Berliner is a jelly donut. In his speech at the Berlin Wall, President Kennedy, when he said "Heute, ich bin ein Berliner" actually said "Today, I am a jelly donut" when he really meant, "Today, I am Berliner" (a native of West Berlin).
- American Motors tried to market its new car, the Matador, based on the image of courage and strength. However, in Puerto Rico the name means "killer" and was not popular on the hazardous roads in the country.
- In China, KFC's "finger-licking good" was translated as "eat your fingers off."
- Parker Pens translated the slogan for its ink, "Avoid Embarrassment Use Quink" into Spanish as "Evite Embarazos - Use Quink" ... which also means "Avoid Pregnancy - Use Quink."
- Chevrolet attempted unsuccessfully to market its Nova compact car in Latin American countries. In Spanish, *no va* means "does not go" or "it doesn't run".
- Mountain Bell Company tried to promote its telephone and services to the Saudi's.
   Its ad portrayed an executive talking on the phone with his feet propped up on the desk, showing the soles of his shoes-- something an Arab would never do!

Source: Jandt, F. E. An Introduction to Intercultural Communication: Identities in a Global Community. 7th Ed. Thousand Oaks.

These language and cultural mistakes can clearly be avoided if we increase our knowledge and understanding of inter-cultural communication. It addresses the problems by examining the communication and interactions between people of different cultures or subcultures. Fundamental to intercultural communication is the belief that it is through culture that people learn to communicate.

Today, with the emergence of more and more multi-national companies, it is unlikely to do business without communicating cross culturally. Targowski and Metwalli (2003) viewed this millennium as an epoch that transnational organizations will ever more focus on the imperative cost of the cross-cultural communiqué procedure. In order to successfully communicate inter- culturally, aspects of cultural variance and assimilation such as use of language, immigrant acculturation and sexual preferences (Jandt, 1995), should be taken into consideration. The other paramount thing is the proficiency, capability and cost of doing business. Knowledge and understanding of cultural factors such as values, attitudes, beliefs and behavior should be acquired. Effective inter-cultural communication in global economy provides pragmatic tools about how to define a communication strategy, train representatives and conduct business talks in order to achieve success.

# 2. The Role of Business Etiquette in Today's Global Business

Typically, inter-cultural gaffes stem from misjudging situations that involve mingling and communicating with others. These include, but are not limited to the way in which we introduce ourselves and meet others, the dress sense for formal occasions, expressing thanks to the hosts as well as appropriate etiquette for the exchange of visiting cards and the presentation of gifts. By considering the fact that in the process of transforming ourselves culturally, the management of a company should be ready to articulate projects, guidelines, procedures and directives with reference to the new corporate culture, and more than that, should be unambiguous in matters concerning employee's expectations (Osborne & Plastrik, 2000) and embolden the variation of pattern.

Although the middle-of-the-road people all over the world consider following the rules of business etiquette to be very monotonous, the fact remains that the elucidation of these societal obligations differs from each other. Etiquette is important for a variety of reasons. It helps to ease what might become a troubled situation and can make or break professional associations, which may be extremely important. In quintessence, etiquette helps people to comprehend what is suitable in any condition. It is also important to know the variance between business protocol and business etiquette.

Abundant research works have been undertaken in such tips to use in international business, as insights into some of the cultural norms that guide effective business communication in different cultures. Business etiquette refers to the manners that guide righteous behavioral decisions in one's professional life (Post, 2007). The application of

business etiquette is challenging because the mannerisms and methods of communication vary among cultures. Some differences are subtle while others are more obvious from one culture to another. For example, a kiss on the cheek is an acceptable way to greet someone in many European countries, while this haptic method is not considered acceptable in the U.S.

In addition, individuals from different cultures also have different sets of communiqué causing impending confusion. In the late seventies of the last century, cultural anthropologist (Hall, 1976) theorized that people's cultural values and beliefs determine their way of communication. Hall characterized this communication behaviour in terms of High context and Low context.

Table 1: Edward T. Hall, 1976, High-context culture and the contrasting Low-context culture

In high context cultures	Most of the information is inferred from the context of a
	message; little is "spelled out." Chinese, Japanese, Arabic, and
	Latin American cultures could be considered high context.
In low context cultures	Context is less important; most information is explicitly
	spelled out. German, Scandinavian, and the dominant North
	American cultures could be considered low context.

Source: Hall, Edward, T. Beyond Culture. Anchor Books (December 7, 1976).

In Table 1 above, High context refers to societies or groups where people have close connections over a long period of time. Many aspects of cultural behavior are not made explicit because most members know what to do and what to think from years of intermingling with each other. Low context refers to societies where people tend to have many connections but of shorter duration or for some specific reason. In these societies, cultural behavior and beliefs may need to be pronounced clearly so that those coming into the cultural environment know how to behave. The social cultural environment plays an important role when a company wants to enter a new market, especially if there is a huge cultural difference between the home country and the host country.

When people from different ethnicity communicate in a business setting, those differences sometimes cause misunderstandings or difficulty in sharing information. For example, when one first meets another businessperson, one must be careful not to use the usual firm handshake with those from countries such as England, Asian, or the Middle East where it is a custom to use a softer handshake (Chaney & Martin, 2007). It may also be expected that both Chinese and Japanese will to bow during initial greetings. On the other hand, Germans are accustomed to use the firmest handshakes. Thus, one must use the appropriate handshake when greeting someone from a different culture to avoid misunderstandings.

# 2.1 Best Practices for Business Etiquette

Creating a set of expectations and standard communication methods helps improve communication within an organization. All employees need an understanding of the behaviors that are expected when interacting with cross-cultural colleagues in the workplace. In a company with a lot of diversity, laying out detailed expectations for behavior might be necessary.

# 2.2 Introductions across Cultures

It may be Adaab/Nomoshkaar in Bangladesh, Guten Tag in Germany, Akwaaba in Ghana, konnichiwa in Japan, Salam in Iran, Merhaba in Turkey or Aloha in Hawaii -- saying hello is easy -- but comprehending cultural distinctions for international business is far more challenging. The etiquette of greeting colleagues across cultures definitely differs. For example, it might be expected that both Chinese and Japanese may bow during initial greetings. To diminish misunderstandings, one may also know how to adapt to others' personal space. For instance, in Cambodia people are addressed with the honorific title "Lok" for a man and "Lok Srey" for a woman followed with the first name or both the first and surname. Here, the conventional way of greeting is a bow combined with a bringing of the hands together at chest level, which is many a time analogous to the joining of the hands together for prayer.

In the case of India, it is a country composed of a horde of religious cultures and etiquettes coexisting side by side. The dominant faith is Hinduism, but significant numbers of Muslims, Buddhists, Sikhs, Christians Jains, and Jews have also lived here through centuries. Within this religious diversity, one finds a coating of British formality and fine etiquette resulting across the country (Rinehart, 2005). Here, the people take pleasure in bargaining during business meet and they have the inclinations for some extensive corporate conventions. When doing business in India, it is important to build a good relationship with the Indians (Overgaard, 2010), because India is a fairly particularistic oriented culture. In a population that is as courteous as it is idiosyncratic, Indian culture's dependence on relationships is easily noticeable.

A number of the major multinational corporations have expanded their operations throughout developed and developing nations. Some of the businesses are direct investments and others are partnership arrangements and strategic alliances with domestic operations. For example, when one is in China, a country with strong traditions, one will have to know that if one is invited to someone's home, it is polite to eat and drink only after the host does it, and the host appreciates it when one tastes every offered dish. During mealtimes, it is also a custom to have the eldest member, or the person with the highest ranking on the table start the meal before anyone else gets to eat.

The accurate way of greeting a person is awfully significant in Chinese culture, because inappropriate greeting is considered very much objectionable. Amongst unfamiliar

persons, associates or at official events, the greeting (in Mandarin) 'Ni Hao' (or 'Nin Hao if much respect is meant) meaning, literally 'you good?' is used. The phrase 'Have you eaten?' is typically used as a household greeting and confirms to the pre-dominance of food in Chinese culture (Li, 2005).

In the northern African country Morocco, during any business transaction/s, it is exceedingly imperative to validate anything that has been agreed to in front of others as it may not have been a genuine conformity and the person may have no intention of following through. Honour and respect are immensely important for the Moroccans, and as an outsider, one has to be careful enough while conversing with Moroccans. While the definition of respect for some Moroccans entails following the norm and remaining modest, the definition differs depending on the individual (Ermilo, 2011). Here, once a relationship has developed, it is a widespread business custom to kiss on both cheeks, first on the left cheek while shaking hands, and men with men and women with women.

In contrast, Australians are more informal, and follow egalitarianism in interactions, and focus on the present and the future (Hecht et al., 1989). Surprisingly, being punctual is looked down upon here, and giving and exchanging gift/s is not a common practice in business. In Australia, one must maintain good eye contact during business conventions and formal tête-à-tête. Furthermore, a single, male passenger using a taxi should sit in the front seat. It is also important to note that first names are almost always used in preference to family names, dress is casual even in the workplace, and greetings are also very informal with phrases such as g'day [good day] (Wilcoxson, 1992). Spoken language is also more likely to be direct, logical, and precise (Hecht et al., 1989).

# 2.3 The Importance of Listening

Engaging in active listening may also serve to promote understanding across cultures in business settings. For instance, expressing active listening may help individuals ask effective questions to reduce one's perceived assumptions that may lead to misunderstandings in cross-cultural communication. By engaging in active listening one may be more equipped to adapt to others' needs and values despite cultural differences (Starosta & Guo-Ming, 2000). Active listening often leads to less cross-cultural conflict in the communication between managers in business settings (Rao, Southard, & Bates, 2005).

# 2.4 Appreciating and understanding Business Etiquette in a diverse culture

Management and communication scholars (Chaney & Martin 2011; Harris & Moran, 2000) concur that in today's global business environment, more managers and directors should be required to understand and appreciate people who are coming from different cultures and nationalities. They added that international management skills are needed for the increasing scope of global trades and investments for the next several decades. Combs (2007) also recommends diversity training for leaders to enhance their own self-

efficacy to meet the current demands for intercultural communication competence due to globalization, which has increased the likelihood of working with more cross-cultural colleagues.

The expansion of EU represents both challenges and opportunities for the business people coming from EU and non-EU countries. Even before the expansion, the EU had a significant role in the way the world conducts business. With the U.S. dollar declining, the Euro became one of the main currencies of the world, with its obvious ups and downs. Thus, all companies doing business in the EU must align with the EU's terms and regulations, observing the directions of the European Commission, even the ones belonging to the new members that came from quite a different background.

If we focus on Romanians and the way in which they do business within this context, the aggressiveness of Romanian businessmen in negotiations depends on their partner and on the compromises they are willing to give. But, generally, Romanians are not aggressive in negotiations; however, they are rather collaborative. People with integrity, confidence and broad-thinking are highly appreciated, as doing business over a glass of wine and toasting on such occasions.

In Europe, different cultures offer some interesting insights on toasting habits. In some cultures, such as the Latin America's ones, business is conducted on a personal level, with agreements being made at the level of people, not companies. That is why you will need the right person to introduce you into the right circles. These intermediaries are sometimes called in Spanish and *despechantes* in Portuguese (the language of Brazil). Latin Americans are after long-term relationships, and it will take some time for people to establish trust to gain such connections. Several trips to Latin America will be necessary to get the wheels turning. Sometimes even basic communication can go wrong, because in certain multi-lingual settings it is quite difficult to appreciate when it their response is a "yes" and when it is a "no."

For instance, when dealing with the Japanese, the encouraging reply "no problem" uttered in a business meeting/negotiation may be misunderstood, just because it starts with a negation, and then because the intonation of the speaker may lead to this kind of impression: "no, problem..." e.g., "the answer is no, because there is a problem." Even in the same language, holding a conversation may be difficult due to the indirectness, yet a polite approach of their communication is often used to maintain harmonious relationships to keep the other person from being embarrassed. In India, when entering a meeting room you must always approach and greet the most senior person first. Meetings must always start off with some informal conversation, because this is part of the 'icebreaking' procedure. But, if new to India, never comment on matters such as poverty or beggars, as these are not the topics, Indians are comfortable talking to the foreigners. Positive topics of conversation are the latest business or political news (concerning India,

of course), the fortunes of the Bombay Stock Exchange or cricket. Steer clear of conversing on personal subjects.

The business persons should also know that there are questions that are not to be asked in certain societies. And here are a few examples. If you are invited to eat in a business partner's home, in some Latin American countries, like Argentina and Chile, as well as in South Korea, it is probably impolite to ask the hostess for a recipe, because it is likely that she did not cook the meal herself; usually servants do that. Besides being embarrassing, this may be considered offensive, since being involved in such labour is specific to a lower class, not to wealthy families.

Another typical example of blundering at the conversational level is asking a male Muslim partner about the female members of his family, which is considered a very intimate side of his life. Then, if invited to a Japanese restaurant it is embarrassing for the host if the guest requests a fork or other utensils, because sometimes, they do not even have them in such places. One will have to learn to use chopsticks properly, or observe others at the dinner table. It is not easy at all to approach the appropriate topics in every situation. That is why discretion is one of the key values in many circumstances. Subjects like sports can be a good choice, on the condition that you speak in positive terms about the local teams.

In some Asian countries (e.g., Japan) and African countries, direct eye contact during interactions is to be avoided because it may be perceived to be a lack of respect, and one can come across as being aggressive. However, it is the norm for American, Middle Eastern, and European cultures to display direct eye contact to be a signal of respect and trustworthiness. Thus, when one is doing business in Japan and other African countries, one must be mindful to avoid making too much direct eye contact with others.

There are also differences in the ways of interacting with others from different cultures in business teams. For instance, Russian and Japanese individuals prefer to focus on the team's cohesion, while Americans prefer to focus on the effectiveness based on the outcome of the group's goals (Christophel, 1996). American individuals tend to prefer to be assertive and celebrate individual accomplishments, while Russian individuals prefer to share feelings and engage in balanced conversations with the team members (Christophel, 1996).

# 3. Conclusion

To conclude, intercultural relationships in the workplace can be improvised by training the people about business ethics. As highlighted in the illustrations in this study, developing business manners across cultures can help individuals gain valuable partnerships, which can be useful for career advancement and career opportunities. In diversified businesses appropriate business etiquette can help reduce misunderstanding

and eradicate conflict among employees. Thus, it is the responsibility of managers to train individuals about business ethics across cultures to be able to communicate with intercultural competence when interacting with others from different cultures. The step towards enhancing the business based communication would also have difficulties on the other hand. But the outcome due to business etiquette and communications shall ensure growth, prosperity and a professional work environment.

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# Interrelationship between FII and Stock Market and their Causal Relationship with Selected Macroeconomic Variables in India

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#### **Abstract**

This paper tries to explore the causal relationship between Foreign Institutional Investment (FII) and Indian Stock Market. Further, the paper examines whether they individually create impact on certain selected macroeconomic variable sand vice versa. Sensex is taken as a representative of Indian Stock Market. Inflation as measured by Wholesale Price Index (WPI), national output as represented by Index of Industrial Production (IIP) and Exchange Rate are the three macroeconomic variables considered for the study. The monthly data of the selected variables for the period from April 2005 to March 2013 is taken for the study. Correlation and Granger causality test have been used to study the causal relationship between FII & Sensex and their causal relationship with the macroeconomic variables. Our results show that a) there is a bidirectional relationship between FII and Sensex, FII and Exchange Rate b) there is unidirectional relationship between Sensex and IIP, Sensex and WPI, FII and IIP & FII and Exchange Rate and c) there is no relationship between FII and WPI.

Key Words: FII, Sensex, WPI, IIP, Exchange rate and Granger causality test.

# 1. Introduction

Indian capital market has witnessed tremendous developments since 1991, when the government had adopted liberalization and globalization policies. Financial liberalisation resulted in the opportunity of foreign investors investing in domestic securities and domestic investors transacting in foreign securities. Capital inflows to emerging economies exceeded their developed counterparts. According to HSBC, in 2009-12, emerging economies of Asia have received capital flows worth \$1trillion which is 484% more than inflows in the preceding four years (Nguyen, 2014). During this period, India received US \$93 billion as inflows which is over two times her inflows of US \$40 billion received in 2005-08. Positive fundamentals combined with fast growing markets made

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India an attractive destination for Foreign Institutional Investors (FII) (Prasanna, 2008). Progressive liberalisation process coupled with strong economic growth made India a favoured destination for foreign investors.

Table 1: FII investment during the period 2004 to 2013 (In Rs. crores)

FII Investment (Financial Year)						
Financial Year	Equity	Debt	Total			
2004-05	44,123	1,759	45,881			
2005-06	48,801	-7,334	41,467			
2006-07	25,236	5,605	30,840			
2007-08	53,404	12,775	66,179			
2008-09	-47,706	1,895	-45,811			
2009-10	110,221	32,438	142,658			
2010-11	110,121	36,317	146,438			
2011-12	43,738	49,988	93,726			
2012-13	140,033	28,334	168,367			

Source: www.sebi.gov.in

Table 1 shows the FII inflows from Equity, Debt and Net Inflows from 2005-05 to 2012-13. However, the fact that volatility in FII inflows and its significant impact on the Indian stock market cannot be ignored. Throughout 2008, many times, the Sensex lost around 600-1500 points on intraday trading owing to unabated selling by FII amid the fears of US recession. The sub-prime mortgage crisis in 2007-08 created a dip in the FII flows as a result of foreign investors fearing about impending recession. Later post-crisis, FII flows improved hoping to exploit favourable domestic situations. Many empirical studies conducted during different periods have revealed that FII flows cause significant impact on the stock market movements (Bhatia & Kishor, 2013; Pal, 2005; Rao, Murthy & Ranganathan, 2005; Thiripalraju & Rajesh,2011). They have examined and found empirical relationship betweenFII flows and capital markets. This paper attempts to confirm the causal relationship between FII and the stock market for a more recent period.

FII and stock markets are also influenced by behavioural pattern of various macroeconomic variables. Sangmi & Hassan (2013) stated that the macroeconomic variables have an important role in bringing investments to India and cause significant impact on the stock price. Various studies have been made analysing the relationship between equity market returns and movements with a specific or a set of macroeconomic variables. For example, the monthly results of IIP and stock prices (BSE and NSE) share a bidirectional causal relationship (Paramati & Gupta2011). Many studies have tried to explore the relationship between stock markets and Inflation (Boyd, Levin & Smith, 2001;Gultekin, (1983), stock markets and exchange rate (Abdalla & Murinde, 1997;Mishra, 2004). FII and interrelationship with stock market and different

macroeconomic variables has been widely researched in the context of India and other emerging economies (Kumar, 2009; Singh, 2005; Srikanth& Kishore, 2012).

#### 2. Theoretical Framework

FII is very important for any economy as it reflects economic health and brings in financial resources and liquidity to the economy. FII exerts a larger impact on the domestic financial markets in the short run and a real impact in the long run (Kumar & Malyadri, 2013). Changes in the portfolio of global investors can be influenced by their perceptions of country solvency than stipulated by strong fundamentals (Mukherjee, Bose & Coondoo, 2002). Emerging markets like India, being capital scarce want to woo foreign investors and retain them in the economy. Many factors had caused unexpected reversals in the pattern of FII flows to the country hitting the panic button in the economy. Therefore, it is imperative to comprehend the significant impact and crucial determinants of FII in the economy.

Stock markets assume a pivotal important role in channelizing the funds from surplus to deficit, from non-profitable to profitable sectors and in the price discovery of assets. Many empirical studies confirm their two-way causal relationship between FII and stock markets and some studies also reveal that FII not only improves liquidity, but also reduces volatility in the stock market (Kumar, 2000). Researchers, however, also believe that the movements in stock market prices are deviated from fundamental reasons and to a significant extent influenced by mobile foreign capital. Uncertainty in the stock market breeds volatility. The influence of uncertain behaviour of macroeconomic variables on the stock market is found to be significant in various studies. This also has an implication on the risk to FIIs and domestic stock market investors.

In understanding the impact of macroeconomic variables on FII and stock market, usually the researchers take one, two or a set of variables for the purpose of study. In this paper, it was intended to focus on a limited number of easily comprehensible variables. Among the widely researched macroeconomic variables like, Interest rates, National output indicated by GDP, IIP, etc., different measures of money supply, Inflation, measured by WPI or CPI, Exchange rate, Gold price, therefore, WPI and IIP representing Inflation and National output and Exchange rate are selected for the study.

# 3. Objectives

- To comprehend the interrelationship between Foreign Institutional Investment and Indian stock market.
- To identify the inter-relationship between stock market and macroeconomic variables
- To examine the inter-relationship between Foreign Institutional Investment and macroeconomic variables

#### 4. Literature Review

Empirical study is conducted to examine the effect of stock price and foreign investment on macroeconomic variables or vice-versa and the results of all those studies have provided different conclusions according to the combination of variables, time period, methodologies and tests used. Here, we have discussed some previous research works/papers and their empirical conclusions that are related to the topic of research. Bhatt (2011) in his paper highlighted that India has been hit by the global meltdown and it is clearly due to India's rapid and growing integration into the global economy.

Bansal & Pasricha (2009) studied the impact of market opening to FIIs on Indian stock market behaviour. They empirically analyzed the change of market return and volatility after the entry of FIIs to Indian capital market. They concluded that while FII and stock market average returns were not related, volatility had been certainly reduced because of FII. Vardhan & Sinha (2014) examined the influence of FII on the Indian Equity Market and its role in integration with US equity market. The existence of structural breaks during the study period was recognised. By using different Vector Autoregressive Models (VAR), the study showed that despite global recessionary trends, FII purchases and sales have steadily increased on account of gradual economic liberalisation and gained momentum in the last five years. FII inflows found to be significantly related to equity market returns. Although inflows were not affected by Exchange rates, outflows and affected by exchange rates. Again, US equity market created no influence on FII inflows and a marginal influence on the FII outflows. Richards (2005) analysed the aggregate daily trading of all foreign investors in six Asian emerging equity markets and found that behavioural pattern of investors extracting information from recent times. The other finding was that relevant foreign investors and external conditions could have a larger effect on emerging markets than implied by previous works.

