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NOTES FOR CONTRIBUTORS

Our global and political environment is bubbling with great hopes and aspirations of pink health and rising graph of Trade, Industry and Commerce all around. As such, it becomes my humble and honest duty, belonging to the world of academics, to interact and share with some instrumental guidelines for the contributors and participants in the forthcoming issues of the Indian Journal of Commerce.

Research along with its practical implications and usage and utility in the field of business studies has great relevance today. It is therefore, suggested that Papers based on application oriented research are more welcome; especially in the fields of industry, commerce, business studies and management areas. The papers must include tables, diagrams, illustrations and such other tools to support the different and divergent viewpoints. As such, the length of a paper including all these has to be cautiously controlled and should not exceed 20 double space pages. Short communications relating to review articles, report of various conferences, summary/views on several governments' reports, database issues etc. should also not exceed more than 5 double spaced pages and are invited to be published. We also welcome book-reviews and summary of Ph. D. dissertations but not in more than two double spaced pages. Care should be taken that whatever manuscripts are sent for publication in this journal should not have been published elsewhere any time before.

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Follow the Author -date (Harvard) System in-text reference: e.g. Saurabh (2014) observed that….A Study (Shantanu et. L. 2015) found that…..When it is necessary to refer to a specific page(s), cite it in the text as: Saurabh (2014 P. 105) observed that…A study Saurabh 2014a, Saurabh 2014b, Saurabh 2014c, so on and so forth.

It is to be noted that only cited works should be included in the 'References' which should appear alphabetically at the end of the paper. Follow the reference citation strictly in accordance with the following examples.

Book : Singh, H. K. 2015. Mutual Funds Market. New Delhi: Kanishka publishers.

Journal Article : Singh, Meera 2015. Journal of Indian School of Political Economy. Jan-March,2015, Vol-22, Nos 1, pp 34-48.

Government Publication : Government of India, Ministry of Communications, Department of Telecommunications 2015. Annual report. New Delhi.

Chapter in a Book : Gilberto Mendoza, 2015, A Premier on Marketing Channels and Margins. Pages 257-276 in Prices, Products and People (Gregory J. Scott, ed.) London. Lynne Rienner Publishers.

All the manuscripts should be sent to **Prof. H.K.Singh, Managing Editor, The Indian Journal of Commerce, Banaras Hindu University, Faculty of Commerce, Banaras Hindu University, Varanasi 221005,** Mobile: 09415264509, E-mail: hksinghmeera@gmail.com • hksinghmeera@yahoo.co.in

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FROM THE DESK OF THE MANAGING EDITOR

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Anasritah karmaphalam karyam karma karotiyah!
Sa samnyasi ca yogi ca na niragnir na cakriyah!!
The Bhagawad Geeta

He who perform his bounden duty without depending on the fruits of action- he is a sannyasin and a Yogin; not he who (has renounced) is without fire and without action.

Welcome to the new issue (Vol. 69, No. 3: July – Sept 2016) of the Indian Journal of Commerce (IJOC). I am most delighted to present before the readers & delegates of **the 69th All India Commerce Conference (AICC)** organized at **Lucknow University.** Lucknow University has been pioneer in the establishment of Indian Commerce Association (ICA) since 1947, so when all of us has assembled for the conference at Lucknow, we are supposed to take into account the debit & credit of all the developmental process and activities. The IJOC is published with the prime objective of providing versatile platform for interaction to academicians & researchers involved in business education. The journal aims at disseminating research output and providing information about recent developments in the relevant fields, by way of research articles on topics related to business and allied areas. With each issue of the journal, we are trying to bring to you the latest and authoritative insights into the facilitating world of commerce education. Business education has taken sea changes and is continuously evolving and transforming with the passage of time. In our country, the business education that prevailed during the Vedic period was focused on building the character, health, wealth and strength of the students which was visible in Nalanda & Takshashila Universities. The present methodology of learning and teaching prevailing in higher education is primarily class-room intensive but the case study method supported with empirical evidences is treated superior for business education & research. So, in this issue our prime goal has been to promote empirical papers and their wide circulation.

In this issue of the journal, we have put together the 9 research papers, reflecting diverse interest in the field of business: **a)** Corporate Social Responsibility, **b)** Changing attitudes of women investors towards different financial securities, **c)** Impact of Cultural Dimension on Materialism, **d)** Four Ps of Marketing, **e)** Future of B2B E-commerce in India, **f)** Cross Market Volatility Spillover between stock market and foreign exchange, **g)** Impact of R&D cost on India's Manufacturing Profitability, **h)** Foreign Direct Investment (FDI) inflows in Multi Brand Retailing & **i)** Raise of a Swadeshi MNC: A case study of Patanjali Group.

Corporate Social Responsibility refers to the initiatives of an individual corporate entity to undertake an extra effort for the welfare of the society and environment as a whole. The CSR practices have been followed since long time in India, but in recent years a lot of efforts have been undertaken to make Indian entrepreneurs aware of the social responsibility as an important segment of their business activity. In the era of globalization, **the status of women** has changed and improved to a great extent by increasing level of literacy. Today, woman plays different role like professionals, as an investors and as independent individuals to develop the economic status of Indian society. ***The participation of women in saving pattern as well as investment options is strengthening the value added economic condition*** so behavioural finance is majorly affected by women investors. Cultural Dimension and Materialism are interrelated and culture shapes the attitudes, belief and lifestyle so it must be treated as a guiding force. The **4Ps** i.e., product, price, place and promotion of **marketing mix** plays major role in the present marketing practices of firms. Marketing mix is generally adopted to satisfy the needs of the customers and recognized markets. Marketing mix is the policy adopted by the manufacturers to get success in the field of marketing. **Online shopping**, different from traditional shopping, has a unique feature of uncertainty, anonymity and lack of control and potential opportunism. Trade through **B2B E-commerce** portals is one of important resource which increases the visibility of MSMEs in the marketplace and helps them to overcome the barriers of time, communication and geography. The adoption of liberalization has increased the interdependence of market around the world. The rapid increase in participation of international investors in cross border transactions increase the capital flow between the countries raised the concern about the impact on **volatility of our stock and exchange rates.** Relationship between exchange rate and stock market has a greater impact on decision taken regarding diversification of risk by traders, arbitrators, hedgers etc. **Research and development,** has become essential in the corporate world as the requirement for new product design and development has increased with reducing product life cycles. Firms, willing to give up current profits to enhance future performance by investing in R&D, are expected to be more competitive in the long run. India's share in global R&D spending has increased over the last five years. **FDI in multi-brand retailing** must be dealt cautiously as it has direct impact on a large chunk of population. Foreign capital, if unchecked, may widen the gap between the rich and the poor. FDI in the retail sector can expand markets by reducing transaction and transformation costs of business through adoption of advanced supply chain that benefits consumers, and suppliers. **Patanjali** has created a miracle and record in the Indian **FMCGs industry.** For the first time after so many decades a normal company, which was born very slowly, is giving sleepless nights to the major FMCG players and is making them run for their money. If we analyze all the facts about Patanjali from starting to now we can come to a conclusion that entrepreneurs are not only be born but they can be made also.

Through this issue, the readers and the delegates may know the opinion of our President for the speedy extension of ICA activities. Our editorial team decided to incorporate, in this issue, the presidential address of **Prof. M.K. Singh.** Due to his efforts and guidance, ICA is having its own land at Greater Noida and we do hope to have attractive ICA building on that piece of land.

I express my gratitude to the erudite authors for their valuable contributions to the journal. Several experts made available their precious time to provide their valuable comments in evaluating the research papers and making critical comments for improving the quality of the papers printed in this journal. I owe a word of thanks to each one of them and especially to the Secretary Dr. Balwinder Singh for providing all support to bring this journal well in time. We intend to work for acquiring the impact factor for this journal in coming future. I request the practitioners to actively participate in AICC and contribute their papers and experiences so as to make the AICC and IJOC, more multidimensional and comprehensive.

At last but not the least, I would like to quote few lines of **Harivansh Rai Bachhan:**

Dhanush utha, prahar kar
Tu sabse phle vaar kar
Agni si dhadhak- dhadhak
Hiran si saejag- saejag
Singh si dahaad kar
Shankh si pukar kar
Ruke na tu, thake na tu
Jhuke na tu, thame na tu

Happy Reading!

Prof. H.K. Singh

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Corporate Social Responsibility: A Comparative Study on Reporting Practices of Top 5 Banks in India

Mandeep Kaur and Yuvika

ABSTRACT

Corporate Social Responsibility refers to the initiatives of an individual corporate entity, undertakes as an extra effort for the welfare of the society, environment as a whole. In a developing country like India, banking sector plays a very significant role in advancement the economy of the country not only by lending money or increasing the liquidity in the country but also by imposing a new practice called Corporate Social Responsibility (CSR). The purpose of this paper is to enlist the different initiatives taken by major banks in India and its reporting.

Key words

CSR, Banking Sector, CSR Reporting.

INTRODUCTION

India is moving ahead in every sphere to uplift the economy. All the companies are moving forward for the profit maximization and the profit which they are gaining it is from the society, so the companies must take it as an obligation towards the society which is to be repaid in terms of social banking for the benefit of the society. The CSR practices have been followed since long time in India, but in recent years a lot of efforts have been undertaken to make Indian entrepreneurs aware of the social responsibility as an important segment of their business activity. RBI by passing a circular in the year 2007, December, directed the Indian banking sector to focus on undertaking CSR initiatives for sustainable development. CSR is the ongoing assurance by business to conduct its functions ethically and add to economic development by improving the quality of life of its workers as well as of the local community and humanity at large. With the increasing need for economic development across the globe, there is demand for financial institutions to take central role in the efforts to eliminate poverty, achieve equitable and accountable systems of governance and ensure environmental security. However in developing countries the situation of CSR activities by financial institutions is not so satisfactory. In this reference the present paper attempts to analyze the CSR and CSR reporting practices adopted by top five Indian banks.

LITERATURE REVIEW

Bowen (1953) defines CSR as responsibility of entrepreneurs to pursue those policies or to take those decisions or to follow those types of relations which are required in terms of the objectives of the firm as well as which support the values of our society. Friedman (1970) has stated that there is only one social responsibility of every business that is to make best possible use of resources and engage in those activities designed to increase its profits and it minimizes the corporation focus only on earning profits. Hederson (2001) has argued that business should focus on how to do the best; it should be able to create job opportunities and increase the wealth of stakeholders. CSR is the concern of only government, not business people. Campbell (2004) mentioned in their studies that these activities increased over a period of time as it provide competitive edge over other in terms of connectivity with customer, investor, government etc. Sharma (2011) has made an endeavor to investigate CSR practices and CSR reporting in India with special reference to banking sector and concluded that banking sector in India is showing interest in integrating sustainability into their business models but still are far from satisfaction. _HYPERLINK "mailto:kvasnickova@pef.czu.cz"KvasnièkováHYPERLINK "mailto:kvasnickova@pef.czu.cz" HYPERLINK "mailto:kvasnickova@pef.czu.cz"Stanislavská Lucie et al (2012) has defined the issue of Corporate Social Responsibility on a theoretical level how it has developed, what is its present scenario and its impact on financial performance of the organization. Other part of the article focuses on three czech banking subjects (Èeská spoøitelna, Komerèní banka a Èeskoslovenská obchodní banka), which regularly take the leading positions of the official corporate donors chart "TOP Filantrop". The article explores the evolution of corporate donations and finds the connection between corporate donations and corporate profit and financial and economic crisis.

Singh et al (2013) has stated that maximum number of banks whether private or public sector are performing CSR practices but the amount spend by them are still not disclosed in their websites. Dheeraj Tiwari (2014) highlighted a proposal of government of India to float a company to manage CSR funds of all central public sector enterprises to ensure efficient implementation of financial initiatives and free companies from additional responsibilities under section 25. The unspent amount of allocated budget for CSR and sustainability activities for a year will be spent within two financial years failing it would be transferred to a sustainability fund. Since the guidelines were issued in 2013, we will have to wait till 2016 for sustainable fund to take off. Singh M.K. and Sharma Sonal (2015) have studied the concept of CSR, its role, challenges before CSR projects and recommendation for its proper implementation. They have tried to give sustainability model of CSR and their main focus is on the issue of sustainability for a better tomorrow.

Literature witnessed that banking industry require special attention because working pattern and dimensions of banks are different from companies (Jensen and Meckling, 1976) in terms of assets and funds. In companies major problem is agency gap between majority shareholder and minority shareholders but in banks depositors are more important than shareholders as majority of assets are funded by them. Two main features set banks apart from other businesses – level of opaqueness in their functioning and the relatively greater role of government and regulatory agencies in their activities (Sharma et al., 2013).

OBJECTIVES OF THE STUDY

- To study the concept of CSR.
- To analyze the CSR initiatives and reporting practices followed by top five banks of India.
- To study the present status and regulation of CSR in banking.

METHODOLOGY

An effort is made in the present study to know the status of CSR and reporting practices adopted by the banking sector for CSR. For the present study five top banks are selected on the basis of value of net assets held by them, and data are collected from the secondary sources i.e. annual reports of concerned banks, web sites, newsletters and other secondary sources. The study covers the financial year 2014-2015.

CSR INITIATIVES BY BANKING SECTOR

ICICI Bank

ICICI Bank is India's largest private sector bank. For the year ended on March 31, 2015, the total assets of the bank are Rs.6,461 billion and profit after tax is Rs.111.75 billion. The bank has 4050 branches and 12451 ATMs set up within the country and it serves over 52 million customers. It has presence in 17 countries.

Table 1. Category wise classification of CSR expenditure by ICICI Bank during 2014-15

Activity	Amount (Rs. Million)
Promoting Education and Healthcare Facilities	260.0
Rural Development	1,137.7
Prime Minister's Relief Fund	37.8
Promoting Education and Research	54.0
Promoting Preventive Healthcare	6.2
Ensuring Environment Sustainability	28.9
Skill Development for Banking Sector	15.7
Financial Counselling (Education)	9.2
Miscellaneous	5.9
Total	1555.4

(Source: ICICI annual report)

The average net profit of the bank for the last three financial years was Rs. 85.79 billion calculated as specified by the Companies Act, 2013. The prescribed expenditure i.e. 2% of average net profits of last three years is Rs. 1.72 billion and actual amount spent towards CSR during FY2015 is Rs. 1.56 billion. As per table 1, bank has contributed maximum amount towards rural development followed by education and healthcare and research.

Bank of Baroda

Bank of Baroda is an Indian state-owned banking and financial services company headquartered in Vadodara in Gujarat, India. It offers a range of banking products to corporate and retail customers through its branches and specialized subsidiaries and affiliates. The bank has 5305 branches all over the world and has presence in 24 countries. The bank has Rs.3,398.43 crore profit after tax for the year ended on March 31, 2015. In financial year 2014-15 total spending of the bank on CSR is Rs. 1783.13 i.e. 0.52% of profit after tax. As depicted by table 2.bank has contributed maximum share of its CSR expenditure for socio-economic development and minimum contribution is towards education

Table 2. Category wise classification of CSR expenditure by Bank of Baroda during 2014-15

Activity	No. of Donations	Amount (Rs lakh)
Education	4	34.34
Health	7	153.46
Socio-Economic Development	4	1080.33
Environment	2	515.00
Total	17	1783.13

(Source: Bank of Baroda annual report)

Punjab National Bank

Punjab National Bank is an Indian financial services company based in New Delhi, India. Founded in 1894, the bank has 6560 branches and 8348 ATMs across 764 cities. It serves over 80 million customers.

Table 3. Categories of CSR expenditure by PNB during 2014-15

Sr. no.	Activity
a)	Rehabiliation work in Uttarakhand (under donation)
b)	Medical Camps
c)	Farmers training including visits to agriculture universities
d)	Tree plantations
e)	Blood donation camps
f)	Distribution of artificial limbs
g)	PNB hockey academy

~~(Source: PNB annual report)~~

It has presence in 9 countries overseas. Bank has Rs. 3,062 crore total profits after tax for the year ended on 2014-15. During this financial year bank has spent Rs. 375.89 lakh on CSR activities, this constitutes 0.12% of profit after tax. Table 3. lists the activities on which PNB has contributed but amount is not disclosed in the annual reports.

HDFC Bank

HDFC bank limited is an Indian banking and financial services company headquartered in Mumbai, incorporated in 1994. HDFC bank has taken various initiatives as part of their CSR initiatives. At present the bank has 4014 branches and 11766 ATMs. Bank has Rs. 10,216 crore total profit after tax for the year ended on 2014-15. The average net profit of the bank for the last three financial years was Rs. 9856.35 crore calculated as specified by the Companies Act, 2013. The prescribed expenditure i.e. 2% of average net profits of last three years is Rs. 197.13 crore and actual amount spent towards CSR during FY2015 is Rs. 118.55 crore. Table 4. depicts that the maximum contribution by bank if for rural development followed by skill training and the minimum contribution is for environment sustainability.

Table 4. Category wise classification of CSR expenditure by HDFC during 2014-15

Sr. No.	Activities	Amount (Rs. Crore)
1	Financial Literacy and Empowerement	7.67
2	Promoting Education	8.56
3	Skill Training and Livelihood Enhancement	12.53
4	Health care	7.28
5	Environmental Sustainability	0.95
6	Eradicating Poverty	1.00
7	Rural Development	80.56
	Total	118.55

(Source: HDFC annual report)

State Bank of India

State Bank of India is an Indian multinational, Public Sector banking and financial services company. It is a government-owned corporation with its headquarters in Mumbai. It is the largest bank in India in terms of deposits, advances, profits, branches and employees. . At present the bank has 16,333 branches and ATMs. Bank has Rs. 13,102 crore net profit for year ended on 2014-15. The SBI earmarks 1% of the previous year's net profit as CSR budget for the year. The CSR budget for FY2015 was Rs. 109 crores but the actual amount spend is Rs. 115.80 corers. Table 5.

depicts that the maximum contribution by bank is for supporting education followed by healthcare and the minimum contribution is for supporting victims of natural calamities.

Table 5. Category wise classification of CSR expenditure by SBI during 2014-15

Sr. No.	Category	Amount (Rs. Crore)
1.	Supporting Healthcare	28.56
2.	Supporting Education	41.20
3.	Sanitation	13.64
4.	Vocational Training/ Livelihood	24.24
5.	Others	4.16
6.	Natural Calamities	4.00
	Total	115.80

(Source: SBI annual report)

COMPARISON OF CSR EXPENDITURE BY BANKS

As per comparative analysis in table 6, the CSR spending analysis of 5 banks reveals that these banks are not spending 2% of their average net profits on CSR projects. The top most performing public sector bank SBI has spent just 0.88% of its net profit, Bank of Baroda 0.52% and PNB ranks the lowest with minimum spending i.e. 0.12% of its net profit. On the other hand ICICI bank has emerged as the best performing bank with 1.82% of spending followed by HDFC bank with 1.2%.

Table 6. Comparison of spending on CSR activities

Bank	Profit after tax (in Cr)	Amount spent on CSR in 2014-15 (in Cr)	Percentage of profit spent on CSR (in Cr)
ICICI	11,175	156	1.82%
HDFC	10,216	118.55	1.2%
SBI	13,102	115.80	0.88%
Bank of Baroda	3,398	17.83	0.52%
PNB	3,062	3.76	0.12%

PRESENT STATUS OF CSR IN BANKING

RBI guidelines on CSR

To highlight the role of banks in corporate social responsibility the RBI circulated a notice on December 20, 2007 for all the scheduled commercial banks, with title **"Corporate Social Responsibility, Sustainable Development and Non-Financial Reporting – Role of Banks".**

Major issues discussed in the notice were regarding -
1. Corporate Social Responsibility
2. Sustainable Development
3. Non-Financial Reporting.

Briefing about the corporate social responsibility program to other member commercial banks RBI followed many international initiatives to highlight the importance of this notice like United Nations Environment Program Finance Initiative (UNEPFI), Global Reporting Initiative (GRI), International Finance Corporation, The Equator Principles and Declaration on Financial Institutions. Apart from these international initiatives, RBI report also talked about other important and urgent issues regarding global warming and extent of problem, stern review-the economics of climate change, the happy planet index, the Kyoto protocol (carbon trade)

New companies bill is a step forward: Clause 135-corporate social responsibility.

