

IPE Journal of

# Management

**Determinants of Operational Efficiency of the Indian Banking Sector: A Panel Data Analysis**  
Dhruv Vyas and Raghavender Raju G

**Risk and Return Expectations: A Comparative Study of Women Stock and Non-Stock Investors of Punjab**  
Tina Vohra

**Green Bonds: Country Experiences, Challenges and Opportunities**  
Sana Moid

**E-tailing at Bottom of the Pyramid: Analysing the Factor for Success**  
Chaman Lal and Kamal Singh

**The Effect of Age as a Moderator on Green Purchase Behavior in Hotel Industry**  
Srishti Agarwal and Neeti Kasliwal

**Relationship between SHG Women's Socio-economic Factors and Empowerment in Medak District**  
Seema Ghosh

**Inclusive Vs Exclusive Approach to Talent Management: A Review Agenda**  
Geeta Shree Roy and V Rama Devi

**Customers' Perspective Towards Perceived Risk with Special Reference to E-Banking Products: A Comparative Analysis**  
Naresh G Shirodkar

**Listed in**

- UGC list of Journals
- Ebsco Database
- ProQuest
- Ulrichs Web



**INSTITUTE OF PUBLIC ENTERPRISE**

## **Aims and Scope**

IPE Journal of Management is a bi-annual, peer-reviewed journal which publishes empirical, theoretical and review articles dealing with the theory and practice of management. The aim of the journal is to provide a platform for researchers, academicians, practitioners and policy-makers from diverse domains of management to share innovative research achievements and practical experience, to stimulate scholarly debate both in India and abroad on contemporary issues and emerging trends of management science and decision-making.

- 
- The views, opinions, data, in IJM are those of the individual author(s) and the Editor-in-Chief, the Editor and the Advisory Board disclaim the consequences of the views expressed in the articles.
  - No part of this publication may be reproduced without the written consent of the publisher. The copyright of all accepted papers will vest with IJM.
  - Copyright @2017, Institute of Public Enterprise. All Rights Reserved.

**Published by:** Satyam N Kandula on behalf of Institute of Public Enterprise

**Owned by:** Institute of Public Enterprise

**Printed by:** Satyam N Kandula on behalf of Institute of Public Enterprise

**Printed at:** Wide Reach Advertising Pvt Ltd, 21, Surya Enclave, Trimulgherry, Hyderabad - 500015

**Place of Publication:** Institute of Public Enterprise, OU Campus, Hyderabad - 500007

**We thank Indian Council of Social Science Research (ICSSR) for financial assistance for publication of the journal.**

# IPE Journal of Management

## Editorial Board

Editor-in-Chief

**R.K. Mishra**

Editor

**J. Kiranmai**

Advisory Board

**Surendra Singh Yadav**, Professor, Department of Management Studies, Indian Institute of Technology, Delhi

**Raj S. Dhankar**, Vice-Chancellor, Amity University, Chhattisgarh, Raipur

**J.D. Agarwal**, Founder Chairman & Director, Indian Institute of Finance, Delhi

**Anjula Gurtoo**, Associate Professor, Department of Management Studies, Indian Institute of Science, Bangalore

**Prajapati Trivedi**, Faculty Chair MPPP, Senior Fellow (Governance) & Adjunct Professor of Public Policy, Bharti Institute of Public Policy, Indian School of Business, Mohali, Punjab

**Stuart Locke**, Professor, Department of Finance, Waikato University, Hamilton, Newzealand

**M. Panduranga Vithal**, Professor, Finance & Strategy, Indian Institute of Plantation Management, Bangalore

**M. Jayadev**, Professor, Finance & Accounts, Indian Institute of Management, Bangalore

**Badiuddin Ahmed**, Dean, School of Commerce and Business Management & Head - Department of Commerce, Maulana Azad National Urdu University, Hyderabad

**Prabhat Pankaj**, Director, Jaipuria Institute of Management, Jaipur

Editorial Support

**A.V. Bala Krishna**

# IPE Journal of Management

## GUIDELINES TO AUTHORS

### General Framework

- Abstract should contain in brief – focus, methodology, findings and conclusion with 5 to 6 key words.
- The author(s) present position, other affiliations, complete mailing address(es) (both postal and e-mail), mobile numbers should be provided.
- Any special circumstance concerning the article such as its earlier presentation at a meeting, seminar, workshop or conference should be mentioned.
- The article should be professionally proof-read in terms of clarity, grammar, spellings, punctuation and consistency of references to minimize editorial changes.
- Submit the articles in an e-mail attachment to [ijm@ipeindia.org](mailto:ijm@ipeindia.org)
- Papers will be acknowledged via e-mail upon receipt.
- IPE reserves the right to reject any article as it may deem unsuitable for publication, without assigning reasons.
- Articles can be processed speedily if they conform to the style and format listed hereunder.
- Editors have the right to edit the text to improve its clarity and make it conform to the journal style.
- Author(s) will receive one complimentary copy of the journal.

### Format

- Limit the levels of heading within an article to two or at the most three.
- Every sub-heading should be bold and other matter should be typed in double space.

### Quotations and Acronyms

- All quotations should be checked carefully for accuracy and should be unaltered except for ellipses and bracketed insertions.
- Acronyms should be spelt out on first occurrence. Capitalization should be unaltered except for ellipses and bracketed insertions.
- However, where two forms are widely in use such as liberalise / liberalize, consistency should be maintained in terms of usage throughout the article.

- The word per cent, not the symbol % should be used in the text.
- Figures below 10 should be spelt out in words, eleven and above in figures, unless the reference is to percentages 3 percent, distance 6 kms or age 9 years old.

### Tables and Figures

- Table and figures should have captions and numbers.
- Tables, charts, illustrations, quotations should be numbered, cited and referenced properly.

### Notes and References

- All notes and references should be at the end of the paper – first ‘Notes’ and then ‘References’.
- Notes should be serially numbered in the text using superscript and the corresponding notes should be listed out separately at the end of the article.
- Please ensure the every reference list and vice versa.
- References listed at the end should be arranged alphabetically by the names of the authors.

### For example:

Reference	Format Outline
Book	Surname, Initials (year), Title, Place of Publication: Publisher Book with Single Author
Book	Surname, Initials & Surname Initials, (year) Title, Place of Publication: Publisher Book with more than two Authors
Book	Surname, Initials (year) Chapter, Title in Surname, Initials (Eds) Title, Place of Publication: Publisher Chapter in an credited Book
Books	Corporate / Govt. / Dept. Name (year) Title, Place of Publication: Publisher Books (with no Author)
Journal Articles	Surname, Initials (year) Title of the Paper, Journal Name, Volume Number, Issue Number Author
Economic & Business Dailies	Surname, Initials (year) Title of the Paper, Newspaper's Name, Month, Day Author
Business Magazines	Surname, initials (year), Title of the Paper, Business Magazine's name, Volume Number, Issue Number Author

## CONTENTS

---

Determinants of Operational Efficiency of the Indian Banking Sector: A Panel Data Analysis Dhruv Vyas and Raghavender Raju G	1
Risk and Return Expectations: A Comparative Study of Women Stock and Non-Stock Investors of Punjab Tina Vohra	13
Green Bonds: Country Experiences, Challenges and Opportunities Sana Moid	23
E-tailing at Bottom of the Pyramid: Analysing the Factor for Success Chaman Lal and Kamal Singh	36
The Effect of Age as a Moderator on Green Purchase Behavior in Hotel Industry Srishti Agarwal and Neeti Kasliwal	53
Relationship between SHG Women's Socio-economic Factors and Empowerment in Medak District Seema Ghosh	64
Inclusive Vs Exclusive Approach to Talent Management: A Review Agenda Geeta Shree Roy and V Rama Devi	77
Customers' Perspective Towards Perceived Risk with Special Reference to E-Banking Products: A Comparative Analysis Naresh G Shirodkar	87



# Determinants of Operational Efficiency of the Indian Banking Sector: A Panel Data Analysis

Dhruv Vyas<sup>1</sup>Raghavender Raju G<sup>2</sup>

## Abstract

Banking sector forms the genesis of the financial sector of any economy. For a developing economy like India, Banking sector forms the backbone of the Financial System. Since, Banks are very crucial for an economy, so banks have to be efficient in its operations as only then they can contribute to the growth and development of an economy. This study focuses on the identification of the determinants of the Operational Efficiency of Indian Banking sector. The period of analysis is from 2005 to 2013 and the frequency of data chosen is annual series. The Panel data models, namely the Fixed Effects and Random Effects were used for the analysis of the data. The variables used in the study are employment in the banking sector, investments in the banking sector, deposits of the banks, World Gold Prices and the Brent Crude Oil Prices. The most important variables turned out to be the bank specific variables which have a positive impact on the Operational efficiency of banks. The Global Macroeconomic variables like gold price share a significant and positive relation with the operational efficiency of Indian banks, whereas the Brent crude oil price do not have a significant impact with the Operational Efficiency of Indian Banks but nevertheless share a negative relation, which is a priori to the theory. Compared to both the estimations, it is found that Random effects model is a good method for estimating this model.

**Keywords:** Indian Banking Sector, Operational Efficiency, Panel Data, Macroeconomic Variables.

## Introduction

Banking sector of any country is considered as one of the most important sectors of the economy. Banks are known as the engines on the track of growth and development for any economy. For the people of the country, banking sector is the most important as it motivates people to save a part of their income and then channelize these household

1. Senior Financial Analyst, Standard Chartered Global Business Services, Chennai and can be reached at dhruv.vyas03@gmail.com
2. Associate Professor, Department of Economics, Sri Sathya Sai Institute of Higher Learning, Prasanthi Nilayam, Puttaparthi, Andhra Pradesh and can be reached at graghavendraru@sssihl.edu.in

saving into productive capital. In general, banks felicitate the economic welfare by the productive use of surpluses to generate employment and leads to high economic activity in the economy. Another advantage for the public is that with their deposits in banks, they can earn a risk free income in the form of interest. Since banks are the most important institutions for the growth of economy, there is a need to look upon the financial health and the performance of the banks.

For an economist, Efficiency is a measure of productivity of the institution. Since efficiency of banking sector is a very vast topic, we would look upon specifically on the operational efficiency in the banking sector to offer value added services, with a good management of resources at reasonable prices is concerned with operational efficiency.

The main aim of operational efficiency is to achieve economic growth or in our case growth of a bank at less technical and social cost. The challenge of increasing operational efficiency is all the more difficult now a days, with respect to bank as there is new technology coming in everyday and the volume of transaction coming in is really a difficult task to handle. So, for the improvement in the performance of the banking sector it is important to look on the operational efficiency of the banking sector.

## **Importance of Operational Efficiency in the Indian Banking Sector**

In the case of a developing economy like India, the economic theories actually proves that if there is increase in the operational efficiency, it will lead to the increase in the lending of banks to the public because when there is efficient utilization of resources at a reasonable cost, there is more money with the bank to lend. This move will trigger the dual objectives which are good for the economy. Firstly, from the perspective of a bank the profitability of a bank increases as there will be more interest income earned by the bank. This is because the interest earned by lending will be more than the deposit rate. Also, the interest income earned by the bank forms a major chunk of the overall profits of the bank. Secondly, there will be more loans asked by the producers so that they can spend on the investment activity and this will result in the increase of overall investment activity in the economy. With these dual objectives achieved we can clearly see the path of economic growth and prosperity in India.

## **Objectives of the Study**

- To analyze the trends of Indian Banking Sector.
- To analyze the trends in the Net Interest Margin (NIM) of the Indian Banking Sector.
- To identify the determinants of the Operational Efficiency in Indian Banks.
- To test whether Fixed Effects model or Random Effects model would explain the determinants of Operational Efficiency with respect to the Indian Baking scenario.

## **Brief Review of Literature**

Since, banking industry is very important for any economy there are a number of studies conducted in this field by many accomplished researchers and economists. Hasan and

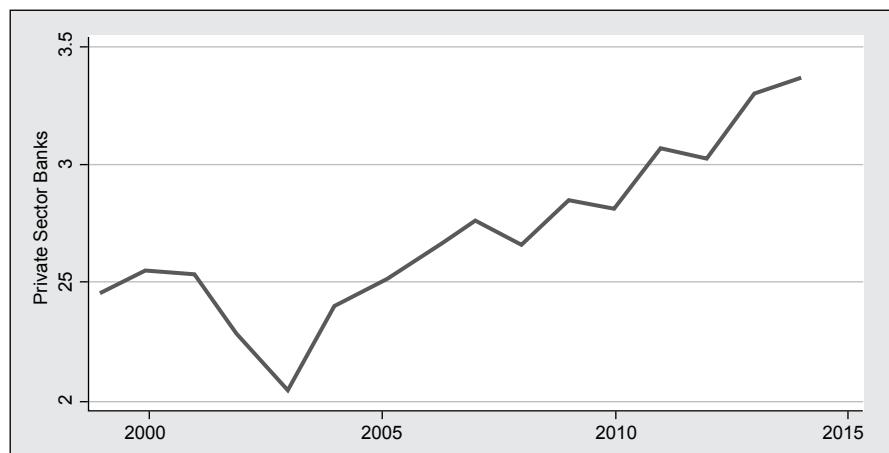
Marton talked about the efficiency in the banking sector in Hungary in the year 2000. The authors tried to analyze the transitional process from the centralized economy to a market oriented system with respect to the efficiency. The study on how specific macroeconomic variables affect the operational efficiency of the US Commercial Banks is done at the aggregate level by Rexford Abaidoo in the year 2004. Empirical approach adopted in this study examines not only the short run but also the long run effects of modeled explanatory variables on the operational efficiency of such financial institutions, mainly the banks. The effect of macroeconomic variables on the operational efficiency of the banking sector in Kenya is studied by Agade in the year 2014. The paper highlights the operational efficiency of the banking industry and also how it is getting affected by the macroeconomic variables.

## **Analysis of Indian Banking Sector**

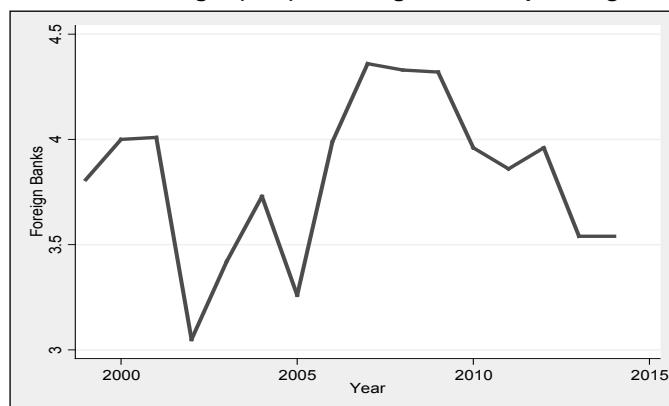
The Indian Banking sector comprises of total 103 fully operating commercial banks. These 103 banks have to be definitely efficient in its operations because this adds to the overall economic growth of a country. In case of banking, we can take profitability as the major factor for the efficiency of the banking sector. Now, there are numerous ways to measure the profitability of the commercial banks. One such way is to check the Net Interest Margin (NIM) for the banks or the Net Interest Income (NII). These two variables for any bank will definitely show the picture of how a bank is performing or status of the bank, with regards to its financial soundness. Net Interest Margin is calculated as the ratio of difference between the Interest Income and the Interest Expended by the bank to the average total assets of the bank. This is the reason it is considered as a good indicator to measure the financial soundness of the bank.

The figures displayed below shows the movement of Net Interest Margin across 103 commercial banks which comprises of the Indian banking sector.

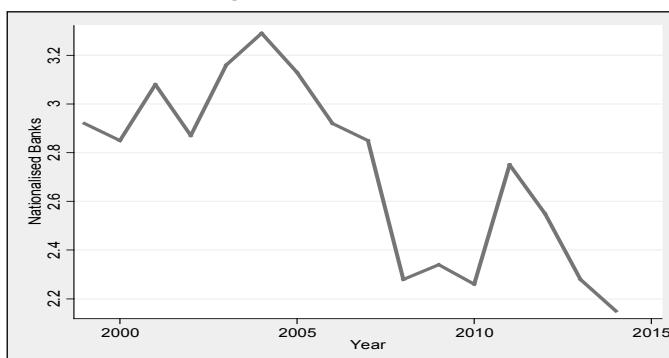
**Figure-1: Net Interest Margin (NIM) of Private Commercial Banks in India (in %)**



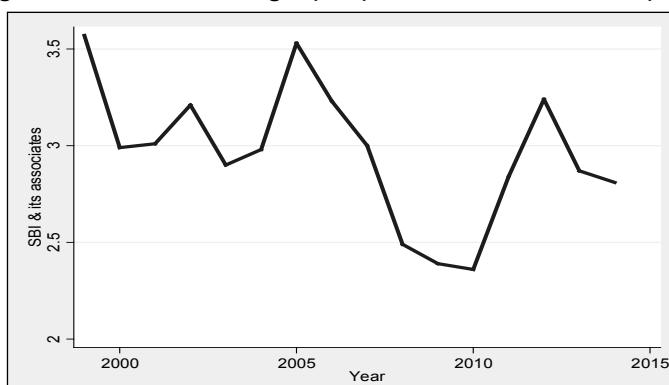
Source: Statistical Tables Relating to Banks in India, RBI (2016-17).

**Figure-2: Net Interest Margin (NIM) of Foreign Banks Operating in India (in %)**

Source: Statistical Tables Relating to Banks in India, RBI (2016-17).