Kumar (2011), attempted to examine the determinants of FII. Taking data for a period of 17 years from Jan 1993 to Dec 2009 and using Granger Causality test, the study concluded that while stock market return, IIP and Exchange rate caused FII flows, Wholesale price index, money supply and interest rate did not have causal relation with FII. Bai & Green (2011) explored the determinants of cross sectional stock return variations in emerging markets and pointed out that exchange rate and inflation together can explain 55% of pure country effects. Dasgupta (2012) has attempted to explore the long-run and short-run relationships between BSE Sensex and four key macroeconomic variables of Indian economy by using descriptive statistics, ADF tests, Johansen and Juselius's cointegration test and Granger causality test. Results showed that all the variables has contained a unit root and are integrated. Johansen and Juselius's cointegration test pointed out at least one cointegration vector and long-run relationships. The Granger causality test has found no short-run unilateral or bilateral causal relationships between BSE Sensex with the macroeconomic variables. Therefore, it is concluded that, Indian stock markets had no informational efficiency. Pethe & Karnik (2000) studied the interrelationships between

stock markets and important macroeconomic variables. Cointegration and Granger Causality tests are performed and the tests revealed that relationships between macroeconomic variables and stock indices are not very conclusive. Another study on macroeconomic variables and the performance of Indian stock markets by Naka, Mukherjee &Tufte (1998) employed co integration tests and identified domestic inflation to be the most severe deterrent to Indian stock market performance and domestic output growth to be the predominant driving force.

Many studies have analysed the relationship between Sensex, FII and a set of macroeconomic variables with data taken during different periods. Chittedi (2009) analyzed the performance of Sensex Vs.FIIs and found that FII s investments in BSE Sensex reveal that FIIs are significant factor determining the liquidity and volatility in the stock market prices. Makan, Ahuja & Chauhan, (2012) studied whether the identified macroeconomic factors could influence movements in BSE Sensex. On the basis of overall analysis and sectoral analysis it was concluded that out of seven variables, exchange rate, FII and call rate were relatively more significant and likely to influence Indian stock market. There was a positive relation between FII and Sensex. Gordon & Gupta(2003)in their paper evaluated the determinants of FII inflows into India and observed that though FII inflows into India are small compared to other emerging markets, they are less volatile. The econometric results indicated that a combination of domestic, regional and global variables are important in determining equity flows to India. The performance of emerging market stocks positively influenced FII flows into India. Lagged domestic stock market returns, and other events such as credit rating downgrades or a depreciation of the exchange rate affected FII flow negatively. Another paper by Bindu(2004)also conducted an intensive study to find out the determinants responsible for the flow of FIIs and their degree of impact created by FII flows and they found out that FII inflow depends on stock market returns, inflation rates (both domestic and foreign), and ex-ante risk. In terms of magnitude, the impact of stock market returns and the ex-ante risk turned out to be the major determinants of FII inflow. The study did not find any causative link running from FII inflow to stock returns. Bohra & Dutt (2011) attempted to examine the behavioural pattern of FII and how different groups of shares in Sensex respond to FII inflows. They concluded that FII and Sensex are positively correlated and Sensex follows FII, except in 2005 and 2008. Considering, individual group of securities, FII shared a positive correlation with those securities that are less regulated and highly capitalised expecting high equity yield.

# 5. Methodology

Methodology is the science of dealing with principles of procedure in research and study.

Data

For the purpose of the study secondary data has been used.

Period of the study

The study covers 8 financial years starting from April 2005 to March 2013 and monthly data is taken for the study of the variables. The date of study included pre-crisis, crisis and post crisis period.

Variables considered for the study and sources of data

The values of all the variables have been enclosed as annexure 1. Monthly data for Net FII investments for the mentioned period published in the website of SEBI have been used. S&P BSE Sensex (referred as Sensex), known as the benchmark index, is taken to represent Indian stock market. Monthly closing values of Sensex are taken from the website of BSE India. WPI Inflation and IIP are considered as the indicators of inflation and national output respectively. The third macroeconomic variable used is the Exchange rate. The monthly values of these macroeconomic variables are collected from the website of RBI, India. There are 96 monthly observations for each variable and a total of 480 observations have been used for this study. The statistical tools and tests such as Correlation, Augmented Dickey Fuller (ADF) Test and Granger causality test are being performed using Gretl software, version 1.9.8 and functions of MATLAB, version 7.8.0 (R2009a) to study correlation and the causal relationship between FII & Sensex and their impact and determinants.

In statistics and econometrics, an Augmented Dickey–Fuller test (ADF) is a test for a unit root in a time series sample. It is an augmented version of the Dickey–Fuller test for a larger and more complicated set of time series models. This test will help to describe whether a time series is stationary or not. Rejection of the null hypothesis denotes that there is no unit root and the series is stationary. Accepting of the null hypothesis denotes that there is the presence of unit root and the series is not stationary.

 $H_0$  - Presence of Unit root, hence non stationary and it has to be difference to make it stationary.

 $\,H_{1}\,\,$  –  $\,\,$  No Unit root and hence the series is stationary.

The following ADF model with trend has been used;

$$\Delta Y_{t} = b_{0} + \delta Y_{t-1} + \beta_{t} + \alpha_{1} \Delta Y_{t-1} + \alpha_{2} \Delta Y_{t-2} + \dots + \alpha_{p} \Delta Y_{t-p} + e_{t}$$

$$\tag{1}$$

Where  $b_0$  is the constant, t denotes time,  $\beta$  is the corresponding coefficient and p is the lag order of the autoregressive process.

H<sub>0</sub> - No causal relationship

H<sub>1</sub> - X Granger Causes Y

The Granger Causality tests help in detecting causality between two variables when both influence each other. If X and Y are two time series and if X Granger causes Y, then X should help to predict Y. To elaborate, in a regression Y against past values of Y, taking

past values of X as independent variables should contribute significantly to the explanatory power of the regression. Further, Y should not be able to predict X. Otherwise, if X helps to predict Y and Y helps to predict X, then there is a possibility of variables other than X and Y are causing both X and Y. The test is based on the following regression equations:

$$Y_{t} = C_{1t} + \sum_{i=1}^{p} \alpha_{i} Y_{t-i} + \sum_{i=1}^{p} \beta_{i} X_{t-i} + u_{1t(2)}$$

$$X_{t} = C_{2t} + \sum_{i=1}^{p} \emptyset_{i} Y_{t-i} + \sum_{i=1}^{p} \varphi_{i} X_{t-i} + u_{t(3)}$$

Where p denotes the number of optimum lag length and  $\mu_{1t}$  and  $\mu_{2t}$  are residuals in the regression equations and not correlated to each other. Granger causality test is known to be sensitive to the choice of lag length. To choose the optimum lag length, the Schwarz' Bayesian Information Criterion (BIC) are used.

# 5.4 Hypotheses

As the focus of research is to understand the inter relationship between FII, Stock market and macroeconomic variables, test of causality is intended to be employed. In this connection, the hypotheses of causal relationships between FII and stock market and with the three variables selected for the study are detailed in Table 2 as below:

Table 2: Hypothesis statements of the study

		-
No.	Null hypothesis	Alternate hypothesis
1.	H <sub>0</sub> : No causality between FII & Sensex	H <sub>1</sub> : Causal relationship between FII & Sensex
2.	H <sub>0</sub> : No causality between Sensex&FII	H <sub>2</sub> : Causal relationship between Sensex&FII
3.	H <sub>0</sub> : No causality between IIP & Sensex	H <sub>3</sub> : Causal relationship between IIP & Sensex
4.	H <sub>0</sub> : No causality betweenSensex & IIP	H <sub>4</sub> : Causal relationship between Sensex & IIP
5.	H <sub>0</sub> : No causality between Exchange Rate & Sensex	H <sub>5</sub> : Causal relationship between Exchange Rate & Sensex
6.	H <sub>0</sub> : No causality between Sensex & Exchange Rate	H <sub>6</sub> : Causal relationship between Sensex & Exchange Rate
7.	H <sub>0</sub> : No causality between WPI & Sensex	H7: Causal relationship between WPI & Sensex
8.	H <sub>0</sub> : No causality betweenSensex&WPI	H <sub>8</sub> : Causal relationship between Sensex & WPI
9.	H <sub>0</sub> : No causality between IIP &FII	H <sub>9</sub> : Causal relationship between IIP &FII
10.	H <sub>0</sub> : No causality between FII & IIP	H <sub>10</sub> : Causal relationship between FII & IIP
11.	H <sub>0</sub> : No causality between WPI & FII	H <sub>11</sub> : Causal relationship between WPI &FII
12.	H <sub>0</sub> : No causality betweenFII &WPI	H <sub>12</sub> : Causal relationship between FII &WPI
13.	H <sub>0</sub> : No causality between Exchange Rate & FII	H <sub>13</sub> : Causal relationship between Exchange Rate & FII
14.	H <sub>0</sub> : No causality between FII & Exchange Rate	$\rm H_{14}$ : Causal relationship between FII & Exchange Rate

# 6. Analysis and Interpretation

With a view to accomplish the predetermined set of objectives of our research, different set of techniques and tests have been adopted. Correlation matrix analysis finds the strength of association between Sensex, FII and selected macroeconomic variables. To explore the causality between two variables, Granger Causality test is commonly performed between the two variables. Taking two variables or time series X and Y, if X Granger Causes Y, then it can be concluded that X has significant unidirectional relationship with Y and X can lend support to predict Y. ADF test is used to find the stationary or non-stationary nature of time series.

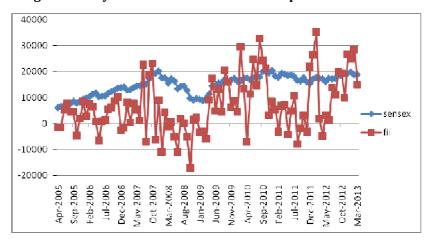
Table 3: Summary statistics using the observation April 2005 -Mar 2013

Variable	Mean	Median	Minimum	Maximum	Std. Dev.	Skewness	Ex. kurtosis	J- Q test	P value
Sensex	14991.60	16171.00	6154.44	20509.10	3803.84	-0.62	-0.75	8.42	0.01
FII	6729.35	5078.25	-17205.40	35227.90	10622.90	0.58	-0.07	5.35	0.07
WPI	6.70	7.13	-0.39	11.15	2.77	-0.49	-0.34	4.32	0.12
Exchange Rate	46.30	45.49	39.27	55.94	4.19	0.54	-0.20	4.80	0.09
IIP	147.38	148.95	99.08	194.20	23.24	-0.33	-0.66	3.49	0.17

Source: Gretl Output

Table 3 shows the descriptive statistics of the variables taken for the study. The minimum and maximum values for all variables exhibits a wide range of values during the study period indicating that the values of the selected variables have reached opposite extremes in the study period. The table also shows that Exchange Rate and FII is positively skewed whereas Sensex, WPI and IIP are negatively skewed. While performing the Jarque-Bera test, in Sensex the time series is not normally distributed and other variables are normally distributed. All the variables are platykurtic.

Fig.1: Monthly values of FII & Sensex from Apr 2005 - Mar 2013



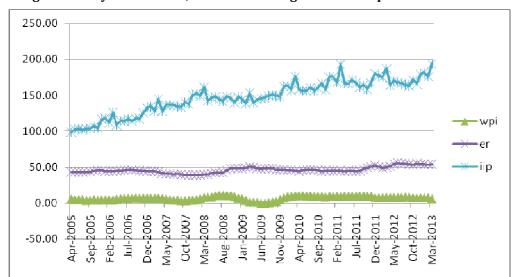


Fig 2: Monthly values of IIP, WPI and exchange rate from Apr 2005 - Mar 2013

Fig. 1 & Fig. 2 give a graphical representation of the monthly data of the variables selected for the study. A glance at Fig. 1s gives an indication about how the values of Sensex and FII move together. Fig. 2 indicates how WPI, IIP and Exchange rate move together for the time period selected.

To perform Granger Causality test, it is a pre requisite that the variables are stationary; else, the results may be distorted by spurious regressions. So, before performing Granger Causality tests, ADF tests are done to determine whether the variables are stationary at their levels or at their first differences.

The variables considered in this paper are the monthly data of Sensex, FIIand three macroeconomic variables namely WPI, IIP and Exchange rate. ADF test is carried out to understand whether all the series are stationary or non-stationary. The results of ADF test statistics are given in the table below.

Level 1st difference P value Variable name T statistic P value T statistic -1.907 0.642 -6.878 0\* Sensex -5.195 0\* FII 0.000232\* -10.492 WPI -3.431 0.053 -4.298 0.00499\* **Exchange Rate** -4.461 0.00302\* -2.381 0.0386\*0.779 -1.613 -6.782 0.000001\*

Table 4: ADF Test for the selected variables

\*Significant level at 5% Source: Gretl output From Table 4 it can be concluded that the FII and Exchange Rate are stationary at level and the p- value of the three variables are less than 0.05 (0.000232, 0.00302). Null hypothesis holding that the variables are non-stationary is rejected for these variables.

In case of Sensex, WPI and IIP, the p-values are greater than 0.05. Null hypothesis holding that the variables are non-stationary is accepted for these variables. Now in order to do test for causality, it is important to make these variables stationary. Thus we have calculated the first difference of all the variables and ADF tests are carried out. The p-values are less than 0.05 in their first difference for Sensex, WPI and IIP (0, 0.00499, 0.000001). All the series are stationary in their first difference and the integrated of order 1 or I(1). The optimum lag order was calculated in the software using BIC.

Correlation refers to any of a broad class of statistical relationships involving dependence. Perfect positive correlation (a correlation co-efficient of +1) implies that as one security moves, either up or down, the other security will move in lockstep, in the same direction. Alternatively, perfect negative correlation means that if one security moves in either direction the security that is perfectly negatively correlated will move in the opposite direction. If the correlation is 0, the movements of the securities are said to have no correlation; they are completely random.

Table 5: Correlation matrix of selected variables

Variables	Sensex	FII	WPI	Exchange Rate	IIP
SENSEX	1	.411**	.349**	0.152	.811**
p-value		0	0	0.139	0
FII	.411**	1	-0.047	.297**	.317**
p-value	0		0.652	0.003	0.002
WPI	.349**	-0.047	1	0.087	.447**
p-value	0	0.652		0.397	0
EXCHANGE RATE	0.152	.297**	0.087	1	.476**
p-value	0.139	0.003	0.397		0
IIP	.811**	.317**	.447**	.476**	1
p-value	0	0.002	0	0	

<sup>\*\*</sup>Correlation is significant at the 0.01 level (2-tailed).

Source: Gretl Output

From Table 5, it is very precise that the Sensex is strongly correlated with IIP (with the correlation value of 0.811). Sensex is moderately correlated with FII and WPI (with the correlation value of 0.411, 0.349 respectively), FII is correlated with Exchange rate with

correlation coefficient being 0.297, WPI is correlated with IIP with the value 0.447 and Exchange rate is also medially correlated with IIP with coefficient being 0.476. The Correlation coefficients are significant at 0.05 and 0.01 level.

There is very low degree of correlation between Sensex and Exchange Rate, FII and WPI, Exchange rate and WPI (with the correlation value of 0.152, -0.047 and 0.087 respectively).

Granger causality test is a technique for determining whether one time series is significant in forecasting another or not. The Granger causality test depicts the direction of causality between two variables when both influence each other.

A time series *X* is said to Grange-cause *Y* if it can be shown, usually through a series of t-tests and F-tests on lagged values of *X* (and with lagged values of *Y* also included), that those *X* values provide statistically significant information about future values of *Y*.

Table 6: Granger causality test of FII and sensex &other variables

Variables		Result of granger causality test					
X	Y	F statistic	Critical value	Null Hypothesis	Result		
FII	SENSEX	17.3111	3.0954	Rejected	FII Granger Causes SENSEX		
SENSEX	FII	11.5755	3.9445	Rejected	SENSEX Granger Causes FII		
IIP	SENSEX	9.8733	3.9434	Rejected	IIP Granger Causes SENSEX		
SENSEX	IIP	0.2914	3.9457	Accepted	Sensex does not Granger Cause IIP		
Exchange Rate	SENSEX	7.9226	2.7047	Rejected	Exchange Rate Granger Causes SENSEX		
SENSEX	Exchange Rate	8.508	2.316	Rejected	SENSEX Granger Causes Exchange Rate		
WPI	SENSEX	15.1311	3.9434	Rejected	WPI Granger Causes		
SENSEX	WPI	0.1984	3.9457	Accepted	SENSEX does not Granger Cause WPI		
IIP	FII	5.7235	3.9445	Rejected	IIP Granger Causes FII		
FII	IIP	3.3935	3.9457	Accepted	FII does not Granger Cause IIP		
Exchange Rate	FII	1.242	3.9445	Accepted	Exchange Rate does not Granger Cause FII		
FII	Exchange Rate	25.2309	3.9457	Rejected	FII Granger Causes Exchange Rate		
WPI	FII	1.2424	3.9445	Accepted	WPI does not Granger		
FII	WPI	1.6069	3.9457	Accepted	FII does not Granger Cause		

Source: MATLAB Output

Granger-causality test has been conducted to study the causal relationship between FII and Sensex, between FII & WPI, FII &IIP, FII & Exchange rate, Sensex & WPI, Sensex & IIP, Sensex& Exchange rate. By examining causal relationship, it will be helpful to understand whether the FII and Sensex have bidirectional relationship, FII and Sensex individually has any impact on the macro economic variables and whether FII & Sensex individually are determined by the macro economic variables. The appropriate lag length is chosen using the Schwarz Bayesian information criterion. Any particular lagged value of one of the variables is retained in the regression if (1) it is significant according to a t-test, and (2) it and the other lagged values of the variable jointly add explanatory power to the model according to an F-test.

Table 6 shows the granger causality relationship between FII and Indian Stock Market and the selected variables. It is found from the table that there is a bidirectional relationship between FII & Sensex.The F-statistic for both is greater than its critical values (17.3111, 11.5755) hence alternate hypotheses  $H_1$  and  $H_2$  are accepted. So, any changes in the Indian stock market or any changes in FII will impact each other in the long run.

There is a unidirectional relationship between IIP &Sensexand IIP Granger causes Sensex. The F-statistic 9.8733, greater than its critical value confirms it. This indicates that an economy with healthy national output has a bearing on the stock market. Alternate hypothesis  $H_3$  is accepted. However, our results do not confirm the causal relationship from Sensex to IIP and  $H_4$  is rejected. The movements in the stock market do not help to predict national output.

F-statistic values of 7.922 and 8.508 greater than their critical values for Granger causality tests between exchange rate and sensex and vice versa confirm that there is a bidirectional causal relationship between sensex and exchange rate. Alternate hypotheses  $H_5$  and  $H_6$  are accepted. Stronger rupee enhances investors' confidence in the stock market as it creates a very conducive environment for businessand a booming stock market backed by profitable business operations results in creation of foreign exchange reserves.

There is a unidirectional relationship between WPI and Sensex (F-value 15.1311> Critical Value(CV) 3.9434)and WPI Granger causes sensex. Alternate hypothesis  $H_7$  is accepted. While results show that Sensex does not Granger cause WPI and alternate hypothesis  $H_8$  is rejected. Inflationary trends have causal impact on the stock market movements, whereas vice versa is not true from this study. Change in inflation is observed to exert influence on the stock market prices from the study.

There is a unidirectional relationship between IIP and FII,FII does not Granger Cause IIP (F-statistic 3.3935 < CV 3.9457) while IIP Granger causes FII (F-value 5.7325 > CV 3.9445). Alternate hypothesis H<sub>9</sub> is accepted. It makes clear that FIIs are attracted by the strength of fundamentals of the economy and increases in national output causes an

increase in FII flows. As FII are only short term portfolio investments, FII do not have a causal impact on IIP.  $H_{10}$  stands to be rejected from the study.

There is a unidirectional relationship between FII and exchange rate, FII Granger causes exchange rate. As FII inflows enter the market, they bring in foreign exchange reserves and FII outflows deplete foreign exchange reserves causing movements in rupee value against foreign currency. Alternate hypothesis  $H_{12}$  is accepted. However exchange rate does not Granger Cause FII, alternate hypothesis  $H_{11}$  is rejected and it has to be understood that Exchange rate is affected by FII and does not cause FII.

There does not exist any causal relationship between FII and WPI. The F- statistics of both these tests are lesser than the CV (1.2424 < 3.9445, 1.6069 < 3.9457) and alternate hypotheses  $\rm H_{13}$  and  $\rm H_{14}$  are rejected. Inflation and FII do not have any causal relationship between them.

#### 7. Conclusion

In this study necessary analyses are performed to understand whether there is an interrelationship between FII & Indian Stock Market, their individual inter-relationship with selected macroeconomic variables. The selected macroeconomic variables are Index of Industrial production, Exchange Rate and Wholesale Price Index. Indian stock market is represented by BSE Sensex. Monthly data of the variables for a time span of 8 years was considered. The paper employed Granger Causality test and correlation analysis to examine the relationships.

On the basis of overall analysis it can be concluded that all the three selected variables are likely to influence the Indian Stock market. There is a bidirectional relationship between FII & Stock market. Many of the previous literature available confirm the existence of bidirectional causal relationship between FII and stock markets. Hence, volatility in stock market can be significantly forecasted by FII and volatility in FII can be significantly explained by stock market movements in India in the long run. In addition to that, certain other variables also lend explanatory power in significantly determining the movements in FII and stock market. This analysis helps domestic and foreign investors in understanding the changing patterns of these two variables vis-à-vis changing macroeconomic environment, while making investment decisions. Policy makers and regulatory bodies would make use of these inter-relations in deciding about policy issues and responding to economic situations.

It can be mentioned that this research can be extended in its scope in the future. The framework for understanding causal relationship between the variables can be made more reliable by incorporating structural breaks appearing in the study period into the model so that forecasting errors could be minimised. To develop a more precise understanding of the relationship between FII and Stock markets, an enhanced list of macroeconomic variables can be included so that the model can be made more robust.