The new Companies Bill attempts to make it compulsory for companies of a certain financial strength to spend at least 2% of their average net profit over three years on corporate social responsibility. As per the new norms, it is not only compulsory to spent two per cent of average profits on CSR, but reporting about it is also mandatory. In case, a company is unable to spend the required amount, then it has to give an explanation for the unspent amount on CSR. this would be applicable on the companies having either net worth of Rs 500 crores or more; turnover of Rs 1,000 crores or more; or net profit of Rs 5 crores or more.

As per notification on August 13, 2012, Securities Exchange Board of India has notified that apart from the performance in operational and financial terms, enterprises have obligations towards the society and should adopt ethical business practices in interest of society and environment as these are equally important. SEBI has made it obligatory for the top 100 listed entities (based on market capitalization at BSE and NSE) that they should incorporate Business Responsibility Reports in their annual reports and these have to be made available in the websites of the companies.

CONCLUSION

Banks play an important role in the development and growth of Indian economy. The Banks studied in this paper are making their contribution for activities like education, health care facilities, skill development, eradication of poverty, national relief fund, sanitation, rural development etc. All most all private and public sector banks are performing their CSR activities effectively but still some banks are not disclosing the information in quantitative form. We recommend that banks should reveal the quantitative data on CSR activities in their annual reports. Non financial reporting should also become compulsory for the banks. Comparison shows that private banks are spending more on CSR projects as compare to public sector banks. So, Government needs to focus more on functioning of the banks through CSR activities. After the involvement of RBI the CSR becomes the important part of Banking Sector but still more regulations and new policies are required to implement the concept of CSR in Indian Banking Sector. RBI should make some policy to draw a line of difference between the banks which are performing CSR activities and those not performing CSR activities. Most of the banks implement CSR in an ad hoc manner and unconnected with their business process. Further deliberate actions are required to be taken by the banks to ensure the socio-environmental viability of projects to be financed. Banks must also provide suitable guidance to its staff on environmental and social risks in lending in order to ensure an environmental concern in banking dealings.

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An Empirical Investigation of Changing Attitudes of Women Investors Towards Different Financial Securities

Veenita Singh and Shubham Joshi

ABSTRACT

In past, the role of women in financial decision was not considered as significant for economic development. In the era of globalization, the status of women has changed and improved to a great extent by increasing level of literacy. Today, woman play different role like professionals, as an investors and as independent individuals to develop the economic status of Indian society. For economic development of country, it is necessary to invest all the savings in a right manner. The participation of women in saving pattern as well as investment options is strengthening the value added economic condition. Various opportunities and schemes have offered by Indian government to motivate women through which the capital appreciation is possible. Savings in turn to investment decision made by women is based on their risk and return demands, safety of money, liquidity, the available avenues for investment, various financial institutions, etc. The study aims to evaluate the impact of age of women to select the investment avenues. In addition to that this paper also aims to gain knowledge of awareness level and risk taking behavior of marital status of women.

Key words

awareness level, capital appreciation, investment avenues, risk taking behavior

INTRODUCTION

Today, the role of women is not limited to the house maker. Now they are more independent ot take their decision to stand themselves. For the economic and social development of country, the women contribution is more significant. They have proved themselves that they are better planner than men. More than 50% of women contribution is in form of unpaid economic activities. The increasing level of education and awareness makes women more independent to take economic decision.

In past, the women were more depended to their spouse' income. The saving habits of women were fulfilling the requirement of contingencies period. In those days, women did not have any awareness about various investment outlets. They are not target as economic maker. But nowadays, the increasing level of education and knowledge of women have improved the economic opportunities to make financial panning by them. Government and other societal as well as economical factors influence the women to develop their attitude regarding financial investments. The psychological behavior and preferences of women is different from the man in context to financial investment decision. Many women influence or control the majority of all consumer purchase decisions and many of the investment decisions. As a result, it is important for women to focus on finances now more than ever. Throughout their lives, as a woman, they will be faced with different financial challenges than their male counterparts. If women are going to take control of their financial future, it's important that they recognize those differences and empower themselves. Today, women will be able to maintain their lifestyle; they should stay involved in investment decisions and consider planning for the unexpected early on.

Now, women are equally valued to men, through their education have knowledge about various aspects of investment and as a result they invest in various investment avenues such as shares, debentures, mutual funds, commodities and bank deposits. Employed women have a greater propensity to save and invest because of their independent earning power. They are also motivated by the investment behavior of their colleagues in their work place. They are supposed to be risk adverse, safety oriented and guided by certainty of returns.

Women in India now participate in all activities such as education, politics, media, science and technology, etc. With a changing scenario, women has started actively participating in investing their surplus money, though it all depends upon the various parameters such as degree of their risk taking capability, influence of family members and friends and the dare to get exposed to modern and innovative investment avenues. Today various financial instruments are available in the financial market like. Fixed Deposit, gold, Real Estate , Life Insurance , Equity Shares, Corporate Bond, Chit Funds and Others etc. The women have to choose proper investment avenue among them, depending upon his specific need, risk preference, and expected return.

REVIEW OF LITERATURE

The review of literature can lead to draw some significant conclusions and serve as a guide mark for this study. It also gives a fair chance to identify one gap that exists in area of research.

1. **Harlow and Brown (1990)** observed in their study that an individual has their own specific mechanism regarding choice of investment avenues. These specific factors are influenced by psychological tends.

2. **Warren et al. (1990) and Rajarajan (2000) emphasized that there is impact of lifestyle as well as** demographic attributes on an individuals to select investment avenues.

3. **Gupta (1991)** concluded that framing the portfolio for investment is more significant rather than selecting an investment choice. Risk tolerant investors can control risk regarding investment. He also defined the terminology as "illusion of control"

4. **Karthikeyan (2001)** has conducted research on Small Investors Perception on Post office Saving Schemes and found that there was significant difference among the investors investment pattern and age factor.

5. **Avinash Kumar Singh (2006) in his** study entitled "Investment Pattern of People" has been concluded that the behaviors of people in Bangalore city are more concern about their investment pattern and the risk associated with this.

6. **Sudalaimuthu and senthil kumar (2008)** in their study on Mutual fund emphasized that there is perception of investors towards mutual fund and its schemes. The attitude towards the purchase of Mutual fund is related on the risk associated with this.

7. **SaritaBahl (2012)** in her study entitled "investment behavior among the working women in Punjab" has concluded that how much women are aware about the investment benefits and whether they invest their money or not, and if invested, how much money is invested by them. She made efforts to determine the level of agreement of working women of Punjab on various aspects of investment planning.

OBJECTIVES OF THE STUDY

This research is primarily concerned to find out the factors that influence the attitude of women while selecting the financial securities. The research objectives can be understood in the following manner:

- To evaluate the impact of marital status of women on their awareness level and risk bearing capacity in context to investment decision.
- To examine the age of women that influence the selection of investment options.

RESEARCH PROBLEM

The present study aims to get some knowledge about the factors that influence the investment attitude of women. The study is designed to find the answers of the following questions:

1. Is there relationship between investment awareness level and women status?
2. How age of women is significant to selection of investment avenues?
3. What is risk taking appetite by different marital status of women?

HYPOTHESES OF THE STUDY

H1: *There is a significant difference between marital status of women and the investment awareness level.*

H2: *There is a significance differences between marital status of women and the risk taking appetite level for investment.*

H3: *There is no significance relationship between age and the investment avenues.*

SAMPLING TECHNIQUES AND RESEARCH METHODOLOGY

The population chosen for this study is women as an investors approaching participation in financial markets. The sample unit for this study is women candidates. The descriptive research with convenient sampling technique is used to research on 100 women respondents. Primary data is collected by administering a detailed questionnaire and also through scheduled interview. The statistical technique designed to analyze the collected data with the help of chi square test.

RESULTS

Testing of hypothesis

H1: *There is a significant difference between marital status of women and the investment awareness level.*

Table No. 1

Marital status	Awareness	Not Awareness	Total
Married	49 (46.23)	20 (22.77)	69
Unmarried	18 (20.77)	13 (10.23)	31
Total	**67**	**33**	**100**

Degree of freedom (Table 1)

V = (r -1) (c – 1)

= (2 -1) (2 – 1)

= 1

The critical value of 5% level of significance at 1 degree of freedom is 3.841. The calculated value (1.57) is less that the critical value so, null hypothesis is rejected. The analysis resulted that there is impact of marital status of women on awareness level regarding investment.

Degree of freedom (Table 2)

V = (r -1) (c – 1)

= (2 -1) (5 – 1)

= 4

The critical value of 5% level of significance at 4 degree of freedom is 9.488. The calculated value (11.40) is greater than the table value so, null hypothesis is accepted. Hence, it is evaluated from the above table that unmarried women have more risk bearing capacity.

Degree of freedom (Table 3)

V = (r -1) (c – 1)

= (4 -1) (8 – 1)

= 21

The critical value of 5% level of significance at 1 degree of freedom is 32.671. The calculated value (14.6096) is less that the critical value so, null hypothesis is rejected. It is also evaluated form the above table that there is significance relationship between ages of women with the selection of investment options.

H2: *There is a significance differences between marital status of women and the risk taking appetite level for investment.*

Table No. 2

Marital status	0-10%	11-20%	21-30%	31-40%	41-50%	Total
Married	23(20.01)	31(27.6)	9(15.81)	4(4.14)	2(2.07)	69
Unmarried	6(8.99)	9(12.40)	13(6.82)	2(1.86)	1(.93)	31
Total	**29**	**40**	**22**	**6**	**3**	**100**

H3: *There is no significance relationship between age and the investment avenues.*

Table No. 3

Age	FD	Gold	Real estate	Insurance	Shares	CB	Chit funds	Others	Total
Upto 30	5(6.2)	9(7.13)	3(2.17)	10(8.99)	2(1.55)	0(.93)	1(2.79)	1(1.24)	**31**
31-40	9(8.6)	10(9.89)	4(3.01)	11(12.47)	2(2.15)	2(1.29)	4(3.87)	1(.72)	**43**
41-50	4(3.4)	3(3.91)	0(1.19)	4(4.93)	1(.85)	1(.51)	2(1.53)	2(.68)	**17**
Above 50	2(1.8)	1(2.07)	0(.63)	4(.74)	0(.45)	0(.27)	2(.81)	0(.36)	**09**
Total	**20**	**23**	**07**	**29**	**05**	**03**	**09**	**04**	**100**

CONCLUSION

Today, married women are more curious to know the different investment avenues available in the market. Being a part a home maker, they are also interested to gather information regarding financial securities. They are more independent to make financial decision and planning. Unmarried women are having greater risk bearing capacity rather than married women. Married women are willing to invest in less risky investment options. It is also concluded from the study that the age factor is significant factor for selection of investment alternatives. The middle age group of women is more interested to plan for financial securities. Nowadays, the attitude of women is changed regarding financial securities. They feel more independent to take decision.

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Four Ps of Marketing: Practices of Micro Enterprises in Arunachal Pradesh

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ABSTRACT

Marketing with marketing mix (MM) approach is an important determining factor of an enterprise's success. The present study is based on primary data. All together 50 units are found to be functioning in the district and are surveyed on the basis of complete enumeration method. The collected data are analysed and interpreted through the help of SPSS software. It is revealed that branding is not a common marketing practice of micro enterprises the district and are not actively engaged in promotional activities. The majority of micro enterprises of Papum Pare district choose local market and cost plus pricing method. The paper analyses about application of MM (Product, Price, Place and Promotion) activities undertaken by micro enterprises in Papum Pare district of Arunachal Pradesh.

Key words

Marketing, Marketing Mix, Micro Enterprises, Product, Place, Price, Promotion

INTRODUCTION

Marketing is an important activity and determinant of an enterprise's success. A proper and effective marketing practice is indeed an essential requisite of contemporary business enterprises. It is not only to capture a place in the market but also to inform to the mass customers about their existence. Earlier the concept of marketing was know only through large manufacturing business. However, the concept and nature of marketing have witnessed perceptibly changes in recent times. The marketing ability of the micro firms are being criticised by various management experts as because of their low investment nature. Now a days micro enterprises are trying to promote their products, through diversification and product development so as to create product utility for the customers. The marketing practices however still not that much adopted by the micro business. As marketing is the only way to promote the business product in the wider market it becomes an important ingredient for business survival. *Stanton* advocates that marketing is a total system of business activities designed to plan, price, promote and distribute want satisfying goods and services to present and potential customers.

Marketing mix is the policy adopted by the manufacturers to get success in the field of marketing (Pillai & Bhagavahi, 2006). The 4Ps i.e., product, price, place and promotion of marketing mix plays important role in the present marketing practices of firms. Marketing mix is generally adopted to satisfy the needs of the customers' and recognized markets. It is also is s directly used towards the customers since the taste and preferences of the customers towards products usually remain dynamic.

There are lots of studies conducted in the area of micro enterprises' performance, growth and marketing practices related to the micro and small businesses. But there is no such study in Arunachal Pradesh. This paper figures out whether micro enterprises have been applying 4ps of marketing mix effectively in the process of marketing practices and deriving benefits out of it.

LITERATURE REVIEW

Dhiwayo (2014) has studied 100 micro fashion boutique firms in Masvingo town in Zimbabwe. The study revealed that most of the micro fashion boutiques of Zimbabwe have not yet adopted the use of marketing and which is the possible reason for the failure of firms to grow. Further the promotion was not constant and not planned in most micro fashion firms as it was done on the reaction of other businesses actions. His study concluded that owner-manager for micro fashion boutiques should start working on the use and adoption of marketing plans so that all elements of marketing are planned and implemented properly.

Kuazaqui (2013) made an exploratory study on the marketing strategies of Brazilian micro enterprises. To know about the knowledge level of the tools and marketing strategies a study was made with 160 stalls at Avenida Paulista in the city of Sao Paulo and another study with 127 micro businesses was done in the various segments in the same city. The study identified how Brazilian micro enterprises apply marketing mix strategies as well as a knowledgeable level of the management tool for growth.

Ramaswamy (2013) in his study on marketing of problems of micro artisan enterprises in Thenzawl Cluster of Mizoram attempted to show the different marketing related problems faced by the 200 micro handloom entrepreneurs. The study found through ranking method that a problem due to 'low margin' emerged as a highest ranking problems for the entrepreneurs of Thenzawl cluster. The existence of middleman has created a gap between customer and the producer. Further his study suggested that the cluster should create a brand that can reflect socio cultural values of Mizo society in the national and international level. Study further stressed that there is a need of greater support of the government agencies in the marketing of the products to the national and international markets.

Weerakoon (2013) tried to identify whether there is differences in level of market orientation in terms of firm level characteristics or not in 49 micro and small businesses of Badulla district of Sri Lanka. The study found that none of the firms are adopting a high level market orientation and all most all the firms were belonging to low level or medium level of market orientation. Further her study also proved that there were statistically significant differences of level of market orientation in terms of owner's gender, educational level and business experience.

Reshmi (2012) explained the role played by Kudumbashree micro enterprises of Kerala in alleviating poverty through their marketing strategies. It is found that most of the micro enterprises felt that more capital investment in the unit can improve the conditions of micro enterprises. Price and quality are some of the most important affecting factors for increase in the demand of the products. The study concluded that Kudumbashree micro enterprises are in the early stages but units has been successful in reaching the unreached through providing ways and means of living and financial independence.

OBJECTIVES

(i) To find out the marketing practices of micro enterprises of Papum Pare District in relation to the Product Branding.

(ii) To find out the marketing practices of Micro Enterprises of Papum Pare District in relation to the Place of Marketing.

(iii) To find out the marketing practices of Micro Enterprises of Papum Pare District in relation to the Pricing Method.

(iv) To find out the marketing practices of Micro Enterprises of Papum Pare District in relation to the Media of Promotion.

HYPOTHESES

H_1: Branding is not a marketing practice of Micro Enterprises of Papum Pare District.

H_2: There is no provision for marketing the products of micro enterprises of Papum Pare District at Global Level.

H_3: Cost plus pricing is the only pricing method of Micro Enterprises of Papum Pare District.

H_4: Advertising of the products is the only promotional media of Micro Enterprises of Papum Pare District.

METHODOLOGY

Research Design: The present study is descriptive and analytical in nature and is conducted in the Papum Pare District of Arunachal Pradesh. Therefore, the present study on the marketing practices of micro enterprises of Papum Pare district is based on complete enumeration survey. The data of micro enterprises are collected from District

Industries Centre, Yupia & Naharlagun. The total numbers of micro enterprises registered under MSME sector are 61(in Papum Pare district) out of which 51 enterprises are found to be functioning in the district. Further, out of 51 micro enterprises, 50 micro enterprises are in manufacturing sector and which are surveyed for present study.

Data Collection and Questionnaire Design: Both primary and secondary data are used for the study. Primary data based on the basis of the objectives and hypothesis and are collected through personal interview with structured questionnaire. The distributed questionnaires consisted of information on whether micro enterprises of Papum Pare District of Arunachal Pradesh brand their product, the area of marketing their products, the pricing methods and the media of promotion. The primary data are then analysed through the help of SPSS.

Scope of the Study: The major emphasis of the study is to identify the marketing practices of micro enterprises of Papum Pare district of Arunachal Pradesh which are involved in manufacturing of goods. The study is conducted by taking up 4Ps of marketing mix viz. Product, Price, Place and Promotion. Each of these elements of marketing mix had various aspects however, the study is concentrated only on identifying whether micro enterprises of Papum Pare district brand their product, what kind of pricing methods are used, the area in which the products are marketed and the type of media use for promotional purposes.

Period of the Study: The survey was conducted during January 2015 to June 2015.

Findings and Analysis of the Study

The information regarding the product branding, pricing method, area of market and media of promotion of micro enterprises of Papum Pare District have been primarily collected and are presented in tables.

It is found that, from the field study, micro enterprises of Papum Pare district engaged in manufacturing sectors are producing various kinds of consumable/industrial products. The products manufactured by micro enterprises of Papum Pare district falls under five major classification or categories i.e.,

i) Agricultural Based,
ii) Demand Based,
iii) Forest Based,
iv) Mineral Based, and
v) Textile Based.

Four Ps of Marketing Mix : Practices by Micro entrepreneurs

The modern marketing system is based on consumer oriented concept and as such it requires every business enterprise to adopt proper marketing practices with regard to the

products they have manufactured, the prices they are fixing for the products, the place where they are going to market their products and the promotion of their products and enterprises. The contemporary marketing practices believe that consumers are more attracted towards products which have a brand name. It can be stated that a good brand name can lead to good selling. Brand name often had a positive impact on the psychology of the buyers about the product. However, it is found out from the table 1 of the study that majority (88 per cent) of micro enterprises of Papum Pare District are not branding their products, while only 12 per cent of them had taken up product branding practice.

About the place of marketing their products by the micro enterprises of Papum Pare district, it is further found out (from table 1) that majority (92 per cent) of them are marketing their products at local level and few enterprises (8 per cent) have marketed their products at national level . And none of the micro enterprises have marketed their products at global market.

Table 1 : Response on MM (branding, pricing and distribution)

		Frequency	Percent	Valid Percent	Cumulative Percent
Brand Name	No	44	88.0	88.0	88.0
	Yes	6	12.0	12.0	100.0
	Total	**50**	**100.0**	**100.0**	
Pricing Method	Cost Plus Pricing	45	90.0	90.0	90.0
	Competitive Pricing	5	10.0	10.0	100.0
	Total	**50**	**100.0**	**100.0**	
Place of Market	Both Local & National	4	8.0	8.0	8.0
	Local	46	92.0	92.0	100.0
	Total	**50**	**100.0**	**100.0**	

Source : Field survey

Further, the prices of the products and the promotional activities of the enterprises affect the consumers' perception towards the product. Products with lower prices are generally viewed as goods of inferior quality while too much promotion or no promotional activities can give a negative impact to consumers. The marketing practices of micro enterprises of Papum Pare district in relation to pricing (table 1) and promotional activities (table 2 & 3) reveals that;

(i) Majority (90 per ecnt) of the micro enterprises of Papum Pare district are pricing their products on the basis of cost plus pricing method while 10 per cent of them have adopted cost competitive base pricing method.