**Figure-3: Net Interest Margin (NIM) of Nationalized Banks in India (in %)**

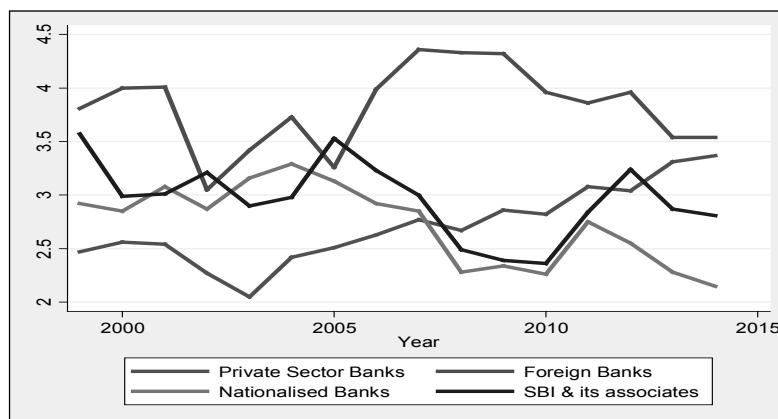
Source: Statistical Tables Relating to Banks in India, RBI (2016-17).

**Figure-4: Net Interest Margin (NIM) of SBI & its Associates (in %)**

Source: Statistical Tables Relating to Banks in India, RBI (2016-17).

The above figures show the trend pattern of NIM for different types of commercial banks operating in India. Except for the trend of NIM in Foreign Banks, the trend of NIM in all other banks is comparatively low. The average NIM of Foreign Banks is around 4% whereas the average NIM of other banks is around 3% and for public sector banks it is even worse. This shows that, when we see the efficiency aspect of the commercial banks, the private sector is more efficient than the public sector because their average NIM is better than the public sector. The graphs of all other banks except foreign banks show a dip during the period of crisis. The reason of that could be, since Foreign Banks are good in management of resources and the profitability is also higher than other banks operating in India, the effect of crisis on the Indian operations of these foreign banks is minimal. The Indian banks were safer during the crisis period as compared to the banks of other countries. Though the NIM is relatively low during crisis period for all other banks except Foreign banks, it did not affect much the overall Indian banking sector. The NIM or the Net Interest Income may have been reduced to some extent but the overall impact of crisis on the banks were minimal, this may be probably because of the monetary policy actions taken by the RBI to safeguard from the crisis. The movement of NIM across the span of a decade or so actually tells us the trend of our banks performance in terms of its efficiency. Approximately, the range of NIM in Foreign Banks is somewhat more than the other banks performing operating in India. Figure 5 shows the combined trend of NIM across all the sectors of banking industry.

**Figure-5: NIM of all the sectors of Indian Banking Industry (in %)**



## Data and Econometric Methodology

### Data

In accordance with the scope and objective of our study, the data has been obtained from 74 commercial banks operating in India, which suffice the overall banking sector in India. Among 74 banks which we took for our analysis, there are 28 Foreign Banks, 20 Nationalized Banks, 7 New Private Commercial Banks, 13 Old Private Commercial Banks and 5 SBI and its associates. In the balanced panel of 74 banks we took the annual data from the year 2005 to 2013. The data source of different banks is from an annual publication by Reserve Bank of India and also the balance sheets of different banks.

The aim of our analysis is to find out the determinants of operational efficiency of the Indian banking sector and 74 banks operating in India can clearly show us the picture of the overall Indian Banking sector. Since there is no such variable as operational efficiency, we have taken Net Interest Income (NII) as a proxy variable to measure the operational efficiency of banks which is the dependent variable in our study. The other independent variables include three bank specific variables which can give a picture of industry specific determinants of operational efficiency in Indian banking sector and two macroeconomic variables which have an impact in the global economy, that can capture the fluctuations in the world economy and its impact on the Indian Banking sector. In order to get the correct picture of the relationship among the variables, we have taken the growth rates of each of the variables for our panel data analysis. The variables are mentioned below in **Table 1**.

**Table-1: Variables used in the study**

Nature of Variables	Variables	Notation used in the study
Bank Specific Variables	Employment in the banking sector	gremp
	Investment in the banking sector	grinv
	Deposits in the banks	grdep
Global Macroeconomic Variables	Gold prices (\$/troy ounce)	grgold
	Brent crude oil price (\$/barrel)	groil

## Econometric Methodology

This section mentions about the various econometric techniques used in the study. These are, Panel Unit Root tests (Levin-Lin-Chu Test), Fixed Effect and Random Effects models and Hausman test.

## Empirical Findings and Results

In this chapter we try to analyze the operational efficiency of the Indian Banking sector which comprises of 74 banks functioning in this country by using Panel Data Analysis for the 9 year period of 2005 to 2013. The results of the panel data analysis are presented in the following sections.

### Panel Unit Root Testing

Unlike time series, the same tests check stationarity while doing panel data analysis. Here we take separate tests to check the unit root problem like Levin-Lin-Chu test, Im-Pesaran-Shin test and Breitung test. For our analysis, we used Levin-Lin-Chu test to check the problem of unit root in the variables. The standard procedure to move forward with the unit root tests is that to check for unit root problem, first at levels  $I(0)$ , if the variable is

stationary then we move on to the analysis taking the variable as it is. But if the variable is not stationary at levels, then we move on to take the first difference I(1) of the variable and even if the variable is not stationary at first difference then we move on to take the second difference I(2) of that variable for further panel regression analysis. For our analysis, to get the correct picture of the relationship among the variables, we took the growth rates of each of the variable in our panel unit root testing and also the further panel regression analysis. Table 2 shows the Unit Root test results of all the variables taken for the analysis.

**Table-2: Unit Root Test Results**

VARIABLES	I(0)	I(1)
grnii	-14.8329	-
gremp	-20.3998	-
grinv	-5.8635	-
grdep	-7.054	-
rgold	-8.255	-
groil	-17.3558	-

Note that, the nomenclature of the variables in Table 2 has changed because all the variables are taken in the growth rate form. In Levin-Lin-Chu test, we take the value of adjusted t-statistic to find out that whether the variable is stationary or not. In all the variables taken, we can see that the value of Adjusted t-statistic is significantly less than zero, so we reject the null hypothesis of a unit root in favor of the alternative hypothesis that the variables are stationary at levels.

## Panel Data Analysis

For the Panel Regression analysis, we took the data of 74 commercial banks which are functioning in India and the analysis ventures the effect on the Indian Banking Sector as a whole. The data is taken from the year 2005 to 2013, a period of nine years which is significant with the panel data analysis. Before moving on to the panel regression, we created a balanced panel with 74 banks as the cross-section variable across 9 time periods. To get the correct picture of the relationship amongst the variables, we took the growth rate for each of the variable. We used two different panel data regression models and those are Fixed effects model and Random effects model. Net Interest Income (grnii) is taken as the dependent variable in the analysis, which is a proxy variable to measure the operational efficiency in the Indian Banking sector. The following results show the effect of all the independent variables taken in the analysis.

## Fixed Effects Regression Equation

$$\text{grnii} = 9.7715 + 0.146 * \text{gremp} + 0.245 * \text{grinv} + 0.289 * \text{grdep} + 0.299 * \text{rgold} - 0.087 * \text{groil}$$

(3.71)	(3.23)	(5.23)	(5.61)	(2.31)	(-1.04)	..(1)
--------	--------	--------	--------	--------	---------	-------

## Random Effects Regression Equation

$$grnii = 9.7315 + 0.180 * gremp + 0.244 * grinv + 0.284 * grdep + 0.301 * grgold - 0.091 * groil$$

(4.29)      (5.92)      (5.85)      (2.38)      (2.38)      (-1.1)    ..(2)

The first equation displays the Fixed Effects Model equation and the second equation displayed above shows the Random Effects Model equation. The explanation for both the equations is elucidated in the further paragraphs.

In the Panel Data Analysis, for Fixed Effects and Random Effects Model, the value of R square is calculated in three different aspects i.e. R square Within, R square Overall and R square Between. First, let us find out what are these three R Squares. The R Square within comes from the mean deviated regression that is, ordinary R square obtained by running OLS on the transformed data. The R-Square between firstly computes the fitted values using the fixed effect parameter vectors and the within individual means of the original y variable. It also calculates the R-square as the squared correlation between those predicted values and within-individual means of the original y variable. Finally, the R Square overall shows the fitted values using the fixed-effects parameter vector and also the original, untransformed independent variables. Table 3 shows the values of all three R Squares in both, the Fixed Effects and the Random Effects model.

**Table-3: Value of R Square**

	Fixed Effects (F.E)	Random Effects (R.E)
R2	within = 0.2379	within = 0.2372
	between = 0.6084	between = 0.6177
	overall = 0.2941	overall = 0.2948

In our analysis, for the goodness of fit, we can say that R Square between, within and overall do not have much difference in terms of their values. However, in our analysis, in case of random effects model the R square between and overall are slightly better than the fixed effects model and with respect to random effects model, R square between can be accepted.

The coefficients indicate how much of the dependent variable changes when independent variable increases by one unit. The t value is considered a good measure to gauge the significance of the independent variable over the dependent variable. For the t value to be significant it has to be higher than 1.96 (for 95% level of significance). The higher the t value, the higher the relevance of the variable. In the above two equations of fixed effects model and the random effects model, the t values of the investment in the banking sector (grinv), deposits in the banks (grdep) is seen as highly significant and the relation seen is positive, the t values of employment in the banking sector and the world gold prices are also quiet significant and share a positive relation with the dependent variable. The t value of Brent crude oil price (groil) is not seen as significant in both the models but the relation is found to be negative.

The economic rationales behind the findings of our study are to be elucidated now. The operational efficiency captures the effective working and management of the material

resources of the bank like human resources, technology etc. In our analysis, we found that the impact of employment in the banking sector is found to be quite significant in increasing the operational efficiency of the bank. When there are more employees, it increases the urge for the banks to give incentives to their employees to improve the performance of the banks and this results in the increase of competition amongst the employees of the banks to perform better day by day. Hence, the efficiency in the operations of the banks increases. Thus, there exists a positive relation between the employment in the banking sector and the operational efficiency in banks. Empirically, from our model we can say that, with 1 unit rise in the employment in banking sector, the operational efficiency of banks increased by 0.18 units.

Investments play a major role in the increase of output in case of any sector. In our analysis too, we found that investment plays a very important and significant role in increasing the operational efficiency. Net Interest Income (NII) is taken as the proxy variable for operational efficiency in the banking sector. NII is the difference between the Interest Income and the Interest expended. If the investment in banks is more, the banks will be motivated to lend more and more to the customers. This eventually increases the difference of the interest payments the bank receives on the loans outstanding and the interest payments the bank makes to the customers on their deposits because the economic activity is more in the country, which is nothing but the rise in the net interest income. The net interest income is very crucial for the banks as it forms more than half of the total operating income of banks which define the operational efficiency of the bank. In our empirical analysis, 1 unit rise in the investment of the banking sector, the operational efficiency of banks is increased by 0.24 units.

Another explanatory variable which is found to be highly significant in the analysis is deposits in the banks. Since the NII (Interest Income – interest expenses) is taken as a proxy variable to measure the operational efficiency of banks then it is obvious to see that when the deposits are more in the banks, the banks would want to lend more and more which increases the interest income as the deposit rate would be higher than the lending rate for the bank. Also, interest income comprises a bigger chunk of the operating profits of the bank which makes the bank to improve on its operational efficiency. Empirically we can say that 1 unit rise in the deposits of the banks will lead to 0.27 units of increase in its operational efficiency.

Gold is considered as an important asset for any financial institution as it gives the rise in the value of the working of that financial institution. Here, we have taken gold as a proxy variable for the alternative investment. Banks keep gold in the form of investment as gold is one such asset whose value never declines in monetary terms. Now, since there is rise in the gold price, there is definitely confidence of the bank in the investment which they had made on gold. Thus, there is positive relation between the rise in gold price and NII because with the confidence of gold investment, banks would try to increase their interest income by moving towards more and more lending to the public as increase in gold prices would increase the value of the investment on gold that banks have made. In our empirical analysis, we found that 1 unit rise in the gold price would lead to 0.30 units rise in the operational efficiency of the banks.

Finally, the Brent crude oil price is considered as the major influential macroeconomic variable in the global economy. The rise in oil prices definitely affect the performance of the banking sector which is reflected in the lower profits earned by the bank and the Net Interest Income (NII) is a major chunk of the operating profit of the banks. In United States of America, the relationship is found to be significant and negative because of the bad performance by the energy and oil companies as the increase in the oil prices is pinching the pockets of these companies and they are unable to repay the loans to the banks which increase the burden of loss on the shoulders of banks. However, in our study, it is found that with respect to the Indian Banking sector, the Brent crude oil prices are not significant in determining the operational efficiency of the banks, but at the same time the relation is found to be negative. It can be explained that it is not significant in the Indian Banking sector as, since in our analysis of 74 banks, only 28 banks are foreign banks which are major players in the global market and are exposed to this risk of rise in oil prices and rest other banks are majorly dominated by the domestic factors. Thus, the impact is not seen so significant in the overall Indian banking sector but nevertheless the relation is found to be negative.

## Hausman Test Results

**Table-4: Hausman Test Results**

<b>Hausman Test Result</b>			
<b>Variables</b>	<b>Fixed (b)</b>	<b>Random (B)</b>	<b>Difference (b-B)</b>
gremp	0.1458405	0.1801916	-0.0343512
grinv	0.2448988	0.2439823	0.0009166
grdep	0.2898148	0.2794747	0.0103401
rggold	0.2998206	0.3016957	-0.0018752
groil	-0.0879599	-0.0910763	0.0031165
p value = 0.4791			

In Hausman test we test the null hypothesis that difference in the coefficients are not systematic i.e. the two estimation methods are good, and therefore they should yield the coefficients that are 'similar'. The alternative hypothesis is that the fixed estimation is good and that the random effects estimation is not. To decide between fixed effects model and random effects model, as which model is good for the estimation, we run the Hausman test. Based on the p value we decide whether to use fixed effect or random effects. If p value is insignificant i.e. larger than 0.05 then we accept the null hypothesis that the coefficients estimated by the random effects estimator is the same as that of the fixed effects estimator, then it is safe to use random effects estimator. In our case, we can see from Table 4, the results say that the p value is insignificant, hence we accept the null hypothesis therefore for our analysis it is safe to use the random effects model. Also, the acceptance of Random Effects model can be proved, if we take the t values we can see that Random effects model shows better t values than the Fixed effects model and also if we see the value of R squares, the Random Effects model shows a better R square between and R square overall (which can be accepted in case of Random effects model) than the R square between and R square overall of the Fixed effects model.

## Conclusions

The study examined the impact of certain bank specific and global macroeconomic variables on the operational efficiency of Indian Banking Sector. The study concludes that bank specific variables like employment in the banking sector, investments in the banking sector and deposits made by banks have a significant and positive effect of the operational efficiency of the banks in India. The study also concludes that global macroeconomic variables like Gold prices have a positive and significant impact on the operational efficiency of Indian Banking sector, but it was also seen that Brent crude oil prices does not have a significant impact on the operational efficiency of Indian banks but nevertheless the effect is seen as negative.

## Recommendations for Policy and Practice

The study established that the selected bank specific variables and one global macroeconomic variable have a significant impact on the operational efficiency of the Indian banking sector. The study recommends that the banks should keep in mind to provide enough incentives to retain their employees in the organization as the employee participation in the activities of bank has a very deep significance on the operational efficiency of the Indian banks and increase in operational efficiency leads to increase in the overall operating profits of the bank.

Secondly, the study recommends that the government should provide good enough environment for the investments to come in the banking sector, as more investment leads to increase in the operational efficiency of the bank and also provide a cushion for the banks, so that the risk of global macroeconomic fluctuations can be reduced which can have an impact on the financial health of banks which can be indicated in the form of low operational efficiency in bank.

## Scope for Further Research

Since, the study is focused on the identification of the determinants of the operational efficiency of the overall Indian Banking sector; further research can be done on the impact of these variables on the various sections of the Indian Banking sector that is, Foreign banks, Nationalized banks, Private commercial banks and SBI and its Associates, and then find out that which variables affect which sector of Indian banks, the most and which variables affect which sector of Indian banks, the least.

## References

- Agade, R. (2014). The Effect of Macroeconomic Variables on Operational Efficiency of Banking Sector on Kenya, *Working Paper*; [Accessed November, 2009].
- Abaidoo, R. (2014). Exchange Rate Volatility, Global Market Exposure and Operational Efficiency among US Commercial Banks, *International Journal of Economics and Finance IJEF*, 6(9).
- Alber, N. (2015). Determinants of Banking Efficiency: Evidence from Egypt, *IBR International Business Research*, 8(8).