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ANNEXURE

Table A1: Monthly data of FII and sensex & the macro-economic variables

Table A1: Monthly data of F11 and Sensex & the macro-economic variables							
MONTH-YEAR	SENSEX	FII	WPI	EXCHANGE RATE	IIP		
Apr-2005	6154.44	-1,476	5.33	43.6419	99.1		
May-2005	6715.11	-1,386	4.59	43.4095	103.1		
Jun-2005	7193.85	5,258	4.68	43.5245	104.0		
Jul-2005	7635.42	7,760	4.84	43.4340	102.4		
Aug-2005	7805.43	4,621	3.48	43.5500	104.1		
Sep-2005	8634.48	4,458	4.38	43.8462	104.4		
Oct-2005	7892.32	-4,627	4.67	44.7575	107.3		
Nov-2005	8788.81	1,874	3.94	45.6315	104.6		
Dec-2005	9397.93	8,361	4.38	45.5633	116.8		
Jan-2006	9919.89	2,756	4.36	44.2010	118.5		
Feb-2006	10370.24	7,436	4.45	44.2300	112.4		
Mar-2006	11279.96	6,430	4.24	44.3378	126.7		
Apr-2006	11851.93	770	4.97	44.8245	108.8		
May-2006	10398.61	-6,647	6.05	45.1959	114.8		
Jun-2006	10609.25	875	6.80	45.8886	114.2		
Jul-2006	10743.88	1,297	6.54	46.3675	117.6		
Aug-2006	11699.05	5,448	7.11	46.4461	114.3		
Sep-2006	12454.42	6,133	6.96	46.0105	118.2		
Oct-2006	12961.9	8,670	6.93	45.3552	117.7		
Nov-2006	13696.31	10,187	6.73	44.7257	125.5		
Dec-2006	13786.91	-2,766	6.96	44.4835	132.8		
Jan-2007	14090.92	-1,682	6.64	44.2062	134.9		
Feb-2007	12938.09	8,195	6.63	44.0195	127.8		
Mar-2007	13072.1	361	6.72	43.7936	144.9		
Apr-2007	13872.37	7,722	6.22	42.0176	128.2		
May-2007	14544.46	5,320	5.52	40.5686	136.9		
Jun-2007	14650.51	1,102	4.46	40.5905	136.7		
Jul-2007	15550.99	22,609	4.42	40.2738	136.6		
Aug-2007	15318.6	-7,162	4.04	40.6791	134.6		
Sep-2007	17291.1	18,788	3.39	40.1735	134.0		
Oct-2007	19837.99	23,091	3.19	39.3661	140.7		
Nov-2007	19363.19	-6,319	3.73	39.3267	137.9		
Dec-2007	20286.99	8,891	4.01	39.3750	150.7		
Jan-2008	17648.71	-11,082	4.54	39.2676	152.5		
Feb-2008	17578.72	4,230	5.68	39.6735	149.3		

	I				
Mar-2008	15644.44	-1,010	7.71	40.1452	161.9
Apr-2008	17287.31	627	7.86	39.9668	142.3
May-2008	16415.57	-5,174	8.20	42.0019	146.7
Jun-2008	13461.6	-11,095	10.89	42.7633	148.4
Jul-2008	14355.75	1,782	11.15	42.7027	144.3
Aug-2008	14564.53	46	11.12	42.9057	141.9
Sep-2008	12860.43	-5,074	10.78	45.5300	148.6
Oct-2008	9788.06	-17,205	10.66	48.6155	146.2
Nov-2008	9092.72	1,617	8.65	48.8517	139.7
Dec-2008	9647.31	2,377	6.68	48.5132	148.3
Jan-2009	9424.24	-3,443	5.87	48.6995	144.4
Feb-2009	8891.61	-3,124	3.61	49.2484	138.5
Mar-2009	9708.5	-5,890	1.65	51.1291	153.5
Apr-2009	11403.25	8,999	1.21	49.9655	139.6
May-2009	14625.25	17,406	1.45	48.5100	144.3
Jun-2009	14493.84	4,898	-0.39	47.6736	145.7
Jul-2009	15670.31	13,182	-0.31	48.3624	146.7
Aug-2009	15666.64	4,523	0.54	48.2426	149.4
Sep-2009	17126.84	20,572	1.40	48.2924	151.0
Oct-2009	15896.28	15,973	1.79	46.6524	149.6
Nov-2009	16926.22	6,181	4.73	46.5305	148.5
Dec-2009	17464.81	8,711	7.15	46.5273	162.4
Jan-2010	16357.96	4,363	8.68	45.8944	163.6
Feb-2010	16429.55	29,438	9.65	46.2732	157.5
Mar-2010	17527.77	13,293	10.36	45.4509	176.5
Apr-2010	17558.71	-6,986	10.88	44.4440	157.8
May-2010	16944.63	11,249	10.48	45.7690	156.5
Jun-2010	17700.9	24,724	10.25	46.4983	156.6
Jul-2010	17868.29	14,686	9.98	46.7617	161.3
Aug-2010	17971.12	32,669	8.87	46.4605	156.1
Sep-2010	20069.12	24,303	8.98	45.8729	160.3
Oct-2010	20032.34	21,211	9.08	44.3540	166.6
Nov-2010	19521.25	3,214	8.20	44.9315	158.0
Dec-2010	20509.09	8412.60	9.45	45.1000	175.6
Jan-2011	18327.76	5,364	9.47	45.3750	175.9
Feb-2011	17823.4	-3,270	9.54	45.3795	168.0
Mar-2011	19445.22	6,883	9.68	44.9143	193.1
Apr-2011	19135.96	7,196	9.74	44.3010	166.2
<u> </u>	1	•	I	L	l

May-2011         18503.28         -4,276         9.56         44.9024         166.2           Jun-2011         18845.87         4,883         9.51         44.8109         171.4           Jul-2011         18197.2         10,653         9.36         44.3960         167.2           Aug-2011         16676.75         -7,903         9.78         45.3135         161.4           Sep-2011         16453.76         -1,866         10.00         47.6905         164.3           Oct-2011         17705.01         3,079         9.87         49.2020         158.3           Nov-2011         16123.46         -3,263         9.46         50.6785         167.5           Dec-2011         15454.92         21,873         7.74         52.3824         180.3           Jan-2012         17193.55         26,329         7.23         51.0015         177.6           Feb-2012         17752.68         35,228         7.56         49.1812         175.2           Mar-2012         17404.2         1,793         7.69         50.3635         187.6           Apr-2012         17318.81         -4,897         7.50         51.6900         164.1           May-2012         16218.53						
Jul-2011         18197.2         10,653         9.36         44.3960         167.2           Aug-2011         16676.75         -7,903         9.78         45.3135         161.4           Sep-2011         16453.76         -1,866         10.00         47.6905         164.3           Oct-2011         17705.01         3,079         9.87         49.2020         158.3           Nov-2011         16123.46         -3,263         9.46         50.6785         167.5           Dec-2011         15454.92         21,873         7.74         52.3824         180.3           Jan-2012         17193.55         26,329         7.23         51.0015         177.6           Feb-2012         17752.68         35,228         7.56         49.1812         175.2           Mar-2012         17404.2         1,793         7.69         50.3635         187.6           Apr-2012         17318.81         -4,897         7.50         51.6900         164.1           May-2012         16218.53         3,222         7.55         54.3314         170.3           Jun-2012         17429.98         1,181         7.58         55.9424         168.0           Jul-2012         17380.75	May-2011	18503.28	-4,276	9.56	44.9024	166.2
Aug-2011         16676.75         -7,903         9.78         45.3135         161.4           Sep-2011         16453.76         -1,866         10.00         47.6905         164.3           Oct-2011         17705.01         3,079         9.87         49.2020         158.3           Nov-2011         16123.46         -3,263         9.46         50.6785         167.5           Dec-2011         15454.92         21,873         7.74         52.3824         180.3           Jan-2012         17193.55         26,329         7.23         51.0015         177.6           Feb-2012         17752.68         35,228         7.56         49.1812         175.2           Mar-2012         17404.2         1,793         7.69         50.3635         187.6           Apr-2012         17318.81         -4,897         7.50         51.6900         164.1           May-2012         16218.53         3,222         7.55         54.3314         170.3           Jun-2012         17429.98         1,181         7.58         55.9424         168.0           Jul-2012         17380.75         11,069         8.01         55.4935         164.7           Sep-2012         18762.74	Jun-2011	18845.87	4,883	9.51	44.8109	171.4
Sep-2011         16453.76         -1,866         10.00         47.6905         164.3           Oct-2011         17705.01         3,079         9.87         49.2020         158.3           Nov-2011         16123.46         -3,263         9.46         50.6785         167.5           Dec-2011         15454.92         21,873         7.74         52.3824         180.3           Jan-2012         17193.55         26,329         7.23         51.0015         177.6           Feb-2012         17752.68         35,228         7.56         49.1812         175.2           Mar-2012         17404.2         1,793         7.69         50.3635         187.6           Apr-2012         17318.81         -4,897         7.50         51.6900         164.1           May-2012         16218.53         3,222         7.55         54.3314         170.3           Jun-2012         17429.98         1,181         7.58         55.9424         168.0           Jul-2012         17380.75         11,069         8.01         55.4935         164.7           Sep-2012         18762.74         19,884         8.07         54.3500         163.1           Oct-2012         18305.38	Jul-2011	18197.2	10,653	9.36	44.3960	167.2
Oct-2011         17705.01         3,079         9.87         49.2020         158.3           Nov-2011         16123.46         -3,263         9.46         50.6785         167.5           Dec-2011         15454.92         21,873         7.74         52.3824         180.3           Jan-2012         17193.55         26,329         7.23         51.0015         177.6           Feb-2012         17752.68         35,228         7.56         49.1812         175.2           Mar-2012         17404.2         1,793         7.69         50.3635         187.6           Apr-2012         17318.81         -4,897         7.50         51.6900         164.1           May-2012         16218.53         3,222         7.55         54.3314         170.3           Jun-2012         17429.98         1,181         7.58         55.9424         168.0           Jul-2012         17236.18         13,664         7.52         55.4248         167.1           Aug-2012         17380.75         11,069         8.01         55.4935         164.7           Sep-2012         18762.74         19,884         8.07         54.3500         163.1           Oct-2012         18505.38	Aug-2011	16676.75	-7,903	9.78	45.3135	161.4
Nov-2011         16123.46         -3,263         9.46         50.6785         167.5           Dec-2011         15454.92         21,873         7.74         52.3824         180.3           Jan-2012         17193.55         26,329         7.23         51.0015         177.6           Feb-2012         17752.68         35,228         7.56         49.1812         175.2           Mar-2012         17404.2         1,793         7.69         50.3635         187.6           Apr-2012         17318.81         -4,897         7.50         51.6900         164.1           May-2012         16218.53         3,222         7.55         54.3314         170.3           Jun-2012         17429.98         1,181         7.58         55.9424         168.0           Jul-2012         17236.18         13,664         7.52         55.4248         167.1           Aug-2012         17380.75         11,069         8.01         55.4935         164.7           Sep-2012         18762.74         19,884         8.07         54.3500         163.1           Oct-2012         18505.38         19,216         7.32         53.0995         171.6           Nov-2012         19339.9	Sep-2011	16453.76	-1,866	10.00	47.6905	164.3
Dec-2011         15454.92         21,873         7.74         52.3824         180.3           Jan-2012         17193.55         26,329         7.23         51.0015         177.6           Feb-2012         17752.68         35,228         7.56         49.1812         175.2           Mar-2012         17404.2         1,793         7.69         50.3635         187.6           Apr-2012         17318.81         -4,897         7.50         51.6900         164.1           May-2012         16218.53         3,222         7.55         54.3314         170.3           Jun-2012         17429.98         1,181         7.58         55.9424         168.0           Jul-2012         17236.18         13,664         7.52         55.4248         167.1           Aug-2012         17380.75         11,069         8.01         55.4935         164.7           Sep-2012         18762.74         19,884         8.07         54.3500         163.1           Oct-2012         18505.38         19,216         7.32         53.0995         171.6           Nov-2012         19339.9         9,869         7.24         54.7845         165.8           Dec-2012         19426.71         <	Oct-2011	17705.01	3,079	9.87	49.2020	158.3
Jan-2012         17193.55         26,329         7.23         51.0015         177.6           Feb-2012         17752.68         35,228         7.56         49.1812         175.2           Mar-2012         17404.2         1,793         7.69         50.3635         187.6           Apr-2012         17318.81         -4,897         7.50         51.6900         164.1           May-2012         16218.53         3,222         7.55         54.3314         170.3           Jun-2012         17429.98         1,181         7.58         55.9424         168.0           Jul-2012         17236.18         13,664         7.52         55.4248         167.1           Aug-2012         17380.75         11,069         8.01         55.4935         164.7           Sep-2012         18762.74         19,884         8.07         54.3500         163.1           Oct-2012         18505.38         19,216         7.32         53.0995         171.6           Nov-2012         19339.9         9,869         7.24         54.7845         165.8           Dec-2012         19426.71         26,792         7.31         54.6470         179.3           Jan-2013         19894.98         <	Nov-2011	16123.46	-3,263	9.46	50.6785	167.5
Feb-2012         17752.68         35,228         7.56         49.1812         175.2           Mar-2012         17404.2         1,793         7.69         50.3635         187.6           Apr-2012         17318.81         -4,897         7.50         51.6900         164.1           May-2012         16218.53         3,222         7.55         54.3314         170.3           Jun-2012         17429.98         1,181         7.58         55.9424         168.0           Jul-2012         17236.18         13,664         7.52         55.4248         167.1           Aug-2012         17380.75         11,069         8.01         55.4935         164.7           Sep-2012         18762.74         19,884         8.07         54.3500         163.1           Oct-2012         18505.38         19,216         7.32         53.0995         171.6           Nov-2012         19339.9         9,869         7.24         54.7845         165.8           Dec-2012         19426.71         26,792         7.31         54.6470         179.3           Jan-2013         19894.98         25,006         7.31         54.2290         182.0           Feb-2013         18861.54         <	Dec-2011	15454.92	21,873	7.74	52.3824	180.3
Mar-2012       17404.2       1,793       7.69       50.3635       187.6         Apr-2012       17318.81       -4,897       7.50       51.6900       164.1         May-2012       16218.53       3,222       7.55       54.3314       170.3         Jun-2012       17429.98       1,181       7.58       55.9424       168.0         Jul-2012       17236.18       13,664       7.52       55.4248       167.1         Aug-2012       17380.75       11,069       8.01       55.4935       164.7         Sep-2012       18762.74       19,884       8.07       54.3500       163.1         Oct-2012       18505.38       19,216       7.32       53.0995       171.6         Nov-2012       19339.9       9,869       7.24       54.7845       165.8         Dec-2012       19426.71       26,792       7.31       54.6470       179.3         Jan-2013       19894.98       25,006       7.31       54.2290       182.0         Feb-2013       18861.54       28,441       7.28       53.8079       176.2	Jan-2012	17193.55	26,329	7.23	51.0015	177.6
Apr-2012       17318.81       -4,897       7.50       51.6900       164.1         May-2012       16218.53       3,222       7.55       54.3314       170.3         Jun-2012       17429.98       1,181       7.58       55.9424       168.0         Jul-2012       17236.18       13,664       7.52       55.4248       167.1         Aug-2012       17380.75       11,069       8.01       55.4935       164.7         Sep-2012       18762.74       19,884       8.07       54.3500       163.1         Oct-2012       18505.38       19,216       7.32       53.0995       171.6         Nov-2012       19339.9       9,869       7.24       54.7845       165.8         Dec-2012       19426.71       26,792       7.31       54.6470       179.3         Jan-2013       19894.98       25,006       7.31       54.2290       182.0         Feb-2013       18861.54       28,441       7.28       53.8079       176.2	Feb-2012	17752.68	35,228	7.56	49.1812	175.2
May-2012       16218.53       3,222       7.55       54.3314       170.3         Jun-2012       17429.98       1,181       7.58       55.9424       168.0         Jul-2012       17236.18       13,664       7.52       55.4248       167.1         Aug-2012       17380.75       11,069       8.01       55.4935       164.7         Sep-2012       18762.74       19,884       8.07       54.3500       163.1         Oct-2012       18505.38       19,216       7.32       53.0995       171.6         Nov-2012       19339.9       9,869       7.24       54.7845       165.8         Dec-2012       19426.71       26,792       7.31       54.6470       179.3         Jan-2013       19894.98       25,006       7.31       54.2290       182.0         Feb-2013       18861.54       28,441       7.28       53.8079       176.2	Mar-2012	17404.2	1,793	7.69	50.3635	187.6
Jun-2012         17429.98         1,181         7.58         55.9424         168.0           Jul-2012         17236.18         13,664         7.52         55.4248         167.1           Aug-2012         17380.75         11,069         8.01         55.4935         164.7           Sep-2012         18762.74         19,884         8.07         54.3500         163.1           Oct-2012         18505.38         19,216         7.32         53.0995         171.6           Nov-2012         19339.9         9,869         7.24         54.7845         165.8           Dec-2012         19426.71         26,792         7.31         54.6470         179.3           Jan-2013         19894.98         25,006         7.31         54.2290         182.0           Feb-2013         18861.54         28,441         7.28         53.8079         176.2	Apr-2012	17318.81	-4,897	7.50	51.6900	164.1
Jul-2012       17236.18       13,664       7.52       55.4248       167.1         Aug-2012       17380.75       11,069       8.01       55.4935       164.7         Sep-2012       18762.74       19,884       8.07       54.3500       163.1         Oct-2012       18505.38       19,216       7.32       53.0995       171.6         Nov-2012       19339.9       9,869       7.24       54.7845       165.8         Dec-2012       19426.71       26,792       7.31       54.6470       179.3         Jan-2013       19894.98       25,006       7.31       54.2290       182.0         Feb-2013       18861.54       28,441       7.28       53.8079       176.2	May-2012	16218.53	3,222	7.55	54.3314	170.3
Aug-2012       17380.75       11,069       8.01       55.4935       164.7         Sep-2012       18762.74       19,884       8.07       54.3500       163.1         Oct-2012       18505.38       19,216       7.32       53.0995       171.6         Nov-2012       19339.9       9,869       7.24       54.7845       165.8         Dec-2012       19426.71       26,792       7.31       54.6470       179.3         Jan-2013       19894.98       25,006       7.31       54.2290       182.0         Feb-2013       18861.54       28,441       7.28       53.8079       176.2	Jun-2012	17429.98	1,181	7.58	55.9424	168.0
Sep-2012         18762.74         19,884         8.07         54.3500         163.1           Oct-2012         18505.38         19,216         7.32         53.0995         171.6           Nov-2012         19339.9         9,869         7.24         54.7845         165.8           Dec-2012         19426.71         26,792         7.31         54.6470         179.3           Jan-2013         19894.98         25,006         7.31         54.2290         182.0           Feb-2013         18861.54         28,441         7.28         53.8079         176.2	Jul-2012	17236.18	13,664	7.52	55.4248	167.1
Oct-2012         18505.38         19,216         7.32         53.0995         171.6           Nov-2012         19339.9         9,869         7.24         54.7845         165.8           Dec-2012         19426.71         26,792         7.31         54.6470         179.3           Jan-2013         19894.98         25,006         7.31         54.2290         182.0           Feb-2013         18861.54         28,441         7.28         53.8079         176.2	Aug-2012	17380.75	11,069	8.01	55.4935	164.7
Nov-2012       19339.9       9,869       7.24       54.7845       165.8         Dec-2012       19426.71       26,792       7.31       54.6470       179.3         Jan-2013       19894.98       25,006       7.31       54.2290       182.0         Feb-2013       18861.54       28,441       7.28       53.8079       176.2	Sep-2012	18762.74	19,884	8.07	54.3500	163.1
Dec-2012     19426.71     26,792     7.31     54.6470     179.3       Jan-2013     19894.98     25,006     7.31     54.2290     182.0       Feb-2013     18861.54     28,441     7.28     53.8079     176.2	Oct-2012	18505.38	19,216	7.32	53.0995	171.6
Jan-2013         19894.98         25,006         7.31         54.2290         182.0           Feb-2013         18861.54         28,441         7.28         53.8079         176.2	Nov-2012	19339.9	9,869	7.24	54.7845	165.8
Feb-2013         18861.54         28,441         7.28         53.8079         176.2	Dec-2012	19426.71	26,792	7.31	54.6470	179.3
	Jan-2013	19894.98	25,006	7.31	54.2290	182.0
Mar-2013 18835.77 14,919 5.65 54.4229 194.2	Feb-2013	18861.54	28,441	7.28	53.8079	176.2
	Mar-2013	18835.77	14,919	5.65	54.4229	194.2

Source: website of SEBI & BSE

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# Impact of Pricing Elements on Customer Purchase Decision for Health Insurance Product

# R. Rama Moorthy, Dr. S. A.Senthil Kumar and R. Haresh

#### **Abstract**

This research investigates the interactive effects of the product pricing on purchase decision for health insurance products. This study has tried to assess the perceptions of the health insurance product regarding impact of pricing policy on the purchase decision of the prospective policyholders. Using data collected from health insurance policyholders in the Karaikal district, the researcher to find out any possible differences in the perceptions among the respondents, especially to assess impact of their purchase decision respective pricing of the product. Finally, it was found that the pricing has impact on purchase decision. This study will go a long way in helping the health insurers to formulate a good pricing strategy to impact the consumers purchasing decision. The results offer important insights for future theory development on pricing product.