Table 2 : Promotional activities by micro entrepreneurs

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Yes	16	32.0	32.0	32.0
	No	34	68.0	68.0	100.0
	Total	**50**	**100.0**	**100.0**	

Source : Field survey

(ii) Majority (68 per cent) are not engaged in any kind of promotional activity while only 32 percent of them are involved in promotion of their products.

Table 3 : Kinds of promotion adopted by enterprises

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Advertising	13	26.0	26.0	26.0
	Sales Promotion	1	2.0	2.0	28.0
	Personal Selling	2	4.0	4.0	32.0
	No Promotion	34	68.0	68.0	100.0
	Total	**50**	**100.0**	**100.0**	

Source : Field survey

(iii) Among the micro enterprises (32 per cent) who are involved in promotion activities, only 2 percent are using sales promotion, 4 percent are using personal selling while majority (26 per cent) of them are using advertising as a means of promoting their products.

Hypothesis Testing

On the basis of the categories of products manufactured by the micro enterprises of Papum Pare district, the hypotheses are tested for product branding, pricing, place and promotion practices.

H_1: *Test of whether branding is not a marketing practice of Micro Enterprises of Papum Pare District.*

Table 4: Chi-Square Tests of branding

	Value	Df	Asymp. Sig. (2-sided)
Pearson Chi-Square	7.718[a]	4	.102
Likelihood Ratio	8.068	4	.089
N of Valid Cases	50		

a. Significant at 0.05 level

Source : Table 1

Here, at 0.05 significance level with 4 degrees of freedom, the calculated value of chi square is 7.718 whereas the table value of chi square is 9.488. Hence, H_1 is accepted.

H_2: *Test of whether there is no provision for marketing the products of micro enterprises of Papum Pare District at Global Level.*

Table 5 : Chi-Square Tests of marketing in the district itself

	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	1.466[a]	4	.833
Likelihood Ratio	1.903	4	.754
N of Valid Cases	50		

a. Significant at 0.05 level

Source : Table 1

Here, at 0.05 significance level with 4 degrees of freedom, the calculated value of chi square is 1.466 whereas the table value of chi square is 9.488. Hence, H_2 is accepted.

H_3: *Test of whether cost plus pricing is the only pricing method of Micro Enterprises of Papum Pare District.*

Table 6 : Chi-Square Tests on Pricing methods

	Value	Df	Asymp. Sig. (2-sided)
Pearson Chi-Square	1.821[a]	4	.769
Likelihood Ratio	2.968	4	.563
N of Valid Cases	50		

a. Significant at 0.05 level

Source : Table 1

Here, at 0.05 significance level with 4 degrees of freedom, the calculated value of chi square is 1.821 whereas the table value of chi square is 9.488. Hence, H_3 is accepted.

H_4: *Test of whether advertising of the products is the only promotional media of Micro Enterprises of Papum Pare District.*

Table 7 : Chi-Square Tests on product promotion

	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	6.441[a]	12	.892
Likelihood Ratio	7.211	12	.843
N of Valid Cases	50		

a. Significant at 0.05 level

Source : Table 1

Here, at 0.05 significance level with 12 degrees of freedom, the calculated value of chi square is 6.441 whereas the table value of chi square is 21.026. Hence, H_4 is accepted.

CONCLUSION

The micro enterprises of Papum Pare district are not market oriented. From the parameters taken up for the study it can be stated that the micro enterprise of Papum Pare district are not adopting proper and effective marketing practices, and their marketing activities are not satisfactory with regard to 4 Ps of MM (branding, labelling, packaging, and promotion etc). The majority of the micro enterprises of Papum Pare district are neither branding nor promoting their products.

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Future of B2B Ecommerce in India – An Empirical Analysis of Sellers' Perspective

Amit Kumar Singh and Aayush Ajmani

ABSTRACT

The electronic commerce among companies promises vast benefits such as dramatically reduced costs, greater access to buyers and sellers, improved marketplace liquidity, and a whole new array of efficient and flexible transaction methods. Among its various types, B2B ecommerce is becoming the bigger revenue generator, both nationally as well as globally. In this paper we have made an attempt to study B2B Ecommerce model and its future perspectives. For this we have done the sector evolution with recent trends. A primary data collection has been done through face to face and telephonic interview with the help of questionnaires. For this, 25 sellers associated with at least one ecommerce portal were interviewed. The study investigated the current perception and future expectations of the respondents. The research also empirically investigated the current perception towards social, economics, infrastructure, and legal and political barriers in the country by using statistical method of Regression. The results show that economic, legal and political and infrastructure environment are moderately and positively correlated with each other. And the infrastructure along with legal and political setup appears to hold the key to unlock the barriers to e-commerce growth in India.

Key words

Marketing, Marketing Mix, Micro Enterprises, Product, Place, Price, Promotion

INTRODUCTION

The most common customers of B2B online classifieds are micro, small and medium enterprises (MSMEs). Small businesses usually lack the requisite financial resources and they find difficult to sell their products and services to potential clients with the help of traditional media such as newspapers, banners and television. Therefore trade through online B2B portals is one of important resource which increases the visibility of MSMEs in the marketplace and helps them overcome barriers of time, communication and geography. India's B2B ecommerce market opportunity is currently valued at$300 billion and the same is expected to expand to $700 billion by 2020, according to a Walmart report. From the emerging trends visible in this space, B2B ecommerce is entering transformative phase. Businesses are adopting the model much quicker than anticipated and a J-curve growth may be around the corner. B2B ecommerce space has been witnessing entry of new start-ups only in the last 23years.

B2B Ecommerce Landscape in India

The Indian ecommerce landscape has been dominated by B2C companies until now. While B2C still continues to grow at an exponential rate in India, B2B ecommerce's now gradually picking up.

Till now, the monetary and trust aspect were holding Indian consumers back to trust ecommerce players in B2B space, considering the size of the transaction involved. However, the growth of the Internet and emarket place along with accelerating technological product obsolescence has resulted in a hyper informed and commoditized B2B marketplace. "After US, India is going to be the most important market globally.

RATIONALE OF STUDY

- To understand and evaluate the present state of E-Commerce industry and market in India.
- To evaluate the future of B2B ecommerce in India.
- To identify the major challenges and recommending possible solutions.
- To identify the major satisfactory and dissatisfactory factors for sellers.

REVIEW OF LITERATURE

Sonja, G. K., and Ewald, A. K. (2003) The outcome of this research is to create long-term customer relationships, firms need to build customer trust. It is widely agreed that e-commerce can only become a broad success if the general public trusts the virtual environment. "The most salient source of trust in a retail setting is the salesperson, where consumer trust is dependent on the salesperson's expertise, likeability, and similarity to the customer". In online shopping, the salesperson is replaced by the web pages on the marketer's web site. In traditional marketplace consumers can get cues from the location and size of a store, the sales personnel in the store, the ambience of the store, can touch and feel the products, whereas in the online environment such cues does not exist. Online shopping, different from traditional shopping, has a unique feature of uncertainty, anonymity, and lack of control and potential opportunism. So compared to traditional shopping, the risks involved in online shopping are greater. Trust is extremely crucial on the internet due to the lack of physical manifestation on the internet. In a digital world where physical interaction is more or less absent, and product qualities and benefits must be presented in a convincing way over the wired network, building trust becomes increasingly important. Customers tend to choose a provider that represents a set of attributes that can be trusted. If consumers trust E-tailers then they will feel comfortable in doing transactions and disclosing personal information to them. Engendering trust in consumers is one of the challenges that online firms have to confront. So it is of utmost importance for the online merchants to understand the factors influencing online consumers' trust in e-tailing

Ha, H. Y., and Perks, H. (2005) introduced the relevant exogenous factors in this context are "consumer traits""situational factors" "product characteristics" "previous online shopping experiences" and "trust in online shopping" By incorporating these exogenous factors next to the basic determinants of consumers' perception and intention to use a technology, the framework is applicable in the online shopping context.

Stockdale, R. and Standing, C. (2004) outlined the potential benefits of B2B e-marketplaces in the context of MSMEs. Several benefits can be achieved by SMEs by participating in e-marketplace such as access to wide range of markets, greater potential for partnerships, 24/7 accessibility, enhanced information exchange, improved customer services, ease of updating catalogues/product information and distribution, lower search and transaction costs, ability to enter supply chain of larger companies.MSMEs can use B2B e-marketplaces in several ways. As a buyer, they can search for new suppliers, post buying requests and search for new/used investment goods. As a seller, they can use e-marketplace to find new leads, put new and used products for sale.

RESEARCH METHODOLOGY AND DATA SOURCES

Steps:

1. Descriptive Research used as it typically focuses on understanding behaviour and the market environment in a single country.
2. SPSS software package was used to process the research data gathered from the questionnaires. For this study, descriptive statistics were used to summarise the data in the form of frequency tables, means and standard deviations, etc.
3. For inferential statistics, the main method was correlation. Correlation analysis provided an assessment of the degree of association between the factors that impacted on e-commerce adoption and usage while a regression analysis was conducted to reveal the weights of the individual factors.
4. Secondary data analysis has also been done by using Regression analysis.

Design:

For sampling, appropriate respondents were identified through help of four ecommerce portal. The survey was directed to the sellers listed in these portals. A bulk of respondents were from one state of the nation.

Sample Size:

25 Respondents out of which **2** Respondents gave self-contradictory answers and were drop from the data analysis. **23** respondents were considered for all analysis of B2B ecommerce.

DATA SOURCES

Primary Data-

1. Collected through Questionnaire which includes questions relating to Current satisfaction level from partnered portal, Future expectations from the portal, Major attractors and detractors and Specific questions on social, economics, infrastructure, legal and political barriers in the country.
2. Questionnaire has been designed using Open ended questions, Close ended questions, Likert scale and Rank order scale.
3. For the purpose of survey, sellers listed in at least one of the ecommerce portal have been interviewed either personally or telephonically. Thus, Convenience sampling technique has been used i.e. selecting any respondent who is readily available.

Secondary data

Secondary sources used to collect qualitative data collection include Website of ecommerce portals, Some published journal and articles in field of B2B ecommerce, Industry reports and Public forum for ecommerce partnered sellers.

ANALYSIS AND RESULTS

Lending Helping Hand to MSMEs

Realizing the huge potential of this sector, Prime Minister Narendra Modi had even discussed the possibility of using B2B platforms with Alibaba's founder Jack Ma.Sources say that Ma too backed the model as he considers it as the growth tool for SMEs. This move is likely to give a fillip to the export oriented businesses. Also, with Amazon launching its B2B portal in India, the segment is now expected to witness exponential growth.

Year	Units
2006-07	361.76
2007-08	377.36
2008-09	393.7
2009-10	410.8
2010-11	428.73
2011-12	447.64
2012-13	447.54
2013-14	488.46

Table 1 : MSME Yearly Growth Rate (in lakhs)source:MSME Annual Report (2014-15) in India

After applying the trend analysis, following results were achieved:

Regression Statistics	
Multiple R	0.98734
R Square	0.97483
Adjusted R Square	0.97064
Standard Error	0.41972
Observations	8

The trend line equation $y = 16.876x + 343.56$

Shows that the co-efficient of "X" is significant at 1% level of significance. So it is concluded that in all India level the number of SME units are increasing rapidly and has good impact on Indian economy.

Evaluating the Functioning and Expectation of Sellers

i. How many ecommerce portals are sellers listed?

Table 2 : Number of portals a seller is listed

Portal Listed	Responses	Percentage
0	0	0.00%
1	8	34.78%
2 or 3	14	60.87%
4 or 5	1	4.35%
5+	0	0.00%

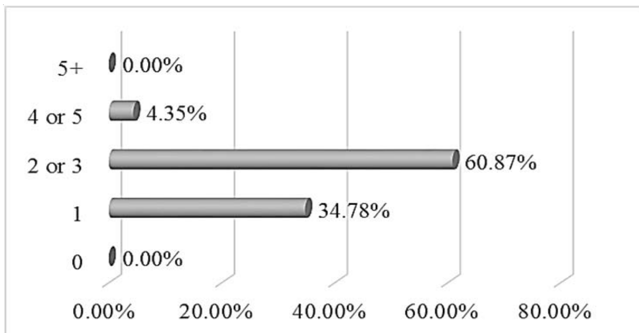

Figure 1 : Number of portals a seller is listed

Key Finding: Over 65% of sellers have registered in more than 1 ecommerce portal, in order to have higher visibility and diversify the risk of any portal failure. Sellers tend to compare their performance across portal.

Has listing on partnered portal increased sellers' sales in first 2 months?

Table 3 : First two month sales impact on sellers post registration

Increased sales in first 2 months	Responses	Percentage
Yes	5	21.74%
No	18	78.26%

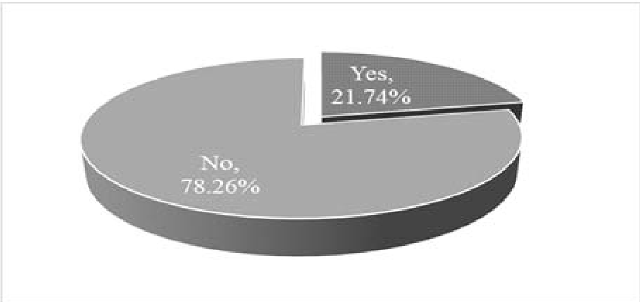

Figure 2 : First two month sales impact on sellers post registration

Key Finding: More than 78% of sellers did not see an increase in orders after the first two months, and they would consequently drop out or switch to other portal.

What is sellers' pay cycle on their partnered portal?

Table 4 : Pay cycle of sellers

Pay Cycle	Responses	Percentage
3 days	0	0.00%
7 days	4	17.39%
15 days	7	30.43%
1 month	7	30.43%
More than 1 month	5	21.74%

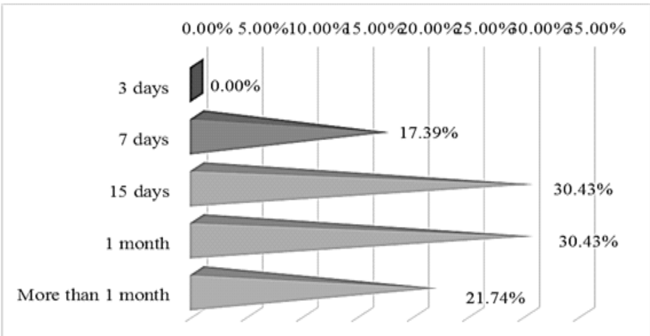

Figure 3 : Pay cycle of sellers

Key Finding: More than 51% of sellers stated that sellers pay cycle with the registered portals is atleast 1 month, which act as major detractor.

What is seller's level of understanding of dashboard?

Table 5 : Level of understanding of dashboard

Dashboard Knowledge	Responses	Percentage
0-20%	8	34.78%
21-40%	8	34.78%
41-60%	4	17.39%
61-80%	2	8.70%
81-100%	1	4.35%

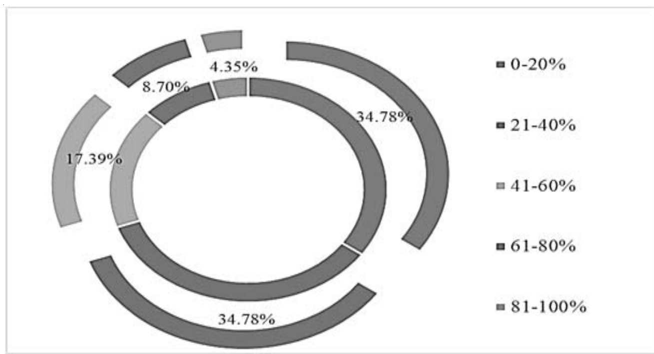

Figure 4 : Level of understanding of dashboard

Key Finding: 86.96% have less than 60% knowledge of the dashboard facility provided by ecommerce portals. This shows that companies investment towards analytics is not been properly transferred to sellers.

Sellers' satisfaction from partnered portal for following features

Table 6 : Seller's satisfaction

Factors	Poor	Bad	Average	Good	Excellent
Logistic Support	4.35%	8.70%	8.70%	52.17%	26.09%
Reverse Logistic Support	21.74%	65.22%	13.04%	0.00%	0.00%
Catalog Management	21.74%	17.39%	56.52%	4.35%	0.00%
Customer Insights Provided	26.09%	47.83%	8.70%	13.04%	4.35%
Overall Experience	4.35%	13.04%	52.17%	26.09%	4.35%

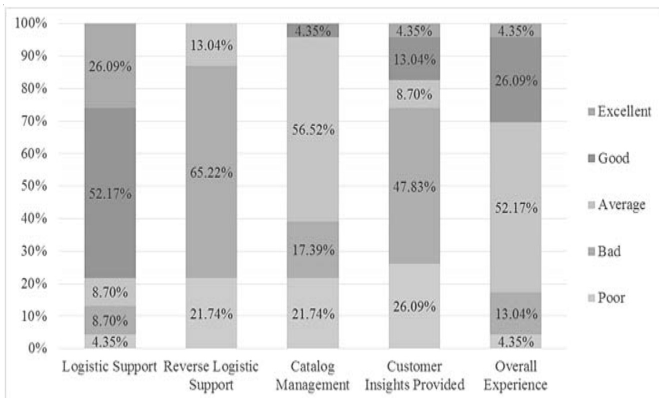

Figure 5 : Seller's satisfaction

Key Finding: 78.26% of sellers are happy with the logistic support provided by the portal, however 86.96% sellers are dissatisfied by the reverse logistic support provided to them. While 60.87% of sellers are satisfied by the catalogue management policies of partnered portals. And 73.91% of sellers are dissatisfied by the customer insights received through partnered portal. While evaluating overall gain received from partnership with ecommerce portal 82.61% sellers are satisfied, however they expect further improvements for better satisfaction.

Does sellers require clarity on payment terms?

Table 7 : Requirement of clarity on pay terms

Payment terms Clarity Requirement	Responses	Percentage
Yes	19	82.61%
No	4	17.39%

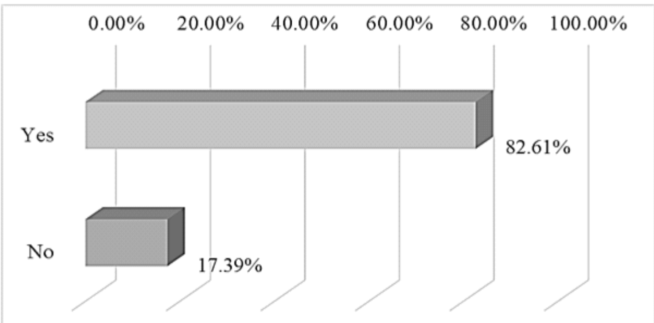

Figure6 – Requirement of clarity on pay terms

Key Finding: 82.61% sellers felt the need of having more clear and transparent payment policies. While 17.39% of sellers are stratified with existing policies.

Do sellers fell need of tutorial for dashboard, registration & listing?

Table 8 : Tutorial requirement for dashboard, registration & product listing

Need for Tutorials	Responses	Percentage
Yes	21	91.30%
No	2	8.70%

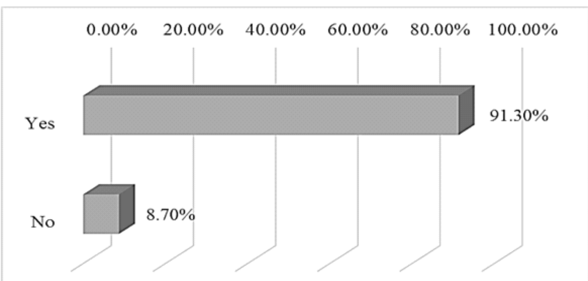

Figure 7 : Tutorial requirement for dashboard, registration & product listing

Key Finding: 91.30% sellers felt the need of having some sort of tutorial or videos for basic but important features including seller's dashboard, registration process and product listing process and conditions.

Doesseller's partnered portal has escalation matrix?