- Basson, N. B. & Ojah, K. (n.d.). The Macroeconomic Determinants of Banking Efficiency: An Empirical Analysis of South Africa against The Rest of the World, *SSRN Electronic Journal*.
- Berger, A. N., Hasan, I. & Zhou, M. (n.d.). Bank Ownership and Efficiency in China: What will Happen in the World's Largest Nation?, *SSRN Electronic Journal*.
- Brown, K., Hassan, M. K. & Skully, M. (n.d.). Operational Efficiency and Performance of Islamic Banks, *Handbook of Islamic Banking*.
- Deyoung, R. (1997). Comment on 'Operational Efficiency in Banking: An International Perspective', *Journal of Banking & Finance*, 21(10), pp: 1325-1329.
- Gujarati, D. N. (1995). *Basic Econometrics*. New York: McGraw-Hill.
- Goddard, J., Molyneux, P. & Wilson, J. O. (2004). The Profitability of European Banks: A Cross-Sectional and Dynamic Panel Analysis, *The Manchester School*, 72(3), pp: 363-381.
- Hsiao, C. (1986). *Analysis of Panel Data*. Cambridge, England: Cambridge University Press.
- Hughes, J. P. & Mester, L. J. (n.d.). Efficiency in Banking: Theory, Practice and Evidence, *SSRN Electronic Journal*.
- Kamarudin, N., Ismail, W. R. & Mohd, M. A. (2014). Assessing Efficiency and Effectiveness of Malaysian Islamic Banks: A Two Stage DEA Analysis.
- Kao, C. & Liu, S. (2009). Stochastic Data Envelopment Analysis in Measuring the Efficiency of Taiwan Commercial Banks, *European Journal of Operational Research*, 196(1), pp: 312-322.
- Kasman, S., Vardar, G. & Tunç, G. (2011). The Impact of Interest Rate and Exchange Rate Volatility on Banks' Stock Returns and Volatility: Evidence from Turkey, *Economic Modeling*, 28(3), pp: 1328-1334.
- Li, Y. (2005). DEA Efficiency Measurement with Undesirable Outputs: An Application to Taiwan's Commercial Banks, *International Journal of Services Technology and Management*, 6(6), P.544.
- Luo, D. & Yao, S. (2010). World Financial Crisis and The Rise of Chinese Commercial Banks: An Efficiency Analysis Using DEA, *Applied Financial Economics*, 20(19), pp: 1515-1530.
- Maheshwari, V. & Prasad, H. (2014). Cross Sectional Analysis of Profitability: A Study of Selected Public Sector Banks in India, *Asian Journal of Research in Banking and Finance*, 4(9), P.191.
- Naruševičius, L. (2013). Modelling Profitability of Banks by Using Dynamic Panel Data Estimation Method, *Social Technologies*, 3(2), pp: 278-287.
- Rajput, N., Chopra, K. & Oberoi, S. (2014). Efficiency of Foreign Banks Operating In India: DEA Analysis, *AJFA Asian Journal of Finance & Accounting*, 6(2), P.439.
- Verbeek, M. (2000). *A Guide to Modern Econometrics*. Chichester: Wiley.

# Risk and Return Expectations: A Comparative Study of Women Stock and Non-Stock Investors of Punjab

Tina Vohra\*

## Abstract

Stock markets have always been associated with two aspects namely the risk and the return. Studies conducted in the past have focused primarily upon the impact of stock market risk and return expectations on the stock ownership by households. According to the academic researchers, women are more risk averse as compared to men and have a lower propensity to take on a higher risk in order to achieve greater investment returns. Further, the literature highlights the differences in investing propensity among different groups of women investors. Therefore, the objective of the study is to examine the impact of demographics on the portfolio choices of women (in terms of their attitude towards the risk and return) by comparing women stock as well as non stock investors of Punjab. For the purpose of the study, data were collected from primary sources using a pre tested, well structured questionnaire. To analyze the collected data, Descriptive Statistics and Crosstabulation analysis have been used. The results of the study brought out that the objective of investing of women varies according to their education, occupation, their personal monthly income as well as the income of the family of the respondents. The results reveal that business women invest with the objective of earning a high return whereas professional women as well as women in service invest in order to earn an adequate return while ensuring the safety of their funds. Similarly, women with higher educational qualification know how to strike a balance between their risk and return expectations. Further the respondents having a low personal monthly as well as family income are more concerned about the return that arises from their investments and are therefore likely to undertake more risk in order to earn a high return. Moreover, the objective of investment of women non stock investors is different from that of women stock investors. Women non stock investors invest, keeping in mind both the safety as well as the return on their investments while women stock investors are more concerned about the return on their investments. The paper suggests that women being risk averse investors (primarily concerned about the return and the safety aspects of their investments) should invest in SIPs (Systematic Investment Plans offered by Mutual funds). Moreover, women who intend to maximize their return should invest in Equity-linked saving schemes. Equity linked saving schemes help women to save tax on the return earned by them because of their tax-free status.

**Keywords:** Crosstabulation, Descriptive Statistics, Return Maximization, Risk Minimization, Women.

\* Assistant Professor, Department of Commerce, BBK D AV College for Women, Amritsar, Punjab and can be reached at tina198416@yahoo.com

## Introduction

Stock markets have always been associated with two aspects namely the risk and the return. Researchers and policy makers in the past have therefore mainly focused upon the risk and return aspect of the stock market in order to measure the satisfaction of the investors'. Studies conducted in the past have focused primarily upon the impact of stock market risk and return expectations on the stock ownership by households. The results of these studies revealed that the stock market participation tends to increase with the return expectations and decrease with the increase in risk expectations.

Furthermore, men and women are found to differ in their approach to investing in areas involving risk taking. Women do not focus on wealth in terms of opportunity but rather in terms of security. They have a preference for conservative products and therefore are less inclined to invest in stocks. Capital preservation is of paramount importance to women and as a result consider assets that provide sufficient growth in their portfolios on a foundation of proper risk management (Inglis, 2012).

## Review of Literature

According to the academic researchers, women are more risk averse as compared to men and have a lower propensity to take on a higher risk in order to achieve greater investment returns.

Bernasek and Bajtelsmit (1996) attempted to identify the reasons for observed gender differences in investment. The study was a descriptive and diagnostic study that seeks to analyze the gender differences that have been offered in a variety of fields, including economics, sociology, education and gender studies. The authors found major gender differences in investing and risk-taking behaviour of men and women. Embrey and Fox (1997) focused on identifying the differences in the investment decisions specifically of single women and how their investment decisions differ from single men. The main focus was to find out the real difference between the investment decisions of men and women. The study used a sample of single households from the 1995 Survey of Consumer finance. Of the 4,299 households surveyed for the 1999 Survey of Consumer Finances, 839 were found to be single person households. The data were analyzed using statistical techniques like Multivariate analysis, Tobit estimation and Likelihood ratio test. The study revealed that women invested in less risky assets as compared to men. Schubert *et al.* (1999) analyzed the gender specific risk attitude of investors towards gambling as well as financially motivated risky decisions. The authors also compared the results of survey studies with that of experimental methods in order to provide a stronger control over the economic environment in which decisions were made. The main experiment was conducted to measure the risk behavior of male and female subjects in financial decision making. In the context treatment, subjects were confronted with risky choices such as lotteries. In the abstract treatment a different group of subjects were made to confront with the same risky decisions as those of the main treatment. The subjects were also made to fill a post experimental questionnaire which yielded information on each subject's disposable income in order to exclude wealth effects due to income differences in gender specific choice behavior. The authors concluded that the comparative risk propensity of male and female subjects was strongly dependent on the financial decision setting.

Dwyer *et al.* (2002) examined the relationship between gender and the risk-taking behavior of mutual fund investors. The data from a national survey of nearly 2000 mutual fund investors was analyzed using t-statistics, descriptive statistics, Chi square statistics, Probit estimates and Linear regression model. The results of the study suggested that women show less inclination towards investments that involved risk. Al-Ajmi (2008) studied the determinants of risk tolerance of individual investors in Bahrain. The data was collected with the help of a questionnaire developed by Dow Jones & Company in 1998. Out of a total of 2,700 questionnaires distributed, 1,546 were returned and 1,484 of them were found usable. The questionnaire included 4 Categories i.e. gender, age, wealth and education. The data was analyzed using descriptive analysis, univariate analysis and analysis of covariance. The authors observed that the risk tolerance of investors varies with the level of education and wealth.

Jacobsen *et al.* (2010) attempted to identify the differences in risk aversion and optimism as factors explaining the gender differences in stock holding. Opinion polls in U.S. and seventeen other countries were conducted to confirm the gender differences in optimism. The authors studied various key economic indicators such as economic growth, interest rates, inflation and future stock market performance. The survey was conducted on a sample size of 500 from each country and each survey aimed at measuring both the present and the future expectation about the economy. The data was analyzed by using various statistical techniques like t test, descriptive and logit regression. The study brought out that even after controlling personal characteristics like income, wealth, education and marital status; men were found to be more optimistic than women. Very optimistic men held 15% more equity while very optimistic women held only 5% more equity which explains the gender differences in stock holding. Parashar (2010) attempted to find out the effect of Personality Traits on Investment Choice made by individual investors. The data was collected with the help of a structured questionnaire. The questionnaire was designed to study the investor's risk tolerance and their investment preferences. Cluster Analysis, Kruskal Wallis test, Factor Analysis and Correspondence Analysis were used to analyze the results of the study. The results of the study revealed that risk takers and adventurous people tend to invest in equity and real estate while risk averse people invest in bonds and mutual funds. Almenberg and Dreber (2012) attempted to explore the link between the gender gap in stock market participation and financial literacy. The data from the 2010 consumer survey conducted by the Swedish Financial Supervisory Authority consisting of a random sample of 1,300 adults from Sweden was studied. Descriptive Statistics and Probit Regression Analysis were used to analyze the results. The results of the study revealed that women were more risk averse as compared to men. Sandhu *et al.* (2015) tried to find out the factors that restrict the investors from investing in the stock market. The data for the study was collected from 234 investors belonging to Chandigarh and NCR region of India. Factor Analysis was used to analyze the results of the study. The results of the study brought out that reasons namely volatility, multiple incomprehensible risks, uncertain returns prevent the investors from investing in the stock market.

## **Research Design**

### **Need for the Study**

The literature on household finance brings out that women tend to make investments that are less risky. The literature also highlights the difference in investing in risky assets

are more pronounced for one group of women investors as compared to another group of women investors. Therefore, the impact of demographics on the portfolio choices of women needs to be investigated by comparing one group of women investors with another group of women investors.

The study by comparing the investment objectives of women stock and non stock investors will help the policy makers in designing programs to ensure greater participation of women in financial markets.

**Objectives of the Study** Following are the specific objectives of the study

- To identify the investment objectives of women investors of Punjab in terms of their attitude towards the risk and return.
- To explore if there is a significant difference in the objective of making investments among women based on their demographics.

## **Data Base and Research Methodology**

The investment objectives of women investors in India were examined with the help of a pre-tested, well-structured questionnaire. The questionnaire was divided into two parts. The first part of the questionnaire was designed to find out the investment objectives of women investors in India. The respondents were asked to choose their investment objectives from between the two investment objectives namely maximization of return and minimization of risk. The second part of the questionnaire was related to the demographic profile of women investors. The data were collected from 400 women investors (200 stock investors and 200 non stock investors) from the four major cities of Punjab, i.e. Amritsar, Jalandhar, Ludhiana and the Union Territory Chandigarh. The sampled respondents were selected using Purposive Sampling Method. As far as the sample of women stock investors is concerned, a list of women investors was prepared with the help of brokerage firms. 5 brokerage firms were selected from each city and then 10 clients from each brokerage firm were selected from their client database. Similarly, for the purpose of selecting a sample of women non stock investors, a list of various service organizations in Amritsar, Jalandhar, Ludhiana and Chandigarh such as educational institutions, banks, insurance companies and medical organizations was prepared. The list was prepared with the help of websites and personal contacts. Thereafter, women working in these organizations were personally contacted. Thereafter, the questionnaires were sent to the respondents by post. Online questionnaires were also mailed to the respondents. The survey was conducted during December, 2015 to September, 2016.

Descriptive Statistics and Crosstabulation were used in order to analyze the collected data.

## **Sample Characteristics**

An attempt was made to incorporate the responses from women belonging to different backgrounds in terms of age, education, marital status, occupation and monthly income. Table-1 exhibits the demographic profile of the sampled respondents.

The first part of the table shows the demographic profile of stock investors while the second part of the table focuses on the demographic profile of non stock investors. The table

shows that the majority of the women stock investors (42%) belonged to the age group between 30-40 years, followed by 40% of the respondents belonging to the age group of less than 30 years. The next category of women stock investors was of the age group of 40-50 years (12%). The women stock investors falling in the age category of 50-60 were 5.5%, while those falling in the age category of above 60 formed just 0.5% of the sample. With regard to the marital status of the respondents, most of the women stock investors i.e. 76.5% respondents in the sample were married while 20.5% of them were single, 2% were divorced and the rest 1% widowed. As far as respondent's occupation is concerned, the table shows that majority of the women stock investors belong to service category (45.5%), followed by businesswomen/self employed women (39.5%). Professional women constituted 15% of the sample. Since the sample respondents were only working women, therefore housewives did not form a part of the sample. Table-3.1 also shows the education level of the sampled respondents. It brings out that 49% of the respondents were postgraduates followed by graduates (44.5%). Few of them were undergraduates (3%) followed by 2% of the respondents with a matriculation degree and only 1.5% of the respondents had a doctoral degree.

The income categorization, shows that 42.5% of the women stock investors belonged to the personal monthly income category of less than Rs.40000 followed by 24% belonging to the income category of Rs.40000-60000. Only 9.5% of the women stock investors were of the income category of 60000-80000 while 24% of the women belonged to the income category of above Rs.80000 income. The family wise income categorization, shows that 2.5% of the women stock investors belonged to the family monthly income category of less than Rs.40000 followed by 17% belonging to the family income category of Rs. 40000-80000. Only 15% of the women stock investors were of the income category of 80000-120000 while 65.5% of the women belonged to the family income category of above Rs.120000 income.

As far as the demographic profile of women non stock investors is concerned, the table exhibits that the majority of women non stock investors (55.5%) belonged to the age group of less than 30 years followed by 27.5% respondents belonging to the age group between 30-40 years. The next category of women non stock investors were of the age group of 40-50 years (11.5%). The respondents falling in the age category of 50-60 were 4.0%, while those falling in the age category of above 60 formed just 1.5% of the sample. With regard to the marital status of women non stock investors, most of the respondents i.e. 59% respondents in the sample were married while 37.5% of them were single, 2.5% were divorced and the rest 1% widowed. As far as women non stock investor's occupation is concerned, the table shows that the majority of the respondents belong to service category (58%), followed by businesswomen/self employed women (15%). Professional women constituted 27% of the sample.

Table-1 also shows the education level of the sampled population. It highlights that 78.5% of women non stock investors were post graduates followed by graduates (20.0%). Few of them were undergraduates (0.5%). Similarly, only 0.5% of the respondents had a matriculation degree and a doctoral degree. The income categorization, brings out that 44% of women non stock investors belonged to the personal monthly income category of less than Rs.40000 followed by 31.5% belonging to the income category of Rs.40000-

60000. Only 14% of the respondents were of the income category of 60000-80000 while 10.5% of the women belonged to the income category of above Rs.80000 income.

**Table-1: Demographic Profile of Respondents**

<b>Demographic Variables</b>	<b>Stock Investors</b>	<b>Non Stock Investors</b>
	<b>No. of Respondents (%)</b>	<b>No. of Respondents (%)</b>
Age (Yrs)	Less than 30	80(40.0)
	30-40	84(42.0)
	40-50	24(12.0)
	50-60	11(5.5)
	Above 60	1(0.5)
	Total	200(100)
Marital Status	Married	153 (76.5)
	Single	41(20.5)
	Divorcee	4(2.0)
	Widow	2(1)
	Total	200 (100)
Education Level	Matriculation	4(2.0)
	Under Graduation	6(3.0)
	Graduation	89(44.5)
	Post Graduation	98(49.0)
	Any other	3(1.5)
	Total	200(100)
Occupation	Businesswoman / Self employed	79(39.5)
	Professional	30(15)
	Service	91(45.5)
	Total	200(100)
Personal Monthly Income (Rs.)	Less than 40000	85(42.5)
	40000-60000	48(24.0)
	60000-80000	19(9.5)
	More than Rs 80000	48(24.0)
	Total	200(100)
Family Monthly Income (Rs.)	Less than 40000	5(2.5)
	40000-80000	34(17.0)
	80000-120000	30 (15.0)
	More than Rs 120000	131(65.5)
	Total	200(100)

Source: Compiled through survey.

The family wise income categorization, shows that 6% of the women non stock investors had a family monthly income of less than Rs.40000 followed by 10.5% who had a family income of Rs. 40000-80000. Only 17.5% of the women non stock investors were of the income category of 80000-120000 while 66% of the women belonged to the family income category of above Rs.120000 income.

## **Analysis and Discussion**

As far as the objective of investing in the stock market is concerned, the respondents were asked to choose the objective of their investments out of the three given objectives namely maximisation of return, risk minimization or both i.e. maximization of return with a reasonable amount of risk. The respondents were allowed to choose any one objective of investment. Descriptive analysis of the data (as shown in table 2) illustrates that the majority of the respondents 162 (40.5%) made investments with the objective of earning a high return while 92 respondents (23.0%) invested in order to ensure the safety of their funds. 146 women (36.5%) want to earn a reasonable amount of return by undertaking a reasonable amount of risk.

**Table-2: Objective of Making Investments**

Objective	Frequency	Percent
Risk Minimization	92	23.0%
Return Maximization	162	40.5%
Both	146	36.5%
Total	400	100.0%

Source: Calculated through SPSS

The following hypotheses were framed in order to measure the effect of demographics on the objective of making investments by women investors:

$H_{01}$ : There is no significant relation between the age of women investors and their objective of making investments.

$H_{02}$ : There is no significant relation between the marital status of women investors and their objective of making investments.

$H_{03}$ : There is no significant relation between educational qualification of women investors and their objective of making investments.

$H_{04}$ : There is no significant relation between occupation of women investors and their objective of making investments.

$H_{05}$ : There is no significant relation between personal monthly income of women investors and their objective of making investments.

$H_{06}$ : There is no significant relation between family monthly income of women investors and their objective of making investments.