**Key Words:** Purchase decision, Health insurance, Product pricing, Multiple regressions.

#### 1. Introduction

Health is an important element of human resource development. Good health is the real wealth of society. It not only enhances human efficiency but also leads to a decline in the private and public expenditure on sickness and disease. The human capital model of demand for health (Grossman, 1972) has been one of the major theoretical innovations that have emerged in this regard. This approach provides insights not only into the demand for medical care, but also into the determination of health itself. Healthcare services help to reduce infant mortality rates, check crud death rates, keep diseases under control and raise life expectancy. Improved health contributes to economic growth in four ways (World Bank, 1993). Health insurance is a type of insurance whereby the insurer pays the medical costs of the insured become illness due to covered causes or due to accidents. The insurer may be a private organization or a government agency. A health insurance policy is a contract between an insurer and an individual or a group, in which the insurer undertakes to provide specified health insurance benefit to the

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insured in consideration of a fixed price called premium payable either in lump sum or in installments. Health insurance normally provides either direct payment or reimbursement for expenses associated with illnesses and injuries. The rate of premium charged the extent of cover provided by the health insurance depends on the specific policy bought under the insurance contract between the insured and the insurer. (Yellaiah and Ramakrishna, 2012). In the case of health insurance, premium is the price which the person looking for insurance pays to the concerned health insurer to purchase a health insurance product. In the insurance business, the pricing decisions involve some factors such as: the premium charged against the policies, interest charged for defaulting in the payment of premium and credit facility, commission charged for underwriting and consultancy activities. Which they influencing the target market or prospects the formulation of pricing strategy is significant. The pricing in insurance is the form of premium rates (Dash & Khan, 2011).

Pricing is a more powerful element in the health insurance marketing strategy which hugely affects the final sale of the product. Price is the assessment placed upon the product by the health insurer. The management must take decisions regarding pricing (premium), investment return, premium level, premium mode, commission rate, insured sum amount, diseases covered, pricing strategy, under writing and price related contingencies. The cost driver is the factor whose change causes incurring of costs, i.e., the number of times the cost has been incurred. There are several studies among several issues regarding health insurance in India. However, there are very few studies involving pricing related and using survey data. There is no such empirical study in Puducherry region more particularly for Karaikal city. The present study is an attempt to fill this gap. We have organized the rest of the paper as follows: in the next section a brief conceptual background has been presented; the methodology and reliability analysis presented in the third section; in the fourth section, we present the data analysis and the multiple regression; the fifth section deals with the conclusion.

# 2. Conceptual Background of the Study.

#### 2.1 Health Insurance

In this section we review the relevant empirical studies relating to health insurance and pricing related. Several studies have discussed and debated various experiments for extending health coverage and recommended micro and macro solution to achieve greater coverage (Ahuja and Narang 2005; Acharya and Ranson 2005; Gupta and Trivedi 2005; Devadasan et. al. 2004a; Devadasan et.al 2004b). Mahal (2002) has examined the entry of private health insurance. He suggested for a comprehensive and long -term perspective at issues of health insurance and health care provision in India. Gumber and Kulkarni (2000) tried to explore the availability of health insurance system for the poor especially women their needs and expectations of a health insurance system and the likely constraints in extending current health insurance benefits to workers in the informal sector. Srinivasan and Ponmuthusaravanan (2009) concluded that the income

variable had a positive influence over the probability of the purchase of health insurance. Kirigia et al (2005), in their study on developed countries claimed that individual and household level variables are important determinants of health insurance ownership. Nyaman (2002) says that the demand for health insurance is a demand for an income transfer in the event of illness.

#### 2.2 Policy Pricing Insurance

In Booms and Bitner (1981)'s framework, the human touch is introduced to deal with the service delivery, namely the firm's personnel and other customers. In such as services of life insurance, the firm's personnel highly influence customer perceptions of the product. Berry (1984) further opined that the firm people are part of the product and hence product quality is inseparable from the quality of the service provider. After the 7's concept came to the limelight, all the elements of traditional marketing mix got a new meaning incorporating human element for service products (Rafiq and Ahmed, 1995). In life insurance has become aimportant of service product in this century. They compared the Kotler (1976)'s 4P's model with the new 7P's model to analyse the variations developed in the elements. The pricing element is old mix involved only three subelements, namely, price level, discounts / allowances and terms of payments. But, the pricing element in the new mix added three more sub-elements to the existing subelements, namely, customers own perceived value, quality &price interaction and price differentiation. These new variables along with the existing variables were used as the items under policy pricing scale in this study (Dash, 2012). Mukherjee (2005) has mentioned about product pricing in Indian life insurance sector. In the insurance industry, with the entry of private players, advancement of technology and speed in communication, with the remotest customers also became very easy. Pricing of life insurance products plays a major role in marketing them. In this study, he has explained extensively the pricing methodology of insurance companies. Low pricing attracts the customers whereas high pricing drives them away. Therefore, competitive pricing which takes care of the interests of both the insurer and the insured should be implemented. Dash (2012) tried to assess the various elements involved in the policy pricing are outlined as: affordability of the price level, flexibility of terms and conditions, worth of its value (as anticipated by the customer), uniqueness and better than alternate policies, simple & clear price structure and discounts/incentives. This study helps in understanding the customer's view point of the various elements associated with policy pricing which will give a chance to the insurers to make a better pricing policy.

# 2.3 Objectives of the Study

- To examine the perceptions of customers (buyer) with respect to impact of health insurance product pricing on the customers' purchase decision.
- To assess impact of their residing locality (urban vs. rural) on their respective perceptions regarding the impact of product pricing on the customers 'purchase decision.

#### 2.4 Hypotheses

 $H_{01}$ : There is a no significant difference between the location and impact of product pricing on the customers 'purchase decision.

 $H_{02}$ : There is a no significant relationship between the income and pricing elements on health insurance.

# 3. Methodology

#### 3.1 Data Collection

The data was collected from primary sources which consisted of the customers involved in health insurance marketing process. The area chosen for this above said sample population covered the Karaikal district of Puducherry. The period of data collection was last one months of 2014. Seventy one health insurance customers were interviewed in this process. These respondents were selected from both urban and rural area in order to assess the impact of residing locality on their perceptions. A well structured questionnaire was framed with questions on their perceptions of the various subelements involved in the health insurance policy pricing. For this purpose, a five-point scale (from 1 to 5) has been adopted with 1 being "Strongly disagree" and 5 being "Strongly Agree".

# 3.2 Measures for this Study

This study covers the aspect of health insurance pricing elements (Services Marketing Mix) impact on the purchase decision of the customers. The scales and various items under these scales (from the customer's viewpoints) are illustrated below:

Scale: Pricing (customers) this item only customer point of view Items:

6 [Strongly Disagree -1, Strongly Agree -5]

# 3.3 Items (Dash, 2012)

PR1: When buying a product, I look for the cheapest product available.

PR2: Price is the most important factor when I am choosing a product.

PR3: The pricing is unique and better compared to other alternate policies.

PR4: Different forms of payment (Cash, Credit card....)

PR5: I tend to buy the lowest-premium product that will fit my needs.

(PR = Pricing is one of the service marketing mix)

#### 3.4 Sample Details

The study was conducted on health insurance customers located in the Karaikal city progressive district of Puducherry union territory. A sample of 90 customers was taken up who were approached personally at their work places and residence. Out of the total, 75 correctly completed the interview schedule in all respects. For choosing the sample,

non-probabilistic convenience sampling technique was used. Due to time constraint, the sample size for the customers was restricted to 71.

# 3.5 Data Reliability with Validity

Reliability can be defined as the degree to which consistent results are produced by the prepared scale (with repeated measures). It is that the measures are free from random error. Churchill (1979) has suggested coefficient alpha to check the internal consistency of items placed under a factor. Further, Heir et al (2006) have also suggested the alpha value to be 0.6 and above. For customers Cronbach's  $\alpha$  were found to be 0.606, which are more than 0.6. All the items under both the scales were found to be having a loading of more than 0.5 (see table-1).

Table-3.5.1 reliability estimates with factor loadings for policy pricing

Factors	Scale Items	Factor Loadings	No. of Items	Cronbach's α
	PR1	.718		
	PR2	.834		
Policy Pricing	PR3	.858	5	.606
(Customers)	PR4	.886		
	PR5	.569		

Note- Extraction Method: Principal Component Analysis. Rotation Method: Varimax with Kaiser Normalization.

PR: Pricing item

# 4. Results and Discussion

A statistical elaboration of the sample took place, and the summary on the distribution of the demographic respondents of sample are tabulated in Table. The gender distribution of the respondents was 62% males and 38% females and they are aged between 18-59 years old. The majority of the respondents were graduations (33.8%) and higher secondary (32.4%). They are annual income Rs.10, 001-15,000 (36.6%), Rs.15, 001 – 20,000 (31.0%) and Rs.5001 – 10,000 (21.1%). There was 70.4% of respondent is married. They are geographical location rural (50.71%).

# 4.1 Perceptions of the Impact of Policy Pricing on the Customers' Buying Decision

If the 71 respondents are taken in to consideration, the impact of health insurance pricing on the customers' purchase decision (neutral to positive, 3.372). As per these respondent' perceptions, the pricing strategies positively influence the customers' decision towards health insurance policy (see table-4.2). This study shows that customers have positive perceptions regarding the pricing impact on customers' buying decision. Hence, it can be inferred that the buyers, think positively about its impact on their decision.

Table 4.1 Demographic profile of respondents

Des	Description		Percent
	Male	44	62
Gender	Female	27	38
	Single	21	29.6
Marital Status	Married	50	70.4
	18 - 29 years	25	35.2
Age	30 - 39 years	18	25.4
	40 – 49 years	22	31.0
	50 – 59 years	6	8.5
	Illiterate	2	2.8
Education	Primary	10	14.1
Qualifications	Higher secondary	23	32.4
	Graduation	24	33.8
	Post Graduation	12	16.9
	Rs.5001 – 10,000	15	21.1
Family Income	Rs.10, 001-15,000	26	36.6
	Rs.15, 001 – 20,000	22	31.0
	Above Rs.25, 000	8	11.3
Geographical	Rural	36	50.71
Location	Urban	35	49.29

Table 4.2 Perceptions of the impact of policy pricing on the customers' buying decision

Types of respondents	N	Mean	Rank
Overall Customers	71	3.372	2
Customers (Rural)	36	3.388	1
Customers (Urban)	35	3.356	3

# 4.2 Testing of Null Hypotheses

Similarly, the customers of both the urban and rural area possess almost similar perceptions with the significance level (0.81) exceeding the given level of 0.05 by a huge margin.

**Table 4.3 Testing of Hypotheses (T-Test)** 

Factor	Comparison of Respondents	t- value	P - Value	Results		
PR1		050	.046	Accepted		
PR2	Customers (Urban) and	.460	.868	Accepted		
PR3	Customers (Rural)	.040	.381	Accepted		
PR4		849	.655	Accepted		
PR5		-1.797	.000**	Rejected		
*significant at 5% level **significant at 1% level						

Source: Primary Data

This is a general assumption that the sellers have a more positive perception regarding the product compared to the same of the customers. The positive perception about the impact of policy pricing on the customers' buying decision. Both the urban and rural customers have a similar perception. Though the urban customers were more developed (both economically and educationally) than the rural customers, they had no differences in their perceptions.

4.3 Regression Analysis on the relationships between independent variables (Pricing Policy) and dependent variable (income) the influence purchase decision

As tabulated in Table 4.4, the Different forms of payment and the lowest-premium product that will fit my needs are found as highly significant to impact purchase decision at 0.01 level in the model. In addition, this interaction was found showing negative correlation to the dependent variable. The R square of the model is 0.603 which explaining 60% of the total variance in the variable in the model.

Table 4.4: Regression Analysis on the relationships between independent variables (Pricing Policy) and dependent variable (income) the influence purchase decision

Variable Standardized coefficients, Beta Sig. VIF PR1(X1) .015 .871 1.354 -.140 PR2(X2) .152 1.532 PR3(X3) .039 .678 1.403 .632 .000\*\* 1.076 PR4(X4) .000\*\* PR5(X5) -.498 1.157 Degree of Freedom 5 R - Square .603 19.707 F-Value 0.000\*\* Significant of Model, ANOVA

**Table 4.4: Regression results** 

Note: significant at \*\*p<0.01; \* p<0.05

Dependent variable: Income

#### 5. Discussion and Managerial Implications

Based on the result, it is concluded that different forms of payment and the lowest-premium product that will fit my needs were positive correlated to the consumer purchasing decision on health insurance product. The result found that there is a relationship between income and policy pricing.

# 5.1 Managerial Implications

The finding of the study shows that pricing elements play a vital role in influencing the perception of customers toward purchase decision of health insurance. The different forms of payment and lowest premium are the key pricing elements having impact on customer's perception towards purchasing health insurance. Existing health insurance players and new/ potential entrants to Indian health insurance market must specify the weight of annual income and pricing factor having impact on customer's perception

towards purchase decision. Based on the relevance of each of these pricing elements, health insurance industry can suggest appropriate pricing strategies. Moreover, health insurance players who are planning to do business should be attentive when studying on health insurance purchase decision, so that they can focus on the major dimensions and plan to meet the customer's perception about pricing.

#### 5.2 Limitations and Further Research

Firstly, this study was carried out mainly in Karaikal city; therefore, the results obtained may not be pertinent to the country as a whole. This study can be extended to other services marketing mix elements and purchase decision. Secondly, the present study has been collected only 71 customers of health insurance, ignoring the other health insurance customer and due to time constraint. This cannot lead to the generalizability of the findings and the results may not be implied conclusively to the whole customer. Additional studies are recommended to fill this gap. Thirdly, other variables (like future purchase decision, other marketing mix elements and overall satisfaction level etc.) having impact on customer's overall purchase decision should be taken into account in future research. Finally, these limitations may decrease the ability of generalizing the results of this study to other insurance customer settings. Therefore, the conceptual and methodology limitations of this study need to be considered when designing future research.

# 6. Conclusion

Based on this study, a few suggestions for the health insurance industry in India regarding their policy pricing strategies can be made. When buying the product the price level cheapest of the customer. Price is the most important factor when I am choosing a product as per the requirements of the potential customer. The health insurance companies ensure that policy pricing is unique and better compared to other alternate policies. A clear and simple price structure should be provided by the selling companies to the customer that can be understood easily by a lay man. When I considered buying product the lowest-premium that will fit my needs. Now, almost all the health insurance companies are inching towards a low-premium policy making the poorer rural sections eligible to possess the most elusive health insurance cover. Health insurance policy pricing strategy adopted by the insurers must incorporate the customers' expectations along with their apprehensions in order to impact their buying decision. The annual income also significant impact of purchase decision on health insurance product.

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# Knowledge Management Challenges and Opportunities in Indian Small and Medium Enterprises (SMEs)

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#### **Abstract**

Knowledge management is an essential tool for efficiently manage the challenges which occur due to turnover of skilled, experienced, and knowledgeable workers. Large scale industries have already taken up these challenges and devised mechanisms to store and manage the intellectual property of an organization, by creating knowledge repositories and patenting innovations. Even though SMEs contribute to major portions in Indian economy, most of them lack innovative approaches towards knowledge management. Compared to international SMEs, Indian SMEs need to increase the use of knowledge management in their day-to-day business activities. This paper is a study on the importance of knowledge sharing, knowledge capturing challenges in the context of SME environment, and setting the motivation for need of knowledge management in SMEs and highlights some case studies pertaining to SMEs in general and Indian SMEs in particular.

**Key Words:** Knowledge management, Knowledge creation, SMEs, Knowledge sharing

#### 1. Introduction

Several market research studies say, the Small and Medium Enterprises (SMEs) in India are witnessing exponential growth, contributing Compound Annual Growth Rate (CAGR) of 5.29 per cent, and developing as a major provider of employment. The demographic distribution of SMEs suggests, more than 55% are in urban India and rest in rural parts of India. 95% of SMEs space in India are Micro enterprises, 4.8% are small businesses and rest 0.2% is medium units. Associated with this high growth rate, Indian SMEs does face some important challenges such as inadequate scale of operation, use of obsolete technology, supply chain inefficiencies due to poor infrastructure support, increased competition in price from products by global industries, higher loan repayments and fluctuating interest rates, inadequate planning while bringing changes in manufacturing strategies and lack of understanding of market scenario. In order to cope up with such problems and to compete with large and global enterprises, SMEs need to adopt innovative approaches in their business processes (Rajesh, 2013) (Supratim

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Dr. Jayasmita Rath, Associate Professor, Department of Management Studies, Nitte Meenakshi Institute of Technology, Bangalore, India Pratihar, 2013). In this context knowledge capturing, storing, and management is considered as important requirements for Indian SMEs.

#### 1.1 Introduction to Knowledge

Knowledge is a critical organizational resource that provides a sustainable competitive advantage in a competitive and dynamic economy (Davenport, 1998; Foss, 2002; Grant, 1996). It is a complex concept which consists of information and skills acquired through experience, it depicts the condition of having information or of being learned. Knowledge comprised of truths, beliefs, perspectives, judgments, expectations and methodologies (Nonaka, 2003). The capture of an employee's knowledge is vital for the organization, and sometimes they help in making key decisions to improve the performance of an organization.

# 1.2. Importance of Knowledge Sharing

David Delong's Book "Lost Knowledge" describes knowledge enables effective actions and supports decision-making without deviating from the context of organizational activity. The knowledge loss would deteriorate the organizational effectiveness and performance. The knowledge transfer aims to identify key places and people, to understand the source of knowledge, the influence of knowledge loss on organizational productivity; and formulate an action plan to ensure the capture of critical knowledge and devise a process to effectively transfer it to the required seeking points.

(Gurteen, 1999) in his work highlighted five important values of knowledge sharing

- Knowledge is viewed as an intangible product which is an outcome of assimilating ideas, plans, processes and required information. In today's knowledge-based economy, it takes the major share of global trade.
- Any organization achieves competitive advantage only through unbiased knowledge sharing.
- Increased turnover of employees in knowledge industries makes the knowledge sharing an important process.
- Poor leveraging of experience and expertise across the organization.
- The threat of knowledge obsolescence, due to rapid changes in technology, business and society.

# 1.3 Knowledge capture and Steps

Knowledge capture comprised of a set of well defined techniques to enable acquisition of an individual's technical knowledge, such as vision, mission, goals, plans, experiences, attitudes, social networks and others, to minimize or mitigate organizational knowledge loss (Sheng, 2010). A variety of methods could be employed and may vary according to each organization's requirements. These techniques range from informal interviews, mind mapping to blogs and wikis, socializing, externalizing, and so on. Knowledge capture

benefits include, minimizing duplication of work, increases the pace of problem solving, improves teamwork, brings more innovation and better ideas, higher client satisfaction and improvement in employee motivation. Without the full support of management, essential training, motivation, and sincere efforts the knowledge capturing would not be successful.

Essentially, knowledge capturing involves following steps;

- *Identify a potential user for the knowledge*. This is a primary step, which provides proper orientation and focus to knowledge capturing process. Identifying an end user of knowledge helps in creating suitable tools for knowledge capturing.
- *Identify a practicing community*. The community includes people who are sources of knowledge, future users of the knowledge, and the people who decide the correctness of the captured knowledge.
- *Establish clarity on what the captured knowledge is really about.* This fixes the scope for knowledge capturing process, which is essential to set milestones for knowledge capturing process.
- *Creating guidelines*. Provide context for people to understand the purpose and relevance of the knowledge.
- *Validate the Guidelines*. Circulate the guidelines around the relevant community of practitioners and knowledge sources.
- Generate the knowledge. The source would be individuals, teams and groups with relevant experience. This can be accomplished through retrospective interviews of individuals, or formal learning processes and meetings designed to codify the knowledge gained (Kitimaporn, 2012).
- *Distill the knowledge*. This process is technically challenging, where you need to classify the knowledge into levels, priorities, key insights, lessons and practices. While grouping it is essential to bring common knowledge together, filter the redundant knowledge, and highlight the niche knowledge.
- Publish the knowledge. It is important to make use of technologies of the current trend to store and manage the captured knowledge, keeping the factors such as easy accessibility, privileged access, security against misuse, and provisions to involve knowledge users in updating knowledge base.

# 2. Knowledge Capturing Challenges in SMES

SMEs face challenges while transforming tacit knowledge into explicit knowledge. In the changing employment scenario, its organizations' ability decides the retention of old knowledge and acquisition of new knowledge. Much of the knowledge within SMEs is tacit and held by experienced people. Various studies have suggested that tacit knowledge appeared not to be effectively passed on to others and was lost when key individuals left the organization. This caused problems in succession planning. Various challenges in SMEs for knowledge capturing are broadly classified under following issues.

#### 2.1 Social Issues

Knowledge is an inherent strength of any human being, social issues such as work culture, location influence, interest levels, enthusiasm, ability to communicate, soft skills, and above all the very structure of the SMEs will attribute to knowledge sharing attitude of people. As a culture, many experienced professionals are knowledge authoritarians and are reluctant to share it and on the contrary, most people are also reluctant to learn from others experience. Mutual trust among people will surely facilitate spontaneous and efficient knowledge sharing, but the culture of Asian countries, suggests people usually do not trust each other to share the knowledge that they possess, and enter into unhealthy competition (Norizzati, 2009; Chowdhury, 2006). People are also lacking confidence to share and exchange expertise. Many people think that if they share knowledge and make their opinions openly available to others, they will lose out in some way. Psychologists accept that Asians are generally less vocal and critical in the workplace compared to Westerners.

#### 2.2 Technological Issues

The Information-Communication-Technology has become part and parcel of most of the business processes. Right from traditional desktop computing to today's mobile enabled cloud computing, groupware, semantic networks, data mining, content management systems, organizations are embarking on the use of technologies. These technologies with suitable application software will augment the process of knowledge capturing (Kitimaporn, 2012). Some of the technological issues with respect to Indian SMEs identified from the study (Mike, 2003; Anand, 2011) are: no uniform standards across organizations which may lead to wrong interpretations, restricted access to IT facilities, and poor organizational investments on IT resources such as software and technical support.

#### 2.3 Financial Issues

The intention of knowledge capturing from an ongoing project could possibly conflict with the project management plan, including project completion date and budget of a specific project. This may result in cost trip ups, and increased payments of incentives offered. This factor would affect SMEs budget planning.

# 2.4. Process Issues

When the question of the amount of knowledge to be captured arises, one need to balance between the tacit and the explicit knowledge. Opening up tacit knowledge and making it explicit or maintaining in its native form becomes a central process issue during knowledge capturing. This situation demands effective mechanisms for knowledge codification. The adopting proper codification will help in putting efficient knowledge dissemination processes in place. Since knowledge capturing is a slow and labor intensive

process, it becomes a challenge to keep an account of discussions, decisions made, and team spirit when projects are of short term period are usually carried out by SMEs.