Table 9 : Escalation matrix awareness

Escalation Matrix Knowledge	Responses	Percentage
No	3	13.04%
Maybe	5	21.74%
Aware but never used	6	26.09%
Yes, but not satisfactory	9	39.13%
Yes and satisfactory	0	0.00%

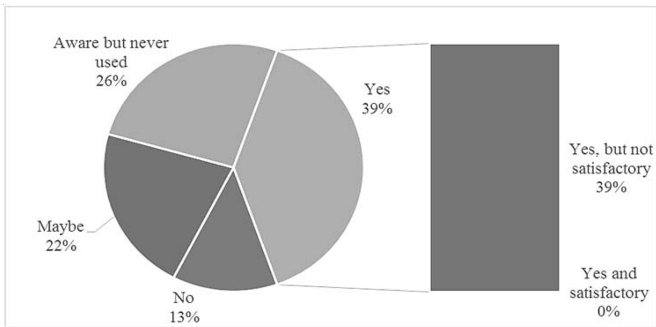

Figure 8 : Escalation matrix awareness

Key Finding:39.13% sellers have used the existing matrix if present with partnered portal in case of any query or issue, however no seller is satisfied with existing setup. While 47.83% are either unaware or not used it because of no clear process knowledge available.

What are the challenges faced by sellers in B2B Ecommerce?

Table 10 : Major detractors for sellers

Detractors	Responses	Percentage
Payment Cycle	21	91.30%
Policies availability and complexity	18	78.26%
Thin margins	16	69.57%
Long product return facility	16	69.57%
Damages in transit	15	65.22%
Channel conflicts-Online/Offline	11	47.83%
Reverse Logistics	9	39.13%
Listing Difficulties	7	30.43%
Lack of Infrastructure	6	26.09%
Inefficient delivery solutions	5	21.74%
Risk, fraud and cyber security	5	21.74%
Information asymmetry	2	8.70%

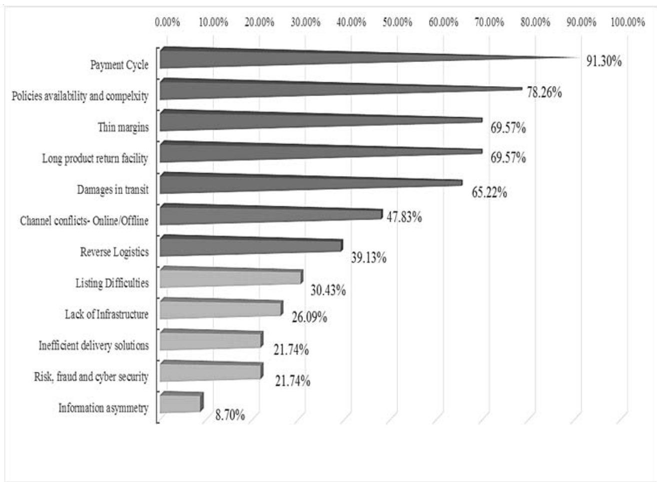

Figure 9 : Major detractors for sellers

Key Finding: Long and irregular payment cycle and complex policies are the major detractors for sellers in B2B ecommerce with 91.30% and 78.26% respectively facing the issues. While thin margins, long product return facility and damage in transit are other major challenges which is been faced by over 50% of sellers. While the minor challenges faced by less than 33% of samples are listing difficulties, poor infrastructure, security issue, inefficient delivery system that increases cost and asymmetry of information. While the issues of reverse logistics and online-offline channel conflict falls in mid-range of challenges with issue faced by less than 50% of sellers and more than 33% of sample sellers.

What are the benefits sellers have received in B2B Ecommerce?

Table 11 : Major attractors for sellers

Attractors	Responses	Percentage
Larger target audience	21	91.30%
Logistics and warehouse support	20	86.96%
Brand association	18	78.26%
Low marketing cost	12	52.17%
Increase Sales	11	47.83%
Cost effectiveness	10	43.48%
Improve brand image	9	39.13%
Role of middlemen eliminated	8	34.78%
Analytics Support	6	26.09%
Sales Automation	5	21.74%

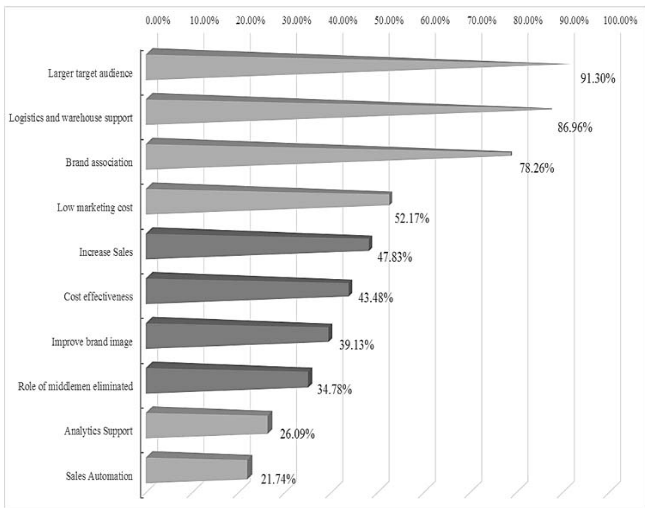

Figure 10 : Major attractors for sellers

Key Finding: Thetop 3 reasons that attractor sellers to be associated with ecommerce portals are larger target audience (91.30%), logistics and warehouse support received from the partnered portal (86.96%), and brand association (78.26%). Cost also play major part with low cost for marketing attract 52.17% sellers and overall cost effectiveness attracts 43.48% of sellers. Analytic support and sales associations are two factors that can create opportunity for further attraction of sellers, if both the factors can be improved. Other motives for association includes increase in sales, elimination of middlemen and improve brand image.

What should be best suited return request time limit for following goods?

Table 12 : Sellers expectation of return policies

Product	1 day	2 days	7 days	15 days	1 Month
Apparel	4.35%	43.48%	26.09%	21.74%	4.35%
Books	17.39%	26.09%	52.17%	4.35%	0.00%
Broken Item	13.04%	56.52%	30.43%	0.00%	0.00%
Electronics	0.00%	8.70%	21.74%	60.87%	8.70%
Gifts	0.00%	0.00%	26.09%	30.43%	43.48%

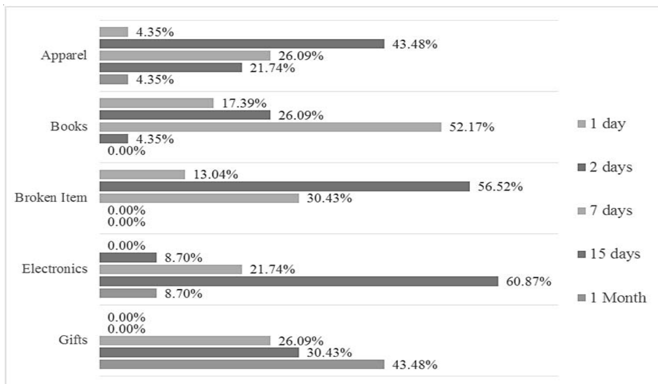

Figure 11 : Sellers expectation of return policies

Key Finding: One of the major challenge faced by the sellers is very long return period available with the customers. Currently all ecommerce portal have return cycle of mostly 1 month and few follow a shorter cycle of 15days. However most of the sellers wants a shorter cycle for most of the product and cycle should vary product to product. For apparel product 91.30% sellers wants the cycle should be less than 15days and mode lies ate 2days with 43.48%. For bools 95.65% sellers wants return cycle to be less than 7 days. For any of the broken or damaged product 100% sellers expect the return request before 7 days, with mode of 56.52% at 2 days.

For electronic products sellers expects a longer return period of 15days with 91.30% in favour of it. Sellers expects the highest return cycle for product sold as a gift, with 73.91% sellers expects the gift return cycle should be in between of 15 days and 1 month.

The Magnitude of Barriers Currently Faced by E-CommerceBusinesses

Economic Barriers

Three items measured the economic situation and sample items include "Prevalence of e-business practices is widespread in India" and "Business environment is conducive in India. The Cronbach's Alpha is 0.83.

Infrastructure Barriers

The infrastructure is measured by three items, with the following as samples: "Connectivity speeds to the internet are fast" and ''Internet penetration beyond urban areas is good". The Cronbach's Alpha for this measure is 0.86.

Legal and Political Barriers

The legal and political environment variable is measured by five items, of which the following are sample items: "There exists suitable legal framework and regulatory guidelines for commercial transactions to handle cybercrimes" and "The government enforces improving of ICT skills of the workforce in the country". This variables yields a Cronbach's Alpha of 0.88.

Social Barriers

The social variable was measured by five items, sample items being: "Customers navigate the web quite easily'' and "There is anational inclination to business innovation and entrepreneurship". The Cronbach's Alpha is 0.79.

Table 13 : Alignment of situation with B2B influencing factors

Item	Factor
Business environment is conducive	Economic
Business and industry function efficiently	Economic
Your revenue comes from on-line business	Economic
Connectivity speeds to the Internet are fast	Infrastructure
Internet penetration beyond urban areas is good	Infrastructure
Power and transport networks support business well	Infrastructure
There exists suitable legal framework for cyber crime	Legal and Political
The government enforces improving of ICT skills of the workforce in the country	Legal and Political
There is an enabling environment for e-business	Legal and Political
The government encourages and supports use of e- documents	Legal and Political
An overall policy statement on e-commerce exists in the country covering technical, economic and political perspectives	Legal and Political
The level of e-literacy is high	Social
Customers navigate the web quite easily	Social
There is a national inclination to business innovation	Social
Customer trust online purchase	Social
Customer are well equipped for online purchase	Social

Data Analysis

SPSS software package was used to process the research data gathered from the questionnaires. For this study, descriptive statistics were used to summarise the data in the form of frequency tables, means and standard deviations, etc.

For inferential statistics, the main method was correlation. Correlation analysis provided an assessment of the degree of association between the factors that impacted on e-commerce adoption and usage while a regression analysis was conducted to reveal the weights of the individual factors.

Table 14 : Cronbach Alpha of B2B influencing factors

Factor	Cronbach Alpha	Number of items
Economic environment	0.8345	3
Infrastructure environment	0.8596	3
Legal and political environment	0.8821	5
Social environment	0.7972	5

The Magnitude of the Barriers

Overall means and medians of the perceived barriers are shown in table below. The lower the mean, the higher the perceived barrier. Thus, the most formidable barriers in order of magnitude are the economic, social barriers and infrastructural barriers. These are all external barriers. The legal and political barriers are also perceived as moderate barriers.

Responses to the likert scale questions corroborated the quantitative measures. The biggest barriers cited by the respondents included: online security and cyber- crime (69.57%), internet connectivity speeds (52.17%). Others cited level of e-literacy (43.48%), trust (34.78%), and Internet penetration (30.43%) as barriers. Further there was the issue of infrastructure - poor transport network and power support. Lastly some of the respondents indicated that internet was costly and responses were often slow especially in outer and remote stations far away from urban areas.Some respondents indicated that they had to contend with customers who were not well versed with web technology.

Table 15 : Statistical values of B2B influencing factors

Factor	Mean	Median	Standard Deviation
Economic environment	1.8595	1.8001	0.7071
Infrastructure environment	1.9865	1.8889	0.6222
Legal and political environment	2.1892	2.1667	0.8002
Social environment	1.9243	2.0002	0.7816

The Relationship Among Barriers

Below table presents the correlation analysis of the factors acting as barriers to e-commerce adoption. The table shows that economic, legal and political and infrastructure environment, all external or macro factors are moderately and positively correlated with each other. It is important to note that the legal and political environment factors and economic environment factors are strongly correlated among all relationships, which means that as improvements in legal and political environment factors take place, there is greater likelihood that economic environment would support the business and economic barrier would reduce.

Correlation Matrix

Table 16 : Correlation among B2B influencing factors

Factor	Economic environment	Infrastructure environment	Legal & political environment	Social environment
Economic environment	1	0.218	0.605	0.147
Infrastructure environment	0.218	1	0.342	0.132
Legal & political environment	0.605	0.342	1	0.253
Social environment	0.147	0.132	0.253	1

The following regression analysis model was obtained from the study findings:

$Y = 0.275 + 0.322X1 + 0.147X2 - 0.277X3 + 0.619X4$ significant at $p=0.001$

Whereby,

- Y is the magnitude of barriers facing E-Commerce
- X1 is economic environment barriers
- X2 is social environment barriers
- X3 is infrastructure environment
- X4 is legal and political environment barriers

The model illustrates that when all variables are held at zero (constant), the value of the magnitude of barriers facing E-Commerce would be 0.275. However, holding other factors constant, a unit increase in economic environment barriers in India would lead to a 0.322 increase in the magnitude of barriers facing E-Commerce, a unit increase in social environment barriers in India would lead to a 0.147 increase in barriers facing E-Commerce. However, a unit increase in infrastructure environment would lead to a 0.277 decrease in the magnitude of barriers facing E-Commerce. Furthermore, a unit increase in legal and political environment barriers would lead to a 0.619 increase in E-Commerce barriers.

Thus, the infrastructure appears to hold the key to unlocking the barriers to e-commerce adoption and usage in India. The results confirm that the barriers under consideration contribute individually and jointly to the magnitude

CONCLUSION

The top 3 attractors in ecommerce portals are larger target audience, logistics and warehouse support received from the partnered portal, and brand association. Other motives include increase in sales, elimination of middlemen and improve brand image.Sellers tend to compare their performance across portal. Long and irregular payment cycle and complex policies acts as a major detractor. Also, the companies investment towards analytics is not been properly transferred to sellers because more of them are not aware of the dashboard facility provided by ecommerce portals. The issues of reverse logistics and online-offline channel conflict falls in mid-range of challenges. Minor challenges include listing difficulties, poor infrastructure, security issue, inefficient delivery system that increases cost and asymmetry of information. While evaluating overall gain received from partnership with ecommerce portal around 82.61% sellers are satisfied, however they expect further improvements for better satisfaction like more clear and transparent payment policies, some sort of tutorial or videos for seller's dashboard, registration process and product listing process and conditions.

The research also empirically investigated the current perception towards social, economics, infrastructure, and legal and political barriers in the country. The results showed that economic, legal and political and infrastructure environment, are moderately and positively correlated with each other. And the infrastructure along with legal and political setup appears to hold the key to unlock the barriers to e-commerce growth in India.

Thus, it can be said that entry of ecommerce giants such as Alibaba and Amazon into B2B has accelerated the trend of B2B websites becoming more like B2C. Online B2B sellers have now recognized that the customer experience in a B2B environment is just as important as the customer experience for B2C. Detailed specifications and product descriptions are crucial. It has been surveyed to that by 2020 the B2B ecommerce market will be twice as large as the B2C market globally.

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Cross Market Volatility Spillover between Stock Market and Foreign Exchange: Evidence from Indian Market

Gnyana Ranjan Bal and Amit Manglani

ABSTRACT

The Present study attempts to assess the Volatility spillover between stock and foreign exchange market in India. Our data includes the CNX nifty and two exchange rates namely US dollar and Japanese YEN. We have applied the GARCH (1,1) and EGARCH (1,1) model to analyze the volatility transmission and asymmetries effect. In overall we conclude that there bi-directional volatility spillover between stock and exchange rates except some cases. We conclude that this type of co-movement between stock and foreign exchange market can influence risk management strategies of different participants in forex market.

INTRODUCTION

The adoption of liberalization has increased the interdependence of market around the world. The rapid increase in participation of international investors in cross border transactions increase the capital flow between the countries raised the concern about the impact on volatility of our stock and exchange rates. The volatility spillover and financial market inter-linkage has attracted a large number of researchers. Such relationship between exchange rate and stock market has a greater impact on decision taken regarding diversification of risk by traders, arbitrators, hedgers etc. Many existing studies have focused on causality and volatility spillover among the stock markets or between stock and exchange rates. The results of these past studies showed mixed evidence of linkage of among the stock and foreign exchange market. Like Slimane, Mehanaoui, & Kazi (2013)analyzed dynamic linkage between European stock market during the global financial crisis. They found that the linkage between European markets has substantially increased during the crisis period. Abdalla and Murinde(1997) studied the interactions between stock and exchange rate in emerging financial market. They found that there is unidirectional causality from exchange rate to stock in case of India, Korea, Pakistan and Philippines. Also several studies have focused the transmission of volatility from one to other market. Like Fedorova and Saleem (2009) studied the volatility spillover between Emerging Eastern European countries like Poland, Hungry, Russia and Czech Republic) and found evidence of direct linkage between the equity markets and currency market. Ghosh (2014) analyzed spillover between large number of financial markets variables and exchange rate. The study found evidence of volatility spillover from the stock market to foreign exchange market. By applying multivariate GARCH the study conclude that there is volatility spillover from government securities (Gsec) market, forward market, derivative market (OIS) and international crude prices to the forex market. Among all these variables the influence of Stock market volatility is most important.Kanas(2000)have found evidence of symmetric volatility spillover between stock and exchange rates. Francis, Hasan and Hunter(2002) found that the currency market volatility is driven by the equity market. Bonga-Bonga and Hoven (2013) has found there is one way volatility transmission from equity to forex market. Zhang and

Key words

Cross Market Volatility Spillover, Volatility Pooling, , Leverage Effect, CNX Nifty, Exchange Rates

Jaffry(2015) analysed the effect of global financial crisis on volatility spillover between Mainland China and Hong kong stock market. By applying BEKK GARCH the study conclude that there is no spillover in pre-crisis period while strong spillover during the crisis period.

Similar studies have been made in reference to Indian market in this regard like, Panda and Deo (2014) studied the volatility spillover between stock and foreign exchange market in India. Their findings show that there is bi-directional spillover and it is higher during the post subprime crisis period as compared to pre-crisis period. Further their study shows the causality is more significant in case of USD as compared Euro currency. Another study by Saha and Chakrabati (2011) studied the asymmetric volatility spillover between Indian stock market and foreign exchange market. They found evidence of volatility spillover among these markets. In another study, Apte(2001) found volatility spillover from stock to exchange rate in Indian. Mishra et al., (2007) analysed volatility spillover between stock market and foreign exchange market in India. Using AR-GARCH model the study conclude that there is bi-directional volatility spillover between the Indian stock market and the foreign exchange market.

Our study revisits the cross market volatility spillover between stock returns and exchange rates. Especially we have taken the daily returns of CNX nifty and two exchange rates i.e. USDR and YENR. Also we focus on asymmetries in the transmission. This can particularly give knowledge how the information transmits from one market to another. Such type of relationship is highly impactful because the recent 2008 crisis has shown the integration of such market and the shock of one market could influence.

DATA AND METHODOLOGY

We have taken daily returns of CNX nifty and two exchange rates namely USD and YEN from the Bloomberg data base as daily data can capture better volatility clustering. The period of the study includes from February, 2007 to March 2015. The samples have been standardized by deletion of the whole period in case of missing of any one data. The returns of all the variables of have been calculated by taking their natural log as follows:

$\mathbf{R_{it} = Ln}\left(\frac{P_t}{P_{t-1}}\right)$ where P_t is price at t period and P_{t-1} is price at t-1 period and Ln means natural log:

The methodologies of studies are as follows:

TEST OF STATIONARY

Before using the time series data for further investigation, the data should be stationary. Stationary means the mean and variance does not change over the period of the time. To test stationarity of data we have applied unit root test the basis of Augmented Dickey Fuller (ADF) and Phillips-Perron(PP).

VOLATILITY CLUSTERING AND SPILLOVER

Our study uses the ARCH family models ARCH(Engel,1982) and GARCH of Bollerslev(1986) and EGARCH of Nelson(1991) to study the volatility clustering and spillover. This can give knowledge about the transmission of news from one to another market.Assume that the Stock Return (ΔSP_t) and Exchange Rate changes (ΔEX_t)are represented by AR(1) process, then in both GARCH(1,1) and EGARCH (1, 1) the equation will be as follows equation (i) and (ii)

$$\Delta SP_t = \beta_0 + \beta_1 \Delta SP_{t-1} + \varsigma_t,\ \varsigma_t \sim N(0, \sigma^2_{t,(\Delta SP)}) \quad \text{(i)}$$

$$\Delta EX_t = \beta_0 + \beta_1 \Delta EX_{t-1} + \varepsilon_t,\ \varepsilon_t \sim N(0, \sigma^2_{t,(\Delta EX)}) \quad \text{(ii)}$$

In above equation (i) and (ii) β_0 is the intercept, SP_{t-1}, EX_{t-1} are the returns of stock price and exchange rate respectively in t-1 period. Similarly ς_t and ε_t are the white noise error terms of stock price and exchange rate respectively.