$H_{07}$ : There is no significant difference between the objective of making investments of women stock investors and non stock investors.

**Table-3: Crosstabs of Demographics of Women and Objective of Making Investments**

Objective	Age (Yrs)					Total	Pearson Chi-Square	df	Sig.	Decision	
	Less than 30	30-40	40-50	50-60	Above 60						
Risk Minimization	40 (20.9%)	31 (22.3%)	14 (29.8%)	5 (26.3%)	2 (50.0%)	92 (23.0%)					
Return Maximization	75 (39.3%)	63 (45.3%)	17 (36.2%)	5 (26.3%)	2 (50.0%)	162 (40.5%)					
Both	76 (39.8%)	45 (32.4%)	16 (34.0%)	9 (47.4%)	0 (0%)	146 (36.5%)					
Total	191 (100%)	139 (100%)	47 (100%)	19 (100%)	4 (100%)	400 (100%)					
Education											
Objective	Matriculation	Under Graduate	Graduate	Post Graduate	Doctorate	Total	Pearson Chi-Square	df	Sig.	Decision	
Risk Minimization	1 (20.0%)	3 (42.9%)	20 (15.5%)	68 (26.7%)	0 (0%)	92 (23.0%)					
Return Maximization	3 (60.0%)	2 (28.6%)	66 (51.2%)	90 (35.3%)	1 (25.0%)	162 (40.5%)					
Both	1 (20.0%)	2 (28.6%)	43 (33.3%)	97 (38.0%)	3 (75.0%)	146 (36.5%)					
Total	5 (100%)	7 (100%)	129 (100%)	255 (100%)	4 (100%)	400 (100%)					
Occupation											
Objective	Businesswoman / Self Employed	Professional	Service	Total	Pearson Chi-Square	df	Sig.	Decision			
Risk Minimization	13 (11.9%)	21 (25.0%)	58 (28.0%)	92 (23.0%)							
Return Maximization	66 (60.6%)	23 (27.4%)	73 (35.3%)	162 (40.5%)							
Both	30 (27.5%)	40 (47.6%)	76 (36.7%)	146 (36.5%)							
Total	109 (100%)	84 (100%)	207 (100%)	400 (100%)							
Personal Monthly Income (Rs.)											
Objective	Below 40000	40000-60000	60000-80000	Above 80000	Total	Pearson Chi-Square	df	Sig.	Decision		
Risk Minimization	37 (21.4%)	28 (25.2%)	4 (8.5%)	23 (33.3%)	92 (23.0%)						
Return Maximization	82 (47.4%)	46 (41.4%)	13 (27.7%)	21 (30.4%)	162 (40.5%)						
Both	54 (31.2%)	37 (33.3%)	30 (63.8%)	25 (36.2%)	146 (36.5%)						
Total	(100%)	(100%)	(100%)	(100%)	400 (100%)						
Family Monthly Income (Rs.)											
Objective	Below 40000	40000-80000	80000-120000	Above 120000	Total	Pearson Chi-Square	df	Sig.	Decision		
Risk Minimization	7 (41.2%)	14 (25.5%)	14 (21.5%)	57 (21.7%)	92 (23.0%)						
Return Maximization	6 (35.3%)	31 (56.4%)	24 (36.9%)	101 (38.4%)	162 (40.5%)						
Both	4 (23.5%)	10 (18.2%)	27 (41.5%)	105 (39.9%)	146 (36.5%)						
Total	17 (100%)	55 (100%)	65 (100%)	263 (100%)	400 (100%)						
Stock Investors/Non Stock Investors											
Objective	Non Stock Investor		Stock Investor		Total	Pearson Chi-Square	df	Sig.	Decision		
Risk Minimization	55 (27.5%)		37 (18.5%)		92 (23.0%)						
Return Maximization	65 (32.5%)		97 (48.5%)								
Both	80 (40.0%)		66 (33.0%)								
Total	200 (100%)		200 (100%)								

Source: Calculated through SPSS, \* indicates significant at 5% level of significance

**Cross tabulation was used to find out whether the objective of making investments varies according to the demographics of women investors.**

Table-3 shows that the Chi-Square values are significant in case of all the variables except age and marital status. Thus, the objective of investing of women varies according to their education, occupation, their personal monthly income as well as the income of the family of the respondents. The results reveal that business women invest with the objective of earning a high return whereas professional women as well as women in service invest in order to earn an adequate return while ensuring the safety of their funds. Similarly, women with higher educational qualification know how to strike a balance between their risk and return expectations. Further the respondents having a low personal monthly as well as family income are more concerned about the return that arises from their investments and are therefore likely to undertake more risk in order to earn a high return.

Moreover, the objective of investment of women non stock investors is different from that of women stock investors. Women non stock investors invest, keeping in mind both the safety as well as the return on their investments while women stock investors are more concerned about the return on their investments.

## **Conclusion**

The study revealed that majority of women investors made investments with the objective of earning a high return and at the same time wanted to ensure the safety of their funds. Women being risk averse investors are primarily concerned about the return and the safety aspects of their investments.

The objective of investing of women also varies according to the education, occupation, personal monthly income as well as the family monthly income of the respondents. Moreover, the objective of investment of women non stock investors is different from that of women non stock investors.

Business women as well as women having a low personal monthly & family income are more concerned about the return that arises from their investments and are therefore likely to undertake more risk in order to earn a high return. On the other hand, professional women, women in service as well as women with higher educational qualification invest in order to earn an adequate return while ensuring the safety of their funds. Further women non stock investors invest, keeping in mind both the safety as well as the return on their investments while women stock investors are more concerned about the return on their investments.

The finding is in tune with that of Dwyer *et al.* (2002); Jacobsen *et al.* (2010) and Almenberg and Dreber (2012).

## **Recommendations of the Study**

Women are risk averse investors and are primarily concerned about the return and the safety aspects of their investments, therefore it is proposed that women should invest in SIPs (Systematic Investment Plans offered by Mutual funds).

Women who intend to maximize their return should invest in Equity-linked saving schemes. Equity linked saving schemes help women to save tax on the return earned by them because of their tax-free status.

## Limitations of the Study

The present study is restricted only to the major cities of Punjab i.e. Amritsar, Jalandhar, Ludhiana and Chandigarh.

The current study is based upon the responses of 400 women respondents only.

## References

- Al-Ajmi, J. Y. (2008). Risk Tolerance of Individual Investors in an Emerging Market, *International Research Journal of Finance and Economics*, 17(1), pp: 15-26.
- Almenberg J. & Dreber A. (2012). Gender, Stock Market Participation and Financial Literacy. *SSE/EFI Working Paper Series In Economics and Finance*. [Available at: <http://ssrn.com/abstract=1880909>].
- Bernaseki, A. & Bajtelsmit, V.L. (1996). Why do Women Invest Differently than Men?, *The Journal of the Association for Financial Counseling and Planning Education*, 7, pp: 1-10.
- Dwyera, P. D., Gilkesonb, J. H. & Listc, J. A. (2002). Gender Differences in Revealed Risk Taking: Evidence From Mutual Fund Investors, *Economics Letters*, 76, pp: 151-158.
- Embrey, L. L. & Fox, J.J. (1997). Gender Differences in the Investment Decision-making Process, *Financial Counseling and Planning Journal*, 8(2), pp: 33-39.
- Jacobsen, B., Lee, John B., Marquering W. & Zhang C. (2010). *Are Women more Risk Averse or Men more Optimistic?*, [Available at: [http://blogs-images.forbes.com/sashagalbraith/files/2011/04/Jacobsen\\_Paper-optimism-and\\_gender.pdf](http://blogs-images.forbes.com/sashagalbraith/files/2011/04/Jacobsen_Paper-optimism-and_gender.pdf)].
- Parashar, N. (2010). An Empirical Study on Personality Variation and Investment Choice of Retail Investors, *Journal of Management Information Technology*, 2(1), pp:33-41.
- Sandhu, N., Singh, D. & Mankotia, N. (2015). *Perceptual Factors Impeding Stock Market Investment-An Empirical Study*. In: International Conference on Technology and Business Management, Dubai. [Available at:<http://www.ictbm.org/ictbm15/ICTBM15CD/pdf/D5129-final.pdf>].
- Schubert, R., Gysler, M., Brown, M. & Blachinger, H.W. (2000). *Gender Specific Attitudes Towards Risk and Ambiguity: An Experimental Investigation*, Institut für Wirtschaftsforschung, Eidgenössische Technische Hochschule.

# **G**reen Bonds: Country Experiences, Challenges and Opportunities

**Sana Moid\***

## **Abstract**

The 2008 global financial crisis not only resulted in a turning point for regulation and practices of capital market participants but also changed the behavior of financial players. Investors and financial institutions are currently more concerned about funds allocation. This paper discusses the green project bonds as an alternative way to finance along with presenting its scope and challenges on a global level. Green Bonds can be categorized as asset-backed securities tied to specific green infrastructure projects but to date have most commonly been issued in form of "use-of-proceeds" bonds that raise capital to be allocated across a portfolio of green projects.

**Keywords:** Green Bonds, Green Finance, Bonds, Coupon Rate, Global, Challenges and Opportunities.

---

## **Introduction**

The International Capital Market Association defines a green bond as: "any type of bond instrument where proceeds are exclusively applied to finance or re-finance partially or completely on new and/or existing eligible Green Projects. Green bonds are debt instruments that are used to finance green projects that deliver environmental benefits. In line with mainstream bonds, green bonds involve issuing entity with a guarantee of repayment of the amount borrowed over certain period of time, and remunerating creditors through coupon with a fixed or variable rate of return. The momentum of continued issuance and market demand has led to growing consensus on what constitutes a green bond and progress has been made on standards and criteria for what constitutes a green project or activity. Green bonds are becoming an increasingly popular financial instrument used by a number of development banks, state and municipal entities, as well as private companies to raise capital for green investments that alleviate climate change accelerating the global transformation towards resource-efficient and low-carbon sustainable economies.

---

\* Assistant Professor, Amity Business School, Amity University, Lucknow and can be reached at smoid@lko.amity.edu and sanamoid14@gmail.com

## History of Green Bonds

In addition to the usual characteristics, it is certified that proceeds of green bonds will be used for specific “green” purposes. The green bond market started in 2007 when the EIB (European Investment Bank) issued its first ever climate awareness bonds which was followed by a \$400mn green bond issue by the World Bank in 2008. Corporate did not enter immediately and took some time but in 2013, the first sizable “green” (classified as ‘use of proceeds’) bond was issued.

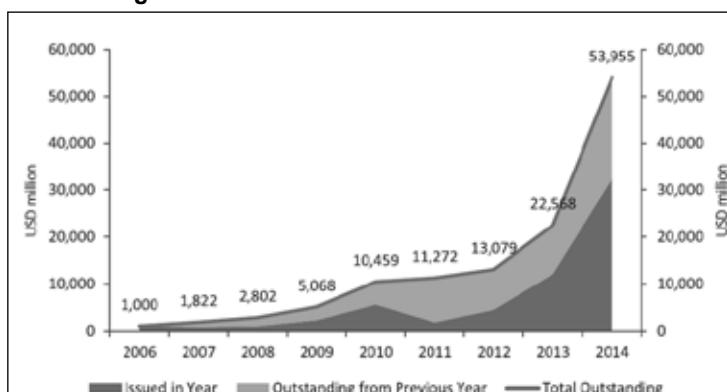
Green bonds are not a product but actually a process. The green bond principles are intentional guidelines on process and lack detail, resulting in lack of consensus on what classifies as a green bond. It is still not sure whether a stringent set of standards constituting green would increase credibility or inhibit growth or innovation.

Green Bonds can provide long-term source of debt capital required by renewable infrastructure projects. Given the fact that cost of project finance debt given by banks is higher than the return for investment-grade project bonds, it may be possible to achieve a reduction in the weighted average cost of capital for green infrastructure financed or re-financed by bonds. Reducing the cost of capital for renewable energy is important because around 50-70 per cent of the costs of electricity generation are in the financial cost of capital, with balance remaining physical or operational costs of the installation. Thus, even a small change in WACC can have a major effect on the long-term cost of capital-intensive renewable energy projects and their competitiveness.

## Global Market Trends – Green Bonds

Green Bond market has been expanding since 2013, with fresh issue of stocks in last two years resulting for over 80 percent of the total outstanding. As shown in Figure below, the total outstanding investments in Green Bonds as on October 2014 is USD 54 billion, including USD 32.5 billion of fresh issuances, more than cumulative issuance of Green Bonds over the last eight years. In the third quarter of 2014, the total number of Green Bonds issued was 28 with total value at USD 9.2 billion.

Figure-1: Historical Issuance of Green Bonds



Source: USAID

The significant growth of Green Bond markets over the last few years can partly be attributed to an overarching trend towards including environmental, social and governance (ESG) issues into the decision process for investments by institutional investors. Currently, over USD 45 trillion of Global "Asset under Management (AUM)" incorporate ESG issues into investment decisions and are participant to Principles of Responsible Investments.

It is important to analyze international market trends while exploring Green Bonds for Indian market. The key learning from the international market are as mentioned below:

*Interest arbitraging against normal bonds does not exist:* Currently, Green Bonds market is at its initial stage but is rapidly expanding and reaching a critical mass with larger investor participation. The current market trends indicate that while demand and supply gap exist, it is still not reflected into pricing advantage for Green Bonds.

*Green Bond investments are not social funds:* All issuers should view Green Bond issuance to be competing with other normal bonds. On the contrary, investors prefer Green Bonds over normal bonds falling into similar risk/reward equation.

*The bond tenures are still low against requirement:* The recently issued Green Bonds have low tenure between 3-10 years; however, there are bonds that have occurred for maturity of over 15 years. For the Indian market, shorter tenure Green Bonds issuance is suggested in the initial stage and should go for longer tenure after the international reputation in the bond market develops.

## Overview of Green Bonds in India

India has set ambitious renewable energy goals for improving energy access and energy security while taking action on climate change. To procure the necessary finance for achieving the national targets, this is the centerpiece of India's climate commitments made at the 2015 UN climate negotiations, the Government of India is working with different market players for enabling market creation and removing key obstruction for mobilizing finance. Likewise, investment from multilateral and national development banks can establish standard models and provide market liquidity. The Government of India is interested in green bonds and approached at least eight domestic lenders to raise lowcost, long-tenure funds through green bond energy plans. Encouraging national players like the Rural Electrification Corporation (REC), Power Finance Corporation (PFC), Industrial Development Bank of India (IDBI), Indian Renewable Energy Development Agency (IREDA), and private sector entities like India Infrastructure Finance Corporation Limited (IIFCL), ICICI Bank, and Yes Bank has entered the market helping scaling up green bonds in India. In 2015, the green bond market in India kick-started with smaller issue of \$100 million to \$200 million with a huge potential of scaling-up. Green bonds are also varied in terms of credit ratings (AAA to BBB) with most green bonds rated AAA to A, providing stability and higher quality of bonds. However, challenges that exist for green bonds

issuance includes high currency hedging cost, poor sovereign rating (BBB-) and lower tenure causing obstacle in its growth. Several entities have issued the green bonds in India, raising more than R120 billion (\$1.85 billion) so far:

**Yes Bank:** Yes Bank issued its first green infrastructure bond in February 2015. Euro denominated R10 billion (\$161 million) 10-year issue and received a AA+ rating.

**Export-Import Bank of India:** Exim Bank issued India's first ever and Asia's second dollar-denominated green bond in March 2015. The BBB-rated issue was oversubscribed by more than three times with majority of investors including asset managers, with banks and sovereign wealth funds with insurance companies accounting for remaining interested parties.

**CLP Wind Farms:** CLP Wind Farms became the first Indian corporate sector to issue green bonds in September 2015 and managed to raise R6 billion (\$90.3 million), receiving an AA-rating and attracting primarily Indian mutual funds as investors with a coupon of 9.15% per annum, in three equal tranches of R200 crore (\$30 million) with maturity in every April in 2018, 2019 and 2020.

**IDBI Bank:** India's State-Owned IDBI Bank raised \$350 million in BBB-rated 5-year green bonds for renewable energy projects in November 2015, becoming India's first public-sector bank for raising funds through green bonds.

**IREDA:** In January 2016, IREDA issued tax-free R10 billion (\$150 million) green bond which was oversubscribed by over five times on the opening day and offered retail investors up to 7.68 percent interest rate for tenures ranging between 10 and 20 years. Factoring in tax savings, the effective interest rate for investors is substantially higher than bank fixed deposits, which attract income tax on interest income.

## The Regulatory Rhymes

The SEBI (Issue and Listing of Debt Securities) Regulations, 2008 ("SEBI Debt Regulations") governs public issue of debt securities and listing of debt securities issued through either public or private placement route, on a recognized stock exchange in India. While, on-shore Green Bonds have been issued and listed under SEBI Debt Regulations, however, in the absence of clear directions or provisions in the SEBI Debt Regulations it was not clear as to what would constitute a Green Bond and what process is required to be followed? With the objective of bringing uniformity related to Green Bonds and for removing future confusion around the subject matter, SEBI in its meeting held on January 11, 2016 approved the new norms for issuing and listing of 'Green Bonds'.