#### 3. Knowledge Management Opportunities in SMES

With the impact of globalization, to survive in this competitive world of economy, SMEs need to adopt a dynamic and a self-sustaining culture of innovation and cluster based approach for the development. Consistent learning is the key enabler for today's knowledge-based economy, the tangible outcome of organizational learning activities is the creation of vital resource of knowledge. The organizations, social and economic values are measured by the ideas and intellectual property generated. This accumulated knowledge will enhance the performance of the organization, which in turn promotes innovation. SMEs offers the following advantages to implement KM practices over large enterprises (McAdam, 2001; Wong, 2004):

- Minimum time to take decisions, due to most of SMEs is managed by the owners, which imply that decision making is centralized (Davidson, 2003).
- The organizational structure of SMEs is simple, usually flatter and less complex. This advantage will greatly help the easy adaptation of various initiatives of knowledge management in both horizontal and vertical business processes.
- SMEs have the advantage of focused workforce, which is usually united under common beliefs and values.
- There is a deep and broad scope of knowledge commonality among members of the SMEs. This will ease out the process of knowledge capturing, knowledge maintenance, knowledge transfer, and knowledge application.

(Desouza, 2006), discuss five key peculiarities that differentiate knowledge management practices in SMEs and larger companies: 1. Every Manager in SME acts as the knowledge repository, 2. The existence of common knowledge among members of the SMEs is deep and broad. 3. SMEs has deliberate mechanisms to avoid pitfalls of knowledge loss, which includes the close social ties between members of the SME act as deterrence against employees leaving the business. 4. SMEs look for exploiting foreign sources of knowledge. 5. SMEs knowingly or unknowingly, manage knowledge in the humanistic way.

In the 'impact of knowledge management on SMEs', (Nazar, 2005), states that retention of high caliber employees is a major concern. Usually employees leave SMEs and join larger organizations, for higher salaries and bonuses. There is also an issue of limited opportunities in SMEs for career progression, and the existence of better prospects in larger organizations. The turnover of highly knowledgeable employees is a major threat to SMEs.

# 4. Benefits of Knowledge Management in SMES

Even though the primary goal of Knowledge Management (KM) is to capture the knowledge, the importance is given to efficiently manage the captured knowledge for organizational use. This collected knowledge should be used effectively to realize organizational mission and vision. There are many initiatives from the Government to inculcate the knowledge management culture among Indian SMEs. In comparison to international SMEs, the Indian SMEs lag in capturing and storing relevant knowledge, making timely use of this, and reap the benefit of this domain. Apart from managing the internal knowledge, an important need of the day is Indian manufacturers should make the best use of the knowledge repositories created by government agencies and industry associations. Some of the major barriers for implementation of Knowledge Management in Indian SMEs are cultural resistance, slow penetration of technology, consumer awareness, cost, and lack of need. Few studies have focused on the benefits of KM for SMEs. We cover some of the benefits here.

#### 4.1 Improved Competitiveness

Competence development is currently accepted as a key tool for fostering the competitiveness of enterprises. Every employee must be competent enough to manage his or her work, by acquiring suitable skills and knowledge empowerment. Tacit knowledge has a central role to play in competency development in SMEs.

#### 4.2 Improved Human Resources

One of the classifications of KM (Bozbura, 2007) considers that KM can be analyzed by means of four dimensions: employee empowerment by training, counseling and mentoring, establishing proper guidelines and strategies for KM, knowledge acquisition from outside world, and the influence of organizational culture. It can be understood from this classification that human resources are the most important element in the organization, which generates the required creativity to produce new knowledge, which improves the level of innovation and development.

# 4.3 Better Financial Results

Improving performance in fund management, results in higher achievements with respect to productivity, innovation, efficiency, customer satisfaction and getting an edge over competitors. The outcome of KM can be best seen through better financial results (Fugate, 2009).

#### 4.4 Improved Innovation

New knowledge is an enabler for innovation. Any innovation to become successful, it should link knowledge of operating processes in an effective and efficient way. The factors involved in knowledge management process have a great influence on innovation. Many researchers claimed that the majority of the KM frameworks only focuses on the knowledge processes without considering the factors which influence them in the context of systems thinking. Some of these factors include vision of the organization, knowledge availability, technical know-how, learning attitude, and work culture. It is the

organization's responsibility to link various KM related resources to the strategic goals of the organization (Rubenstein, 2004).

# 4.5 Improved Decision Making

SMEs can improve their capabilities in problem solving, continuous learning, strategic planning, decision making, and so on, by successfully adapting various KM activities, which includes knowledge acquisition, knowledge storage, knowledge creation, and application of shared knowledge (Zack, 2009).

# 4.6 Improved Performance

SMEs performance will be strongly influenced by the rapid, effective and innovative utilization of the resources and knowledge assets, infrastructures, processes and technologies (Darroch, 2005).

#### 5. Some of Knowledge Management Research Findings in SMES

This section provides some of the research findings, including the purpose of investigation, the source of secondary data used for research and research findings.

Reference	Purpose of Investigation	Secondary Data	Findings
(Haibo,	To empirically investigate	This paper uses a sub-	The researchers propose
2009)	the relationship between	sample of firm-level data	that: 1) engaging in
	knowledge management	from the SME Business	knowledge management
	and innovation behaviors	Policy Panel that has been	can develop absorptive
	in SMEs.	tracked longitudinally by	capacity of a firm, which
		EIM Business Policy and	consequently contributes
		Research since 1998. The	to innovation orientation
		total panel consists of	and in turn, innovation
		about 2000 SMEs and is	behavior of the firm; 2)
		stratified according to	knowledge management,
		sectors (manufacture,	including external
		construction, retail and	acquisition and internal
		wholesale, and service)	sharing, has a positive
		and size classes (0-9, 10-	effect on innovation
		49 and 50-99 employees).	behavior of a firm; and 3)
			innovation orientation
			plays a mediating role in
			the relationship between
			knowledge management
			and innovation behavior.

(Haibo,	The research considers	This paper uses a sub-	The study indicates that
2009)	three aspects of the	sample of firm-level data	knowledge management
	knowledge Management	from a longitudinal SME	practices and
	practices which include	Business Policy Panel of	organizational learning
	external acquisition,	Dutch SME funded by the	are closely interrelated
	internal sharing and	Dutch government. The	with each other in SMEs.
	storing of knowledge.	panel data are collected by	
		EIM Business and Policy	
		Research three times per	
		year. The total panel	
		consists of about 2000	
		SMEs and is stratified	
		according to sectors	
		(manufacturing,	
		construction, retail and	
		wholesale, and service, etc.)	
		and size classes (0-9, 10-49	
		and 50-99 employees).	
(Miguel,	This paper model	608 companies are	One of the main
2010)	structural relationships	considered for sampling.	conclusions from the
	between knowledge	441 surveys are received,	suggested model and
	management and the	representing 72.5%	the research developed
	growth of the activity of	sample. From these, 208	is the existing
	the SMEs with greater	companies have been	relationship between
	focus on innovation.	detected with greater focus	the proxy variables of
		on innovation, and full	the Intellectual capital
		economic and financial	management and the
		information from a total of	growth rates of the
		163 companies for the	business activity in the
		2003, 2004 and 2005 years	companies with a
		were collected.	greater strategic focus
(Tunc, 2007)	The aim is to find out	A questionnaire prepared	The results of the
	the senior managers'	to gather knowledge from	survey show that
	perceptions about the	randomly selected	Turkish SMEs have no
	extent to which the	manufacturing companies	inclination towards
	components of KM	was sent to their senior	sharing knowledge
	contribute to the	managers. It is asked to be	even inside the
	success of SMEs in	filled by the presidents,	company. There is a
	Turkey.		fear of losing control by
		directors, assistant	managers.
		directors, etc. who work	
		for the company for at	
		least three years.	

(n. )	I	I	l '
(Egbu, 2000)		The information	The paper makes an
	•	presented in this article	attempt to analyze, a
	culture, commitment	has taken from three main	
	and motivation as	sources. Firstly, some of	of the knowledge
	important variables in	the materials presented	content, people,
	the effective	are based on a two-year	processes, culture and
	management of	research project funded	technology, and their
	organizational	by the Economic and	interdependence is vital
	knowledge.		in any coherent and
		(ESRC) under its	robust strategy for
		innovation Programme.	managing
		The study involved four	organizational
		case studies from four	knowledge in
		different innovative	construction.
		construction	
		organizations; over 50	
		ethnographic interviews,	
		company archive documents and video	
		capture of innovative	
		Processes and products.	
(Rajesh,	Carried research works	Collected from Indian	Some of the important
2008)		automotive component	opinions of the
2000)	in KM in SMEs in India,	manufactures SMEs.	research include,
	with particular	manufactures SWLs.	customer-focused
	reference to the		knowledge is the most
	automotive component		common KM strategy
	sector.		among Indian
			automotive component
			manufacturers. Top
			management is more
			active and supportive in
			KM initiatives in
			international auto
			component
			manufacturers. Indian
			SMEs need to focus
			more on the strategic
			issues in KM for reaping
			the benefits of KM for
			sustainable
			competitiveness. The
			research conducted has
			also highlighted the
			need of IT for KM in
			Indian SMEs.

#### 6. Conclusions

The current study article covers some of the issues and challenges pertaining to the implementation of knowledge management in Indian SMEs. The article provides the importance of knowledge, knowledge capturing and steps, knowledge capturing challenges, and knowledge management opportunities and advantageous pertaining to Indian SMEs. It also highlights some of the important research findings in integrating KM in SME sector.

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# A Study on Consumer Preference towards Instant Food Products

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#### **Abstract**

Food is a basic need which is to be fulfilled for everyone's survival. Previously every food was prepared by the people in their home itself. But in the present fast moving world time has become precious, many have changed their food habits and shifted to a number of instant food products. Instant food products play a very significant role in the present day situation where both men and women are employed. Since the demand for instant food products are picking up, number of manufacturers entered in to the field of instant food products with different brand names. Thus the consumers can choose any brand of their own choice. In this research paper an attempt is made to ascertain the consumers' preference towards instant food products. For analytical purposes, statistical tools such as chi-square test and factor analysis are used. The results reveal the fact that there is no association between occupation, family monthly income, family type and spouse employment and the monthly expenditure on ready-to-eat instant food products. Further the factor analysis indicates that packing, hygiene, societal influence and influence of advertisement play an important role in forcing the customers to buy the instant food products.

**Key Words:** Consumer preference, Instant food products, Chi-square test and Factor analysis

#### 1. Introduction

Food is required for the physical existence of every living thing. It is any substance consumed to provide nutritional support for the body and which can be metabolized by an animal to give energy and build tissue. As far as human beings are concerned, they give more importance to tasty food. In olden days, people used to have their food prepared by themselves. The food was properly processed for improving the quality, and nutritive value and preventing the deteriorative changes. One may witness changes in the food habit mainly due to increase in the ratio of working women, increased urbanization, impact of western culture, and changes in lifestyle. Now-a-days priority is given to

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instant food products by many people instead of traditional home made food products. The changes in the business and marketing environment lead to the production and marketing of different goods and services to satisfy various needs of modern consumers and hence instant food products.

The term "instant food" refers to simple, fast and convenient food and at the same time it is also easy and fast to prepare. It is also free from microbial contamination and it possess the characteristic of hygiene nature These food products may be in the form of packed products which are ready to eat, ready to cook and the like. In the market there are a number of products which make the cooking more convenient. For the purpose of this research the instant food products are classified into two categories such as ready-to-eat items including the items which require simple boiling or heating or mixing with water, such as, noodles, chapathi mix, parota mix, idli/dosa mix, rava dosa mix, bajji mix, briyani mix, puliyodara mix, gulab jamoon mix, and chatni mix and readymade cooking materials which make the cooking more convenient include sambar powder, chilly powder, rasam powder, turmeric powder, idli chilli powder and the like. A large number of branded and unbranded items are available for these products. Consumers get information about these products from various sources such as advertisements in TV, Radio, Newspaper and Magazines, shopkeepers, neighbours, relatives, friends, children and window display.

While purchasing instant food products a number of factors influence the purchase decision of a consumer. These factors are classified into four categories such as packing of the products, hygiene, societal factor and influence of advertisement. Considering these factors, a consumer may prefer any brand of instant food products as his/her choice. In order to probe into these factors the researcher has made an attempt to study the consumer preference towards instant food products.

#### 2. Objective

- To identify the brand preferences of the respondents for instant food products.
- To test the significant relationship between socio-economic factors and monthly expenditure spent on instant food products
- To test the significant relationship between socio-economic factors and the factors influencing the purchase decision of a particular brand
- To identify the factors influencing the consumers to prefer instant food products

# 3. Hypotheses

- There is no significant relationship between socio-economic factors and monthly expenditure spent on instant food products
- There is no significant relationship between socio-economic factors and the factors influencing the purchase decision of a particular brand
- Packing and hygiene factors influence people to purchase instant foods

#### 4. Scope

The present study covers Dindigul town only. The data are collected from only those who are using instant food products. The study is undertaken in the time period between May and July 2013. This study is about consumer preference towards instant food products which covers Ready-to Eat items such as, Noodles, Parota Mix, Idli/Dosa mavu, Bajji Mix, Briyani Mix, Gulab Jamoon Mix, Puliyodara Mix, and Chatni Mix and Readymade Cooking Materials such as, Sambar Powder, Chilli Powder, Rasam Powder, Turmeric Powder, and Idli Chilli Powder in vegetarian category and Chicken 65 Powder, Fish Fry Masala, Mutton Masala, Chilli Chicken Masala and Fish Kulambu Masala in non-vegetarian category.

#### 5. Review of Literature

Rees (1992) identified flavor, texture, appearance, advertising, reduction in traditional cooking as the most influencing factors of consumers' choice towards food products. Brown et al. (2000) analysed the young consumer's preferences towards food by analyzing their nutritional awareness behavior under home, school and social environment and found that most of the young consumers' food preference is "fast food" which was definitely not suitable for them. Shivkumar (2004) identified that family members, recommendation of the dealer and advertisement plays a vital role for a consumer to prefer instant food products irrespective of the income group, Ramasamy, K., et al. (2005) identified that the awareness and attitude towards the product played a major role in influencing its buying behavior. Tamlurkar (2006) has mentioned that emergence of industrial societies, reduced domestic servants, women folk going to the jobs and the emergence of nuclear families is an important factor for preferring instant products. Usha (2007) analysed the existing buying behavior of Instant Food Products by individual households and predicted the demand for instant food products in Kolar District. She used multi-stage random sampling technique and concluded that the study area is not purchasing the Dosa/Idli mix, pickles and sambar masala even though they are readily available because of high price, low quality and poor taste. So she suggested to the manufacturers to give importance to the quality of instant food products and create awareness about these products through media especially in rural areas. Hirekenchanagoudar Renuka (2008) found that a majority of the residents of Hubli and Dharwad purchased biscuits, chips, fruit juice and ice creams and so she opined that there is a wide scope for this type of business and concluded that the purchase of these products was impulsive and most of them were health and quality conscious. Albayrak Mevhibe and Alan Zekiye (2009) tried to compare the consumers' attitudes and preferences towards the food products of manufacturers and private brands. They found that there was a good awareness about the private food products among a good number of respondents. Makgosa Rina and Mabalane Nohenesi (2011) analysed the consumer perception towards health, convenience, price, and service of Fast Food Restaurants. The results of their study revealed that the consumers in Botswana had negative perception about the health aspects of fast food restaurants. Price and Service are viewed positively.

Finally they suggested that the fast food restaurant managers have to improve the hygiene, cleanliness, quality ingredients, reasonable price and focus more attention on improving service delivery. Swamy Bala et al. (2012) made an attempt to analyze the existing buying behaviour of Instant Food Products by individual households and to predict the demand for Instant Food Products of Hyderabad city in Andhra Pradesh. They identified the factors that influenced brand preference of the selected instant food products as best quality followed by retailer's influence, ready availability and convenience. According to Pradeepa and Kavitha (2013) technological changes and the changes in the lifestyles of the people followed by convenient usage, easy availability, less time consumed and better taste are the main reasons behind the rapid growth of the instant food industry.

# 6. Methodology

An interview schedule was administered and Quota sampling technique was used to collect data from 150 respondents in Dindigul Town covering respondents from five quotas such as, Labour, Self employed, professionals, private sector employees, and government sector employees. Statistical tools applied for the analysis are: Percentage analysis, Chi-Square test and Factor analysis

# 7. Limitations of the Study

This study is based on convenient sampling which is a non-random sampling technique. So the results of the study cannot be generalized. As the study records the past events of the respondents, their responses are based on their memory recall.

#### 8. Analysis and Interpretation

In order to analyze the consumer preference towards instant food products, it is essential to analyze the socio-economic profile of the respondents. In Table 1 Socio-economic profile of the respondents is presented.

Table 1 shows that out of 150 sample respondents, 36% are in the age group of 25-35, 58% are females, 34% have educational qualification upto HSc, more than half of the respondents (52%) are from rural areas, 35.30% have the family's monthly income of upto Rs.10,000, major portion of them (60.70%) are in nuclear family system, 52% have 2 to 4 dependents, nearly two-third (66%) of them are non-vegetarian, and 60.70% of the respondents' spouses are employed.

Monthly expenditure of instant food products and their timing of purchase

The life style of the people has changed which in turn is having an impact on demand for instant food products. For analysis purpose, instant food products are classified into two as (1) Ready-to-eat items (with simple boiling or heating or mixing with water or with rice) and (2) Readymade cooking materials. Since instant food products are available in

small packets, the problem of storing does not arise. Further people can buy as and when they require it. In Table No 2 monthly expenditure of instant food products and their Timing of purchase are analyzed.

**Table 1: Socio- Economic Profile** 

Particulars		Respondents		
Valid		Frequency	Percentage	
Age	Upto 25	34	22.70	
	25-35	54	36.00	
	35-45	32	21.30	
	45&above	30	20.00	
	Total	150	100.00	
Sex	Male	63	42.00	
	Female	87	58.00	
	Total	150	100.00	
Education	Upto Hsc	51	34.00	
	UG	33	22.00	
	PG	37	24.70	
	Professional	25	16.70	
	Any other	4	2.60	
	Total	150	100.00	
Area	Rural	78	52.00	
	Semi-urban	40	26.70	
	Urban	32	21.30	
	Total	150	100.00	
Family Income (🔻)	Upto 10,000	53	35.30	
	10,000-25,000	43	28.70	
	25,000-50,000	38	25.30	
	50,000 & above	16	10.70	
	Total	150	100.00	
Family Type	Joint family	59	39.30	
	Nuclear	91	60.70	
	Total	150	100.00	
Number of dependents	Upto 2	24	16.00	
•	2-4	78	52.00	
	4 & above	48	32.00	
	Total	150	100.00	
Food Habit	Vegetarian	51	34.00	
	Non-vegetarian	99	66.00	
	Total	150	100.00	
Employment of spouse	Employed	91	60.70	
	Not employed	59	39.30	
	Total	150	100.00	

Source: Primary Data

Table 2: General details about monthly purchase of instant food products

Particulars	Ready-to	-eat items	Readymade cooking materials		
Particulars	Frequency	Percentage	Frequency	Percentage	
Monthly Expenditure (₹.)					
Upto ₹1000	119	79.30	140	93.3	
1,000 – 1,500	7	4.70	6	4.00	
1,500-2,0000	12	8.00	1	0.70	
2,000 & above	12	8.00	3	2.00	
Total	150	100.00	150	100.00	
Timing of purchase					
Planned	73	48.70	75	50.00	
Occasional	55	36.70	58	38.70	
Impulsive	22	14.70	17	11.30	
Total	150	100.00	150.00	100.00	

Source: Primary data

From the above Table 2, one can state that frequency of purchase of instant food and cooking material is heavy among people who spent up to  $\P$  1000 for such items. The respondents have got information from various sources. Nearly 50% of the respondents are able to plan their purchases well in advance and hardly 15% of the respondents are not able to plan in advance and their buying behavior is impulsive in nature.

# **Brand Loyalty**

A number of branded products are available in instant food product market. Consumers may prefer to buy branded products of their choice. In Table No 3 brand preferences are analyzed

In case of Ready- to -eat items, for Noodles 1/3<sup>rd</sup> of the people prefer Maggie, and 1/3<sup>rd</sup> of the people do not buy noodles at all. As regards parota mix 2/3<sup>rd</sup> of the people do not prefer it, and regarding idly and dosai mavu more than 1/3<sup>rd</sup> of the people are not buying it. Further people are not aware of local brands as regards rava dosa mix, 75% of the people are not buying it and GRB is popular among buyers for it. For Bajji mix, MTR is popular among buyers, for Briyani Mix, Aachi brand is popular, for Gulobjamun mix MTR tops the list of brand preferences, for Puliyodarai mix only a very small percentage prefer Aachi brand, for chatni mix Anil brand is popular among users. In case of readymade cooking materials it is observed that Sakthi brand leads the brand preference. As regards non-vegetarian items Sakthi brand is far ahead of other items. In case of fish kulambu masala though 50% of the non vegetarians are not buying, sakthi brand is still popular in this segment also. The analysis clearly shows that in readymade cooking materials, Sakthi masala is the leader in the market followed by Aachi and Anil.