GARCH model:Generally standard deviation is used as crude measure of variance to assess unconditional variance. But modern studies estimate the GARCH as measure of variance to explain the conditional variance. The spillover equation in GARCH(1,1) model can be explained as follows:

$$h_{t(SP)} = \beta_0 + \beta_1 \varepsilon^2_{t-1} + \beta_2 h_{t-1} + \varphi(\textit{squared residuals of EX}) \quad \textbf{(iii)}$$

$$h_{t(EX)} = \beta_0 + \beta_1 \varepsilon^2_{t-1} + \beta_2 h_{t-1} + \varphi(\textit{squared residuals of SP}) \quad \text{(iv)}$$

In both the equation(iii) and (iv) h_t indicates the conditional variance and $\beta_0, \beta_1, \beta_2$ *and* φ are parameters where $\beta_0, \beta_1, \beta_2 \geq 0$. Here the lag of squared residuals from the mean equation ϵ_{t-1}^{2} and previous variance h_{t-1} explains and spillover.

E-GARCH (1, 1): To analyze the impact of good or bad news the E-GARCH model has been used i.e., asymmetric or leverage effect. In following equation (v) and (vi) the and natural log of conditional variance of stock and exchange rate respectively. denotes the impact of change in news on volatility and shows the leverage effect. denotes the volatility spillover between the market.

$$\boldsymbol{ln\ h_{t(SP)} = \beta_0 + \beta_1 ln\ h_{t-1} + \beta_2 \left|\frac{\epsilon_{t-1}}{\sqrt{h_{t-1}}}\right| + \gamma \left|\frac{\epsilon_{t-1}}{\sqrt{h_{t-1}}}\right| + \varphi(residuals\ of\ EX)} \quad \text{(v)}$$

$$\boldsymbol{ln\ h_{t(EX)} = \beta_0 + \beta_1 ln\ h_{t-1} + \beta_2 \left|\frac{\epsilon_{t-1}}{\sqrt{h_{t-1}}}\right| + \gamma \left|\frac{\epsilon_{t-1}}{\sqrt{h_{t-1}}}\right| + \varphi(residuals\ of\ SP)} \quad \text{(vi)}$$

EMPIRICAL RESULTS

Descriptive Statistics:

The Table: 1 shows the descriptive statistics of all the variables. There are total 1939 observations in case of all

Table: 1 Descriptive Statistics of Stock return

	SXR	USDR	YENR
Mean	0.000438	0.000187	0.000178
Median	0.000701	4.03E-05	0.000000
Maximum	0.163343	0.039038	0.057050
Minimum	-0.130142	-0.032938	-0.046989
Std. Dev.	0.016105	0.005468	0.009400
Skewness	0.120038	0.186826	0.270867
Kurtosis	12.84046	7.726767	6.156159
Jarque-Bera	7828.085***	1816.354***	828.5035***
Probability	0.000000	0.000000	0.000000
Sum	0.848783	0.362136	0.344446
Sum Sq. Dev.	0.502630	0.057940	0.171236
Observations	1939	1939	1939

Here S.D indicates Standard Deviation, Sk-Skewness,Kurto-Kurtosis and J-B indicateJarque-Bera.

*** denotes significant at 1% level

the series. The average return of stock and both the exchange rates are positive though very less. We can see the mean of stock returns is high as compared to both the exchange rates, while in case of exchange rates average return of USD is more. The volatility is denoted by standard deviation. The stocks are more volatile as compared to compare to exchange rate. The SD of YEN is 0.009400 and USD is 0.005468 shows, YENR is more volatile. All the series are positively skewed during the sample period.The Jarque-bera is significant @1% level so the normality of all the distribution has been rejected. It indicates non normality of the variables.

Table:2 Unit root Test

Variable	ADF	PP
SXR	-41.33327***	--41.25747***
USDR	-41.63511***	-41.78360***
YENR	-42.65222***	-42.63690***

From Table:2 It can be observed that all the variables are stationary at level, as the null hypothesis of unit root has been rejected at 1% level. Stationarity shows the mean and variance of the series are constant, so there is no problem of further inferences.

Volatility Clustering and Spillover

The Figure 1, 2 and 3 shows the plot of stock, USDR and YENR respectively. It can be clearly observed these returns are showing some sort of volatility pooling and persistence. Among Exchange rates the moving pattern of YENR shows more volatility clustering as compared to USDR. For further evidence we estimate the ARCH family models.

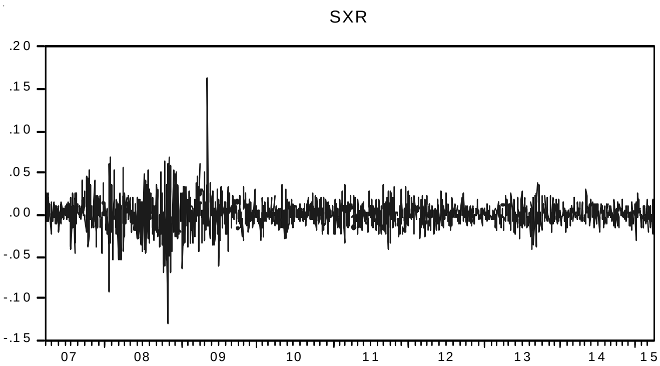

Figure 1: Plot of Stock returns

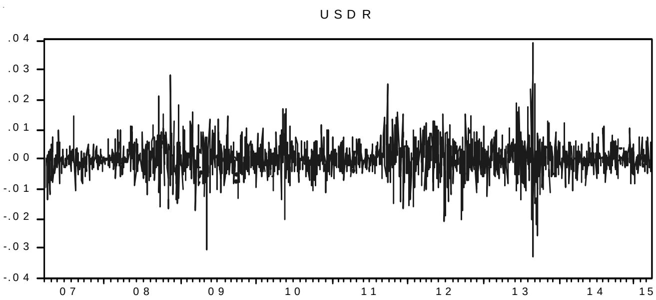

Figure 2: Plot of USDR

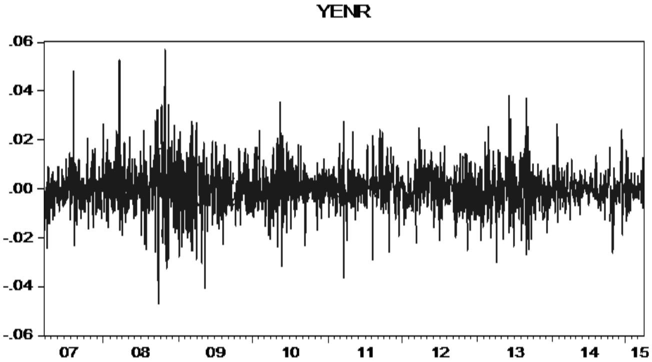

Figure 3: Plot of YENR

The results presented in Table 3 and 4 show that all the coefficients of GARCH (1,1) and EGARCH (1,1)estimation for the stock and exchange rates. With reference to all Equations the following are the parameters

In all the table α_0 and α_1 are the parameters of mean equation.

β_0 = Constant in variance equation

β_1 = Lagged squared residuals (ARCH Term)

β_2=Lagged conditional variance (Garch Term)

γ = Leverage effect

φ = Spillover effect

Volatility spillover between Stock and USDR:

In Table 3, in both GARCH(1,1) and E-GARCH(1,1) model and are highly statistically significant. It gives the evidence of presence of both volatility clustering and pooling. In GARCH model the parameter ö is statistically significant in both spillovers from stock to USDR and USDR to stock. It shows there is bi-directional spillover between stock and exchange rates. While in EGARCH there is spillover only from stock to USDR. So there is unidirectional spillover from stock to USDR.And also there is leverage effect. And positive ã co-efficient indicates good news has more impact as compared to bad news. Arch LM diagnosis indicates there is no arch effect.

Table 3: Volatility spillover between Stock and USDR

Coefficients	GARCH (1,1)		E-GARCH(1,1)	
	Stock→USDR	USDR → Stock	Stock→ USDR	USDR → Stock
α_0	0.000102	0.000743***	0.000196**	0.000594***
α_1	-0.137656***	- 1.045565***	-0.137920***	-1.046965***
β_0	4.64***	9.88***	-0.410525***	-0.186369***
β_1	0.086909***	0.062197***	0.169663***	0.144563***
β_2	0.894172***	0.933501***	0.040406***	-0.046540***
γ			0.974053***	0.991395***
φ	-3.06***	0.000393**	-2.022221***	0.675177
LM	0.022157	0.004329	0.046720	0.000527

***, ** and * indicates significant at 1%, 5% and 10% level respectively

Volatility spillover between Stock and YENR

In Table 4, in both GARCH (1,1) and E-GARCH(1,1) model both the ARCH co-efficient GARCH coefficient are highly statistically significant. It gives the evidence of presence of both volatility clustering and pooling. The results show that in GARCH model the spillover parameter ö is significant in both case of stock to YENR and YENR to stock. We can conclude that there bi-directional spillover between stock and YENR. Also the similar results have been observed in EGARCH model. The spillover parameter is significant in both ways transmission. Thus gives evidence of bi-directional spillover. We can also see that leverage effect is also significant. But the coefficients are different. That is positive from stock to YENR and negative in case of YENR to stock. Shows impact of positive and negative news are different. The diagnosis test shows there is no arch effect.

Table 4: Volatility spillover between Stock and YENR

Coefficients	GARCH (1,1)		E-GARCH(1,1)	
	Stock→YENR	YENR → Stock	Stock→YENR	YENR → Stock
α_0	8.46	0.000494**	0.000229	0.000470**
α_1	-0.279993***	- 0.671766***	-0.280615***	-0.675841***
β_0	2.40***	1.01***	-0.594430***	-0.136725***
β_1	0.071460***	0.050158***	0.165469***	0.108324***
β_2	0.892680***	0.944357***	0.059460***	-0.013206*
γ			0.951969***	0.994015***
φ	-0.000211***	0.000247***	-3.794212***	2.476761***
ARCH LM	0.048424	0.001453	0.047645	0.006893

***, ** and * indicates significant at 1%, 5% and 10% level respectively

CONCLUSION

We have assessed the extent of Volatility spillover between stock and foreign exchange market in India. By applying GARCH and EGARCH we analyzed the transmission of news and asymmetries in spillover. The findings of our study show that in both the model there is bi-directional spillover between Stock and YENR. In case of stock and USDR there is contradicting result in both the model i.e. bi-directional in GARCH and uni-directional in EGARCH. There is also asymmetric effect. Our study contributes significantly the past literature and also significant both for foreign market participants and policy makers. Such relationship between equity and foreign exchange market can be used while making risk management strategies.

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Impact of R&D Cost on India's Manufacturing Profitability: A Study on Pharma Sector

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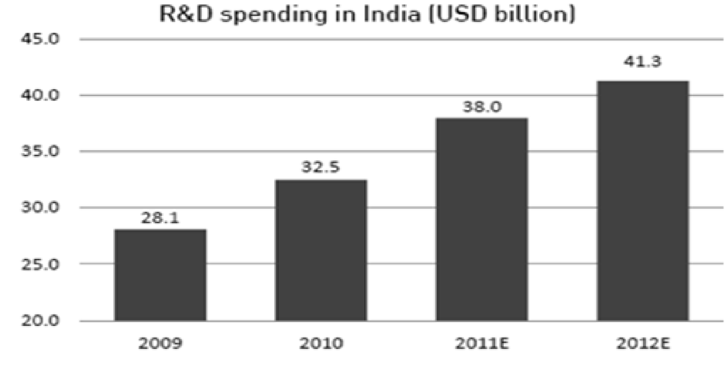
ABSTRACT

This paper aims to investigate the effect of R&D (research and development) expenditures on profitability in manufacturing sector of India taking a sample of 39 firms from Pharma industry during 2007 to 2012. Regression method was applied for testing the research hypotheses. Findings indicate that spending on R&D cause to earn more profit in future years. Thus, it can be argued that effect of R&D expenditure on firm evaluating measures is significant and positive.

INTRODUCTION AND RESEARCH PROBLEM

R&D, standing for research and development, has become essential in the corporate world as the requirement for new product design and development has increased with reducing product life cycles. Firms, willing to give up current profits to enhance future performance by investing in R&D, are expected to be more competitive in the long run. India's share in global R&D spending has increased over the last five years. According to Battelle, India is estimated to have had the eighth largest annual R&D investment in the world in FY10. Its share in global R&D spending is estimated to have risen to 2.8 percent in FY11 from 2.6 percent in FY10.

Exhibit 1
R&D spending in India (USD billion)



Source: Battelle, 2012 R&D spending estimate by Battelle, 2012 R&D Funding Forecast, Aranca Research

Manufacturing holds a key position in the Indian economy, accounting for nearly 16 percent of the real GDP in FY11. As per the United Nations Industrial Development Organisation (UNIDO), India is currently the second largest producer (after China) of textiles, chemical products, pharmaceuticals, basic metals, general machinery and equipment, and electrical machinery. The pharmaceutical sector is strong, with annual

Key words

R&D cost, Profitability, Manufacturing, and Pharma sector

revenues of USD21.7 billion in FY10. Accounting for 10 percent of the world's market share, it is ranked third in the world after the US and Japan (in terms of volume). There are more than 5,000 pharmaceutical firms in India, employing about 340,000 people. The country accounts for around 25 percent of the world's generic drug production and has 25 percent of the drug master files with the US Food and Drug Administration. India also has the highest number of FDA-approved production facilities in the world.

The Indian pharmaceutical industry is one of the highest R&D spenders in the manufacturing domain; companies spend between 10 to 20 percent of their annual sales on R&D. Is outcome of this rising R&D investment positive? Keeping this in view, the main objective of this research paper is to assess the impact of R&D cost on profitability in Indian pharma industry because the efficiency of a business concern is measured by the amount of profits earned. The larger the profits, the more efficient and profitable the business becomes.

OBJECTIVES OF THE STUDY

The aforesaid research question can best be comprehended through the following objectives.

a) To determine the trend of R&D costs and profitability in Indian Pharma Industry

b) To explore the relationship between R&D costs and profitability in Indian Pharma Industry

c) To find out the impact of R&D cost on profitability in Indian Pharma Industry.

In this context, the rest of the paper organized into seven parts. Part one discusses the previous established research work which has been conducted in the domain of R&D cost in pharmaceutical industry. Part two discusses the methodology adopted. Part three explores the relationship between R&D costs and profitability and part four determines the impact of R&D cost on profitability in Indian Pharma Industry. Finally the last part summarizes, concludes and makes few recommendations.

REVIEW OF LITERATURE

This section reviews the literature on impact of R&D costs on profitability.

Branch (1974) in his study found that R&D costs and profitability exists bilateral influence relationship, where there is a tendency for R&D to influence future profitability, but only slightly influenced by past profitability. *Lev and Sougiannis (1996)* stated that current R&D cost were positively associated with subsequent earnings. *Eberhart et al. (2004)* stated that firms that increase their R&D expenditures report significantly positive future operating performance. *Lev and Sougiannis (1996), Chan et al. (2001)* and *Chambers et al. (2002)* found a positive relation between measures of the level of R&D investment and subsequent excess returns. *Kothari et al. (2002)* also reported that R&D expenditure has low collateral value and are thus less attractive for capitalization. *P Archarungroj and Y Hoshino (1999)* found positive relationship between R&D expenditure and profitability. *F.M. Scherer (2001)* explained that in principles, profitability and investment in R&D can be linked in three rather different ways: a) successful of R&D, can greatly to company profits; b) The profit earned by a company serve as a source of funds to support R&D investments; c) Managers' expectations of future profit opportunities, can exert a demand-pull influence on R&D investment. In pharmaceutical company, profits are an important stimulus to, and source of funding for, research and development (R&D), which in turn leads to a stream of health enhancing new products. *Abdellah, Dastgir, Soltani (2011)* explained that there is a positive relationship between research and development cost and profitability of pharmaceutical companies. He has taken 20 large and multinational pharmaceutical companies based on these companies' sale to make out the relationship between these two segments of financial reports and reported that there is a relationship between these two. The study of *Branch (1974)*, with construct of a relationship as R&D being independent variable and profit and sales growth being dependent, strongly support that R&D activity tends to increase both profit and growth. However, some studies have demonstrated that R&D cost is negatively related to profitability (e.g. *Jayadev & Stiglitz, 2009*), especially in the pharmaceutical industry which requires huge R&D expenditure to develop one new drug, and the huge cost always decreases the firm's profits. *Lewin and Chew (2005)*, state that high spending on R&D is not a guarantee of high profitability unless firms manage it properly.

The extensive literature review suggests that all though a great number of studies have been made the previous years in finance and accounting field which indicate that firms view R&D costs as investments that are expected to return future benefits.; but most of them referred to the USA and to the UK. Less emphasis has been given to measure the impact of R&D expenditure on profitability and market value in India particularly in Pharmaceutical Industry.

RESEARCH DESIGN

The research design used in present study belongs to the correlational research category. The variable types are the dependent and the independent, different tests were used to measure the relationship between the dependent and the independent variables.

Universe and the Sample

The universe of this study consists of all the companies operating in pharmaceutical sector of India. In order to make present study perfect, a purposive random sample of 39 companies were selected depending on following conditions:

- The availability of continuous data for a period of 6 years (2007 to 2012)
- The firm is active during period mentioned above and its shares are traded either in NSE/BSE
- The book value of equity is not negative in any year.
- Investment in R&D activities is another criterion for selection of the sample. The companies which are selected as sample invested a minimum 1percent of their total investment in R&D activities.

PERIOD OF THE STUDY

The overall performance of the pharmaceutical industry in India has been studied for 06 years starting from 2007 to 2012. The study period covers the last year 10th Five year Plan and entire eleventh five year plan of Union Government of India. During the 11th Plan period, R&D forms one of the most crucial activities in the pharmaceutical industry. The R&D activity in the Indian pharmaceutical industry gathered pace largely with the enactment of the Product Patent Act in 2005. The patent enforced a royalty fee for all generic drugs manufactured during 1995-2005, thereby encouraging R&D activity for new and innovative drugs. R&D is conducted in the form of new drug discovery, contract research or clinical trials. Thus the period of study so chosen is meaningful in focusing the attention on the R&D investment pattern and its influence over the important dimensions of business i.e., profitability and market value in the pharmaceutical industry.

Data Collection and Reliability

The *CMIE Prowess* database has been used to collect data about the sample companies. All the companies those are selected are listed in both NSE (National Stock Exchange) and BSE (Bombay Stock Exchange). As all data have been taken there from the annual reports of the concerned companies, those are validated and reliable.

Important terms used

Profitability: It has been taken as Post-tax profitability and calculated as follows:

Profitability= PAT/Sales

R&D costs: It is the cost a company incurs in process of developing new goods and services to best suit the company's and consumers needs. It decreases the company's profit in the short run, but creates the potential for higher profit in the medium and long term.

Hypothesis

H_0: The relationship between R&D cost and profitability in Indian pharmaceutical industry is linear.

H_1: The relationship between R&D cost and profitability in Indian pharmaceutical industry is non-linear.

If the significant value (Sig. value) is less than 5% (0.05), the linearity of the relation between the two variables is approved otherwise rejected.

Tools and Techniques used

On the basis of data availability different statistical and financial tools; such as Mean, Standard Deviation, Chi-square test, Pearson's coefficient of correlation, Regression, etc. have been used in accordance with reliability and consistency of data.

Data Analysis

Through this section, an attempt has been to study the impact of R&D expenses on Profitability using trend analysis, mean, standard deviation, correlation and regression analysis.