Even though the process of issuing Green Bonds is same as issuing other corporate bonds, there are few additional disclosures required related to periodic reporting of fund allocation. The issuer would have to make disclosures including use of proceeds, listing of projects to

which Green Bond proceeds have been allocated in the annual report and periodical filings made to stock exchanges. The other salient features are as under:

- i. The issuance and listing of Green Bonds shall be governed by the existing SEBI regulations for issuance of Corporate Bonds i.e. SEBI (Issue and Listing of Debt Securities) Regulations, 2008. However, the issuers of the Green Bonds will have to make additional disclosures/ follow procedures.
- ii. The definition of Green Bonds should be prescribed by SEBI from time to time. However, care must be exercised in defining the green label for such bonds and should be aligned with the international guidelines and investors expectations.
- iii. Requirement of independent third party reviewer/ certifier/ validator, for reviewing/ certifying/ validating the pre-issuance and post-issuance process including project evaluation and selection criteria, for lending credibility to the issue of Green Bonds. However, given the fact that availability of such third party reviewer/ certifier/ validator in India is not sufficient and globally such review is not compulsory, the same has been kept optional by SEBI.
- iv. Escrow account for tracking the proceeds of Green Bond is not made compulsory by SEBI. However, issuer is required to present details of the systems/ procedures to be used for tracking the proceeds of the issue, including the investments made and/ or investments earmarked for eligible projects and the same shall be verified by the external auditors.

## **Benefits**

The green bond market can offer several important advantages for green investment:

*Providing an additional source of green financing.* Given massive green investment needs, bonds are one complete financing instrument for addressing such projects. As traditional sources of debt financing is not sufficient in light of immense green investment needs, there is a need for introducing new means of financing that can influence a wider investor base including institutional investors (such as pension funds, insurance companies and sovereign wealth funds) managing over USD 100 trillion in assets globally.

*Enabling more long-term green financing by addressing maturity mismatch.* In many countries, the ability of banks to provide long-term green loans is constrained due to the short maturity of their liabilities and a lack of instruments for hedging duration risks. Corporate sector accessing short-term bank credit also face refinancing risks for long-term green projects. If banks and corporate sector can issue medium and long-term green bonds for green projects, these constraints on long-term green financing can be mitigated.

*Enhancing issuers' reputation and clarifying environmental strategy.* Issuing a green bond is an effective way for developing and implementing a credible sustainability strategy for

investors and general public by clarifying how proceeds raised will contribute towards pipeline of tangible environmental projects. Green bonds can thus help enhancing an issuer's reputation along with internal sustainable development policies, as this is an effective way for the issuer to display its commitment towards improving environmental sustainability. These enhancements may result in benefits for product marketing as well as potential government policy incentives for business operations.

*Offering potential cost advantages* While the cost advantage is not yet clear in the current nascent green bond market, it is possible that, once the market attracts wider investor base both domestically and internationally, a better pricing for green bonds vs. regular bonds may emerge provided demand is sustained. According to CBI, a number of issuers also report benefit in the increased speed of "book building" translating into reduced costs for marketing and road shows. In some countries, government incentives like tax reduction, interest subsidies and credit guarantees, are also being discussed as options for further reducing the funding costs for green bonds, with US having already experimented in this area with green property bonds and municipal bonds.

*Facilitating the "greening" of traditionally brown sectors.* The aforementioned benefits of the green bond market can function as a transition mechanism that encourages issuers in less environmental-friendly sectors for taking part in the green bond market (provided they ring-fence proceeds for green projects) and also for reduce the environmental footprint by engaging in green investment activities that can be funded via a green bond.

*Making new green financial products available to responsible and long-term investors:* Pension funds, insurance companies, sovereign wealth funds and other institutional investors having special preference for sustainable (responsible) investment and long-term investment are looking for new financial instruments for achieving their investment targets. Green bonds provide these investors with access to such products and way for many other investors for diversifying their portfolios. As the bulk of assets under management globally are passive investments tracking indices, green bond indices are an important set up for ensuring accessibility of green bond investment to the mainstream, passive funds. This facilitates green bond market to be scalable, avoiding being a niche market only.

## Global Experiences

*Japan:* The Ministry of the Environment, Japan has set up "Green Bond Guidelines, 2017" on March 28, 2017 with the purpose of spurring issuances of Green Bonds and investments in them in Japan. This "Green Bond Guidelines" have been developed with the objective of spurring issuances of Green Bonds and investments in them in Japan. In course of development, for maintaining credibility of the green characteristics of Green Bonds, the Guidelines seek to prevent "green-wash" bonds from being issued and invested in.

As the International Capital Market Association continues to update its recommended Green Bond Principles with the objective of improving integrity and transparency of green

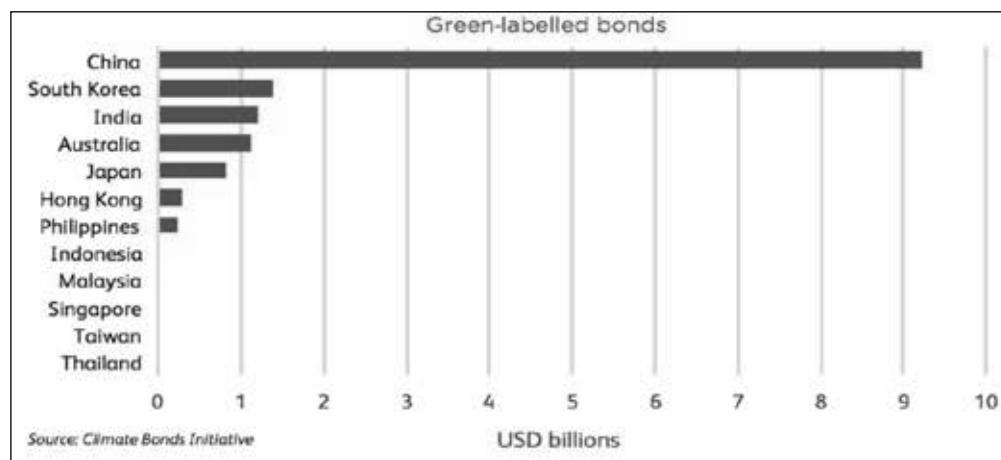
bond market internationally, developments in Japan also continue to move toward this goal. One of the developments that have been seen is a growing practice among some issuers for arranging of second opinions on compliance of product with International Capital Market Association's Green Bond Principles.

**Singapore:** Sustainable investments have gone main stream, and Singapore is taking steps for match demand by growing a green bond market. The global green bond market has grown rapidly over the years, reaching more than US\$80 billion (S\$112 billion) in 2016. Under the green bond grant scheme, issuers can offset up to \$100,000 of costs incurred from obtaining an independent review based on international green bond standards. For qualifying, bonds can be denominated in any currency but must be issued in Singapore, with a minimum size of \$200 million and tenure of at least three years.

**Other Asian Economy:** In a region dealing with excessive pollution and greenhouse gas emissions, climate change-induced droughts and floods, exacerbated by high coal-fuelled energy consumption, countries in Asia are exploring innovative clean and green financing products like green bonds for moving towards a sustainable, low carbon economy.

The Asian market for green bonds is dominated by China, South Korea, India and Japan.

**Figure-2: Asian Markets for Green Bonds**



Asian markets have witnessed a rapid increase in green bond transactions in recent years, including China, India, Japan, South Korea and the Philippines. Green bonds are going mainstream in the overall bonds market, mainly because of the growing global awareness about the pressing need for environmental protection.

In the second half of 2016 Black Rock, world's largest asset manager, issued a climate change warning, stating that investors could no longer ignore the phenomenon and that they should cause in the costs of environmental problems, such as fossil fuel usage, water

consumption, and carbon emissions as a percentage of annual sales when they decided which companies to invest in.

Such rapid expansion only comes from broad-based shift: existing green issuers, largely developmental organisations, been joined by an increasingly diverse range of entities, including developed-market corporate like Apple, Toyota, Hyundai and Iberdrola, as well as issuers from emerging economies, mainly in Asia, including Bank of China, China's Industrial Bank, Bank of

**USA:** In 2008, The World Bank Issued First Fixed-Rate Bond Carrying A Green Label. In Less than a decade, the market has grown to \$118 billion in outstanding bonds labeled green. in addition, another \$576 billion in unlabeled bonds fund climate-friendly projects. Investors around the world are increasingly familiar with the challenges of climate change and the energy conversion. More and more of them are clamoring for investment tools taking environmental criteria into account. They are showing interest in the bonds and "100% green" investing. And while green bonds remain a relatively small phenomenon, the market is expanding rapidly. In September 2016, the Luxembourg Stock Exchange announced the opening of the "Luxembourg Green Exchange (LGX)", the world's first platform dedicated for green financial instruments. Despite this impressive progress, green bonds still represent less than 1% of the worldwide bond market. The United States is world's leading issuer, with more than \$24 billion in green bonds outstanding in mid-2016, according to the Climate Bonds Initiative. The U.S. bond market, with \$40 trillion outstanding, dwarfs those of other countries. Green bonds comprises of merely 0.061% of the total U.S. bond market, a significantly lower percentage than in China, India, and South Africa, and order of magnitude below the share in the Nordic countries, Germany, the Netherlands, and France. Moreover, China is on the brink of overtaking the United States as the leading issuer in 2016. The relatively slow pace of U.S. green bond issuance is a major obstacle to this country's efforts to address climate change. Many market participants challenge that the problem in the United States is lack of supply and not of demand. Green bond issues are typically oversubscribed. Reason behind weak U.S. green bond activity is still not clear. Part of the answer lies in the market's lack of maturity.

**UK:** The UK has become a global hub for green finance initiatives. A wide range of pioneering green finance initiatives and organizations are based in London. London Stock Exchange is attracting international green bond issuance in different currencies and have been issued in the London markets in a range of currencies. In July 2015, the stock exchange established a range of dedicated 'green bond' segments to increase the visibility of the green bonds for investors. As of January 2016, 10 green bonds were listed on the London Stock Exchange. In January 2016, the Green Finance Initiative (GFI) was launched aiming to mobilise the capital required for implementing the Paris climate change agreement and the UN's Sustainable Development Goals.

## Issues with "green" bonds

**Green Bond Standards:** The International Capital Markets Association (ICMA) has the green bond principles and the Climate Bonds Initiative has the climate bond standards.

There are also green bond indices being developed by the various banks or rating agency. These indices and principles spell out standards and practices defining what are considered “green”. The definitions in both are quite broad and guidelines voluntary; so they do not hamper innovation in green financing. However, the definitions also led to great deal of confusion over what is considered green. CICERO, a second-party reviewer of green bonds, offered “shades of green” methodology, through which green bonds are graded “dark, medium or light” green depending on the underlying project’s contribution to “implementing a 2050 climate solution”. A second problem faced by green investors is their limited capacity to analyse green projects, in which case the role of third party guarantors like CICERO and audit firms like KPMG and EY becomes vital.

**Investors:** So far, all Indian green bond issues have seen 15-20 per cent investment by dedicated green funds including supra-nationals like International Finance Corporation, KfW, European Investment Bank, Asian Development Bank, and other funds, which have a compulsion clause to invest in green projects. For any pricing advantage over conventional bonds, this proportion needs to go up to 50 per cent.

**Funding:** Banks are the major source of direct green infrastructure financing. However, the scale of investment along with the “maturity mismatch” significantly exceeds the capabilities of post-financial crisis banking sector with inhibited balance sheets. Indian PSU banks are already grappling with huge NPAs and are credit inhibited. Bond markets, which provide both an alternative and complement to bank financing of debt, will be required to play a crucial role. Bonds with long tenors are potentially a good fit with institutional investors’ long-term liabilities, allowing for asset-liability matching.

**Low Credit Rating of Potential Green Bond Issuers:** Infrastructure companies in India do not have a very good credit rating history. In addition, apart from biggest names in power generation sector, viz., NTPC and Tata power, no other company has credit rating to be able to issue bonds in the capital markets. Because of the nature of business, power generation is capital intensive and relies mainly on debt for funding, which further hampers new companies from being able to raise debt in the capital markets.

**Cost:** The issue of “green bonds” entails an additional monitoring and certification cost. Although this is completely voluntary, it does tend to increase the cost of a “green” issue.

## Key Challenges for Indian Entities

The following challenges are considered to be the key risk elements for issuance of Green Bonds for Indian entities.

**Hedging costs:** Currently, hedging costs are very high estimated at 8 percent and above for 10 year tenure) and hence take away the cost advantage for foreign currency financing in India. There is a need for exploring instruments/methods that can enable reduction of such costs.

**Credit ratings:** India’s current sovereign rating of BBB- is not attractive for risk-averse investors. Thus credit enhancement, offered by multiple agencies like IFC, AFD, and

USAID-DCA, can help enhance credit rating. However, there are costs associated with such credit enhancement services and hence cost benefit analysis needs to be done.

**Regulations:** The external commercial borrowing (ECB) guidelines pose certain challenges for the usage of proceeds from Green Bonds. Viable solutions include: Refinancing SPVs by IPPs issuing corporate bonds in foreign currency, On-lending possibility for SPV of Infrastructure Finance Company created for issuance of Green Bonds, Issuances of Green Bonds by an overseas SPV of a domestic FI, Only 25 percent of ECBs are allowed to refinance existing loans, remaining to be used for development of new construction, which poses a challenge for launching Green Bonds for operational assets.

## Policy Recommendations

Given the ambitious goals but limited budget capability of the government, the cost effectiveness of government policies becomes an important issue. According to a study by Climate Policy Initiative and the Indian School of Business, debt related policies are most cost effective incentive for green financing. In particular, combination of reduced cost and extended debt tenors are most effective. Green bonds have the ability of reducing cost of debt for green projects by 150-200bps as compared to project finance loans. Following measures are recommended

**Regulatory changes in IRDA:** Regressive regulations are one of the major reasons the market for corporate debt is under-developed. A couple of regulatory changes by PFRDA and IRDA will go a long way in creating a market for debt in India. Regulations to some extent are hampering the growth of bond market in India and needs to be relaxed. But, it is not recommended that IRDA mandates insurance companies to invest in areas if they choose not to.

- a. The Insurance Act does not permit insurance companies to invest in private limited companies preventing them from investing in many infrastructure projects and renewable projects, specifically because renewable power developers are usually smaller companies that are privately held.
- b. IRDA requires 15 per cent investment in infrastructure and housing for life insurers (10 per cent in infrastructure by non-life insurers). But the following regulations are restrictive:
  - i. Investment is permitted only in highly rated companies.
  - ii. Exposure is allowed up to 25 per cent of the net worth of the infrastructure company (Most infrastructure SPVs are up to 75 per cent debt financed, making their net worth low compared to the size of the investment required. This restriction requires a large number of insurance companies to invest for even very small projects, viz., for an INR 100cr project, INR 75cr of debt would be required and this would still require investment from 20 insurers.) Exposure norms should be restructured depending on the net worth of the insurance company and not the project SPV.

- iii. Recently, IRDA allowed exposure up to 20 per cent of project cost but requires 100 per cent guarantee by AA rated parent. This restriction becomes very capital intensive for the guarantor preventing the development of a vibrant bond market.

**Regulatory changes required in PFRDA: Pension Funds / EPS / PPF / EPF / NPS:** As with insurance, it is not recommended for pension funds to be forced to take risks that they are not willing to, but given the size of the EPS and PPF corpus, even a small allocation to infrastructure or green projects will go a long way in developing the market.

**Revisiting PSL Norms for Green Investing (RBI):** The RBI priority sector lending requirements allow bank loans up to INR 15 crore for purposes like solar power generators, biomass power generators, wind mills, micro-hydel plants and non-conventional energy based public utilities to be eligible to be classified as priority sector loans under "Renewable Energy". The RBI probably right wants banks to lend to newer borrowers and not classify their existing renewable loans to large players to be classified as PSL.

**Clear Specifications and Monitoring for Green Bonds (SEBI):** The SEBI, in December 2015, came out with a concept paper for issuance of green bonds in India, which stated that no additional regulations are required for issuing green bonds in India. However, government incentives cannot operate in grey areas where the definition of green is "voluntary". If it is decided to provide incentive for green bonds, the definition of "green" must be standardized.

**Bond Guarantee Fund:** A green bond guarantee fund on lines of IIFCL bond guarantee program (or an expansion of the same) can have a significant impact on the credit rating of renewable power projects. Apart from the NTPC, Tata Power and a few others, most power companies in India do not have a credit rating that can enable them to issue bonds. Renew Power was able to raise money from the capital markets via credit enhanced bonds where 28 per cent of the bond issue was guaranteed.

**Retail Tax Incentive for Green Bonds:** For mobilising retail savings, government can include or create a new category for green bonds on the lines of infrastructure bonds which receive an exemption under Sec 80CCF, which will help Indians save more while directing money towards renewable energy.

## Conclusion

The "green" bond market is relatively new aspect of global capital markets and has been pioneered by multi-national institutions. Although it comes under the fixed income umbrella, the number of dedicated investors with compulsion for socially responsible investing is increasing every year. Considering that fossil fuels have enjoyed huge subsidies throughout their history and have led to environmental degradation and contributed to global warming; it is appropriate that renewable energy and technologies that reduce the carbon footprint get the same advantage. Green bonds are just another way of classifying and channelizing investments in "green" projects. Although the market is burgeoning, broad guidelines are coming to the front. As the market matures, investors will require that green bond issuers report on the status of deployment and environmental outcomes of the investments.

In general, global leaders need to take three steps for reducing the carbon footprint. First, governments around the world would do well to promote the development and standardization of “green” bonds as a way to finance environmentally sustainable projects. Second, there should be incentives for investing in sustainable projects funded by a carbon tax on polluting sources of energy and finally, more funds to be dedicated for investment in environmentally sustainable projects.

Major cart off is that green bonds are changing the scenario of available investment products, helping to address solutions to global environmental challenges, and their area variety of options to choose from for institutional and individual investors. It is believed that this will continue to grow in the future as investors, in particular millennial, look to make a positive impact in their communities and worldwide via their investment portfolios.