**Table 3: Brand Preferences for Instant Food Products** 

	Not aware of brand name	Brand name	Frequency of brand selected	Not buying
Ready -to- eat				, ,
Noodles	11	Maggie	51	
		Top Ramen	16	
		Foodles	11	
		Yipee	10	
		Anil	3	48
Parota Mix	21	Valis	9	
		Anil	8	
		Krisna	6	106
Idli/Dosa	33	Different home-made	57	60
Rava dosa	4	GRB	20	
		Krisna	19	
		Anil	16	91
Baji mix	16	MTR	25	
		Aachi	14	
		Sakthi	5	90
Briyani mix	14	Aachi	22	
		Sakthi	12	
		J.T.	6	96
Gulab Jamoon	22	MTR	39	
mix		Ruchi	16	
		Aachi	10	
		Milkmaid	1	62
Puliyodara	3	Aachi	12	
Mix		Sakthi	9	126
Chatni mix	1	Anil	12	135
		Everest	2	
Readymade coo	oking materials			
Sambar	12	Sakthi	61	
powder		Aachi	31	
		Ashirwad	2	44
Chilli powder	11	Sakthi	63	
		Aachi	23	
		Ashirwad	2	51
Rasam	18	Sakthi	34	

powder		Aachi-	12	
		Everest	2	84
Turmeric	19	Sakthi	45	
powder		Aachi	29	
		Natraj	3	54
Idli chilli	23	Aachi	28	
		Sakthi	10	
		Krisna	11	78
Chicken 65	7	Sakthi	63	
Powder		Aachi	22	
		Everest	3	4
Fish fry	7	Sakthi	31	
masala		Aachi	15	
		Everest	4	42
Mutton	6	Sakthi	31	
masala		Aachi	23	
		Everest	2	27
Chilly	6	Sakthi	35	
chicken		Aachi	20	
		Preethi	6	32
Fish kulambu	6	Sakthi	23	
masala		Aachi	13	
		Everest	8	49

Source: Primary Data

Impact of socio-economic factors on monthly expenditure on instant food products

The socio economic factors such as Occupation, Family monthly income, Family type and Spouse employment may have influence on monthly expenditure on instant food products. In order to analyse this aspect, Chi-square test has been used and the same has been presented in Table No.4.

In the case of ready-to-eat items one do not observe any significant relationship between Occupation, Family monthly income, Family type and Spouse employment and Monthly expenditure on ready-to-eat items, whereas in the case of readymade cooking materials, there is a significant relationship between family monthly income and spouse employment and monthly expenditure on them. It also shows that there is no significant relationship of Occupation and Family income with monthly expenditure on cooking materials. It means that work pressure forces people to go in for readymade cooking materials. Hence the first null hypothesis that there is no significant relationship between socio- economic factors and monthly expenditure spent on instant food products

regarding ready-to-eat items is accepted, and regarding monthly expenditure on readymade cooking materials, the null hypothesis relating to Occupation and Family type is accepted and relating to Family monthly income and Spouse employment is rejected.

Table 4: Relationship between socio-economic factors and monthly expenditure spent on instant food products

Socio economic factors	Monthly expenditure on ready-to- eat items			Monthly expenditure on readymade cooking materials				
	Chi	d.f.	Table	Significance	Chi	d.f	Table	Significance
	square		value		square		value	
	value		@ 1%		value		@ 1%	
			level				level	
Occupation	16.667	12	18.5	Not	17.044	12	18.5	Not
				significant				significant
Family	9.929	9	14.7	Not	30.156	9	14.7	Significant
monthly				significant				
income								
Family type	1.094	3	6.25	Not	1.678	3	6.25	Not
	significa		significant				significant	
Spouse	1.162	3	6.25	Not	11.975	3	6.25	Significant
employment				significant				

Source: Primary data

Relationship between socio-economic factors and the factors influencing the particular brand of instant food products

There may be a significant relationship between socio-economic factors and the factors influencing the purchase decision of a particular brand of instant food products. The following Table 5 shows the analysis with the help of Chi-square test.

Table 5: Relationship between socio-economic factors and the factors influencing the particular brand of instant food products

	Factors	Chi square value	d.f.	Table value @ 1% level	Significance
1	Occupation	11.239	8	13.4	Not significant
2	Family monthly income	8.210	6	10.6	Not Significant
3	Type of family	2.802	2	4.61	Not significant
4	Spouse employment	0.178	2	4.61	Not significant

Source: Primary data

The above analysis indicates that, all the four factors mentioned above are not having any influence in selecting the brand of instant food products. Hence the second null hypothesis that there is no significant relationship between socio-economic factors and the factors influencing the purchase decision of a particular brand is accepted.

Dominant factors for buying instant food products - Factor analysis

For the purpose of understanding the factors which influence people to buy instant food products factor analysis is applied. Thirteen variables were identified as influencing factors. To test the adequacy of the sample Kaiser-Meyer Olkin test was calculated and it was 0.759. It shows that the sample is fit for further analysis. The overall significance of correlation matrix was tested with the help of Bartlett test of Sphericity (chi- square 646.735 and significant at 0.000) It also supports the validity of further analysis. The principal component analysis was employed for extracting factors and orthogonal varimax rotation was applied. The variables whose communalities were greater than 0.50 were retained. For the purpose of study four factors having Eigen values greater than one were extracted. The Eigen values of the four factors along with the cumulative percentage of the variance are presented in Table No 6.

**Extraction Sums of Squared** Rotation Sums of Squared Initial Eigen values Loadings Loadings Component % of Cumulative % of Cumulative % of Cumulative Total Total Total Variance Variance Variance % % % 3.981 26.537 26.537 3.981 26.537 26.537 3.032 20.213 20.213 2 2.295 15.299 41.836 2.295 15.299 41.836 2.739 18.263 38.476 3 1.471 9.807 51.643 1.471 9.807 51.643 1.622 10.813 49,289 7.143 4  $1.07\overline{1}$ 58.786 1.071 7.143 58.786 1.425 9.497 58.786 5 6.227 .934 65.013 70.504 6 .824 5.491 7 .745 4.968 75.473 4.398 79.871 8 .660 9 .611 4.071 83.942 10 .526 3.508 87.450 90.809 11 .504 3.359 12 .436 2.906 93.715 14 .316 2.108 98.520 .222 1.480 100.00

**Table 6: Total variance explained** 

In Table No 3 Eigen values associated with each linear component (factor) before extraction, after extraction and after rotation are presented. We have identified 15 factors within the data set. The Eigen values associated with each factor represent the variance explained by that particular linear component and the table also displays the Eigen values in terms of percentage of variance explained (factor one explains 26.53% of the total variance). It is very much clear that the first few factors explain relatively large amount of

Extraction Method: Principal Component Analysis.

variance particularly factor one, whereas subsequent factors explain only small amount of variance. We have extracted factors with eigen values greater than one which leaves us with four factors The eigen values associated with these factors are again displayed in the columns labeled extraction sum of the squared loading The cumulative values of the four dominant factors was found to be 58.786%

In Table No 7 loading of the variables under each of the four extracted factor is presented

**Table 7: Rotated component matrix** 

	Component				
	1	2	3	4	
Availability	.782				
Re-usable Packing	.719				
Convenient to store	.704				
Small pack	.682				
Attractive packing	.561				
Easy to handle	.549				
Hygiene		.867			
Healthy		.855			
Quality		.626			
Tasty		.531			
Influence of children			.799		
Influence of neighbor			.790		
Influence of advertising				.824	

Extraction Method: Principal Component Analysis Rotation Method: Varimax with Kaiser Normalisation

# a. Rotation converged in 4 iterations

The first factor "Packing" explained 26.537% of the variance. It consists of six variables. The first variable is the availability of the instant food products with the factor loading of 0.782 since they are available in every retail shops. The second variable is the re-usable packing of the instant food products with the factor loading of 0.719 as the pack can be reused for other domestic purposes. The third variable is the convenience of storing the instant food products with a factor loading of 0.704. The fourth variable is the small pack of the product with factor loading of 0.682 since people prefer many products which are compact and take less space in the shelf. The fifth variable is the attractive packing of the product with the factor loading of 0.561. The last variable is easy handling of the instant food products with the factor loading of 0.549.

The second factor "Hygiene" explained 15.299% of the variance. It consists of four variables. The first variable is the hygiene of the instant food products with the factor loading of 0.867 since people are being educated and more concerned about hygiene. The second variable is healthiness of the instant food products with the factor loading of 0.855. The third variable is the quality of the instant food products with the factor loading of 0.626 since many consumers have started importance to the quality products. The ending variable is the tastiness of the instant food products with the factor loading of 0.531 as many people take these foods for tastiness instead of fulfilling the hunger.

The third factor "Societal influence" explained 9.807% of the variance. It consists of two variables. The first variable is the influence of children in the buying of instant food products with the factor loading of 0.799. The second and last variable is the influence of neighbor in the buying of instant food products with the factor loading of 0.790. In the present day situation, one cannot avoid the influence of the society in making a buying decision.

The last factor "Influence of advertising" explained 7.143% of the variance. It consists of only one variable that is the influence of advertising in the buying of instant food products with the factor loading of 0.824. Today advertising plays a major role in influencing the people to buy any product especially instant food products.

Hence it is concluded that factors like packing, hygiene, societal influence and influence of advertisements are the main factors influencing the people to purchase the instant food products.

#### 8. Conclusion

Rapid changes are noticed in the buying behavior of customers towards instant food products and instant cooking materials. As regards brand loyalty Sakthi products followed by Aachi products are well remembered in readymade cooking materials. For the purpose of analysis, a comparison is made between socio-economic factors such as, family monthly income, occupation, family type and spouse employment and brand preferences and the results show that these factors are not having any relationship with brand preferences. The analysis of impact of socio economic factors on monthly expenditure on instant food products, occupation, family monthly income, family type and spouse employment do not have any impact on monthly expenditure on ready-to-eat items, occupation and family type do not have any impact on monthly expenditure on readymade cooking materials and the family monthly income and spouse employment have the impact on the readymade cooking materials. The factor analysis clearly establishes the fact that packing, hygiene, societal influence and influence of advertisement play a predominant role in forcing the customers towards instant food products and readymade cooking materials. Therefore manufacturers are suggested to concentrate on advertising the instant food products attractively and differently by using celebrities to popularize the usage of these products. Further they have to give attention to convenient, attractive, reusable, and compact packing since packing is the tongue of the company through which it speaks. In general there is a thought among several people that instant food products erode our health. So the manufacturers have to do a tremendous work in proving that it is just a myth and inculcate in their minds that they are good for health. Since the demand for instant food products are gaining momentum, manufacturers should concentrate on the factors mentioned above so as to increase their market share. But at the same time it is to be borne in mind that advertising and packing will definitely increase the cost of the product. As a result the price will also increase. Hence it is the duty of the manufacturers to make the consumers realize that the price charged is reasonable for the quality.

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# Do Women Still have A Medieval Mindset towards Themselves? A study on the Impact of Decision Making Index in Empowering Woman Entrepreneurs

#### Dr. Sonia Selwin & Shaista Banu Harris

#### **Abstract**

Empowerment of women entrepreneurs in India is gaining importance during the past years. But we need to study if women still have a medieval mindset. This can be found by the decision making empowerment index which shows the attitude of the women about their decision making ability. It is assumed that women with medieval mindset believe that they should not be involved in major household decision making and a good wife listens to every decision and follows what the husband demands. Hence we see that decision making is the key to empowerment. The research philosophy underpinning this study was objectivist ontology and positivist epistemology positions. A descriptive research design, empirical and quantitative research approach was followed. 130 women entrepreneurs from 4 States in South India were interviewed using convenience sampling technique. Decision making empowerment index were calculated. Based on the result in ANOVA, it was found that there was a significant difference among the four groups of respondents regarding their empowerment index. The analysis further shows that decision making empowerment index was moderate. The research provides insights on how to improve the empowerment of women entrepreneurs.

**Key Words:** Power, Empowerment, Women entrepreneurs, Decision making, Entrepreneurship

#### 1. Introduction

On this year's International Women's Day, there was a statement brought out by Mr. Rahul Gandhi, the Vice Chairman of the Indian National Congress Party in The Economic Times which demands attention. He said that there is a need to change the "Medieval mindset" and give women leadership positions in politics, business and social spheres to ensure rightful place for them in the society. Rahul (2014) http://economictimes.indiatimes.com/topic/Rahul Gandhi. Taking this into consideration, one would wonder if modern society still has a "Medieval mindset" towards women. This study is focused on the women entrepreneurs themselves if they

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still have a medieval mindset towards themselves. Unless women have a change from within her, no one else can help her. It is said that most times "The worst enemy of a person is one's own self". Hence women must be first empowered within and expose this empowerment in their household decisions first before she reaches out to the society. Women should be respected and be given equal status in economic and social life. One of the means to equal status which is most notable and universally accepted is empowerment through social entrepreneurship propounded by Mr. Mohammed Yunus, the father of micro finance, Bangladesh. Studies need to be conducted to find out if women still have a medieval mindset where they believed that women should not be involved in decision making of the household and a good wife listens to every decision and follows what the husband demands. Empowerment of women can start from within herself and that empowerment is lighted by taking part in the decisions in the household level. Taking part in decisions regarding family matters like spending money, decisions related to the children, freedom to visit places and so on definitely makes the women feel responsible and empowered.

Conceptualization of empowerment is exceedingly diverse. The empowerment of women is multi-dimensional which includes political, social, economic, participation and so on. The role of women in decision making in issues relating to political, social, economic or participation plays a pivotal role in their empowerment. Hence we see that decision making is the key to empowerment. Decision making is one of the key sources of empowerment of women. What matters most is how the decisions are taken. The following points should be considered, the situation, initiativeness, the context and the autonomy in which the women take decision. Moreover the influence of the other members of the family in the decisions taken by the women entrepreneur is a very important factor to be considered to realize the extent of empowerment of women entrepreneurs. This study makes an in-dept analysis of the impact of decision making on the empowerment of women entrepreneurs. This would indeed be a base for the policy makers to boost up the empowerment of women entrepreneurs.

# 2. Review of Literature

*Entrepreneur and entrepreneurship* 

Entrepreneurship is the process of spotting out the right business and running the business which would produce profit. Entrepreneurship involves proper planning to invest and carry out the business activities. The entrepreneurs are the persons who start the business and those who take risk so that they can get profit.

Women entrepreneurs have a pivotal role in the development of the Indian Economy. Though they are not given attention and talks about their role is put aside, still ever person knows that if given the push, they could definitely raise up contributing to the household income, society and the nation as a whole. The role of women entrepreneurs will help them have access to financial resources, possess properties and bring about

transformation in India both socially and economically. Many micro enterprises have emerged as a result of Social Entrepreneurship which is enhancing the status of women in India by transforming them as the agents of social betterment by seizing more economic opportunities otherwise left unexplored.

According to Cole (1959) 'Entrepreneurship is the purposeful activity of an individual or group of associated individuals undertake to initiate, maintain or organize profit oriented business unit for the production or distribution of economic goods or service'. Women can definitely be involved in business which would help them become socially empowered.

# Women entrepreneur

Vinza (1987) defines woman entrepreneur as "a person who is an enterprising individual with an eye for opportunities and an uncanny vision, commercial acumen, with tremendous perseverance and above all a person who is willing to take risks with the unknown because of the adventurous spirit she possesses." This study focuses only on the women who are currently running a business. They have vision of flourishing in the business and persevere to be successful in their enterprise.

# Entrepreneurs under study

The study by Archer (2009) depicts three distinct groups of Entrepreneurs in microfinance. The first is the MFI founders, who are termed as "Social Entrepreneurs". They are centered on a "social value proposition". The second are the "Necessity Entrepreneurs" who are the microfinance borrowers. They are forced to start a business in order to survive. The third is the "Device Manufacturer" from whom products are purchased with microfinance loans. They are said to be "Commercial Entrepreneurs". In this study, the researchers have focused on the Necessity Entrepreneurs. The women entrepreneurs in Madurai under study have mostly borrowed money to start their micro enterprise.

#### **Empowerment**

While trying to define empowerment, one must first be able to understand what is power. Power is the ability to take decision and enforce what a person thinks without the influence of another party. Hence if a person is to be disempowered, that person does not have the capacity to take own decision and is influenced by another party in every decision he makes. But mere ability to take decision cannot make a person empowered. According to Kabeer (2001), there are three inter-related components in empowerment.

Resources: or "enabling factors" or "catalysts" for conditions under which empowerment is likely to occur i.e., they form the conditions under which choices are made; Agency: which is at the heart of the process through which choices are made, and; Achievements:

which are conceived as the outcomes of choices. These three processes will help a person to achieve empowerment.

Empowerment of women is about increase in the ability to decide things by themselves that will improve the wellbeing of the women at home, community and in the nation. Women who has more decision making power and self-reliance over various household activities may be more empowered when compared to the ones who do not possess these qualities.

The terminology of women development itself has been shifted to various terms during the past years and now it has been ultimately coined as "Women Empowerment". Empowerment of women is defined in many ways by different thinkers. To mention a few, Kabeer (2001) opines empowerment as "The expansion in people's ability to make strategic life choices in a context where this ability was previously denied to them.". Further women's empowerment should lead to the liberation of men from false value systems and ideologies of oppression. It should lead to a situation where each one can become a whole being, regardless of gender, and use their fullest potential to construct a more humane society for all. (Batliwala 1994).

According to Selwin (2013), Empowerment in is a multi-pronged process, through or by an entity or entities, of developing and enhancing of an individual's personality, skills and resources and to fulfill one's legitimate individualistic human needs and to overcome impediments, for happiness and rational contentment in life in a definite context. Thus, the ultimate outcome of an individual's empowerment can be assessed by the level of happiness a person possesses. "Economic resources are not that all matter in people's lives" warns Gurría (2008), Secretary -general of the 32 Country Organizations for Economic Co-operation and Development (OECD). Although there are many catalysts that help women become empowered, it is the women themselves who should be bold enough to break through the barriers and be empowered. "Women need to be able to assert their own agency to break out of gender discrimination." (Hannan, 2004). A feasible way to achieve this is by starting micro enterprises whereby economic, social and psychological empowerment could be achieved. The women should be motivated to participate in training programs so that they can develop themselves and improve their decision making power. Though there are many programs conducted for the development of women, researches show that women reap minimum benefits.

# Micro finance & Empowerment

Micro finance has been developed and supported by governments all over the world as it has been proved time and again that it indeed empowers people, women in particular. This concept was specially implemented on women all over the world which resulted in improving the financial conditions of women entrepreneurs.

Leach and Sitaram (2002) studied the impact of micro finance on women's empowerment and came out with a controversial result which stated that the Indian Sudra Women were not empowered due to their involvement in the Silk reeling business. Women were underpaid in the silk reeling industry. To study how women were empowered through micro finance, women were encouraged to start silk reeling enterprise. After three years of observation, it was seen that none of the women was better off but they became more indebted. And they were relieved at not having to take up the so called 'empowering' project again.

Tripathy (2005) emphasized on the micro enterprise as a step towards rural women empowerment. The basic hypothesis was the empowerment process begins with and is supported by economic independence of women. A comparative analysis was made between micro entrepreneurs and non entrepreneurs and housewives. It was found that the equity in the food consumption pattern and asset ownership in the family were better for the micro entrepreneurs than for the non entrepreneurs and housewives. Moreover, the gender inequity in workload burden is seen more prominent among the working women than the housewives. Thus the findings suggest that there is empowerment of rural women through micro enterprises.

In spite of various researches supporting micro finance, there are researches which also give the drawback of micro finance. Emily (2005) through her study in Zimbabwe conducted an Ethnographic research, which studied the women entrepreneurs prove that group lending and business training programme in urban Zimbabwe failed to meet the needs of most informal entrepreneurs because they offer a poor cultural fit with the target population and because they are rarely able to cultivate entrepreneurial skills such as innovation and market discovery among their clients.

Loman (2006) studied 36 women entrepreneurs in Madurai district using both quantitative and qualitative method of data collection. He focused on the impact of the Shakti-project on the poor rural Indian women in terms of empowerment and increased income. Empowerment was limited to economic, social and cultural domains. It was found that entrepreneurs were economically poor but not poorest of the poor. Changes in empowerment were found especially within the social and cultural domain. They were self confident, proud of themselves and treated with respect. The concept of empowerment was found to be a useful tool to study changes in the lives of entrepreneurs.

Studies also have been conducted on the empowerment index of women entrepreneurs. In the study by Kamal & Princy (2006), the evidence of women's empowerment in India is portrayed. Study was conducted on married women aged 15 to 49. In order to measure the different dimensions of empowerment, four indices were created viz. Household autonomy index, mobility index, attitude towards gender index and domestic violence index. Multi logistic regression analysis was used to find out the important

determinants for women's empowerment. It was found that 43 percent of the women had high household autonomy, 23 percent had high freedom to move outside their home, 40 percent have no gender preference attitude; and only 43 percent of the women defy domestic violence. There was significant divergence in these indices of women's empowerment among the different states. Women's educational level was an important predictor for all the four dimensions of women's empowerment.

Moreover, Makombe (2006) explored and described the extent of the SIDO/UNIDO WED programme in the empowerment women micro entrepreneurs in Tanzania. Using a cross-sectional and casual comparative research design, both quantitative and qualitative data were collected. He points out that the WED programme-supported the women to become empowered in almost all indicators. However, they lacked self-reliance over their assets like their counterparts in the control group. The findings on women's freedom of movement show that it is an area where traditional ideologies, as structural factors are resistant to changes normally influenced by women's income. The majority of interviewees from both categories were of the view that husbands and wives should have equal say in decision making and division of labour between husbands and wives should also be equal. Such study are few in India. Though women are weak in physical strength when compared to men, they have strength in her state of mind and strength of character which compensates the lack of physical strength, which many a times is not recognized (Brahm, 2005).

# Decision making and empowerment

Muzamil & Shubeena (2008) had undertaken to analyze the Decision-Making Power among married and unmarried women. Scale regarding 'Decision Making Power among Women' was used on 100 women, selected through multi-stage sampling method. The paper reveals that there is no significant differences between married and unmarried women regarding their decision making power. However, highly significant differences are observed, between married and unmarried women, related to their empowerment. Women generally possess low decision making power and are mainly dependent on masculine and/or familial decision making.

Ajeet & Nalin (2009) claimed that Autonomy has a multi-dimensional aspect such as civil, political, social, economic, cultural participation and rights. According to them empowerment starts from home where they have control over the resources. There is inequality when women don't have decision making power and less control over the resources.