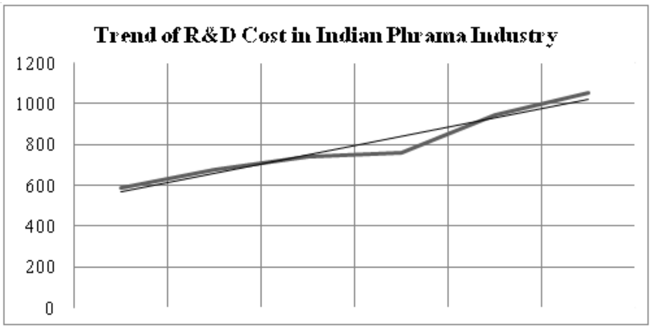
Trend of R&D Expenditure in Indian Pharmaceutical Industry

From the table, it is observed that during the period of our investigation (2007-12), the volume of R&D cost in Indian Pharmaceutical sector has fairly increased from Rs.23063.5 crores to Rs. 40089 crores with cumulative growth rate of 12 percent per annum. The highest R&D investment was found to be Rs. 6651 cores in 2012 for Dr Reddy's Labs, whereas lowest was established in the year 2010 for Marksans Pharma Ltd. However, we noticed highest

Table-1**Trend of R&D Expenditure**

Company	**Period**						**Mean**	**Std Devn**	**Growth**
	2007	**2008**	**2009**	**2010**	**2011**	**2012**			
Celestial Biolab	8.6	8.4	21	35.4	39.4	63.8	29.43	21.28	0.49
Amrutanjan	12.3	86.3	24	7.8	6.4	0.6	22.9	32.03	-0.45
Suven Life Sc	270.4	300.6	344.6	366	333.8	336.8	325.37	34.23	0.04
Marksans Pharma	54.2	2.4	0.6	0.5	NA	NA	14.43	26.53	-
NatcoPharma	81.95	75.94	115.2	77.9	110.5	84.3	90.97	17.27	0.01
Neuland Labs.	252.3	259.8	206.7	117.9	118.8	121.3	179.47	68.34	-0.14
Fres.KabiOnco.	357.1	262.3	307.3	347	850.7	723.7	474.68	247.65	0.15
Ajanta Pharma	174.4	314.1	223.9	219.6	478.8	395.4	301.03	117.72	0.18
Dishman Pharm	99.1	21.8	69.8	82.2	86.3	138.7	82.98	38.19	0.07
Indoco Remedies	110.7	101.4	111.3	125.7	113.3	173.2	122.6	25.98	0.09
Aarti Drugs	35.4	52.7	29.4	49.9	68.1	56.4	48.65	14.16	0.10
Hikal	79.8	81.6	79.6	83.6	102	133.4	93.33	21.38	0.11
PlethicoPharma.	279	176.4	180.9	134.7	83.7	25.2	146.65	87.67	-0.38
Merck	14.8	15.6	20.4	28.5	33.9	64.2	29.57	18.53	0.34
ShasunPharma	218.4	207	166.9	202.4	142.7	116.3	175.62	40.52	-0.12
FDC	63	117.6	211	193	208.1	204.3	166.17	61.55	0.27
Strides Arcolab	375	532.5	580.5	152.5	1103.7	1223.8	661.33	418.59	0.27
J B Chem & Pharm	121.3	107.8	60.1	97.4	113.6	156.5	109.45	31.48	0.05
Unichem Labs	228.3	327.1	302.1	317.8	663.5	591.6	405.07	177.27	0.21
Elder Pharma	34	43.4	45.1	53.9	49	51.5	46.15	7.11	0.09
Alembic	345.4	462.4	476.9	490.4	18.5	18.5	302.02	225.58	-0.44
Pfizer	238	245.8	283.5	292.7	106.7	64.7	205.23	95.87	-0.23
Abbott India	35.5	50.2	12.1	18.6	13.4	17.8	24.6	15.09	-0.13
GlenmarkPharma.	513.7	659.1	619.1	518.6	659.2	796.5	627.7	105.3	0.09
Biocon	478.7	646.5	743.8	753.8	520	377	586.63	152.49	-0.05
Divi's Lab.	102.8	114.7	119.6	214.5	216.6	282.7	175.15	73.22	0.22
Sanofi India	45.3	50.1	132.3	55.2	67.4	41.7	65.33	34.01	-0.02
Torrent Pharma	1121.4	1131.7	1150.3	1195.5	1336.5	1246.4	1196.97	82.54	0.02
Ipca Labs	328.3	429.2	502.2	572.8	779.6	779.6	565.28	184.7	0.19
Wockhardt	1278.6	1267.4	1104.7	1198.7	1101.9	1738.2	1281.58	236.28	0.06
Cadila Health.	1560	1618	1895	2178	3017	4007	2379.17	957.28	0.21
GlaxosmitPharma	58.1	126.8	80.2	54.4	38.7	24.6	63.8	36.13	-0.16
Sun Pharma.Inds.	1882.8	1443.9	1511	1436.7	1592	2008.7	1645.85	242.25	0.01
Jubilant Life	526	708.4	1512.8	880	799.4	1047.7	912.38	341.62	0.15
Aurobind Pharma	967.1	1175.1	1032.3	1014.8	1757.2	1989	1322.58	438.2	0.16
Lupin	1421.4	1933.7	2669.1	4251.1	5475.6	6161.6	3652.08	1943.03	0.34
Dr Reddy's Labs	2928	4372	4578	4271	6247	6651	4841.17	1380.33	0.18
Ranbaxy	4605.1	4713.8	4943.8	4978.9	4702.1	4937	4813.45	158.35	0.01
Cipla	1757.3	2340.1	2515	2626.8	2848.5	3238.3	2554.33	498.46	0.13
Max	4605.1	4713.8	4943.8	4978.9	6247	6651			
Min	8.6	2.4	0.6	0.5	6.4	0.6			
Total	23063.55	26583.64	28982.1	29696.2	36003.6	40089			
Average	591.37	681.63	743.13	761.44	947.46	1054.97			
Source: CMIE PROWCESS database									

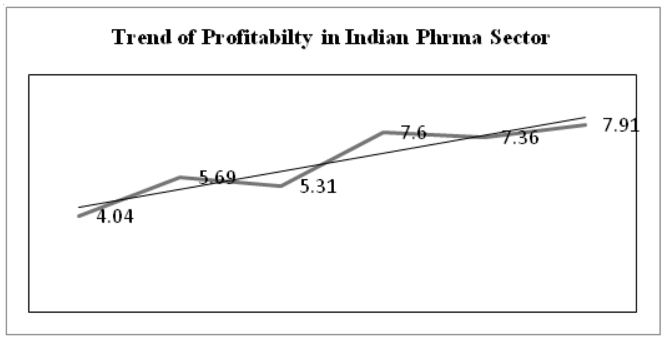
cumulative growth in case of Celestial Biolab Ltd (about 49 percent per annum) followed by Lupin with 34 percent and lowest with a very popular company in Indian pharma sector; i.e. Amrutanjan Ltd, where growth rate was found to be negative (-) 44 percent. The year-wise analysis reveals that in 2007, the Ranbaxy Ltd has invested highest amount, (Rs 4605.1 crores) in R&D, followed by Dr Reddy's Labs with Rs. 2918 crores. Again in 2008, 2009 and 2010 Ranbaxy too topped the list as regards to the investment in R&D is concerned, where as Dr Reddy's Labs replaced the Ranbaxy Ltd in this respect in the last two years of study. Contrary to this, Celestial Biolab have invested least in R&D activities (Rs. 8.6 crores) in 2007, followed by Amruntanjan Health with Rs.12.3 crores and Merck with Rs.14.8 crores. However, the average R&D investment in Indian Pharma sector is found to be Rs. 796.67 crores during the entire period of study.



From the company-wise analysis, it becomes clear that investments in R&D is in increasing trend for companies like; Celestial Biolab, Solven Life Sciences, Fres Kabionco etc, whereas a declining trend was observed for companies like; Amruntanjan Health, Neuland Labs. Shasun Pharma and Glaxosmit Pharma with negative growth rate over the period. Similarly, a fluctuating trend was marked for companies like; Natco Pharma, Dishmant pharma, Arati Drugs etc throughout the period of study. Moreover, companies like; Shasun Pharma, Plethico Pharma, JB chemicals and Pharma have incurred huge investment on R&D activities during the initial period of study, but their investment declined sharply towards the end. Moreover, to measure the consistency in R&D investment, the standard deviations of all 39 samples were calculated and results showed that Dr Reddy's Lab has highest standard deviation (4841.17) followed by Ranbaxy with 4813.45, Lupin India Ltd with 3652.08 and so on. It indicates that the investment pattern in these companies followed a high degree of variation during the period of study though they have invested a lot in R&D activities. In contrast, smaller companies like; Elder Pharma, Arati drugs and Natco pharma have invested regularly in R&D activities during the period of study.

1.4.2 Trend of Profitability in Indian Pharmaceutical Industry

From the table, it is apparent that the overall profitability measured through Return on Investment (RoI) has reasonably increased from 157.73 in 2007 to 308.68 in 2012 with a cumulative growth rate of 5.83 percent per annum. During the period the highest Profitability was found to be 30.99 in 2012 for Celestial BioLab, whereas lowest was recorded in the same year for Amrutanjan Health. However, we noticed highest cumulative growth in Merck (57 percent) followed by Glaxo with 56 percent and lowest with a extremely fashionable company in Indian pharma sector; i.e. Amrutanjan Ltd too, where growth rate was found to be negative; i.e. (-) 49 percent. Year-wise analysis of sample companies reveals that in 2007, Suvenlife sciences has highest Profitability, (10.94), followed by Neuland Labs (8.72). Moreover, Neuland labs stood at the top of the list of all samples so far as the profitability is concerned during the period (2008 to 2011). But Celestial Biolabs replaced the Neulands in this respect in the last year of study i.e., in 2012 with a profitability score of 30.99. Contrary to this, Glaxosmit Pharma has least Profitability (0.33), followed by Merk with 0.41 and Sanfoi with 0.47 during the period of this study. Similarly, lowest profitability score was found for Merck with 0.37 in 2008, 0.15 crores for Abott India in 2009, 2.06 for Marksan in 2010, 0.59 and 0.05 for Amrutanjan Health in the last two years of the study. However, the average of profitability of Indian Pharma sector is found to be 6.32 during the entire period of study.



Company-wise analysis profitability score ascertains that Suven health Sciences followed by Fres Kobi Onco have evidenced highest score of 21.02 and 12.49 during the period under our study. On the other hand, companies like Amrutanjan Health found to have lowest average

Table 2 : Trend of Profitability

Company	Period						Mean	Std Devn	Growth
	2007	2008	2009	2010	2011	2012			
Celestial Biolab	4.41	4.16	10.91	6.12	15.62	30.99	12.04	10.3	0.48
Amrutanjan	1.48	10.05	2.49	12.01	0.59	0.05	4.45	5.2	-0.49
Suven Life Sc	10.94	25.09	24.49	27.05	22.1	16.46	21.02	6.1	0.09
MarksansPharma	2.26	2.01	2.03	2.06	1.95	1.89	2.03	0.1	-0.04
NatcoPharma	4.21	3.19	4.25	5.15	3.12	4.92	4.14	0.8	0.03
Neuland Labs.	8.72	11.52	6.56	13.48	2.96	4.67	7.99	4.0	-0.12
Fres.KabiOnco.	7.42	10.48	11.21	12.44	19.98	13.4	12.49	4.2	0.13
Ajanta Pharma	7.06	10.77	6.94	12.73	10.35	11.47	9.89	2.4	0.10
Dishman Pharm	3.52	0.59	1.65	2.55	2.03	2.96	2.22	1.0	-0.03
Indoco Remedies	3.21	3.73	3.12	5.69	2.33	3.03	3.52	1.2	-0.01
Aarti Drugs	1.13	1.57	0.72	3.53	3.3	3.81	2.34	1.4	0.28
Hikal	3.26	2.62	1.65	4.58	3.99	3.88	3.33	1.1	0.04
PlethicoPharma.	5.03	3.69	3.79	5.65	2.02	2.53	3.79	1.4	-0.13
Merck	0.41	0.37	0.41	2.33	3.57	3.91	1.83	1.7	0.57
ShasunPharma	3.12	4.54	3.4	6.5	2.46	2.54	3.76	1.5	-0.04
FDC	1.34	2.23	3.55	4.19	2.93	2.87	2.85	1.0	0.16
Strides Arcolab	6.03	8.62	7.41	10.58	14.63	17.14	10.74	4.3	0.23
J B Chem & Pharm	2.22	1.87	0.86	3.83	4.4	4.35	2.92	1.5	0.14
Unichem Labs	4.06	5.51	4.55	7.47	8.61	9.32	6.59	2.2	0.18
Elder Pharma	0.73	0.77	0.72	2.73	2.58	3.52	1.84	1.2	0.37
Alembic	2.08	4.5	4.26	6.46	7.84	7.41	5.43	2.2	0.29
Pfizer	3.01	3.09	3.6	5.05	4.94	6.65	4.39	1.4	0.17
Abbott India	0.56	0.71	0.15	2.67	2.09	2.11	1.38	1.0	0.30
GlenmarkPharma.	4.12	4.68	7.09	6.64	8.4	9.88	6.80	2.2	0.19
Biocon	5.39	7.14	7.92	9.1	9.25	9.41	8.04	1.6	0.12
Divi's Lab.	1.39	1.09	0.99	3.05	3.63	3.52	2.28	1.3	0.20
Sanofi India	0.47	0.47	1.26	2.43	2.51	2.26	1.57	1.0	0.37
Torrent Pharma	8.63	11.3	9.68	13.26	12.62	12.97	11.41	1.9	0.08
Ipca Labs	3.32	3.83	3.75	5.79	5.04	5.27	4.50	1.0	0.10
Wockhardt	7.85	11.06	7.6	13.02	13.26	14.77	11.26	3.0	0.13
Cadila Health.	6.04	9.2	10.64	11.16	12.79	15.24	10.85	3.1	0.20
Glaxosmit Pharma	0.33	0.71	0.41	2.67	3.16	3.09	1.73	1.4	0.56
Sun Pharma.Inds.	3.93	5.95	5.33	7.91	7.94	8.1	6.53	1.7	0.16
Jubilant Life	2.88	3.21	5.92	5.17	5.5	5.83	4.75	1.4	0.15
AurobindoPharma	2.86	4.88	3.58	6.84	7.15	7.54	5.48	2.0	0.21
Lupin	6.93	7.27	8.92	9.23	12.16	12.39	9.48	2.3	0.12
Dr Reddy's Labs	6.98	12.09	10.1	14.05	14.81	14.81	12.14	3.1	0.16
Ranbaxy	5.6	11.86	10.62	13.82	15.13	13.14	11.70	3.4	0.19
Cipla	4.8	5.45	4.74	7.41	9.45	10.58	7.07	2.5	0.17
Max	10.94	25.09	24.49	27.05	22.1	30.99	21.02	10.28	0.57
Min	0.33	0.37	0.15	2.06	0.59	0.05	1.38	0.13	-0.49
Total	157.73	221.87	207.27	296.4	287.19	308.68	246.52	90.07	5.83
Average	4.04	5.69	5.31	7.60	7.36	7.91	6.32	2.31	0.15
Source: CMIE PROWCESS database									

Profitability of 0.55 followed by Abbott India (0.15), Glaxosmit Pharma (0.33) during the whole period of study. Lastly, it is found from the table that Makson Pharma, Abott and Amrutanjan Health have wider variations in profitability as represented by bigger score in standard deviation. On the other hand, lower score of standard deviation in case of companies like; Celestial Biolab, Dishman Pharma and Sanfoi India implies that these companies have maintained regular profitability during the period of study.

Correlation Analysis of R&D Cost and Profitability

The correlation between R&D cost and Profitability was evaluated through Karl Pearson's coefficient of correlation and computed values are presented in following table.

Table 3 : Correlation between of R&D Cost and Profitability

		R&D Cost	Profitability
R&D Cost	Pearson Correlation	1	.714**
	Sig. (2-tailed)		.000
	N	39	39
Profitability	Pearson Correlation	.714**	1
	Sig. (2-tailed)	.000	
	N	39	39

From the table, the coefficient of correlation between R&D cost and profitability is found to be 0.714, which indicates that R&D cost is significantly and positively correlated to the profitability firms in Indian pharma industry.

Impact of R&D Cost on Profitability in Indian Pharmaceutical Industry

After assessing the degree of correlation, effort has been made to analyze the magnitude of influence of R&D cost on the profitability by applying the linear regression analysis. The basic model of which is:

Profitability = f (R&D Cost)

$P = á + â_1 X_1 + e$

P= Profitability of Pharmaceutical companies

X_1= R&D Cost

The "á" is constant and "â" is coefficient to estimate and "e" is the error term. Profitability is taken as the dependent variable and R&D cost as independent variable. Table 4 represents the impact of R&D cost over profitability through regression analysis.

Table 4 : Impact of R&D Cost over Profitability in Indian Pharmaceutical Industry

Coefficients[a]						
Model		Unstandardized Coefficients		**Standardized Coefficients**	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	4.124	0.606		4.275	.000
	R&D cost	.830	.851	.889	11.788	.000
Adjusted R Square : 0.784						
a. Dependent variable: profitability						

The adjusted R-Square value (0.784) indicates that the R&D cost is about 78.4 percent responsible for change in profitability. The coefficient (B) value of 0.830 represents that 100 percent change in R&D cost leads to 83 percent change in Profitability in Indian pharmaceutical sector. The regression equation to estimate the relationship is follows:

Profitability = 4.124 +(0.830 × R&D Cost)+ 0.606

From the above statistical analysis it can be concluded that there is linear relationship between R&D cost and profitability in Indian Pharmaceutical Industry as the calculated Sig value of 0.000 is less than 0.05. The above result suggests that the greater intensity on research and development cost increases a firm's innovation capabilities and therefore increase the firm's profitability.

Hence the null hypothesis is accepted by rejecting the alternative hypothesis.

SUMMARY AND CONCLUSION

This paper aims to investigate the effect of R&D spending on profitability in pharmaceutical sector of India during 2007 to 2012 taking a sample of 39 companies. The research employs Pearson's correlation coefficient and also regression analysis through cross-sectional and combined data. From the analysis it is concluded that there is a significant positive relationship between R&D cost and profitability. The rgression analysis reveals that 100 percent change in R&D cost leads to about 83 percent change in profitability in pharmaceutical sector of India.

In order to capitalize on its competitive advantages and remain ahead of competing markets, India must take active steps to attract pharmaceutical research investment to transform this country into a global hub for pharmaceutical research and development.

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Foreign Direct Investment (FDI) Inflows in Multi Brand Retailing: A Case Study of New Delhi and Mumbai City

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ABSTRACT

This study aims at investigating perceptions of people towards FDI inflows on multi brand retail sector. For this a survey has carried out in two major cities: Mumbai and New Delhi. A compressive questionnaire has been used to collect data from 200(100 from Mumbai and 100 from New Delhi) respondents through email randomly drawn from middle and higher middle class of people with awareness of FDI in multi brand retail. The logistic regression model was used for examining perceptions of people towards FDI inflows on multi brand retail sector. The study finds that there is a positive relationship between age, occupation, education, people benefited and FDI inflows in retail sector. However, there is a negative relationship between gender, experience, percentage, sector benefited and FDI inflows in multi brand retail sector. This study also reviewed some of the earlier works on impact of FDI inflows in multi brand retail. It is observed from the literature review that impact of FDI inflows on multi brand retail is mixed; positive and negative. A SWOT analysis of Indian FDI inflows in multi brand retail sector is discussed. Finally a conceptual framework has been developed for analyzing impact of FDI inflows on small and middle farmer. Further, the paper goes on to discuss some of the policy suggestion for better inflows of FDI on multi brand retail sector in India. Finally, scope for further research and limitations is spelt out.

INTRODUCTION

Foreign Direct Investment (FDI) plays an important role in India's growth dynamics. India is the second fastest growing economy in the world. It is third largest economy in the world in terms of GDP and fourth largest economy in terms of Purchasing Power Parity (WDI, 2011). India presents a huge opportunity to the world at large as an economic hub. Standing on the threshold of a retail revolution and witnessing a fast changing retail landscape, India is all set to experience the phenomenon of global village. India is the "promised land" for global brands. She tops in the list of emerging markets for global retailers and India's retail sector is expanding and modernizing rapidly in line with economic growth. The future is promising; the market is growing, government policies are becoming more favorable and emerging technologies are facilitating operations. Modern retail[1] has entered India as seen in sprawling shopping centers, multi-storied malls and huge complexes offer shopping, entertainment and food all under one roof.

India's growing retail boom is a success story. With strong fundamentals developing in the Indian economy in the liberalized environment since 1991 with changes in income levels, lifestyles, taste and habits of consumers with preference for superior quality and branded products, vast domestic market with a very competitive manufacturing base, India has also observed a major retail boom in recent years. The Indian retailing sector is at an inflexion point where the growth of organized retailing and growth in the consumption is going to take a higher growth trajectory (Roy and Kumar, 2011).