## References

- Bacani, B., Robins, N. & McDaniels, J. (2015). Insurance 2030. UNEP Inquiry/Principles for Sustainable Insurance. [Available at: [http://unepinquiry.org/wp-content/uploads/2015/06/Insurance\\_2030.pdf](http://unepinquiry.org/wp-content/uploads/2015/06/Insurance_2030.pdf)].
- Bloomberg (2015). *EIB Links Green Bonds to Projects in Push for Climate*, October.
- Buiter, W. & Fries, S. (2002). *What Should The Multilateral Development Banks Do?* European Bank For Reconstruction and Development. [Available at: <http://www.ebrd.com/downloads/research/economics/workingpapers/wp0074.pdf>].
- Caldecott, B. (2011). *Green Infrastructure Bonds: Assessing the Scale of Low Cost Capital Required to Tackle Climate Change*. Climate Change Capital, London. [Available at: [http://www.climatechangecapital.cn/images/docs/publications/ccc\\_thinktank\\_-\\_green\\_infrastructure\\_bonds\\_-\\_assessing\\_the\\_scale\\_of\\_low\\_cost\\_capital\\_required\\_to\\_tackle\\_climate\\_change.pdf](http://www.climatechangecapital.cn/images/docs/publications/ccc_thinktank_-_green_infrastructure_bonds_-_assessing_the_scale_of_low_cost_capital_required_to_tackle_climate_change.pdf)].
- Cherney, M. (2013). Banks Launch New Indexes For Green Bonds, *Wall Street Journal*, [Available at: <http://online.wsj.com/articles/banks-launch-new-indexes-for-green-bonds-1415885411>].
- Kaminker, C. & Stewart, F. (2012). The Role of Institutional Investors in Financing Clean Energy, *OECD Working Papers on Finance, Insurance and Private Pensions*, No. 23, Paris: OECD Publishing.
- Kennedy, C. & Corfee-Morlot, J. (2012). Mobilising Investment in Low-carbon, Climate Resilient Infrastructure, *OECD Environment Working Papers*, No. 46, Paris: OECD Publishing.
- Kochetygova, J. & Jauhari, A. (2014). Climate Change, Green Bonds and Index Investing: The New Frontier. [Available at: <http://au.spindices.com/index-family/environmental-social-governance/green-bonds>].
- KPMG (2015). Gearing up for Green Bonds: Key Considerations for Bond Issuers.

OECD (2016). *Mobilising the Debt Capital Markets for a Low Carbon Transition*, Paris: OECD Publishing.

WEF (2013). *Reducing the Cost of Capital for Green Projects*.

World Bank (2014a). *Growing The Green Bond Market To Finance A Cleaner, Resilient World*. [Available at: <http://www.worldbank.org/en/news/feature/2014/03/04/growing-green-bonds-market-climate-resilience>].

World Bank (2014b). *Main Mechanism for Financing Infrastructure*. [Available at: <http://ppp.worldbank.org/public-private-partnership/financing/mechanisms>].

Wieckowska, M. (2013). The Role Bonds in Financing Climate Resilient Economy, *Copernican Journal of Finance and Accounting*, 2(1), pp:153-167

Zongwel Luo (2011). Green Finance and Sustainability: Environmentally-Aware Business Models and Technologies, IGI Global.

## Websites

[http://www.sebi.gov.in/cms/sebi\\_data/boardmeeting/1453349548574-a.pdf](http://www.sebi.gov.in/cms/sebi_data/boardmeeting/1453349548574-a.pdf)

[15http://www4.unfccc.int/submissions/INDC/Published%20Documents/India/1/INDIA%20INDC%20TO%20UNFCCC.pdf](http://www4.unfccc.int/submissions/INDC/Published%20Documents/India/1/INDIA%20INDC%20TO%20UNFCCC.pdf)

[http://www.sebi.gov.in/cms/sebi\\_data/attachdocs/1449143298693.pdf](http://www.sebi.gov.in/cms/sebi_data/attachdocs/1449143298693.pdf)

<http://www.icmagroup.org/assets/documents/Regulatory/Green-Bonds/GBP>

<http://www.icmagroup.org/assets/documents/Regulatory/Green-Bonds/GBP-2016-Final-16-June-2016.pdf>

[http://www.chinadaily.com.cn/business/2017-03/17/content\\_28589210.html](http://www.chinadaily.com.cn/business/2017-03/17/content_28589210.html)

<http://growthcrossings.economist.com/article/scperspectives-asia-follows-chinas-path-to-green-bond-growth/>

<http://www.straitstimes.com/business/singapore-to-roll-out-green-bond-grants>

# E-tailing at Bottom of the Pyramid: Analysing the Factors for Success

Chaman Lal<sup>1</sup>  
Kamal Singh<sup>2</sup>

## Abstract

Globalization and ICT revolution have forced e-retailers to look for global market place due to challenges and opportunities associated with it. Global e-tailers are looking towards emerging economies for diversification of their markets. Tectonic shifts in orientations and aspirations of the Indian consumers have made Indian retail sector as one of the preferred destinations for global retailers. E-retailing is not a new concept for Indian customers as urban customers are already experiencing and experimenting with the click style of retailing. But, it is the customers of rural India who hold the key to success in future for e-tailing. Shopping patterns in rural India have shown a paradigm shift from price-driven to quality-driven approach. Therefore, an attempt has been made to analyse the rural customers' shopping behaviour towards online retailing in globalized era through purposive sampling. The study results in the form of alternative strategies to tap and exploit the opportunities available in one of the most profitable segments of global market space.

**Keywords:** Ruralites, E-tailing, Liberalization, Bottom of the Pyramid and Rural.

## Introduction

21<sup>st</sup> century is marked by globalization and ever increasing adoption of information and communication technology (ICT) as major social and economic trend. These changing trends have created a new global economy called "service economy" powered by technology, fueled by information and driven by knowledge (Totonchi and Manshady 2012). In this new economy, with the use and integration of ICT in businesses, environment has created new opportunities for innovators in market space and thrown new challenges for survival to existing players (Amit and Christoph 2001). The opportunities are in the form of access to new markets and challenges come from host as well as home competition. Retailing is

<sup>1</sup> Assistant Professor, School of Business and Management Studies, Central University of Himachal Pradesh and can be reached at chamankashyap1983@gmail.com

<sup>2</sup> Assistant Professor, Department of Economics and Public Policy, Central University of Himachal Pradesh and can be reached at kamaleco84@gmail.com

one of the fast expanding sectors in this globalized era where ICT has opened new vistas for retailers. To exploit the opportunities and to address the challenges of globalization, global retail players are looking towards emerging economies (Bairoch and Wright 1996). Due to changing market metamorphosis and favourable business environment, among the emerging markets India is one of the preferred destinations for global retail players. Rapid economic growth, rise in per capita income, growing purchasing power, consumerism and brand proliferation have changed the face of the Indian retail sector. Information and communication technology (ICT) revolution and increase in consumer awareness has made Indian consumers more familiar with the global brands (Battacharya 2012). These changes in the shopping behavior of Indian consumers have made Indian retail sector a cynosure in the global market. Recent policy changes in Foreign Direct Investment (FDI) norms in retailing; both in multi brand and single brand has opened flood gates for many foreign players to enter into India's retail market. The western orientation of Indian consumers, wider penetration and usage of information technology and the presence of a large number of 'young' customers have increased options and competitions for foreign as well as domestic retailers. Indian consumers are also experimenting with click style of retailing (e-retailing/e-tailing/online-retailing) along with traditional retailing. As a result of this changing behaviour of Indian retail customers, the big e-retail players like Amazon.com, Snapdeal, e-bay, and Flipkart etc. are creating fissures in the centuries old traditional Indian retailing. The growth in the e-tailing sector is driven by the need to save time, money, access to brands and 24\*7\*365 days hassle free services to consumers. E-retailing accounts for about 10 percent of the overall growth of e-commerce market (Arora 2013) and online retail industry in India has grown at a rapid pace i.e. around 56 per cent (CRISIL 2014). Companies like Amazon and Dell are profitability running their virtual stores by putting the entire customer experience from browsing products to placing orders and paying for purchases online. The success of such companies and high growth rate of online retail industry have encouraged more and more traditional retailers to create an online presence to augment their brick-and-mortar outlets. The urban consumers have already shown positive response to the click style of retailing but it is the consumers of rural India (approx. 70 per cent population) who hold the key to success. Rural Indian contributes to 56 per cent of India's income, 64 per cent of its expenditure and 33 per cent of its savings (Krishnamacharyulu and Ramakrishnan 2011). Rapid growth in mobile has further strengthened the hope for e-retailing. The shopping patterns in rural India have also shown a paradigm shift from price-driven to quality-driven as they are also considering the associated costs (time and effort costs etc.) while shopping. Gone are the days when it was argued that e-tailing is not a viable concept for rural India due to illiteracy and poor IT infrastructure. During last decade, literacy rate has been much higher in rural India than urban and the projects like Bharat Nirman, and MGNREGA, etc. have changed the life style of the bottom of the pyramid segment (Krishnamacharyulu and Ramakrishnan 2011). To improve the ICT access, Govt. of India has also launched digital India scheme and in a short span of time positive results are noticed. Therefore, this is the perfect time

to analyse whether customers of real (rural) India; those generally resist changes (Dogra and Kharminder, 2008) are ready to adapt to the changing environment of retailing or not? To analyse the rural customer behaviour towards e-retailing, Himachal Pradesh (H.P.); a hilly terrain is selected, which is purely a rural market. Analyzing the behaviour of ruralites of hilly terrain is the need of the hour as more than 30 percent of Indian states fall in this category and moreover geographical situations in this segment of Indian market is different than plain and ruralites are also showing urban orientation for their shopping due to a variety of factors. Himachal Pradesh is an attractive market for online retailers for number of reasons such as the literacy rate (83.78 percent) is above than national average of 74.04 percent, per capita income is quite high i.e. Rs. 60,000 (Economic survey of H.P.) and area of the state (55673 sq. kms) is also an attraction as it can be efficiently covered through innovative distribution strategies.

## Conceptual Framework

New global service economy backed by globalization and ICT revolution (Totonchi and Manshady 2012) has made retailing sector especially online retailing is one of the rapid growing industry in global market space (Krishnamacharyulu and Ramakrishnan 2011). Multi-channel as well as internet retailing are emerging as highly relevant mode of operation in the rapidly changing retail scenario which results in conversion of brick-and-mortar retailers into online stores (Dawes and Nenycz-Thiel 2014; Neslin *et al.* 2006; Neslin and Shankar 2009; Zhang *et al.* 2010). Kotler and Bloom (1984) reported intangibility as one of the major measure of internet retailing. Intangibility has strong influence on consumer decision-making (Laroche *et al.* 2001) and intangibility feature of any goods/ services is one of the crucial factor of the ease or difficulty of individual's decision making criterion in pre-purchase evaluations (Murray 1991). To address intangibility issues of e-tailers, the internet has provided fertile soil for new forms of products and delivery issues (Laroche *et al.* 2005). Adonova (2003) stated that internet is a low-cost selling technology that needs substantial customers' acceptance and a specific business model in order to be a viable alternative to traditional retailing. Different types of traditional retailers follow different strategies with respect to e-commerce depending on their pre-internet market positioning. Key quality dimensions of online retailing are reliable/prompt responses, access, ease of use, attentiveness, security and credibility. Out of all, the access dimension had a significant effect on overall service quality but not on satisfaction (Jun *et al.* 2004). Hofacker (2008) has highlighted a broad picture of e-tail constraints and tradeoffs. Assortment, customer-to-customer value creation, site design and structure, and the network topology are the main determinants of e-tailing. Online-retailing exhibits characteristics of service transaction such as intangibility, inseparability, perishability, and heterogeneity in services delivery (Zeithaml *et al.* 1985). Ha and Stoel (2012) reported four e-shopping quality factors namely; security/privacy, web site, customer service, and atmospheric. Website and atmospherics have significant impact on e-shopping satisfaction and intentions. Online customers are influenced by two major factors that are impulsiveness and recreational factor (Vojvodic

and Matic 2013) and also perceived usefulness and perceived ease of use have positive impact on the consumers' attitude towards e-retail business (Liao and Shi 2009). The easily accessible local retail market and the concern about risk in the virtual environment significantly affect the consumers' attitude and behavioral intention to use e-retailing (Dogra and Kharminde 2009; Liao and Shi 2009). Ramus and Nielsen (2005) stated in depth the range of consumers' beliefs about internet shopping as; convenience of shopping, variety, enjoyment, social aspect, personal service, price, and technical systems. 24\*7\*365 customer service, desirable price, better information, and virtual showroom bearing less cost are the major contributors for the e-tailing growth in India (Arora 2013). Ziqi *et al.* (2001) highlighted that transaction security, price elasticity, set up outlay, consumer perceptions of e-vendors, IT education and internet usage are some of the important factors affecting consumers' perception and decision to shop online. Shopping context utility and perceived risks affect the consumers' choice to shop online or in-store (Lee *et al.* 2002). Khare *et al.* (2011) reported that hedonic and utilitarian values, attitude, availability of Information, purchase intention and gender as main parameters for the online shopping. Brick-and-mortar store preferences may be a crucial driver of online retail store choice (Dewes and Nenycz-Thiel 2014) and trust is one of the major determinants for virtual shopping (Gefen, Karahanna, and Straub 2003). Globalized retailers may face established and functional retailing distribution network, mass media, transportation, and storage infrastructure as major challenge while selling to customers of emerging markets especially to rural customers (Goldman, Ramaswami, and Krider 2002; Samiee 1993).

The literature review indicates that most of the studies have focused on online retailing in foreign countries and researcher came across with very few studies in Indian context that have actually looked into rural market from internet shopping perspective. There is a relative dearth of literature on some very important part of e-tailing in rural India, and no fruitful study is conducted on hilly terrain where situations are totally different than plain. Ruralites those represent 70 percent of the retail customers have not been researched thoroughly. This is the most important consideration, which has governed the choice of the research work. The study uncovers few hidden aspects of rural market of India, which is totally unexplored and untapped. Though the study is confined to Himachal Pradesh, it has relevance and significance in designing of e-retailing strategies for the rural markets of India too.

## **Objectives**

This paper is intended to achieve the following objectives:

- To analyse the shopping behavior of customers at the bottom of the pyramid towards e-retailing
- To determine the success factors of e-tailing in rural India
- To provide both local and global e-retailers with suggestions to tap the most profitable segment of the market

## **Research Methodology**

The present research paper follows the conclusive research design and mainly based on primary data collected from ruralites of Himachal Pradesh.

### **Sampling**

Himachal is divided into three administrative divisions by Government of Himachal Pradesh. Here, random sampling cannot be applied in selecting the respondents due to operational difficulties and also researcher did not have exhausted list of population. In such cases, Cadler, Phillips, and Tybout (1981) advocated the use of purposive sampling keeping in mind the relevant dimensions of population. Hence, multistage-purposive sampling is used to collect the data.

## **Sample Size and Data Collection**

In order to meet the objectives of the study, at first stage, district Kangra of Himachal Pradesh is selected. District Kangra is the largest district of the state and having largest social constituents. Five developmental blocks namely; Dharamshala, Kangra, Nagrota Bagwan, Rait, and Bhavarna are randomly selected at second stage to design sample frame. At the third stage, 100 rural customers from each block, those are internet savvy are taken as sample to collect the data. In total, data is collected from 500 customers on various parameters of e-retailing suggested by Levy *et al.* (2008) along with 4As of rural marketing (Krishnamacharyulu and Ramakrishnan) to meet the objectives of the study. Data is collected with the help of schedule method to maintain the accuracy of data (CR Kothari).

## **Schedule Formulation**

On the basis of literature survey, a pool of 25 simple understandable statements relating to different dimensions of online retailing and rural marketing were collected in the initial stage of construct formulation. Keeping in mind the well established and non controversial importance of content of the statements (Strauss and Smith, 2009) and its relevance as major measure of construct validity, experience survey of expert professional (Messick, 1995) was consulted for generation of pool of items. Judgmental sample of professors from three universities i.e. IGNOU, New Delhi, Himachal Pradesh University, Shimla, and Central University of Himachal Pradesh, dealing in the field of marketing and retailing were included in experience surveys as expert, as is advocated by Churchill, (1979). The statements were further refined to 20 statements after first round of discussion between researchers. These 20 statements were again brain stormed with experience surveys and 15 statements were finalized. Only essential variables were kept and number of items in scale were kept below 20 as asking too much from respondents may give rise to unwillingness and invalidity of construct (Cannell, Oksenberg and Converse, 1977). As recommended by Malhotra (2008), sensitive questions like income and demographics were kept separate.

## Statistical Techniques

Demographic profile of respondents was analyzed using frequency distribution. Reliability of construct was checked by applying Cronbach's alpha. To bring down the statements to manageable level of dimensions, factor analysis using principal components method of factor extraction with varimax rotation was used. Apart from these, item analysis, mean, Anova, t-statistics were calculated and used at various stages of data analysis.

## Reliability Analysis

Reliability coefficient is measured by the Cronbach's alpha and reliability coefficient value is given as in table 1.

**Table-1: Cronbach's Alpha Values for all the measures**

Description	No. of Items	Cronbach's Alpha
Ruralites behaviour towards online retailing	15	0.659

Source: Reliability Analysis using SPSS 19.0

The reliability values in the above table indicates that the reliability coefficient Cronbach's alpha for all the items of the schedule is above 0.6; indicates good reliability (Chawla & Sondhi 2011). The Cronbach's alpha values above 0.6 or more are considered very good for research instrument testing and moreover values above to 0.5 can be considered for further analysis (Nunnally 1978).