Their objectives firstly was to investigate the percentage involved in decision making power of women in socio-cultural, socio-economic and health aspects of their own lives; Secondly, the assessment of regulatory factors or ability to formulate the decision making power and thirdly, the comparative account of women's empowerment and its associated

factors through the comparison between working (paid and un-paid workers) and nonworking women. Analysis showed that women had more autonomy through the decision making power on different aspects of life such as household, access to money, self-health care and freedom of movements to relative's house or to the market. The study also provides socio-cultural and socio-economic variations in the level of empowerment. The striking feature is that among the paid workers, decision making power in spending the earnings are seen to be high in Jammu, Goa, New Delhi and low in Nagaland, Mizoram, Orissa, Madhya Pradesh etc. Zonewise, highest degree is found in North zone and lowest in Central zone. Women's autonomy through the comparison among three working categories viz. non-working, working (paid) and working (unpaid) is seen to vary in different spheres of cooking, buying jewelry. Earning women have greater access to decision making power. But in case of access to money, there is no significant difference between non-working and working (paid) women. Among the other two of decision makings such as mobility and health care, non-working women shows lesser ability in mobility. In health care ability, lesser autonomy is found among the working (unpaid) women than non-working and working (paid) women. This study was a detailed study of the decision making power of women taking in consideration most of the states in India.

# 3. Objectives

- To analyze the extent of decision making rights possessed by the women entrepreneurs.
- To find out if there is a significant difference in the decision making rights empowerment index among the respondents belonging to the different South Indian States
- To provide workable solutions to improve the strategies of enterprising on the basis of the study outflow.

# 4. Hypotheses

- There is a significant difference in the decision making empowerment power among the respondents belonging to the different South Indian States.
- Women Entrepreneurs have a very low degree of decision making empowerment index.

# 5. Methodology

This research was conducted based on Positivist paradigm. Based on Objectivist ontological and positivist epistemological stance, quantitative analysis and descriptive research design were used. Deductive approach was followed that is, based on the review of literature of women entrepreneurship and empowerment, hypothesis was constructed and efforts are taken to test the hypothesis so that it could be accepted or rejected. After which the theory was generalized to the entire population.

It is assumed that the reality is that women entrepreneurs are empowered and study conducted regarding the women empowerment is objective. Moreover, the responses are considered to be objective and there is no relationship between the women entrepreneurs and the interviewer. The facts are being projected and generalized in this study. Primary and secondary source of data were collected. Convenience sampling technique was used to select the sample of 130 women entrepreneurs. All the South Indian micro women entrepreneurs were the population of the study. Samples were taken from women entrepreneurs who belong to Tamil Nadu, Kerala, Andhra Pradesh and Karnataka were chosen.

A structured questionnaire was used to analyze the empowerment of women through their involvement in business. The questionnaire studied the variables to measure the decision making ability of the women entrepreneurs. These statements were scored on a Likert scale on 1 to 5. The data analysis was carried out by using SPSS. In order to accomplish the objectives of the study, percentage analysis and ANOVA were used. Decision making empowerment index was calculated to find out the extent of independence the women have on deciding about their personal issues, family and expenditures. The significant difference among the four groups of respondents regarding the decision making empowerment are analyzed with the help of ANOVA.

# 6. Analysis of Data

State of Origin

In the present study, the respondents were divided based on the states they belonged to, mainly Andhra Pradesh, Kerala, Tamil Nadu, Karnataka, which are named as group I, group II, III and IV respectively. The distribution of respondents according to their State of origin is shown in Table 1.

S. No.	State	Number of Respondents	Percentage
1	A.P.	5	4
2	Kerala	25	19
3	Tamil Nadu	85	65
4	Karnataka	15	12
Total		130	100

Table 1 State - wise distribution of respondents

Most of the respondents (65 percent) were Tamilians. And only 4 percent of the respondents were people who speak Telugu. The subsequent analyses were carried out with respect to the above classification of the respondents.

# Educational Level of the respondents

The education provides exposure about various means for the development of enterprises, social participation and personality traits of the respondents. Management of the enterprises and handling the problems that arise in the enterprise would be easier

for the educated than the uneducated. The education gives more self motivation so that they could achieve great heights in life. In the present study, the options for the levels of education are confined to illiterate, primary, secondary/ higher secondary, graduate and post graduate.

It is inferred that around 40 percent of the total respondents have completed only their primary schooling. Among them, majority of the respondents belong to the group III category. None of the respondents have completed their postgraduate. Only 11 percent of respondents are graduates. It indicates that most of the women entrepreneurs in the study are not well qualified.

# Decision making among the respondents

Decision making: An Indicator of empowerment

According the previous definitions, empowerment is a process and not a condition or state of being. Women can be empowered by increasing their autonomy in decision making. In this study, the main decisions taken by a women entrepreneur is considered.

#### Decisions on Personal issues

- a. Involvement with NGO/Societies
- b. Visiting parents and friends
- c. Offering presentations to others

# Decisions about children

- a. Enrolment of children to school
- b. Taking children to hospital
- c. Vaccination of children
- d. Marriage of children

# Decision related to spending

- a. Spending your own money
- b. Spending your husband's money
- c. Purchase of household things
- d. Purchase or sale of land
- e. Borrowing or lending money
- f. House repairs

The decision making ability represents the capability of the respondents to take any decision related to the business and family affaires. The hypothesis "There is a significant difference in the decision making power among the respondents belonging to the different South Indian States" is tested with the help of some related statements. These variables were divided into three main parts. Firstly, Decision on Personal issues were

studied which includes involvement with NGOs/Societies. Many women are not allowed to associate with the NGOS. They are forced to limit their association with the family members or nearby neighbors. Hence this variable was included to find out the decision making empowerment index. Moreover, decision to visit friends and relatives without seeking permission from their spouse is studied. Of course, informing the spouse where she goes is important but does she have to seek permission? This variable is included as there are many families in India where women are not allowed to visit their friends or family members without permission from their spouses and even if they are granted the permission, they are given a time limit within which they should be back home. Usually, women in India cannot take decision to purchase any gifts without the permission of their husbands. This study is made to see if they still follow this medieval mindset or are they able to have power over influencing the decision to purchase gifts for those she wants to give. Likewise, decisions relating to the children like decision to send kids to school or to choose the school they feel is best, decision to get the kids married or to take them to hospital is no doubt important for which the women can be asked contribute to the decision. Spending is the third important category in this study. How far is the woman allowed to spend their own money and their husbands money is studied here. In many houses in the Indian society, women are not allowed to spend the money they earn. The money is taken over by the husband and the dutiful wife does not protest against this as they feel that it is her responsibility to provide for her family. This is when the man takes advantage over the women, exploiting her in every way. The man becomes lazy and waits for women to be the bread winner. She not only earns but does all the household chores also. In such scenario in Indian villages, this study is made to find out if such medieval mindset still exists in today's women entrepreneurs. To analyze the current decision making empowerment among the women entrepreneurs, they were asked to rate these statements according to their involvement at five point scale namely own decision, joint decision, decision of husband, decision of other and none. The assigned scores on these scales are 5,4,3,2 and 1 respectively. The mean score was being calculated and the resulting F-Statistics was found using ANOVA.

The table 2 represents the mean score of the variables in decision making and their respective 'F' Statistics. The higher decision making ability among the group I respondents is identified in the case of house repairing and borrowing or lending money since its mean scores are 3.2408 and 3.1443 respectively. Among the group II respondents, these are house repairing and marriage of children since the respective mean scores are 3.6817 and 3.1141. Among the group III respondents these are marriage of children and enrollment of children in school since its mean scores are 3.3446 and 3.1214 respectively. Whereas among the group IV respondents, these are marriage of children and enrollment of children to school since the respective mean scores are 3.6804 and 3.6561.

Table 2: Variables in decision making ability among the respondents

		Mean	Mean score among the respondents			
S. No	Variables in Decision making ability	Group	Group II	Group	Group IV	F. Statistics
1	Enrollment of children to school	2.4517	2.8681	3.1214	3.6561	2.9163*
2	Taking children to hospital	2.6083	2.4541	2.9608	3.2708	0.8084
3	Visiting parents and friends	3.1142	3.0681	2.8189	2.6196	0.6173
4	Involvement with NGO/Societies	3.0843	2.8143	2.5033	2.1718	2.6814*
5	Purchase of household things	2.4039	2.6117	2.0891	1.8646	3.0417*
6	Purchase or sale of land	1.8968	2.4543	2.6817	2.9143	2.8601*
7.	Vaccination of children	2.6414	2.8212	2.9093	3.1441	1.3343
8	Spending your own money	2.0817	2.9108	2.4562	3.4246	3.1177*
9	Spending your husbands money	1.9108	2.3442	2.6861	2.0817	2.4562
10	Marriage of children	2.6862	3.1141	3.3446	3.6804	2.7143*
11	Offering presentations to others	2.2083	2.5086	2.8917	3.0814	3.0626*
12	Borrowing or lending money	3.1443	2.9081	2.3861	2.4146	2.0962
13	House repairs	3.2408	3.6817	2.8608	3.1408	0.7629

<sup>\*</sup> Significant at five percent level

Testing the hypothesis "There is a significant difference in the decision making power among the respondents belonging to the different South Indian States"

More than half variables under study have significant difference among the four groups. The significant difference among the four groups of respondents have been identified in the case of enrollment of children to school, involvement with NGO/societies, purchase of households, purchase or sale of land, spending own money, marriage of children, and offering presentations to others since the respective 'F' statistics are significant at 5 percent level. Hence the hypothesis is accepted.

# Decision making empowerment index (DMI)

The empowerment on decision making ability among the respondents is summated with the help of an index called as Decision making Empowerment Index (DMI). If the decision making index is poor, it is considered that still the women entrepreneurs have medieval mindset. If it is high it will be considered that the women entrepreneurs no longer have medieval mindset. It is calculated by the following formula

$$DMI = \frac{\sum_{T=1}^{n} SDMV_{i}}{\sum_{T=1}^{n} MSDMV_{i}}$$

Where SDMV - Score on decision making variables

MSDMV - Maximum score on decision making variables

I = 1....n - Number of variables in decision making empowerment

The DMI is confined to five classifications. The respondents on the basis of their DMI is illustrated in table 3.

	Decision Making	N	Number of respondents				
S.	Empowerment	Group	Group	Group	Group	Total	
No	( in percent)	I	II	III	IV		
1	Less than 20	1	5	9	3	18	
2	21- 40	3	9	15	4	31	
3	41-60	1	8	43	6	58	
4	61-80		3	12	1	16	
5	Above 80			6	1	7	
	Total	5	25	85	15	130	

Table 3 Decision making empowerment (DMI) among the respondents

Most of the women entrepreneurs have Decision Making empowerment index between 41 to 60 percent and 21 to 40 percent which constitutes 44.62 and 23.85 percent to the total respectively. Among the group I and II respondents is the Decision Making Empowerment index is between 21 to 40 percent which constitutes 60.00 and 36.00 percent to its total respectively. Among the group III and group IV respondents, this is 41 to 60 percent which constitutes 50.58 and 40.00 percent to its total respectively. The is found to be more among the women entrepreneurs in group III when compared to other groups of respondents.

If the DMI is less than 20, it is assumed that the decision making empowerment is "very low", if DMI is between 21 and 40, the decision making empowerment is "low". If the DMI is between 41 and 60, the decision making empowerment is "moderate". If the DMI is between 61 and 80, the decision making empowerment is "high" and if the DMI is above 81, the decision making empowerment is very high.

The analysis infers that the DMI among the respondents is moderate. This shows that women in south India so not have medieval mindset toward themselves as they have moderate decision making index. Hence the above hypothesis is rejected. The study further shows that group 3 respondents have higher Decision Making Empowerment Index when compared to the other respondents.

#### 7. Findings

- Most of the respondents (65 percent) were Tamilians. And only 4 percent of the respondents were people who speak Telugu.
- The higher decision making power among the women entrepreneurs from Andhra Pradesh is identified in house repairing and borrowing or lending money since its mean scores are 3.2408 and 3.1443 respectively. Among respondents from Kerala, decision making ability is depicted in repairing house and marriage of children since the respective mean scores are 3.6817 and 3.1141. Among the respondents from Tamil Nadu more decision making power is seen in deciding matters relating to the marriage of children and the enrolment of children in school since its mean scores are 3.3446 and 3.1214 respectively. Similarly, women entrepreneurs from Karnataka also had more decision power in deciding about marriage of children and enrolment of children to school since the respective mean scores are 3.6804 and 3.6561.
- Regarding the decision making variables, the significant difference among the
  four groups of respondents have been identified in the case of enrolment of
  children to school, involvement with NGO/societies, purchase of households,
  purchase or sale of land, spending own money, marriage of children, and offering
  presentations to others since the respective 'F' statistics are significant at 5
  percent level.
- Most of the women entrepreneurs have decision making empowerment index between 41 to 60 percent and 21 to 40 percent which constitutes 44.62 and 23.85 percent to the total respectively. Among the respondents from Andra Pradesh and Kerala, the decision making empowerment index is between 21 to 40 percent which constitutes 60.00 and 36.00 percent to its total respectively. Among the respondents from Tamil Nadu and Karnataka, Decision making empowerment index is between 41 to 60 percent which constitutes 50.58 and 40.00 percent to its total respectively. The decision making empowerment index is found to be more among the women entrepreneurs from Tamil Nadu when compared to women entrepreneurs from other South Indian States. Hence it is found that the women entrepreneurs do not have a medieval mindset about themselves.
- The analysis infers that the DMI among the respondents is moderate. The study further shows that group 3 respondents have higher decision making empowerment index when compared to the other respondents.

#### 8. Suggestions

- Since most of the respondents were concentrated in one south Indian state, there is a need to conduct research studies on a national level across states to analyze the decision making abilities of Indian women.
- Marketers in AP can target women consumers in the case of financial services
  and investments since women are seen as having higher decision making power.
  Marketers who are in the business of furnishing and refurbishing homes, would
  find it profitable to target women consumers in AP and Kerala. For retail stores
  dealing in jewelry, wedding sarees and catering, women in Karnataka and Tamil
  Nadu are the target segment.
- Since decision making empowerment index is found to be more women entrepreneurs in the State of Tamil Nadu, banking institutions would find it beneficial to transact with these women in providing loans. In the other States, since empowerment is still not at impressive levels, there is a real need for NGOs to help and support backward communities to create awareness about the need for women to be able to make their own decisions and also provide training workshops in decision making, time management and entrepreneurial skills. Since the decision making index is moderate among the south Indian women entrepreneurs, it is seen that women entrepreneurs do not have a medieval mindset, but there are some women who still have a medieval mindset. Government should provide training to address this issue so that women will know the importance of taking decision and how it would help them to bring a mindset of the 21st century so that women entrepreneurs can succeed by improving their decision making ability.
- There is a need for the government to plan and implement promotional programs in media that highlight the benefits of empowering each individual. It has been known for generations that no society can prosper without the contribution of all its members. The biggest barrier for women in making individual decision making is because of the low-confidence level and mindset that has to be changed by giving them more support and encouragement. In the villages, the areas that women could contribute to develop the national economy, needs to be studied. The old and outdated social outlook to stop women from entering in the field of decision making and entrepreneurship is one of the reasons for their failure. They are under a social pressure that barrier can be removed by providing them training programs on leadership.
- One aspect that the government can focus on when promoting women empowerment and decision making is to use role-models who are popular in the minds of the masses such as Kiran Bedi and cine actors/ politicians such as Jaya Bachchan. This will create a positive impact on common women folk who have an inspiration to look up to.
- In recent times one of the key problems that women face is security. There have been innumerable incidents of kidnapping and rapes of women across the

- country. Thus women in India lead a protected life with the support of their family. To change this situation, there is a need for better policing of the streets especially at night so that women can make their own decisions and take care of themselves.
- Another aspect that reduces women's ability to make their own decisions is education. Many Indian families do not give equal importance to the education of their daughters and sons. There is a mind-set that the boys have to grow up and get a good job to take care of his family while the girls can be married off to a man who will take care of her. This leads to women being less educated, economically unstable and unable to be self-dependant. Thus government initiatives to educate and support the girl-child can have a huge impact on the next generation. They can be supported by their families and peer group by encouraging them and appreciate new ideas. Acknowledging their personal achievement can create a career path and they in turn become good decision makers.

# 9. Conclusion

India is one of the fastest developing countries in the world but the gap in development in different areas of society is widening. Gender inequality is one of these key divisions. There are visible differences in people's outlook towards women as more women are educated and form part of the work force than ever before. But the old medieval mindset still exists in a large part of our society. In the few instances related to traditional roles where women indeed have decision making skills, there is an opportunity for marketers to target women consumers. All women entrepreneurs in different states do not possess the same decision making empowerment. There is a significant difference in the decision making index among the women entrepreneurs. The study shows that there is only moderate level of empowerment among the women entrepreneurs which have to be improved. Since most of the respondents were concentrated in one south Indian state, there is a need to conduct research studies on a national level across states to analyze the decision making abilities of Indian women. Unless the mind-set of the society and the women entrepreneurs, that decision-making is done better by men changes, women will continue to be hidden away from the lime-light. This mindset can be changed only with the built in cooperation of the government, NGOs, media and society alike. Women have made great strides in society but there is still a long way to go before she can be truly independent and able to make her own decisions pertaining to her life.

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Book Review ISSN: 2348-3784

# The HR Scorecard Linking People, Strategy and Performance

P. Stella

The book presents many helpful concepts and tools to measure the effectiveness on HR as a function, to measure return on investment on talents and talent initiative, to measure the impact of HR on organizational performance and as a basis for business case development of our deliverables.

It is intended to guide HR managers through the challenges of converging trends. The Human Resource architecture is the sum of HR functions, the broader HR systems and the resulting employee behaviors.

The key phrases of this book are strategy implementation system, strategy implementation process, balanced score card and high – performance work system. Three well respected thought leaders in the HR field have conducted extensive research of more than 2500 companies to uncover a model for implementing HR strategies and measuring results.

This book helps the readers to understand the strategic functions of today's organization. Many companies fail to maximize the productivity and objectives of the organization due to lower competencies and ineffective policies. So there is the need to develop the HR scorecard to maintain and improve the effective of the organization.

To transform the structure of HR into strategic functions, HR leader must:

- Clearly define the business strategy.
- Build a business case for HR as a strategic asset.
- Create a strategy map with leading and lagging indicators and tangibles and intangibles.
- Identify HR deliverables within the strategy map.
- Align the HR architecture with HR deliverables.
- Design the strategic measurement system.
- Implement the management by measurement.

The HR scorecard can help both the practical and theoretical levels. It can help any manager to develop the set of models and assess the impact of company's HR architecture.

P. Stella, Assistant Professor, Department of Management Studies, Francis Xavier Engineering College, Tirunelveli, Email: stellajenefa@gmail.com Because of the HR scorecard the HR department can take immediate rethinking and modulate their strategy. The good measure can definitely consist of the validity, deficiency and the measurement. To increase the confidence of the people this book is well enough to explain the vision and the goal what the organization expecting from the measurement.

The authors in the field outline the powerful measurement system that highlights the HR role played by the organization. They can explain both the advantages of the scorecard and how the HR scorecard can act as the key driver for value creation. The need for this system is that the employee fully understands the system and tries hard for making better results.

In this book we understand that the Human Resource roles start with the HR architecture. It contains HR function, HR system and strategic employee's behavior. These three important components can make the HR architecture as the strategic asset. The illustration of the value creation contains the following components. They are financial, customer, internal/external process and the growth of the organization.

We understand that the strategic human performance must contain the motivation, the employee's skills and the employee strategic focus regarding the benefits of the employee towards the performance. The dimension of performance must consist of critical casual thinking, understanding the principles of the organization, estimating the casual relationship between the individuals and the organization and communicating the HR strategic performance to other authorities.

It introduces a new way to measure and think about the contributions of individuals into the success of business.

It provides a framework that focuses on identifying where Human Resource issues are performance drivers and hindrances to strategy implementations. It develops a measurement system that provides valid, reliable indicators of Human Resource contribution to the success of strategy implementation and ultimately to firms performance.

All HR leaders are not capable to understand the entire concepts of this HR score card. Many of the examples quoted in the book are quite complex and can be used only by the large organizations such as Verizon/GTE, General Mills and General Electric. It is also difficult to pick just a few efficiency measures and performance drivers from the comprehensive list prepared by the authors.

# **Profile of authors**

Brain Becker is the professor of Human Resource Management and the Chairman of the "Department of Organization and Human Resources" in the School of Management at the State University of New York. He published the book regarding Union and Non union organizations. Mark Huselid is the Associate Professor of HR strategy in the School of "Management and Labour Relation" of Rutgers University. Dave Ulrich is the professor of business at the University of Michigan. He has published books and articles on Human Resource and the organizational issues too.

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# Indian Economy: A snapshot

#### Bipasha Maity and Vidya Suresh

#### **Summary**

This report is an evaluation of India's macroeconomic management since 2010. It proceeds to examine the supply side of the economy followed by demand side contribution to GDP and thereafter examines various indicators that impact on the economic growth. India's growth is expected to recover from 4.4 per cent in 2013 to 5.2 percent in third and fourth quarter of 2014 and 4.9 percent for the whole year. This rate of domestic growth has to be supported by stronger global growth impulses, better export competitiveness and implementation of stalled investment projects. The effect of key macro factors on economy and policy dilemma shall be highlighted in this paper.

Key Words: Indian Economy, GDP, Inflation, CAD, Rupee depreciation

Sectoral contribution to growth

The growth in the Indian economy had been varying down from 9.6 per cent in Q4 of 2010-11 and stayed at 4.4 per cent for three quarters from Q3 of 2012-13 to Q1 of 2013-14 which pushed the expansion of the country to below the potential level. Since then, there are signs of growth bottoming out with insignificant improvement recorded during Q2 and Q3 of 2013-14 to 4.8 and 4.7 per cent respectively. However, this growth has been meagre and clear signs of revival are yet to come forward. The descending growth rate was primarily caused by structural factors that crippled investment activity and financial savings. Sluggish growth in fixed capital formation over successive quarters, high inflation and low business assurances contributed to the decline in prospective growth. In the last decade, growth has progressively come from the services sector, whose share to overall growth of the economy has been 65 per cent, while that of the industry and agriculture sectors has been 27 per cent and 8 per cent respectively.