Key words

Foreign Direct Investment, Impact, Logistic regression, Retail Sector and SWOT Analysis.

Retailing in India is gradually inching its way toward becoming the next boom industry. The whole concept of shopping has altered in terms of format and consumer buying behavior, ushering in a revolution in shopping in India. India had to open retail sector being a signatory to World Trade Organisation's General Agreement on Trade in Services, which include wholesale and retailing services. There were many apprehensions towards opening of this sector. There are several examples of the benefits of FDI in India. FDI in the retail sector can expand markets by reducing transaction and transformation costs of business through adoption of advanced supply chain that benefits consumers, and suppliers (farmers). The Retail Sector of Indian economy is going through the phase of tremendous transformation. This also can result in net gains in employment at the aggregate level (Patibandla Murali, 2007).

Retailing[2] can be said to be the interface between the producer and the individual consumer buying for personal consumption. This excludes direct interface between the manufacturer and institutional buyers such as the government and other bulk customer. A retailer is involved in the act of selling goods to the individual consumer at a margin of profit. It can also be defined as the timely delivery of goods and services demanded by consumers at prices that are competitive and affordable. Government has taken a number of policy measures, in recent times for encouraging growth of retail business and other allied activities like creation of required infrastructure facilities, centers of manufacturing excellence, providing for a good network of production, marketing, storages, distribution and cold chain facilities for spreading the effects of development to downstream level for inclusive growth (Basker E, 2005).

Indian retail sector today is valued at $ 450 billion which is and it accounts for around 15 percent of GDP and 8 percent of total employment and is increasing day by day due to its increasing middle class population and their spending power (Economic Survey, Govt. of India).

A BRIEF LITERATURE REVIEW

There are large numbers of studies available regarding impact of FDI inflows on retail sector. The results of the studies show varied evidence across the world. Some of authors reported it has positive impact. Whereas some other researchers showed it has negative impact. Lastly, some authors proved that FDI inflows in retail will promote overall economic development and social welfare of the country if it is done in the right manner, it can prove to be a boon and not curse. So it is imperative to give a list of study undertaken so far in the following manner.

A study by **Henley (2004)** reported that China is in better position in attracting FDI when compared to India. India's performance is understated because of various reasons like high tariffs, poor physical infrastructure, unfriendly regulatory system etc. It concludes with a hope of liberalization which would be driven by external pressures and state level initiatives. In another study **Palit and Nawani (2007)** attempted to explain the country-wise dissimilarities in the arrangement of FDI flows in retail of developing Asian economies. The study refers that the location of retail markets influences FDI flows and also argues that certain countries enjoy comparative advantages in the form of superior technological capabilities and infrastructure which attracted greater volumes of FDI. Developing countries like India find the production processes becoming complex due to intensive technological development.

On the contrary a study by **Joseph et.al (2008)** showed that all segments of the Indian economy were affected by the entry of large corporate giants in the multi-brand retail business. It has found that unorganized retailers experienced a decline in their sales and profit with the organized retailers. The liberalization of FDI for multiband retail sector would affect unorganized small retailers by giving rise to monopolies of large corporate houses with respect to pricing and availability of goods.

A recent study by **Jain and Sukhlecha (2012)** inferred that in spite of various problems the entry of foreign investment in retail sector is found to be the most effective for the country's development and supremacy in the world scenario. They also noticed that there are few issues to be addressed for the consumer's right to be saved, for the employment opportunities to be generated and also for the regularization of the retailers working in different areas. Against above study **Moghe (2012)** critically analyzed the decision of Indian government to open retail sector for FDI in single-brand and multi-brand category and it's likely to have negative impact on various components of Indian economy.

An interesting study by **Ozturk and Ilhan (2007)** reported that new FDI policy on multi-brand retailers will bring minimum of 100 million US dollars with half of the investment on back-end infrastructure facilities life cold chains, transportation, refrigeration etc. It was because the government of India wanted to minimize post-harvest losses and to provide reasonable remuneration prices to farmers with this new policy. So, now the retailers will be able get at least 30% of source for goods from small and medium sized suppliers in multi-brand and at the same time it will also enable the single-brand retail sector to get benefits out of this. The FDI policy on multi-brand retail would create opportunities for the Micro, Small and Medium Enterprises (MSMEs) to reach out the International markets. Research studies on Indian economy emphasises the need for development of MSME sector, as most of them are highly unorganized. It has seen that the reason behind this is largely because their inability to get access to advanced technology and availability of limited options to improve its market interface.

A study by **Mandeep (2009)** showed that FDI in retail brings latest technological knowhow, well-integrated supply chains, standards and quality products. It not only upgrades human skills but also increases sourcing for Indian retail sectors to reach Global retailers. The Indian logistics has always suffered due to lack of investment mainly in retail chain, due to which market mechanism failed to gain desired level of efficiency in spite of being a second largest producer of fruits and vegetables. The limited integration in cold-chain infrastructure has always been a challenge to Indian economy.

The study by **Roy and Kumar (2012)** argued that multi-brand retail sectors are likely to open doors for big supermarkets, which would tend to bring larger benefit to consumer, as they would experience lower prices with more diverse products and higher quality product than the traditional retailers. The study conducted by **Chari and Raghavan (2011)** reveals that allowing entry to giant retailers to the Indian market may help tackle inflation especially in food prices. Moreover, it will help to enhance the technologies and distribution systems and supply chain efficiency in India.

A study by **Balasubramanyam and Mahambare (2002)** argued that FDI is very effective in promoting development activities conditioned by co-operant factors in the host economies which possess a threshold level of human capital. The new FDI reforms will help the Indian economy to bring structural change in labour markets with better work environment. A similar study by **Wakchaure (2011)** argues that Indian workers in small shops work without formal contracts for long hours with very low wages. Most the unorganized sector largely depends on child labour. Hence with new FDI retail policy these issues may be resolved as the main agenda of the new FDI reforms is to minimize unorganized sectors in India.

Bhaskaran (2012) conducted a SWOT analysis of FDI towards the multi-brand retailing which brought out the significant challenges and key success factors of FDI in Indian scenario. It reviews the impact of organized retailing on the unorganized sector. Surveys specified some specific policy recommendations for regulating the interactions of large retailers and suppliers and for firming the good response of the unorganized retailers. Finally, a study by **Kalhan (2007)** shows that the emergence of shopping malls in Mumbai has severely influenced operations of small shopkeepers and other unorganised business outlets. The sales figures and operating profits have been shown to be badly experiencing a receding behaviour. The study further stated that Mega Malls are making deep inroads in the sales of retailers operating in the unorganised retail sector.

OBJECTIVES OF THE STUDY

The study undertaken to ascertain the following objectives

1. To investigate perceptions of people towards FDI inflows on retail sector.
2. To describe SWOT analysis of Indian FDI inflows on retail sector.
3. To develop a conceptual framework for analyzing impact of FDI inflows on small and medium farmers

METHODOLOGY AND DATA SOURCES

This study used some dummy variables and categorical variable to captured likely impact of FDI inflows in retail sector**.** In this study an attempt has been made to examine impact of FDI inflows on retail on the basis of a preliminary survey carried out in two major cities: Mumbai and New Delhi. A compressive questionnaire has been used to collect data from 200(100 from Mumbai and 100 from New Delhi) respondents through email randomly drawn from middle and higher middle class of people with awareness of FDI in retail. The questionnaire for this research has been designed to collect demographic profile such as: name, age, sex, education qualification and occupation of respondents.

Using these data, logistic regression method has been adopted for examining impact of FDI inflows on retail.

Logistic regression (sometimes called the logistic model or logit model) is used for prediction of the probability of occurrence of an event by fitting data to a logistic curve. An explanation of logistic regression begins with a logistic function, which like probabilities, always takes on values between zero and one:

$$f(z) = \frac{e^z}{e^z + 1} = \frac{1}{1 + e^{-z}} \qquad (1.1)$$

The model has an equivalent formulation

$$p_i = \frac{1}{1 + e^{-(\beta_0 + \beta_1 x_{1,i} + \cdots + \beta_k x_{k,i})}}. \qquad (1.2)$$

This functional form is commonly called a single-layer artificial neural network. A single-layer neural network computes a continuous output instead of a step function. The derivative of p_i with respect to $X = x_1 \ldots x_k$ is computed from the general form:

$$y = \frac{1}{1 + e^{-f(X)}} \qquad (1.3)$$

Where $f(X)$ is an analytic function in X. With this choice, the single-layer neural network is identical to the logistic regression model. This function has a continuous derivative, which allows it to be used in back propagation. It is also preferred because its derivative is easily obtained:

$$y' = y(1 - y)\frac{\mathrm{d}f}{\mathrm{d}X}. \qquad (1.4)$$

The logistic regression model used for examining impact of FDI inflows on retail in this study is specified as follows:

$IM = â_0 + â_1 AG + â_2 GEN + â_3 EDU + â_4 OC + â_5 EX + â_6 PE + â_7 PBE + â_8 SBE + U_t$ (1.5)

Where:

IM= Impact of FDI on retail

AG = Age of the respondent

GEN=Gender of the respondent

EDU = Educational qualification of the respondent

OC = Occupation of the respondent

EX = Experience of the respondent

PE = Proportion of FDI to be allowed

PBE=Class of people likely to benefit

SBE = Sector likely to benefit

The coefficients $â_1, â_2, â_3, â_4, â_5, â_6$, $â_7$ and $â_8$ stands for the elasticity coefficient of AG, GEN, EDU, OC, EX, PE, PBE, and SBE respectively.

The dependent variable Impact (IM) in this model is a qualitative variable which was incorporated into the model as a dummy variable taking the value 1 or 0. The value 1 indicates that FDI inflow has positive impact on retail sector, while value 0 indicates that FDI inflow has negative impact on retail sector. However, due to the violation of certain assumptions of classical regression model logistic regression model was preferred over the ordinary least squares to compute the estimates for the binary model.

FINDINGS AND DISCUSSION

Before conducting logistic regression the reliability test of above data has been performed. Table 1 show 0.78 as the value of Cronbach's Alpha is and it comes out to be greater than .6 implying that the data we have collected is reliable.

Table 1: Reliability Statistics

Cronbach's Alpha	Cronbach's Alpha Based on Standardized Items	No of Items
.780	.760	200

Out of 200 respondents, 125 were male and 75 were female. Further, out of 200 respondents, 3 had primary education, 11 had secondary education, 71 had graduation education, 81 post graduation and 34 had doctorate education. Also out of 200 respondents, 35 were retail businessmen, 42 were university teacher, 38 were banking professional, 42 were P. G student and 43 were doctoral student. Impact-wise 78 of the respondents replied that FDI inflows would have positive impact on retail sector, while, 122 replied that FDI inflows would have negative impact on retail sector. Coming to those supporting the extent of FDI, 29 were in favor of <10%, 31 were in favor of 10-20%, 33 were in favor of 30-50%, 42 were in favor of 50-70%, 30 were in favor of 70-90% and 35 were in favor of 100%. Benefit wise, 13 respondents were of view that FDI inflows would benefit local retailers, 137 hold views that it would benefit foreign multiband retailers, 42 replied that it would benefit general customers and 8 said that it would benefit small shop and hawkers. Finally, looked at sector wise, 22 hold view that it most likely to benefit groceries, 26 replied that it would benefit health and beauty, 23 were of view that it would likely to benefit furniture, 24 said that it would benefit consumer electronics, 21 hold view that it would benefit apparel, 20 said it would benefit books, 16 were view that it would likely to benefit hospitality, 25 replied it would benefit jewelry and 23 hold view that it most likely to benefit other sectors.

Table 2: Model Summary of Logit Model

Step	-2 Log likelihood	Cox & Snell R Square	Nagelkerke R Square
1	244.637[a]	.108	.146

In the above table 2 the log likelihood shows that the model is reasonably good fit and is appropriate for the purpose of identifying the main factors that contribute to the more impact of FDI inflows. It is an indicator of how much unexplained information there is after the model has been fitted and in general large values of the log-likelihood statistics indicates a poorly fitting statistical model. So here the model can be considered a moderately good fit.

Table 3: Hosmer and Lemeshow Test

Step	Chi-square	df	Significance
1	8.963	8	.345

The fitness of model is further strengthened by the non significant value of Hosmer and Lemeshow (Mayers et al., 2006).

The following table 4 shows perception of the people regarding likely impact of FDI inflows in retail sector

Table 4: Logistic Regression Results

Variables	Coefficient	Standard Error	Wald Statistic	P-Value	Odd Ratio
AGE(AG)	.118	.020	36.126	.000	1.125
GENDER (GEN)	-.195	.170	1.323	.250	.823
EDUCATION (EDU)	.368	.078	22.508	.000	1.445
OCCUPATION (OC)	.304	.063	23.358	.000	1.355
EXPERIENCE (EX)	-.108	.027	15.909	.000	.898
PERCENTAGE (PE)	-.093	.050	3.473	.062	.911
PEOPLE BENEFITED (PB)	.245	.119	4.251	.039	1.278
SECTORS BENEFITED(SB)	-.053	.033	2.566	.109	.948

Codes Used: gender (male=1, female=0), impact (positive impact=1, negative impact=0), educational qualification (under metric=1, metric=2, graduation=3, post graduation=4, doctorate=5), occupation(retail businessmen=1, university teacher=2, banking professional=3, p.g. student=4 and doctoral student=5), percentage(<10%=1, 10-20%=2, 30-50%=3, 50-70%=4, 70-90%=5 and 100% =6) , people benefited (1=small shop and hawker, 2=local retailers, 3=general customers and 4=foreign multiband retailers), sector benefited(groceries=1 , health and beauty=2, furniture=3, consumer electronics=4, apparel=5, books=6, restaurants=7, jewelry and accessories=8 and others sector=9).

The relationship of Age (AG) and FDI Inflows in Retail Sector

The model shows that age has positive impact on FDI inflows in retail sector and it is highly significant (coefficient=.118, p-value= 0.000 and Wald statistic=36.126). This reflects, older people think FDI inflows would have better positive impact while, younger people think it would have lesser positive impact. The result further strengthened by odd ratio of 1.125 suggesting that older people expecting better positive impact of FDI inflows on retail while, younger people are expecting less.

The Relationship of Gender (GEN) and FDI Inflows in Retail Sector

The results indicate that gender has negative impact on FDI inflows in retail sector but it is not significant (coefficient=-.195, p-value= 0.250 and Wald Statistic =1.323). This means female hold a view that FDI inflows on retail would have positive impact while, male hold a view that it would have negative impact. The result further strengthened by odd ratio of 0.823 suggests that female person are expecting positive impact of FDI inflows on retail while, male people are expecting negative impact. Since gender coefficient is not significant it would have very little impact or some time no impact on FDI inflows.

The Relationship of Education (EDU) and FDI Inflows in Retail Sector

The result reveals that there exists a positive relationship between education and impact on FDI inflows in retail sector. It is highly significant (coefficient=.368, p-value= 0.000 and Wald statistic=22.508). This indicates, more educated people of the view FDI inflows would have better positive impact while; lesser educated people are of the opinion that it will have lesser positive impact. The result further strengthened by odd ratio of 1.445 suggests that more educated people are expect better positive impact of FDI inflows on retail while, lesser educated expect less.

The Relationship of Occupation (OC) and FDI Inflows in Retail Sector

The result shows that there exists a positive relationship between occupation and impact on FDI inflows in retail sector. It is highly significant (coefficient=.304, p-value= 0.000 and Wald statistic=23.358). This suggests rank of expecting better positive impact of FDI inflows in ascending order are 1=retail business man, 2=university teacher, 3=banking professional, 4=P.G. student and 5=doctoral student. The result further strengthened by odd ratio of 1.355 suggests that doctoral student expect better positive impact of FDI inflows on retail compared to P.G. student, banking professional, university teacher and retail business man student in descending order.

The Relationship of Experience (EX) and FDI Inflows in Retail Sector

The results indicate that there exists a negative relationship between experience and impact on FDI inflows in retail sector. It is highly significant (coefficient=-.108, p-value= 0.000 and Wald statistic=15.909). This means less experience people think FDI inflows would have better positive impact while; more experience people think it would have negative impact. The result further strengthened by odd ratio of .898 suggests that more experience people think FDI inflows would negative impact while; less experience people think it would have positive impact.

The Relationship of Percentage (PE) and FDI Inflows in Retail Sector

The results show that there exists a negative relationship between percentage of FDI allowed in retail and impact on FDI inflows in retail sector. It is significant (coefficient=-.093, p-value= 0.062 and Wald statistic=3.473). This implies if more percentage FDI inflows will allowed in retail it would have negative impact compare to less percentage FDI inflows. The result further strengthened by odd ratio of .911 suggests that more percentage of FDI inflows would have negative impact while less percentage would have positive impact.

The Relationship of People (PB) and FDI Inflows in Retail Sector

The results suggest that there exists a positive relationship between different people benefited and impact on FDI inflows in retail sector. It is significant (coefficient=.245, p-value= 0.039 and Wald statistic=4.251). This means rank of expecting better positive impact of FDI inflows in ascending order are1=small shop and hawker, 2=local retailers, 3=general customers and 4=foreign multiband retailers. The result further strengthened by odd ratio of 1.278

The Relationship of Sector (SB) and FDI Inflows in Retail Sector

The results reveal that there exists a negative relationship between different sector benefited and impact on FDI inflows in retail sector. It is not significant (coefficient=-.053, p-value= 0.109 and Wald statistic=2.566). So, on the basis of above result nothing can be said about relationship between different sectors benefited and impact on FDI inflows in retail sector

A SWOT Analysis of Indian FDI Inflows on Retail Sector

SWOT analysis is a tool for strategic management. In this analysis, a study can be made with reference strength, weaknesses, opportunities and threats of retail industry. In any strategic planning process, two factors namely internal and external environmental factors play an important role. A thorough study of these factors is important for further planning. The environmental factors, which are internal to the retail sector, can be classified as strengths and weakness. The factors which are external to the sector can be classified as opportunities and threats. The strategic analysis of environmental factors is referred as SWOT analysis. This analysis provides the information that is helpful in understanding the retail sector resource mobilization and capabilities to the competitive environment in which it operates.

Strengths

- FDI in retail enhances competitions. As the competition increases, the competitor is compelled to serve quality of goods at competitive at reasonable price.
- The benefits of larger organized retail segments are several. The consumers get a better product at cheaper price. So consumers get value for their money.
- A large young working population with median age of 24 years, nuclear families in urban areas, along with increasing working women population and emerging opportunities in the service sector are going to be the key growth drivers of the organised retail sector in India.

- Employment opportunities both direct and indirect have been increased. Farmers get better prices for their products though improvement of value added food chain.
- Customers will have access to greater variety of international quality branded goods.
- Increase in disposable income and customer aspirations are important factors.
- It has also contributed to large scale investments in the real estate sector with major national and global players investing in devolving the infrastructure and construction of the retailing business.
- Large domestic market with an increasing middle class and potential customers with purchasing power.

Weakness

- Lack of infrastructure in the retailing chain has been one of the major issues of concern which has led the process to an incompetent market mechanism.
- FDI in retail will mainly cater to high-end consumers placed in metros and will not deliver mass consumption goods for customers in villages and small towns.
- The rapid development of retail sector is the sharp improvement in the availability of retail space. But the current rally in property prices, retail real estate rentals have increased remarkably, which may render a few retailing business houses unavailable. Retail companies have to pay high rentals which are blockage in the turn of profits.
- Retailing today is not about selling at the shop, but also about researching and surveying the market, offering choice, competitive prices and retailing consumers as well.

Opportunities

- Indian retail industry has come forth as one of the most dynamic and fast paced industry with several players entering the market.
- It can become one of the largest industries in terms of numbers of employees and establishments.
- FDI in retail will improve distribution and warehouse technologies.
- The inflow of FDI in retail sector is bound to pull up the quality standards and cost-competitiveness of Indian producers in all the segments and hence India will significantly flourish in terms of Consumer Expectations.
- There will be sustainable development and many other vital economic issues will be focused upon like child labour, overtime, not taking of their welfare. These issues will not have any room in this transparent open system as contract between the employer and worker will evict corruption from grass root level and will control black money.
- Rural retailing is still unexploited Indian market.
- Global retail giants take India as key market. The organized retail sector is expected to grow stronger than GDP growth in the next five years driven by changing lifestyles, increase in income and favorable demographic outline. Food and apparel retailing are key drivers of growth.