## Factor Analysis

15 statements of measure of the study put to factor analysis so as to find out the dimensions perceived by the respondents (Table 2). The value of KMO's measure of sampling adequacy comes out to be 0.647 and Bartlett's test of sphericity was found to be significant, depicts that factor analysis can be applied on this data.

**Table-2: Factor Analysis (PCA and Varimax): Ruralites behaviour**

KMO's	0.647
Bartlett's Test of Sphericity (Sig)	0.000
Variance Explained	71.21 percent
Number of Factors Extracted	6

Source: Factor Analysis using SPSS 19.0

Principal component analysis was used because the dimensions produced by factor analysis were to be further subjected to analysis. The basis for factor extraction was kept as rotated factor loading of at least 0.50 which is desirable (Costello and Osborne, 2005). To get the stable factor as measure of further analysis, Cronbach's alpha was again checked for statements of respective factors. Application of factor analysis on statements measuring rural customers' behaviour gave six factors solution. Each factor is well

established component of online retailing or virtual retailing as proposed by Levy *et al.* in 2008. Seventy percent variance explained was taken as the method for deciding number of factors. Though there is general perception to use factor in further multivariate analysis when the variance explained is at least 60 per cent (Malhotra, 2008) but in social sciences studies, 50 percent of variance is useful and can be taken ahead (Zenk and Eckhardt, 1970). Details of each factor containing respective statements are given in the Table-3 along with factors loading.

**Table-3: Factor Profiling**

Factor No.	Factor Name	Statements	Factors Loading
1	Convenience and Risk	E-shopping saves time	0.778
		E-shopping is risky	0.745
		E-shopping provides 24*7*365 facility	0.514
2	Reliability and Assurance	Varieties of goods are available on e-shopping websites	0.829
		E-tailers provide sufficient product information	0.737
3	Customized Services	Accurate information is provided by e-tailer	0.698
		Home delivery should be provided by e-tailers	0.762
		Hesitate to share bank/credit or debit card details	0.686
4	Conditional trust on e-tailing	Delay in delivery causes worry	0.641
		Trust e-tailing	0.723
		Complicated system creates problem	0.715
5	E-tailing limitations	Prefer cash on delivery	0.652
		Necessity of having online account/credit or debit cards is an inhibiting factor for e-shopping	0.762
		Prefer traditional shopping over online	0.747
6	Price point benefits	E-shopping is cost saving	0.786

Source: Factor Analysis using SPSS 19.0

## Results and Findings

### Rural customers' behaviour towards e-retailing

Following tables show the results of descriptive statistics (t-test and mean) and ANOVA at 95 percent level of significance.

Table 4 (given below) exhibit results of respondents' gender wise analysis of buying behavior of the customers , as the table testifies that both male and female customers of the hilly state are behaving in tandem towards all the identified factors of online retailing except e-retailers' promised performance and communication. There is significant difference in their opinion for these two factors. Women are not much impressed with the varieties, description and information of the merchandises available on virtual stores. This may be because rural women shop after thorough comparison, evaluation and consultation with retailers. Because of the low level of the financial inclusion in rural India and advance e-payment condition for e-shopping, women sometimes prefer traditional retailing over online retailing. E-tailing is the urban concept, this myth is proven wrong in this study, as the results show that ruralites are accepting this style of shopping as it saves time and cost, but because of low level of awareness, rural customers take it as a risky venture. Area of concern for bottom of the pyramid segment while e-shopping is e-tailers' services. The customers look for prompt home delivery of the merchandises while shopping online. The rural customers do prefer e-shopping where e-tailers provide cash on delivery facility along with simple shopping procedures. This positive response for e-shopping may be because of high literacy in the state and price point benefits provided by online players.

**Table-4: Respondents' Gender-wise Analysis**

Description	Gender	Frequency	Mean	Levene Statistic (Sig. Value)	t-Statistic	Sig. Value
Convenience and Risk	Male	290	3.78	0.671	-1.117	0.265
	Female	210	3.85			
Reliability and Assurance*	Male	290	2.60	0.176	2.082	0.038
	Female	210	2.40			
Customized Services	Male	290	3.98	0.450	-1.939	0.054
	Female	210	4.13			
Conditional Trust on e-tailing	Male	290	3.24	0.662	-0.483	0.629
	Female	210	3.29			
E-tailing Limitations*	Male	290	3.22	0.120	-2.083	0.038
	Female	210	3.45			
Price point benefits	Male	290	3.99	0.301	-1.347	0.179
	Female	210	4.08			

Source: Field Survey

Note: \* Significant at 5% level of significance

Results in table 5 indicate that there is a significant difference in the behavior of customers from different occupational setup. Students and employees prefer e-shopping as it is convenient, but they also opined that it is risky too. All the respondents have the doubts about the promises of e-tailers. They look for more variety, sufficient, and accurate information about merchandises as well as other aspects. Students, employees and others (housewives etc.) are more concerned about efficient home delivery. Results also indicate that ruralites are ready to adopt e-retailing but look for adaptive procedures and cash on delivery facilities as they hesitate to share their financial secrecy on internet. Conditions like online payment and having credit and debit cards are the major bottlenecks for e-tailing especially in the segment of students and others those are dependent on their family members and due to this they go for traditional retailing. Price point benefits like offers and discount etc., attract all the rural customers.

**Table-5: Respondents' Occupation-Wise Analysis**

Description	Occupation	Frequency	Mean	Overall Mean	Levene Statistic (Sig. Value)	F-Statistic/ Brown Forsythe* (Sig. Value)	Sig. Value
Convenience and Risk**	Student	148	3.87	3.81	0.000	3.37*	0.020
	Employee	94	3.92				
	Self Employed	140	3.67				
	Others	118	3.81				
Reliability and Assurance**	Student	148	2.86	2.52	0.000	8.764*	0.000
	Employee	94	2.50				
	Self Employed	140	2.32				
	Others	118	2.33				
Customized Services**	Student	148	4.21	4.05	0.000	3.308*	0.023
	Employee	94	3.97				
	Self Employed	140	3.89				
	Others	118	4.08				
Conditional Trust on e-tailing**	Student	148	3.11	3.26	0.000	7.828*	0.000
	Employee	94	2.96				
	Self Employed	140	3.33				
	Others	118	3.60				
E-tailing Limitations**	Student	148	3.29	3.32	0.486	7.565	0.000
	Employee	94	3.43				
	Self Employed	140	3.60				
	Others	118	2.93				
Price point benefits**	Student	148	4.08	4.02	0.000	4.804*	0.003
	Employee	94	4.23				
	Self Employed	140	3.88				
	Others	118	3.95				

Source: Field Survey

Note: i)\* Brown Forsythe value ii) \*\*Significant at 5% level of significance

**Table-6: Respondents' Age-Wise Analysis**

Description	Age	Frequency	Mean	Overall Mean	Levene Statistic (Sig. Value)	F-Statistic/ Brown Forsythe* (Sig. Value)	Sig. Value
Convenience and Risk**	Up to 20	52	4.08	3.810	0.003	4.468*	0.002
	20-30	226	3.77				
	30-40	110	3.88				
	40-50	64	3.77				
	Above 50	48	3.60				
Reliability and Assurance	Up to 20	52	2.44	2.520	0.000	1.190*	0.319
	20-30	226	2.54				
	30-40	110	2.65				
	40-50	64	2.35				
	Above 50	48	2.42				
Customized Services**	Up to 20	52	4.03	4.050	0.000	3.530*	0.009
	20-30	226	4.12				
	30-40	110	4.18				
	40-50	64	3.80				
	Above 50	48	3.72				
Conditional Trust on e-tailing**	Up to 20	52	2.35	3.260	0.000	12.269*	0.000
	20-30	226	3.32				
	30-40	110	3.33				
	40-50	64	3.68				
	Above 50	48	3.22				
E-tailing Limitations**	Up to 20	52	2.85	3.320	0.000	15.422*	0.000
	20-30	226	3.35				
	30-40	110	3.07				
	40-50	64	3.36				
	Above 50	48	4.21				
Price point benefits**	Up to 20	52	4.04	4.020	0.000	8.889*	0.000
	20-30	226	4.16				
	30-40	110	4.02				
	40-50	64	3.88				
	Above 50	48	3.54				

Source: Field Survey

Note: i)\* Brown Forsythe value ii) \*\*Significant at 5% level of significance

The results show that there is significant difference between the responses of different age group respondents in various parameters of e-shopping except reliability and assurance given by e-retailers. E-shopping is luring rural customers especially of age groups up to 40 because of price point benefits. The customers of age group up to 40 prefer e-shopping

as it is convenient but they look for customized services from e-retailers like quick home delivery and secrecy of their financial details. The young rural customers look for cash on delivery facility as advance payment acts as a hindrance for their virtual shopping.

**Table-7: Respondents' Education-Wise Analysis**

Description	Education	Frequency	Mean	Overall Mean	Levene Statistic (Sig. Value)	F-Statistic/ Brown Forsythe* (Sig. Value)	Sig. Value
Convenience and Risk**	Matric	76	3.63	3.81	0.000	5.779*	0.000
	10+2	64	3.66				
	Graduation	148	3.72				
	PG	132	3.92				
	Higher	80	4.08				
Reliability and Assurance**	Matric	76	2.21	2.52	0.000	5.238*	0.000
	10+2	64	2.21				
	Graduation	148	2.64				
	PG	132	2.67				
	Higher	80	2.57				
Customized Services**	Matric	76	3.95	4.05	0.006	10.722*	0.000
	10+2	64	4.43				
	Graduation	148	3.82				
	PG	132	4.03				
	Higher	80	4.28				
Conditional Trust on e-tailing**	Matric	76	3.63	3.26	0.000	5.744*	0.000
	10+2	64	3.49				
	Graduation	148	3.01				
	PG	132	3.24				
	Higher	80	3.20				
E-tailing Limitations	Matric	76	3.42	3.32	0.863	2.019	0.092
	10+2	64	3.47				
	Graduation	148	3.34				
	PG	132	3.36				
	Higher	80	2.99				
Price point benefits**	Matric	76	3.82	4.02	0.021	4.777*	0.001
	10+2	64	3.94				
	Graduation	148	3.97				
	PG	132	4.21				
	Higher	80	4.08				

Source: Field Survey

Note: i)\* Brown Forsythe value    ii) \*\*Significant at 5% level of significance

Table 7 exhibits the results of respondents' education wise analysis. There is a significant difference for all identified factors of e-tailing on the basis of respondents' education. The rural customers having graduation, post-graduation (PG) and higher education feel at ease with e-tailing. All educational group customers look for more variety, accurate product description, and sufficient information on the virtual store. They demand for better customer services like prompt home delivery and secrecy of their financial information. The rural customers trust e-tailing that provides them cash on delivery facility with simple shopping procedure. They opine that main problem of e-tailing is condition of advance payment through e-banking or credit/debit cards. Graduates and highly educated customers prefer e-shopping because of price benefits available.

## **Managerial / Research Implications**

Indian rural market is untapped and unexplored market place. To target this highly attractive and profitable segment of the global market, understanding the complexities is need of the hour. The present study exhibits the snap shots of behaviour of rural customers of India. Taking insights from this study, managers and policymakers of global retailing world can devise effective e-tailing strategies to tackle the challenges thrown by this segment. The study highlights the grey area of rural market space like rigidity in few segment and distribution peculiarities associated in hilly terrain. The results suggest that global as well as domestic e-players need to be adaptive according to the mindset of the ruralites as these are rooted to grass and generally reflect sticky behaviour (Krishnamacharyulu and Ramakrishnan 2011). The present study further provides guide to e-retailers to segment the market space as well as to select the target segment for effective implementation of the retailing strategies. Findings of the study further indicate that rural market of India is also experiencing transformation under the wave of globalization and this market space is no more completely orthodox (Dogra & Kharminde 2008). Hence, globalized but adaptive marketing tools can also be tested in this part of the market space.

## **Opportunities for e-Retailers in Rural India**

Unexplored and untapped nature of rural market (Krishnamacharyulu and Ramakrishnan 2011; Dogra & Kharminde, 2008; Kashyap et.al 2005) provides ocean of opportunities to global e-tailers. On the basis of results, the study reports following rural pull factors:

The myth of rural marketing that e-tailing is an urban concept has been shattered in the present study as it finds that rural customers of Himachal Pradesh irrespective of gender, occupation, education level, and age group prefer shopping through internet. To exploit this segment, e-retailers must perform according to their promises as the bottom of the pyramid segment generally believes in references. Hence, viral marketing can be used to develop competitive advantage here.

Students and employees may comprise a promising segment as they prefer as well as trust online retailing due to convenience and price point benefits. The study suggests precautionary measure that meeting promises may lead towards creation of loyal customers as ruralites generally resist changes (Krishnamacharyulu and Ramakrishnan 2011).

E-retailers may select students as their prospective customers because after few years they will be independent one and may play maximum roles; decider, influencer, payer, and buyer etc. in their household shopping. Various schemes can be floated time-to-time for this segment, so that they can shop more and may become a source of competitive advantage in the form of loyal customer.

Customers between 20-40 age groups are the real customers of virtual retailing as per the study. Online retailers may plan and design their strategies according to this segment. To resolve their problems, innovative distribution system can be designed to meet the challenges of physical distribution.

India is the home of the trysumers (young population) and this segment is accepting e-tailing with both hands. To serve trendy customers (up to 20-25 years), retailers have to think on advance payment condition as they are students and most of them neither have their e-banking accounts nor debit/credit cards.

Due to huge and well established network of traditional retailers and penetration of social institutions, virtual retailers can tie up with the rural mom and pop stores along with Aanganwari workers and Self Help Group (SHG) members to deliver merchandise as per customers' expectations.

Increasing literacy level, rising aspirations, growing job opportunities in rural India make this market a hot cake in the global market space. The study suggests that e-tailers may select students, employees and customers having higher education as their prospective customers.

## **Inhibiting factors for e-tailing in Rural India**

Besides the ocean of opportunities, rural market space also having few inhibiting factors and if e-tailers manage to handle the challenges of this market, they have opportunity to develop the best competitive advantage in the form of loyal customer pool. Few of the challenges of this market are as follow:

Geographical situation of the state and low level of financial inclusion make rural customers more demanding about customized services like fast home delivery and cash on delivery.

Due to moderate internet knowledge, ruralites look for simple buying procedures. To address this issue e-retailers can work on the simplification of the shopping procedures and may provide adequate information making website more users friendly.

Being dependent on others, students and housewives prefer home delivery of the merchandises with cash on delivery facility. Advance payment through e-banking or debit/credit cards condition creates difficulties to these segments. To resolve this, adaptive system must be developed.

## **Limitations and Future Research**

The results of the present study are based on sample survey of hilly terrain only. Result may not be acceptable in all cases as it covers only one district. To generalize results, data may also be collected from other parts of the country or other hilly state of India. Further, full

range of statistical tools could not be applied on the data set. Although it is acceptable for exploratory study (Calder, Phillips, & Tybout 1981), another issue is the use of purposive sampling in the present study. The present study is elementary in nature. Taking insights from the present study, researcher can analyse the other dimensions of online retailing like service quality parameters, perceived risk and value proposition for rural e-shoppers. To validate the results, researchers can also test the methodology on other states.

## Conclusion

Increasing buying capacity, media explosion, changing media habits, and high literacy rate make Indian rural market a lucrative market place for both domestic and foreign retailers. To encash the latent opportunities available in this unexplored and untapped market, the retailers need to change and to adapt according to the market profile. The present study shows that the rural market is no more an orthodox market as rural people are accepting the modern means of retailing. To succeed in the rural market space, deep understanding of ruralites' behavioural variables is a must. Without this, no retailer can design adaptive and integrated marketing strategies. Important market segments like students and highly educated service class customers demand more customized services, prompt home delivery and cash on delivery facilities. To serve these segments, retailers must perform according to their promises and to gain a strong loyal customer base and long term competitive advantage, adaptive strategies should be framed and implemented.