Agriculture has improved its pursuance with the help of good monsoons and equally distributed rainfall. Water management has also improved in terms of storage for release during the rabi season with 85 major reservoirs in the country having 16.3 per cent more water compared to the previous year. The kharif food grains production is estimated at 129.3 million tones this year. Thus, sufficient preservation of soil moisture and reservoirs boosted the crop production during 2013-14. The Index of Industrial Production (IIP) showed no expansion during April-January 2013-14, compared with 1.0 per cent growth in the previous year.

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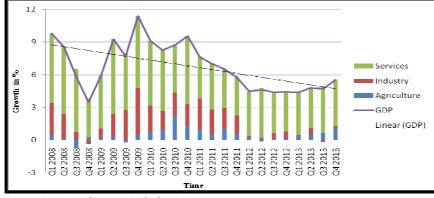


Figure 1 Sectoral contribution to growth

Source: Asian Development Outlook, 2014

This static growth over two years resulted in poor investment and consumption demand, which again had an effect on reduction in production of capital goods and consumer durables in the current year. Growth of core industries, which provide key inputs to the industrial sector dipped 2.4 per cent during 2013-14 compared to a growth of 6.9 in previous year. Output of basic metals, fabricated metal products, machinery and equipment, motor vehicles, food products, gems & jewellery and communication equipment also had a drop. The contraction in the mining sector during current year was largely because of decline in natural gas and crude petroleum output, regulations pertaining to the environment, allocation of rights to private capital and social issues like rehabilitation of displaced persons. Many industries including thermal power generation that depend on the output of the mining sector have had to import inputs from abroad, driving up costs and also contributing to import growth by increasing the current account deficit.

Industrial growth and manufacturing were volatile across all sectors in this period. The manufacturing sector's poor performance has been driven by declining outputs of industries like machinery, metal products, radio, television, motor vehicles and communication. Many factors pulled the growth like consumer and investor pessimism about the prospects of the economy, sluggish growth of investment, poor margins of the corporate sector and decline in the rate of growth of credit flows and so on. The stable growth of service sector led experts to opine that the economy was on a service-led growth path, but long-term changes in the IT and ITES industries will be the deciding factor for the fate of the services sector. The current slowdown in this sector is due to decline in the performance of construction, trade, transport and communications activities. Thus, to achieve a higher growth rate, all the three major sectors of the economy have to perform well.

#### Demand side factors affecting growth

The demand side factors contributing to nation's growth is technically referred to as aggregate demand. It is related to the total expenditure flow in an economy in a given period and consists of Consumption demand by the households (C), Investment demand, i.e., demand for capital goods (I) by the business firms, Government expenditure (G) and Net income from abroad (X-M).

Table 1 Growth in GDP at Constant Market Prices (per cent)

Economic Variables	2005-	2006-	2007-	2008-	2009-	2010-	2011-	2012-
Economic variables	06	07	08	09	10	112R	121R	13AE
Total final consumption								
expenditure	8.7	7.7	9.4	7.7	8.4	8.1	8.1	4.1
Private final consumption expenditure	8.6	8.5	9.4	7.2	7.4	8.6	8.1	4.0
Government final consumption expenditure	8.9	3.8	9.6	10.4	13.9	5.9	8.6	4.1
Gross capital formation	16.2	13.4	18.1	-5.2	17.3	15.2	0.5	3.9
Gross fixed capital formation	16.2	13.8	16.2	3.5	7.7	14	4.4	2.5
Changes in stocks	26.7	31.6	31.3	-51.4	67.7	29.7	-30.6	47.6
Valuables	-1.6	13.7	2.9	26.9	57.6	32.4	6.6	-18.1
Exports	26.1	20.4	5.9	14.6	-4.7	19.7	15.3	5.1
Less imports	32.6	21.5	10.2	22.7	-2.1	15.8	21.5	5.7
Growth in GDP at 2004-05								
market prices	9.3	9.3	9.8	3.9	8.5	10.5	6.3	3.3

Source: Économic Survey 2012-13, http://indiabudget.nic.in/last accessed at 2.00 pm, 07 July 2014.

GDP measured at market prices dipped in 2012–13 as compared to 2011–12. During the same period, private consumption expenditure slowed down from 8.1 per cent to 4.0 per cent. Growth in government consumption, which sharply picked up till 2009-10, remained subdued for the rest of the year as fiscal pressures intensified. Government's consumption expenditure also slowed down from 8.6 per cent to 4.1 percent and the gross fixed capital formation continued to decelerate from 4.4 to 2.5 per cent. The rate of growth of consumption expenditure and particularly that of private final consumption expenditure has generally been more stable than investment, except in 2012-13. Increasing fuel prices, instable currency, food inflation and weak employment prospects affected the confidence of consumer. Investment compacted due to structural and procedural delays, monetary tightening and challenge of repayment in foreign currency due to weak domestic currency added fuel. According to the RBI (2013), as on May 1, 2013, nearly half of 566 central sector projects (worth Rs. 1.5 billion and above) got delayed, leading to cost overruns of 18 per cent or higher. Many reasons like bottlenecks in project approvals and implementations, problems with land acquisition, environmental

regulations, legal issues pertaining to contracts and political problems of people resisting large projects, could be cited.

Consumer and Wholesale inflation

Any macroeconomic performance is generally evaluated by growth, inflation and external balance. If economic growth is one of the crucial indicators of a country's performance, then inflation must be a close second. Due to decline in vegetable prices, inflation in terms of the all India Consumer Price Index (CPI)-Combined (Rural + Urban) declined to 9.87 per cent in December 2013 from a high of 11.16 per cent in November 2013. Excluding food and fuel components, CPI stood at 8.0 per cent in December 2013 with contributions from housing, transport & communications and miscellaneous group including services. Wholesale Price index (WPI) had steadily increased during July-November 2013 from a low of 4.6 per cent in May 2013. Input costs were high due to low agricultural productivity, absence of competition in distributional channels and wastages due to shortage of storage facilities. Supply side factors like prices of vegetable, fuel, diesel and electricity also contributed heavily to inflation.

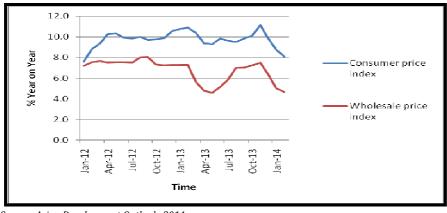


Figure 2 Inflation

Source: Asian Development Outlook, 2014

The depreciation of the rupee along with the increase in international crude oil prices has led to a rise in domestic fuel prices. In the first half of September 2013, the price of the Indian basket of crude oil had increased to Rs. 7,263 per barrel, up by 35 per cent compared with the same basket in the second half of April 2013. Domestic consumption of petroleum products has been falling since October 2012. It remained unclear if this decline was due to the response to a higher cost of fuels or the result of the slowdown in economic activities or due to rationalization of domestic oil prices. Nominal rural wage growth showed a declining trend for over two years, but the rate of increase at 15.5 per cent in October 2013 continued to put pressure on overall inflation. Increasing CPI-rural labour (RL) inflation superseded gains from rising nominal wages leading to decline in

real rural wage growth. Even if the current season's agricultural production improves, the relief from inflation may be temporary.

#### Monetary Management

The monetary policy of Reserve Bank of India (RBI) has remained focused on twin objectives of taming inflation and facilitating growth. RBI in its third quarter review of monetary policy on January 28, 2014, hiked the repo rate by 25 bps to 8 per cent on account of upside risks to inflation. Due to mounting inflationary pressures during January 2010 to October 2011, RBI adopted tight monetary policy and raised policy rates (repo rates) by 375 basis points, from 4.75 per cent to 8.5 per cent. There was a moderation in inflation from its peak of 10.9 per cent in April 2010, to an average of 7.6 per cent during April- December 2012.

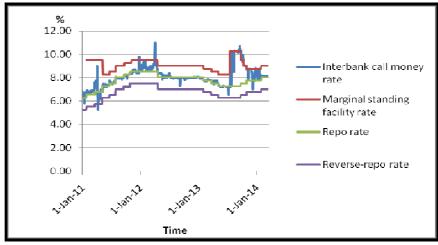


Figure 3 RBI Policy interest rates

Source: RBI official website, accessed on 20 July 2014

RBI released the first bi-monthly review of the Monetary Policy for 2014-15 on 01st May, 2014. The highlights of the policy review are: The key Repo Rate (RR) rate under the Liquidity Adjustment Facility (LAF) was kept unchanged 8.00%. As a result, the Reverse Repo Rate (RRR) and the Marginal Standing Facility (MSF) rate stand unchanged at 7.00% and 9.00% respectively. The bank rate, MSF rate, Cash Reserve Ratio and Statutory Liquidity Ratio (SLR) remained unchanged at 9.00%, 9.00%, 4% and 23% respectively.

## CAD, external debt and currency depreciation

The worsening of Current Account Deficit (CAD), external debt and rupee value has alarmed the policy makers in past couple of years. The Indian economy's CAD has increased to 4.8 per cent of GDP in 2012–13. This was considered very high by most analysts and they termed it at an unsustainable level. Exports are contracting because of

stagnating world demand and imports have been increasing despite a slowdown of domestic economic activities. The decline in exports was notable in engineering goods, electronics, gems and jewellery and iron ore. Imports, on the other hand, grew by 6.0 per cent in the first quarter of 2013–14, with gold leading the way. Imports had actually contracted in the first quarter of the previous year (2012–13) by 5.7 percent. Petroleum, oil and lubricants (POL) imports grew by 6.4 per cent despite a decrease of 5.7 per cent in international crude oil prices (Indian basket). According to the RBI, the trade deficit has widened in the first quarter of 2013–14 to US\$50.2 billion from US\$42.2 billion in the first quarter of 2012–13. The Government of India has also taken some specific steps to curb and discourage the import of gold. Apart from inflation-indexed bonds, import duty on gold was raised to 8 per cent and banks have been instructed to ensure 20 per cent of the gold imported is kept in customs warehouses and fresh imports are allowed only after 75 per cent of the retained amount has been exported. It may be noted that gold is imported for re-exporting under gems and jewellery after value addition in India.

To finance a high CAD, adequate and reasonably stable long-run capital flows are the best option. However, Foreign Direct Investment (FDI) and foreign portfolio investments made by Foreign Institutional Investors (FII) have been inadequate and the latter has been volatile in nature. Increase in the flow of FDI is the most stable option, though as is well known, the impact of greater doses of FDI on the domestic economy is not quite clear. It may have very different kinds of effects in different sectors of the economy. FII flows are volatile and current global events like the FED announcement about the future direction of monetary policy in the USA have made this kind of inflow even more unreliable.

Table 2 India's Merchandise Trade

Item		April-Ma	arch			April-Dec	ember	
	2011-	-12	2012-13		2012-13		2013-14	
	Value	Growth	Value	Growth	Value	Growth	Value	Growth
1	2	3	4	5	6	7	8	9
Exports	306.0	21.8	300.4	-1.8	217.4	-4.0	230.3	5.9
Of which: Oil	56.0	35.1	60.9	8.6	44.8	5.7	45.4	1.5
Non-oil	249.9	19.2	239.5	-4.2	172.7	-6.3	184.9	7.1
Gold	6.7	10.8	6.5	-3.2	4.7	-6.0	4.4	-5.4
Non-Oil Non-Gold	243.2	19.5	233.0	-4.2	168.0	-6.3	180.5	7.4
Imports	489.3	32.3	490.7	0.3	364.2	0.1	340.4	-6.6
Of which: Oil	155.0	46.2	164.0	5.9	121.8	9.8	125.0	2.6
Non-oil	334.4	26.7	326.7	-2.3	242.4	-4.1	215.4	-11.1
Gold	56.3	39.1	53.7	-4.7	38.0	-9.0	23.7	-37.6
Non-Oil Non-Gold	278.0	24.5	273.0	-1.8	204.4	-3.2	191.7	-6.2
Trade Balance	-183.4		-190.3		-146.8		-110.0	
Of which: Oil	-98.9		-103.2		-77.1		-79.5	
Non-oil	-84.4		-87.2		-69.7		-30.5	
Non-Oil Non-Gold	-34.8		-40.0		-36.4		-11.2	

Table 3 India's Balance of Payment

	2010.10		2012			,	\$ billion
	2012-13 (PR)		2013-14				
	(FR)	Q1(PR)	Q2 (PR)	Q3 (PR)	Q4 (PR)	Q1 (P)	Q2 (1
1	2	3	4	5	6	7	
1. Goods Exports	306.6	75.0	72.6	74.2	84.8	73.9	81
2. Goods Imports	502.2	118.9	120.4	132.6	130.4	124.4	114
3. Trade Balance (1-2)	-195.7	-43.8	-47.8	-58.4	-45.6	-50.5	-33
4. Services Exports	145.7	35.8	35.0	37.1	37.8	36.5	34
5. Services Imports	80.8	20.8	18.7	20.4	20.9	19.7	1
6. Net Services (4-5)	64.9	15.0	16.3	16.6	17.0	16.9	1
7. Goods & Services Balances (3+6)	-130.7	-28.9	-31.5	-41.7	-28.7	-33.6	-1
8. Primary Income (Net)	-21.5	-4.9	-5.6	-5.8	-5.2	-4.8	-
9. Secondary Income (Net)	64.4	16.9	16.1	15.7	15.8	16.7	1
10. Net Income (8+9)	42.9	11.9	10.5	9.9	10.6	11.8	
11. Current Account Balance (7+10)	-87.8	-16.9	-21.0	-31.9	-18.1	-21.8	-
12. Capital Account Balance	-0.3	-0.2	-0.2	0.0	0.2	0.8	-
13. Financial Account Balance	85.4	16.1	21.0	30.8	17.6	20.1	
of which: Change in Reserves	-3.8	-0.5	0.2	-0.8	-2.7	0.3	1
<ol> <li>Errors &amp; Omissions (11+12+13)</li> </ol>	2.7	1.1	0.2	1.1	0.3	0.9	
Memo: As a ratio to GDP							
15. Trade Balance	-10.6	-10.2	-11.4	-12.0	-9.0	-11.3	-
16. Net Services	3.5	3.5	3.9	3.4	3.3	3.8	
17. Net Income	2.3	2.8	2.5	2.0	2.1	2.6	
18. Current Account Balance	-4.8	-4.0	-5.0	-6.5	-3.6	-4.9	-
<ol> <li>Capital and Financial Account, Net (Excl. changes in reserves)</li> </ol>	4.8	3.8	4.9	6.5	4.0	4.6	-

Source: RBI website accessed on 30 July 2014

Table 4 India's financial account

						(US\$ b	illio
	2012-		2012	-13		2013	-14
	13 (PR)	Q1 (PR)	Q2 (PR)	Q3 (PR)	Q4 (PR)	Q1 (P)	()
	2	3	4	5	6	7	
. Direct Investment (net)	19.8	3.8	8.2	2.1	5.7	6.5	6
1.a Direct Investment to India	26.9	5.9	9.5	4.3	7.2	6.5	7
1.b Direct Investment by India	-7.1	-2.1	-1.4	-2.2	-1.4	0.0	-0
. Portfolio Investment	26.7	-2.0	7.6	9.8	11.3	-0.2	-4
2.a Portfolio Investment in India	27.6	-1.7	7.9	9.8	11.5	-0.5	-(
2.b Portfolio Investment by India	-0.9	-0.3	-0.3	-0.1	-0.2	0.2	(
. Financial Derivatives & Employee Stock Options	- <b>2.3</b>	-0.6	-0.5	-0.4	-0.9	<b>-0.5</b>	-1
. Other Investment	45.2	15.4	5.6	20.0	4.2	14.0	4
4.a Other equity (ADRs/GDRs)	0.2	0.1	0.1	0.0	0.0	0.0	(
4.b Currency and deposits	15.3	6.4	3.5	2.6	2.8	5.6	
Deposit-taking corporations, except the central bank: (NRI Deposits	) 14.8	6.6	2.8	2.7	2.8	5.5	
4.c Loans*	10.7	3.5	3.0	5.7	-1.6	5.9	-{
4.c.i Loans to India	11.1	3.5	3.3	5.9	-1.6	5.4	-{
Deposit-taking corporations, except the central bank	1.3	3.0	2.0	2.6	-6.3	4.7	-6
General government (External Assistance)	1.3	0.1	0.1	0.4	0.6	0.3	-(
Other sectors (ECBs)	8.6	0.4	1.2	2.9	4.1	0.4	1
4.c.ii Loans by India	-0.4	0.1	-0.3	-0.2	0.0	0.4	(
General government (External Assistance)	-0.3	-0.1	-0.1	-0.1	-0.1	-0.1	-0
Other sectors (ECBs)	-0.1	0.1	-0.3	-0.1	0.1	0.5	(
4.d Trade credit and advances	21.7	5.4	4.1	7.7	4.5	2.5	-1
4.e Other accounts receivable/payable - other	-2.7	-0.1	-5.1	4.0	-1.5	0.2	-{
. Reserve assets	-3.8	-0.5	0.2	-0.8	-2.7	0.3	10
inancial Account (1+2+3+4+5)	85.4	16.1	21.0	30.8	17.6	20.1	

Source: RBI website accessed on 30 July 2014

Table 4 shows the relative importance of FDI, FII and other investments in the financial account of the balance of payments. Other investments, which are an aggregate of different short- and long-term flows such as loans, trade credit and advances and NRI deposits have been important in terms of the relative importance vis-à-vis FDI and FII. FDI flows might increase if the various measures announced by the Government of India to facilitate and augment such flows turn out to be successful. If that occurs it would benefit the economy's external balance by improving the quality of capital flows that are used to finance the CAD. There has been a net outflow of FII to the tune of US\$12.1 billion till July 2013 due to FED announcement about its future policy.

The increasing CAD financed by higher debt flows has increased India's external debt to a considerable extent during 2012–13. The stock of external debt stood at US\$390 billion on March 31, 2013. The major components of this increase are increases in external commercial borrowings (ECBs) and rupee denominated short-term non-resident deposits. The rise in external debt and the continuous deceleration in GDP growth have increased the vulnerability of the economy at the end of 2012–13 as compared with the previous year. There has been an increase in the ratio of total debt to GDP over the year 2012–13 from 19.7 percent of GDP to 21.2 per cent. The ratio of short-term debt to total debt has increased from 22.6 per cent to 24.8 per cent. The debt service ratio stood at 5.9 per cent, down from 6 per cent in the previous year, but substantially higher from the 4.4 per cent at the end of 2010–11.

The problem of a high and rising CAD along with volatile, unpredictable capital flows has not only worsened the external debt position of the economy, but also exerted pressure on the currency. This has been due to events like changes in the FED's policy stance and early signs of recovery in the USA. The FED chairman's announcement of a proposed exit from quantitative easing came on May 22, 2013. The rupee touched a historic low of Rs. 68.80 against the US dollar on August 28, 2013. It stands at Rs. 60.85 on August 1, 2014. The depreciation of a nation's currency makes headline news and is treated as indicative of a weak economy and ineffective government and central bank. The immediate inflationary effect of higher domestic cost of imports transforms the discomfort in to fear. This opens debate amongst economists and policymakers as to the need to intervene and set the economy back on wheels or to allow the market to correct itself through the forces of demand and supply. In short run, imports could be discouraged, exports could be encouraged and capital inflows incentivized. In market determined exchange rates, the RBI may decide to intervene in foreign exchange markets to stem the depreciation of the rupee which depends on its assessment of the adequacy of existing reserves and the extent of short-term debt repayment obligations. In this context, heavy FII inflows can also boost up the value of the Rupee if market conditions are favourable.

#### Conclusion

One of India's most pressing policy challenges is to create significantly more productive and well-paying jobs which are inclusive as well. Such jobs are vital to sustain high growth. As the proportion of the workforce that depends on agriculture declines and given that 12 million people enter the workforce each year, manufacturing will have to play a key role in generating productive and well-paying jobs. In many ways, manufacturing is well placed to play this role. First, India's factor endowments provide an abundance of semiskilled labor, which is essential for a comparative advantage in laborintensive manufacturing. Second, India has developed the capabilities required for a diversified and dynamic manufacturing industry in terms of the range of manufactured products produced and of India's manufactured export basket, which includes relatively sophisticated chemical and pharmaceutical products, as well as auto components. Moreover, India's information technology and engineering services have increasingly been deployed by multinational corporations for designing industrial products for global markets, including sophisticated memory chips used in a range of electronic devices. Unfortunately, manufacturers in India do not perform close to their tremendous potential. For many years now, the sector has contributed around 15% of GDP and 12% of employment. By comparison, manufacturing in the People's Republic of China, Malaysia, Thailand, and Vietnam accounts for close to 25% or more of GDP.

The World Bank's Doing Business 2014 study on regulations ranks India 134<sup>th</sup> of 189 countries for ease of doing business. Particularly problematic are regulations on starting a business, obtaining permits and closing unprofitable units. To this, the recent National Manufacturing Policy proposes rationalizing and simplifying business regulations including the use of single-window clearance mechanisms; an exit policy that aims to balance firms' need to adjust employment in response to market conditions with labour's need for income security; financial and institutional mechanisms to develop technology, especially for small and medium-sized enterprises; large-scale infrastructure development; and clustering manufacturers in new national investment and manufacturing zones.

The second set of issues relates to the paucity of land that can be used for productive industry by displacing people and reducing agricultural activities. The third problem, fundamentally an economic one, relates to the pricing mechanism by which a public good can be privately apportioned as in the case of telecommunication spectrum pricing. These problems are not only vexing but have long-term economic implications and serious political consequences too. Solutions can only be found through a prolonged democratic debate about arriving at a consensus that is perceived to be fair and equitable. These problems have led to a major logjam in the clearances and approvals for infrastructure projects. As of June 2013, about 50 per cent of Central sector projects of Rs. 1.5 billion and above were delayed with estimated cost overruns of up to 20 per cent. These delayed projects were in roads, power, petroleum and railways. The leverage of the firms operating in this sector has increased with borrowing going up because of the delays. A

Project Monitoring Group has also been set by the Prime Minister's Office to monitor pending mega projects and get them started. Concerted efforts in the short and intermediate time frames would be essential to bring about a turnaround in investment demand. Infrastructure bottlenecks affect other industries too and this has been a factor contributing to the slowdown in manufacturing as a whole, ultimately affecting business firms' profitability and sales.

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