Threats

- Massive job losses in short run.
- Inadequate infrastructure for modern multi brand retailing.
- Another concern is that the global retailers would conspire and exercise monopolistic power to raise prices and monopolistic (big buying) power to reduce the prices received by the suppliers.
- The unorganized sector has dominance over the organized sector in India because of low investment needs.
- It would lead to very inequitable competition and eventually result in large-scale exit of domestic retailers, especially the small family managed outlets, leading to large scale displacement of persons employed in the retail sector.
- The Lack of uniform tax system for organized retailing is also one of the obstacles. Inadequate infrastructure is likely to be an obstacle in the growth of organized retails.

Impact of FDI Inflows on Retail Sector-A Conceptual Framework

This study also tries to examine impact of FDI inflows on small and medium farmers through a schematic diagram.

Small and medium farmers in most of India face vicious circle of poverty. Therefore, FDI is an instrument to bring all these farmers from vicious circle of poverty.

More FDI inflow in retail sector will help for growth of retail sector which further will leads to application of good quality fertilizer and pesticides. Then it will lead to more production and sales of product in right price at right time. Finally, it will help for restoration of some macro economic variables such as: exchange rate, foreign exchange reserve, rate of employment, consumption, investment, import and saving. It also controls stock market volatility, enhance managerial skill, increase government revenue, used sophisticated technology and control trade deficit. All the above macroeconomics variables help for high performance of international and domestic market, increasing investor confidence on Indian economy and its stock market.

Finally, it would result in more production, more employment, reduction of poverty, high growth rate and increment of welfare of the people. The reverse scenario could be encounter if there is less FDI inflows into retail sector in India. It can easily be understood through following schematic[3] diagram.

POLICY SUGGESTIONS

Based on the findings our submission is that FDI in multi-brand retail should be seriously considered by the government and a gradual opening-up made possible. Despite country-wide speculation on the plight of various stakeholders, trading associations, politicians, etc. giving various arguments for and against FDI in retailing, they seem to be missing the main point and their arguments are largely based on perception and there has not been serious academic research in this area. After all, there may not be such a serious threat to small retailers in the long-run. India needs to take a lesson from China where organized and unorganized retail seem to co-exist and grow together.

LIMITATIONS OF THE STUDY

The study suffers from the following limitations:

For investigating perceptions of people towards FDI inflows on retail sector, only 200 respondents (100 from Mumbai and 100 from New Delhi) were considered which may not be a representative figure. For primary survey this study was used convenience sampling for collection of data.

SCOPE FOR FURTHER RESEARCH

By way of pointers to future research, an ex-post analysis may be carried out in respect of FDI inflows on retail sector as and when data become available. A comparative study with reference to China or any of the emerging economies may also be attempted.

CONCLUDING REMARKS

Government seems to be determined to go ahead with and gradually liberalize the retail sector. This seems to be due to the conviction that bringing in the big retail chains would unleash a lot of employment opportunities in rural and urban areas. The fears of the opposition, on the other hand, are that the entry of retail giants would mean job losses as small mom-and-pop retailers get pushed out of existence. The fact is there is merit in both arguments. On the plus side, it is clear that agriculture is not providing enough jobs for the economy and there is an unprecedented wave of migration to urban areas. The entry of retail chains, which buy straight from the farmer, is bound to bring about greater purchasing power as the producer will get much better prices. Similarly, this gives a bonanza to the consumer who gets food products sourced directly from the farmer without having to pay the middleman's commission. It is clearly a win-win situation for all. But the agitators have a point too. They are worried that the 15 million small retailers in the country may be forced out of existence. India has the largest retail economy in the world, according to a study by the CII (Confederation of Indian Industry) and A.T. Kearney.

At the same time, as the saying goes, no one can stop an idea whose time has come. And the time has certainly come for retail chains to enter this country. The process has been gradual, as mentioned earlier, but even so large retail has made a dramatic impact in the areas where it has been allowed to make an entry. In the long run, it is clear that the entry of large retail chains will benefit the agricultural sector, which is in dire need of resuscitation. They will also have a long-term effect on agricultural unemployment, which is the big worry for policymakers right now. Therefore the hue and cry over loss of jobs is somewhat premature. Domestic retail chains have already been allowed to set up business and it is now merely a matter of allowing bigger foreign players into the country multinational giants like Walmart and Carrefour also have deep pockets and their huge investible funds are meant for sourcing products from rural areas, which in turn will

Figure 1: Schematic Diagram for Impact of FDI on Retail Sector

Source: Author Own Imagination

India is at the crossroads with regard to the retail sector. Several emerging market economies have gone ahead and reaped the benefits of modern retail. Politics is an unfortunate reality that has been coming in the way of success of organized sector and ultimately the overall retail sector. There is need of balanced approach to retail and government has to play a very vital role in shaping the future course. Though traditional retail has been performing a vital function in the economy, it has to shed off its shortcomings and inefficiencies and this is actually happening. Thus, the organized sector is not only impacting the other sectors positively but also it has benefited its own competition i.e. unorganized sector. So, organized sector becomes the growth mantra of Retail sector.

On the other hand, FDI in multi-brand retailing must be dealt cautiously as it has direct impact on a large chunk of population. Foreign capital, if unchecked, may widen the gap between the rich and the poor. Thus, the entry of foreign capital into multi-brand retailing needs to be anchored in such a way that it results in a win-win situation both for India and global players.

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Footnote

[1]The word retail is derived from the French word retailer, meaning to cut a piece off or to break bulk. In simple terms, it implies a first-hand transaction with the customer.

[2]While traditional retailing is well understood and has been then for ages, modern retailing encompasses a direct interface with the customer and the coordination of business activities from end to end-right from the concept or design stage of a product or offering, to its delivery and post-delivery service to the customer.

[3]A conceptual framework has been developed to gauge impact of FDI in retail for small and medium farmers. The most important factor in weak supply chain system is the distress sales. Distress sales also discourage (medium) farmers from investing in productivity enhancing practices. If a farmer incurs additional costs for improving productivity, this will increase the output, which, in turn, increases the supply at the time of harvest. This is exactly where the entry of large retail firms makes a difference if they source directly from farmers, pay for the output at the time of delivery and adopt efficient supply chain.

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Raise of a Swadeshi MNC: A Case Study of Patanjali Group

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ABSTRACT

India is a country with vast population next to China and this population is an advantage and disadvantage for India. Attracted by this population and the growing business prospects, MNC's around the world are eager to enter into Indian business environment and show their presence felt to the world with good business opportunities and also good profits. FMCG industry in particular has a scope for major growth in India. Industry stalwarts like HUL, P&G etc are ruling the Indian FMCG segment. Identifying the enormous scope for growth in this segment many new corporates are also entering into it. Indian origin companies like Dabur, Emami etc are also giving good competition to the MNC's. But the entire FMCG industry was taken by a thundering storm with one company entering into the segment and it had diverted the attention of the Whole country towards it. This paper tries to enlighten and highlight the readers with the information relating to the birth of a new ***SWADESHI MNC – PATANJALI****.*

Key words

Natural, Yoga, Ayurveda, Swadeshi, Profits, Price

INTRODUCTION

The FMCG sector in India was growing annually at 11%. On the overall it is expected to touch $US 110.4 during 2012-20. Food products followed by personal care and fabric care are the leaders in terms of the market share. East access, changing lifestyles and growing levels of awareness among the people are the reasons for the growth of FMCG market in India. The govt was also from its side fully supporting this growth of FMCG sector be relaxing the norms and allowing 51% FDI in multi brand and 100% FDI in single brand outlets.

SALES DRIVERS OF FMCG

- Availability: There was a slowdown in distribution expansion in 2014 by 1.1% when compared to that of the previous years.
- Awareness: The awareness levels are high but still got to be higher and media' role in this should be more significant.
- Macro Factors: The macroeconomic indicators that play a significant role are GDP and IIP (Index of Industrial Production).
- Sachets or Low Volume Packs: The FMCG industry's considerable growth depends on these packs only because of the significant amount of population in rural areas.

NEED FOR THE STUDY

The FMCG sector in India was fastly growing and many corporates are trying their best to catch that pace and recent player in the race was Patanjali group. Every aspiring entrepreneur and promising marketer should be able to learn and adopt the strategies and policies of Patanjali which has set up a new benchmark in the field of FMCG.

REVIEW OF LITERATURE

The data present in this paper was collected from both the Primary Sources and Secondary Sources. Primary sources of data include interacting with the various academicians, retail shop managements and personally visiting and interacting with the various shopkeepers and distributors of Patanjali products and Secondary sources of data include data collected from various news papers, magazines, journals etc.

BIRTH OF PATANJALI

In 1995, when Baba Ramdev was still a normal yoga teacher and not known to anyone, his disciple at that time Acharya Balakrishna started Divya Pharmacy to manufacture ayurvedic and herbal medicines under the aegis of Baba Ramdev's guru Swami Shankar Dev.

Table 1: Shareholding pattern of Patanjali Group as on 30-09-14

S.No	Name of the Shareholder	Percentage of Share
1	Acharya Balakrishna	93.709
2	Sarwan Poddar	3.016
3	Sunita Poddar	3.016
4	Rajat Prakash	0.121
5	Govind Agrawal	0.121
6	Ram Bharat	0.015
7	Muktanand	0.002

(Source: Compiled by Author)

Table 2: Market Capitalization of top FMCG Companies

S.No	Company Name	Market Capitalization (Crores)
1	Dabur India Ltd	47,681.5
2	Godrej Consumer Products Ltd	42,081.4
3	Emami Ltd	25,699.5
4	Colgate-Palmolive (India) Ltd	25,543.5
5	Marico Ltd	25,477.7
6	P&G Hygiene & Healthcare Ltd	20,066.9
7	Hindustan Unilever Ltd	17,0372.2
8	Gillette India Ltd	16,111.1
9	Godrej Industries Ltd	12,535.7
10	Bajaj Corp Ltd	6,325.5
11	Jyothi Laboratories Ltd	5,686.9
12	Patanjali Ayurved	40,000

(Source: Business Standard)

For the first three years they have distributed the medicines free of cost and even they don't have enough money to complete the registration formalities of the pharmacy. Soon the medicines got a good name in the society and then Balakrishna has decide to diversify the product portfolio but unable to do as Divya Pharmacy was registered as a trust. Meanwhile Baba Ramdev was also becoming famous and the funds started pouring from various NRI's and banks are ready to give loans and thus Patanjali was born in 2006.

GLIMPSES OF PATANJALI GROWTH

- Patanjali's first product was Amla Juice with Gooseberries which later followed by Aloe Vera juice, Shikakai etc.
- 600 different types of products are present in Patanjali's product range.
- 15,000 employees are working in Patanjali's units across India.
- Patanjali targets Rs.10, 000Cr turnover in 3-4 years.
- Patanjali has plans to enter into baby care segment, garments, bio fertilizers, healthy food, and organic cotton clothes etc.
- **"Swadeshi is our goal"** proudly declared by Baba Ramdev.
- Ramdev has personally tasted Patanjali's Noodles and sent to the laboratory 13times before it was finalized.
- **"Collective Charity and Prosperity are our goals"** declares Baba Ramdev.
- The profits that are earned through Patanjali group are used to establish Acharya Kulams, Vedic Schools, Ayurvedic Colleges and Research Institutes across India.
- Patanjali was also conducting animal trials for medicines relating to Cancer, Hepatitis etc.
- Patanjali doesn't visit any colleges for recruitments, and usually recruits workers by its network and advertisements.
- The employees of the Patanjali Group work in harmony and none of the employees smokes or consumes alcohol.
- Many of the employees of the group have rich experience in the FMCG sector and many are working with a missionary zeal to help others and serve the society.

- Ghee was one of the prominent products for Patanjali and it has alone earned a profit of Rs.400Cr in 2014.
- Patanjali also plans to release a new brand of mineral water named 'Divyajal', 'Shishu Kare' brand of child care products, 'Soundarya' brand of beauty products, 'Power Vita' brand of health supplements, 'Vasthra' brand of textiles etc. Along with these it also plans to enter into segments like Juices, Pasta, Oats, salt, Malted beverages etc. .
- Patanjali was building new cow shelter with 1000 cows in 2000 acres ate Teliwala.
- Patanjali's product range consists of 500 varieties of Ayurvedic Medicines and 300 varieties of cosmetic, healthcare and food products.
- It has manufacturing plants at Madhya Pradesh, Maharashtra, Karnataka, Uttar Pradesh and Delhi.
- In AP & Telangana they have sold Rs.60Cr worth of products this year and plans to sell Rs.120Cr of products by next year.
- When compared to other products the products of Patanjali is 10-20% cheaper and also offer 10-20% more margins to retailers and distributors.

Table 3: Price Wars of Patanjali

S.No	Name of the Product	Price of Patanjali (Rs)	Price of Competitor (Rs)
1	Noodles	15	25 (Maagi)
2	Toothpaste (100gm)	35	47 (Dabur)
3	Mixed Fruit jam (500gm)	70	105 (Kissan)
4	Liquid Detergent (500ml)	30	45 (Ezee)
5	Chavanprash (500gm)	115	160 (Dabur)
6	Pineapple Juice (1ltr)	85	99 (Dabur)
7	Honey (500gm)	135	199 (Dabur)
8	Facewash (60gm)	60	80 (Pears)
9	Shampoo (200ml)	110	159 (H&S)
10	Bathing Soap (75gm)	15	24 (Himalaya)
11	Dish wash bar (175gm)	10	15 (Vim)
12	Corn Flakes Mix (500gm)	145	182 (Kellog's)
13	Detergent Powder (250gm)	13	19 (Rin)

(Source: Compiled by Author)

Product Development at Patanjali works on three basic principles: Competitive Pricing, Purity of Raw Materials and Innovation.

One such example of Patanjali products is Aloe Vera juice which Ramdev used to preach to drink for health and the disciples complained that its very costly and costs approx Rs.1200 a litre, then Ramdev and team sourced the leaves from the farmers directly and then manufactured the juice and sold it for Rs.150-Rs.200 a litre.

Purity at Patanjali is given most importance and it has ventured into categories such as Ghee as there are many complaints from the public that such brands are being adulterated. 36.78% of the total revenue of Patanjali group comes from Ghee itself. Innovation also plays a prime spot in Patanjali range such as candies are made of Aloe Vera.

The pricing is very competitive for Patanjali products because the top management salaries are very less at Patanjali unlike other MNC's and also the advertising cost and sourcing of raw materials directly etc will have a major impact on the same. (See Table 2 for detailed info on prices).

Patanjali has earned revenues of Rs.2, 007Cr in 2014-15 which is in par with top FMCG players in the country in the country such as P&G with Rs.2, 409Cr, Jyothi Laboratories with Rs.1,504Cr and Emami Ltd Rs.2,220Cr in the same year. In case Patanjali goes for listings then it would be bigger than Jyothi Laboratories and Emami as per global brokerage firm CLSA's report. If the revenues of Patanjali cross Rs.5000Cr, then its market capitalization would be around Rs.40,000Cr.

Table 4: Revenues from different categories of products of Patanjali in 2014-15

S.No	Product	Revenue Contribution (%)	Growth Rate (%)
1	Food	36.78	99.57
2	Healthcare	19.13	30.58
3	Toiletries	14.56	53.77
4	Dental Products	10.93	45.86
5	Hair Care	10.78	51.35
6	Cosmetics	7.38	40.7

(Source: Compiled by Author based on info on Patanjali website)

REASONS FOR SUCCESS OF PATANJALI

- *Distribution Efficiency:*
  Acharya Balakrishna the master mind behind the growth of Patanjali empire has created a strong

distribution network across India. Patanjali has tied upwith corporates like Big Bazaar which belongs to Future Group and Reliance Fresh. There are 80 super distributors and 700 distributors and 5000 franchisee stores across India. Its also about to ink an agreement with hypermarkets such as Spencer's and More also. The group also plans to set up Patanjali Megamarts also.

- *Affordable Price:*
  As already discussed earlier the competitive pricing was one of the best reason for the success of Patanjali. The price wars table above clearly depicts the difference in pricing when compared to various MNC's in the FMCG Industry. Rawmaterial sourcing directly from the farmers is also one of the reason for the affordable pricing. Low salaries when compared to other MNC's less advertising budget and people working with a sense of service to mankind rather than profitability are also considered as some of the reasons for the affordable pricing policy of Patanjali.

- *Swadeshi Slogan:*
  One of the major reasons for the success of Patanjali is focusing it as an Swadeshi Brand. Ramdev and team are very successful in portraying Patanjali as the swadeshi brand and it created an image in the people that Patanjali was their own brand which was built from the foundations of ayurveda which has a major place in the history and culture of India. Replacing the MNC's is the motive of top people at Patanjali. Swadeshi pride was going to be slowly injected to the Indian people so that the Indian money doesn't go out.

- *Other reasons:*
  Other reasons for the thundering success of Patanjali are its huge advertisement strategy through which Patanjali became the 2nd huge advertisement strategy in India. Quality of Patanjali products are also the major reason for the success of Patanjali. For example Patanjali noodles are made of Atta and Rice Bran Oil when compared to noodles of other MNC's which are made of Maid and Refined Oil. The other reason for the success of Patanjali was the image of Baba Ramdev as a yoga guru and his interaction with 2Crore plus people during his course of interaction as the yoga guru with his followers across the country.

THE ROAD AHEAD FOR PATANJALI

Along with the higher growth prospective for Patanjali, the challenges are also coming very fast. Sourcing of raw materials will be a major problem for them in the future keeping in view the volumes. To reach online consumers faster Patanjali should increase its manufacturing units and warehouses across the country as e commerce websites like Grofers and Big Basket are now offering Patanjali products. Patanjali products portfolio is also unwieldy which in turn becomes a challenge to develop an apt advertising strategy and plan. (Mudra and Mckann Erickson are entrusted with the job of preparing the advertising plan). From a zero advertising budget Patanjali group has done a U turn to become the third biggest television advertiser in the country. The main emerging challenge of Patanjali is to sell its products to those set of people who don't believe in belief system.

INTERESTING FACTS ABOUT PATANJALI

- 6000ltrs of Amla juice was produced every hour at its Hoshiarpur plant in Punjab.
- Patanjali's business has grown 150% this year.
- Purchasing was being supervised by Swami Muktananda and Bharat Ji (Ramdev's brother).
- Everyday 30 ltrs of 'Shudhi" a disinfectant brand was produced in its goshala at Uttarakhand.
- A new cow shelter is in progress which can accommodate 1000cows in a 2000 acres at Haridwar.
- Patanjali group was building a yoga-theme park and museum near Roorkee. This was Ramdev's answer to Disneyland.
- It's a new record in the Indian MNC history that Patanjali crossed Rs.2000Cr turnover in less than 10 years.
- There was a unique concept called 'tastemaker' that was followed at all the manufacturing locations of Patanjali.
- TV channels Sanskar and Aastha have played a major role in promoting Patanjali.
- Actor Hema Malini who was once a disciple of Ramdev will be the brand ambassador for Patanjali's maida-free biscuits.

- Every employee at Patanjali dresses in white clothes.
- Working hours are long at Patanjali.

CONCLUSION

Patanjali has created a miracle and record in the Indian FMCG industry. For the first time after so many decades an normal company which was born very slowly is giving sleepless nights to the major FMCG players and is making them run for their money. If we analyze all the facts about Patanjali from starting to now we can come to a conclusion that Entrepreneurs are not only be born but they can be made also. Entrepreneurship is in the blood of Balakrishna and this mixed with the popularity and charisma of Ramdev is what has made Patanjali as today. But as discussed there are many challenges that are ahead for Patanjali and the top leadership should concentrate on them with the foresight and make sure that there was a Swadeshi MNC in India which had the credibility of ruining the fortunes of FMCG giants like HUL, P&G etc. Patanjali also needs a corporate look with business school graduates as they can make a lot of difference in the present market, logistic stream etc. If Patanjali can catch the pulse of the people and give them what they need in low price, good quality and with innovation they day is not far when this country and slowly the world will witness the born of *Corporate Giant, Swadeshi MNC run by Social sanyasi and team 'Patanjali'*.

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