## References

- Andonova, Veneta (2003). Online Disintermediation: Differences In The Behavior Of Traditional Retailers In Adopting E-Commerce, *Management Research: The Journal Of The Iberoamerican Academy Of Management*, 1(3), pp: 279-90.
- Arora, Jyoti (2013). Prospect of E-Retailing In India, *IOSR Journal of Computer Engineering*, 10(3), pp: 11-15.
- Balram, Dogra & Ghuman, Kharminder (2008). Rural Marketing. New Delhi: Tata McGraw Hill.
- Bhattacharya, Rajiv (2012). The Opportunities and Challenges of FDI in Retail in India, *IOSR Journal of Humanities and Social Science*, 5(5), pp: 99-109.
- Cadler, Bobby J., Phillips, Lynn W. & Tybout, Alice M (1981). Designing Research for Application, *The Journal of Consumer Research*, 8(2), pp: 197-207.
- Cannell, Charles E., Oksenberg, Lois. Converse, Jean M (1977). Striving for Response Accuracy: Experiments in New Interviewing Techniques, *Journal of Marketing Research*, 14(3), pp: 306-315.
- Chawla, Deepak. & Sondhi, Neena (2011). Research Methodology: Concepts and Cases, New Delhi: Vikas Publishing House Private limited.
- Churchill, Gilbert A (1979). A Paradigm for Developing Better Measures of Marketing Constructs, *Journal of Marketing Research*, 16(1), pp: 67-73.
- Costello, Anna B. & Osborne, Jason W (2005). Best Practices in Exploratory Factor Analysis:

- Four Recommendations for Getting the Most from Your Analysis, *Practical Assessment Research & Evaluation*, 10(7), pp: 1-9.
- CRISIL Opinion (2014). <http://www.crisil.com/pdf/research/CRISIL-Research-Article-Online-Retail-Feb14.pdf>
- Dawes, John, & Magda, Nenycz-Thiel (2014). Comparing Retailer Purchase Patterns and Brand Metrics for In-Store and Online Grocery Purchasing, *Journal of Marketing Management*, 30 (3/4), pp: 364-82.
- Economics & Statistics Department, Government of Himachal Pradesh (2013). Economic Survey of Himachal Pradesh 2013-14.
- Gefen, David., Elena, K. & Detmar, W. Straub (2003). Trust and TAM in Online Shopping: An Integrated Model, *MIS Quarterly*, 27 (1), pp: 51-90.
- Goldman, Arieh (1974). Growth of Large Food Stores in Developing Countries, *Journal of Retailing*, 50 (2), pp: 50-6.
- Goldman, A, Robert, K. & Seshan, R (1999). The Persistent Competitive Advantage of Traditional Food Retailers in Asia: Wet Markets' Continued Dominance in Hong Kong, *Journal of Macro Marketing*, 19 (2), pp: 126-139.
- Ha, Sejin. & Leslie, Stoel (2012). Online Apparel Retailing: Roles of E-Shopping Quality and Experiential E-shopping Motives, *Journal of Service Management*, 23(2), pp: 197-215.
- Hofacker. F. Charles (2008) E-tail Constraints and Tradeoffs, *Direct Marketing: An International Journal*, 2(3), pp: 129-143.
- Jun, M, Zhillin Y. & DaeSoo, K (2004). Customers' Perceptions of Online Retailing Service Quality and Their Satisfaction, *International Journal of Quality & Reliability Management*, 21(8), pp: 817-840.
- Kashyap, P., Amp, R. & Sidhartha (2005). *Rural Marketing*, New Delhi: Wiley.
- Kaynak, Erdener S. & Tamer, Cavusgil (1982). The Evolution of Food Retailing Systems: Contrasting the Experience of Developed and Developing Countries, *Journal of the Academy of Marketing Science*, 10 (3), pp: 249-6.
- Khare, Arpita & Sapna, Rakesh (2011). Antecedents of Online Shopping Behaviour in India: An Examination, *Journal of Internet Commerce*, 10(4), pp: 227-244.
- Kothari, C.R (2004). *Research Methodology; Methods and Techniques*, New Delhi: New Age International (P) Limited.
- Kotler, Philip. & Bloom, Paul (1984). *Marketing Professional Services*, Englewood Cliffs, NJ: Prentice Hall.
- Krishnamacharyulu & Ramakrishnan (2011). *Rural Marketing: Text and Cases*, New Delhi: Pearson Education India.
- Laroche, M ., Bergeron, J. & Goutaland, C (2001). A Three-Dimensional Scale of Intangibility, *Journal of Service Research*, 4(1), pp: 26-38.

- Laroche, M., Yang, A., McDougall, G. & Bergeron, J (2005). Internet Versus Brick-and-Mortar Retailers: An Investigation Into Intangibility and its Consequences, *Journal of Retailing*, 81(4), pp: 251-267.
- Lee, Sheang K. & Soo, Jiuan, Tan (2003). E-retailing Versus Physical Retailing: A Theoretical Model and Empirical Test of Consumer Choice, *Journal of Business Research*, 56 (11), pp: 877-885.
- Levy, M., Weitz, A.B. & Pandit, A. (2008). *Retailing Management*, 6th edition, New Delhi: Tata McGraw Hill.
- Malhotra, Naresh K (2008). *Marketing Research: An Applied Orientation*, 5th edition, New Delhi: Prentice Hall of India.
- Melis, K., Campo, K., Breugelmans, Els. & Lamey, L (2015). The Impact of the Multi-Channel Retail Mix on Online Store Choice: Does Online Experience Matter?, *Journal of Retailing*, 91(2), pp: 272-288.
- Messick, Samuel (1995). Validity of Psychological Assessment: Validation of Inferences from Person's Responses and Performances as Scientific Enquiry into Score Meaning, *American Psychologist*, 50(9), pp: 741-749.
- Minten, Bart (2008). The Food Retail Revolution in Poor Countries: Is it Coming or is it Over?, *Economic Development and Cultural Change*, (56), pp:767-789.
- Murray, K.B. (1991). A Test of Services Marketing Theory: Consumer Information Acquisition Activities, *Journal of Marketing*, 55, pp: 10-25.
- Neslin, Scott A. & Venkatesh, Shankar (2009). Key Issues in Multichannel Customer Management: Current Knowledge and Future Directions, *Journal of Interactive Marketing*, 23 (1), pp: 70-81.
- Neslin, Scott. A et al.(2006). Challenges and Opportunities in Multichannel Customer Management, *Journal of Service Research*, 9 (2), pp: 95-112.
- Nunnally, J.C. (1978). *Psychometric Theory*, New York: McGraw-Hill.
- Bairoch, P. & Kozul-Wright, R. (1996). Globalization Myths: Some Historical Reflections on Integration, Industrialization and Growth in the World Economy, *Discussion paper 113*, Geneva: UNCTAND.
- Amit, R. & Christoph, Z. (2001). Value Creation in E-Business, *Strategic Management Journal*, 22, pp: 493-520.
- Ramus, Kim & Niels , A. Nielsen (2005). Online Grocery Retailing: What do Consumers Think?, *Internet Research*, 15(3), pp: 335-352.
- Samiee, Saeed (1993). Retailing and Channel Considerations in Developing Countries: A Review and Research Propositions, *Journal of Business Research*, 27 (2), pp: 103-29.
- Strauss, Milton E. & Smith, Gregory T (2009). Construct Validity: Advances in Theory and Methodology, *Annual Review of Clinical Psychology*, 5, pp: 1-25.

- Totonchi, Jalil. & Manshady, Kholamreza (2012). Relationship between Globalization and E-Commerce, *International Journal of E-Education, E-Management and E-Learning*, 2 (1), pp: 13-28.
- Vojvodic, Katija. & Matea, Matic (2013). Challenges of E-Retailing: Impulsive Buying Behaviour' in Sanda Renko, Blazenka Knezevic (Ed.) Challenges for the Trade of Central and Southeast Europe pp (155-171), International Business and Management, Volume (29): Emerald Group Publishing Limited.
- Zeithaml, V.A., Parasuraman, A. & Berry, L.L. (1985). Problems and Strategies in Services Marketing, *Journal of Marketing*, Vol. 49, pp: 33-46.
- Zenk, Gordron K. & Eckhardt, William (1970). Comment on "Militarism, Personality and Other Social Attitudes, *The Journal of Conflict Resolution*, 14(1), pp: 121-124.
- Zhang, Jie et al.(2010). Crafting Integrated Multi-Channel Retailing Strategies, *Journal of Interactive Marketing*, 24 (2), pp: 168-180.
- Ziqi Liao. & Xiping, Shi (2009). Consumer Perceptions of Internet-Based E-Retailing: An Empirical Research in Hong Kong, *Journal of Services Marketing*, 23(1), pp: 24-30.
- Ziqi, Liao. & Michael, Tow Cheung T (2001). Internet Based E-Shopping and Consumer Attitudes: An Empirical Study, *Journal of Information and Management*, 38(5), pp: 299-306.

# The Effect of Age as a Moderator on Green Purchase Behavior in Hotel Industry

Srishti Agarwal<sup>1</sup>  
Neeti Kasliwal<sup>2</sup>

## Abstract

Industrial revolution and technology advancement as well as the misuse of environment resources has brought attention among the people towards the environment pollution and its exploitation. This paper aims to investigate the effect of different age group of consumers towards the usage of green services offered by the hotels. The structured questionnaires were distributed to 700 respondents, where 463 responses came out. After collection of data, ANOVA test has been used to know the difference among the different age group in their awareness, perception of consumers, preferences of consumers, willingness to pay and consumer green acceptance behavior and also, Tukey's Post hoc test in ANOVA has been used to determine which age groups differ from each other. The major findings suggested that consumers having age group of 29 years or younger and 40-49 years would have difference in their willingness to pay as compared to other age group of consumers but with respect to ecoliteracy, perception of consumers, preferences of consumers and consumer green acceptance behavior there is no difference among age different age groups. It implies that age can be the major moderating factor in influencing consumers in using green services in hotels.

**Keywords:** Indian Consumers, Green Services, Hotel Industry, Consumer Behavior.

## Introduction

Green marketing is an emerging strategy for sustainable development. The increasing concern for the environmental issues like global warming and climate change, people's concern for a healthy environment to live and preferring environmental friendly products and services to consume, marketers these days are trying to exploit on the same to ensure

1 Assistant Professor, The IIS University, Jaipur and can be reached at Srishtiagarwal1990@gmail.com

2 Associate Professor, School of Pharmaceutical Management, IIHMR University, Jaipur and can be reached at neetikasliwal@iihmr.edu.in

sustainable growth and also trying to use these ideas in framing their strategies. Today, green market segments are growing much faster and taking major hold in the market than the traditional market. They are still comparatively small, but they have a large market which can be addressed to grow into a bigger one.

Bhattacharya *et al.*, (2009) showed that consumers showed their preference for products from those companies which invest in social and environmental responsibility issues. In McKinsey research article by Dan & Aline (n.d.), para.2 showed that 66% of the global consumers prefer to buy products and services from companies that give back to society; according to a recent Nielsen survey of 28,000 online respondents in 56 countries, it has been seen that many consumers are aware and they know about the green products and services but consumers hardly make their buying decisions. People generally think as eco-friendly consumers, our actions often fail to match the standards of our intentions. The simple reason can be that people don't really care about the environment. Although social pressures and companies initiatives force people to accept eco-friendly products but they don't actually have genuine environmental beliefs' (Kasliwal and Agarwal, 2016).

Green products and services are those which causes less damage to the environment as compared to the other non-green products and services ([isustainableEarth.com](http://isustainableEarth.com), 2014).

D'Souza, Taghian, Lamb, Peretiakos (2006) found that consumers have positively analysed their past experiences with respect to the buying and involvement with the ecofriendly products. This positive implication in saving environment by using green products and services are major attraction which can increase intention of consumers to buy more green products and services. "Ustad (2010) and Park (2009) stated that hotels in the country have now started to embrace environmental management practices in three major areas (i.e. energy management, waste management and water conservation)". Furthermore, a hotel that embrace and execute these green practices tend to achieve financial and non-financial gains in terms of cost-savings, hotels' image with the general public, and safeguards environmental resources (Mensah, 2006; Kirk, 1998).

A fresh step towards implementation of green practices by hoteliers has brought new research to know about the consumer's perspective towards the implementation of green practices in the hotels. The increasing concern for the environment, the consumers are now focusing on the ecofriendly products and services but these changing preferences did not able to convert their preferences to the purchasing decision. But the weakness of green products are seen as a way for hotels to reduce costs, comforts and convenience being sacrificed by the consumers, reduce luxurious conditions which may be expected by the consumers while staying in a hotel (Baker *et al.*, 2013). All of these factors show consumers' unwillingness to pay for the green practices followed by the hotels. But with respect to ecoliteracy, perception and choice of preference there is a strong association among awareness, perception and choice of preference the consumers show towards green attributes followed by the hotel industry (Kasliwal & Agarwal, 2015). Practicing green marketing initially costs higher as it encourages green products / services, green technology, green power/energy which requires a lot of money to be spent on R&D programs. Many consumers may not be willing to pay a premium for green products that can affect the

sales of the company. So there is need for the companies to make consumers aware about the presence and benefits of green marketing by means of various tools available for integrated marketing communication. Consumers might be willing to pay premium price if they see additional benefit such as quality, environmentally safe product, energy saving items, and non-hazardous products (Bhatia and Jain, 2013). Despite of unwillingness to pay, green marketing can help organizations to gain a competitive advantage and a strong consumer base (Renfro L A, 2010). This study will help in knowing consumers' perspective for the green practices followed in a hotel with respect to various age groups of consumers.

## Literature Review

The following review of various studies suggests that there has been a tremendous growth in green consumerism that can be seen broadly among consumers as well as hoteliers. Review of literature has given an insight to bring a new light for future study.

Kim et.al., (2011), "The findings of the study were that, females in generation Y seem to be more concerned about environmental consequences than males are. It was also seen that female members of Generation Y who preferred to stay at a green hotel were more likely to take advantage of a linen reuse option than their male counterparts were." "It was also seen that, if hotels does *business with environmentally friendly service providers, advertises its environmentally friendly practices, provides environmentally friendly foods (i.e., low toxicity, organic or locally grown/made), and has a recycling program* then Generation Y guests will be willing to pay more for a green hotel."

A study conducted by Boztepe (2012), this study was to analyze the impact of environmental awareness, green product features, green product prices, green product advertisement and demographical features of consumers on purchasing behaviors of consumers". The findings showed that, as environment consciousness, green product features, green promotion and green price increases, the green purchasing behavior will also going to increases as these factors would affect green purchasing behaviors of the consumers in a positive way.

Study by Bhatia & Jain (2013), where "*the results were shown that respondents who were surveyed were aware about the green products and practices, but most of the respondents were not aware about the green initiatives taken by central/state government, NGOs and business houses in India.*" Results of this study revealed that the "overall green values, awareness about green products and practices and the perception towards green marketing had positive impact on consumer which persuaded them to buy and prefer eco friendly products over conventional products".

Study conducted by Noor et.al., (2014), identified that tourist with high environmental attitudes was willing to stay in a green hotel. The result of the study suggested the greater interest of tourists towards green hotels, greater would be the eagerness to identify the hotels' green practices.

Perera and Pushpanathan (2015), the finding of the study indicated that in Wennappuwa, the positive connection was identified among product related to environment and place

strategies and customer satisfaction of the Hotel Industry. It was also seen that there was very strong positive relationship between “environment product strategy & customer satisfaction was observed in Ranweli Hotel. The satisfaction level of environment place strategy in Ranweli hotel was higher than Club Hotel Dolphin and Hotel heaven Inn.”

A study by Varghese and Santhosh (2015), were found out that ratio of females consumers are more towards the consumption of green products. The main attraction of green products was quality and 100% of the consumers were aware about the green products. Despite of awareness, 63.75% of the respondents had the opinion that eco friendly products were overpriced. The problems faced by the consumers were lack of availability, high price, low promotion etc while buying the green products. This implied that the consumers were aware but due to certain problems they were not able to consume the green products.

Biswas (2016), suggested “that products price, availability, performance and quality have the highest impetus on consumers’ intention to pay the green price premium.” “Thus price and quality concern could be the major factors for the market improvement of green products. Willingness to pay of consumers would increase with their trust on the offered value of green products. However corporate environmental performance or practices doesn’t influence WTP thus highlighting consumers’ lack of awareness or interest on companies’ environmental disclosures or other sustainability practices.”

Zaiton et.al., (2016), was identified that for the financial benefit, the hotels need to make their public image in the market by using sustainable practices. Therefore, hotels in the country should continue to execute sustainable tourism practices in order to gain return in their investment. In terms of non-financial benefit, the study found that improving the hotels’ image to the guests and the local communities have the highest mean. This was followed with the benefit of providing a safe and healthy environment.

## Research Methodology

To collect data, 700 standardized questionnaires were distributed where overall responses came out to be 463. The database of these consumers was Indian Tourists who visited within the states of India can be either business or leisure travelers. These consumers were not restricted to any particular state and this study tried to make the sample a true representative of pan Indian consumers. Once the data was collected, appropriate statistical tools have been used. ANOVA test was used for analyzing differences between age and other variables; also Tukey’s Post hoc test in ANOVA has been used to determine which groups differ from each other.

## Objectives and Hypothesis

**The objectives of the current study are:**

- To know the difference between Age and ecoliteracy of consumers towards green attributes of hotels
- To know the difference between Age and perception of consumers towards green attributes of hotels

- To know the difference between Age and consumers' preference towards green attributes of hotels
- To know the difference between Age and willingness to pay more towards green attributes of hotels
- To know the difference between Age and consumer green acceptance behaviour towards green attributes of hotels

## Hypothesis

**H<sub>0</sub>1:** There is no significant difference between Age and ecoliteracy of consumers towards green attributes of hotels

**H<sub>0</sub>2:** There is no significant difference between Age and perception of consumers towards green attributes of hotels

**H<sub>0</sub>3:** There is no significant difference between Age and consumers' preference towards green attributes of hotels

**H<sub>0</sub>4:** There is no significant difference between Age and willingness to pay more towards green attributes of hotels

**H<sub>0</sub>5:** There is no significant difference between Age and consumer green acceptance behaviour towards green attributes of hotels

## Data Analysis and Interpretation

The following tabular representation has shown age profile of respondents.

**Table-1: Demographic Profile**

AGE	29 or younger	263	56.8
	30-39 year old	121	26.1
	40-49 year old	46	9.9
	50 or older	33	7.1
	Total	463	100

Source: SPSS outcome

Respondents of the age group of 29 or younger years were 57%, 26% of the respondents between the age group of 30-39 year, 10% respondents between the age group of 40-49 year and 7% respondents between the age group of above 50 or older years.

## ANOVA

**Table-2: Relationship of Age among Variables**

			Sum of Squares	df	Mean Square	F	Sig.
Eco-literacy	Between Groups	(Combined)	.057	3	.019	.984	.400
	Within Groups		8.862	459	.019		
	Total		8.919	462			
Consumer Perception	Between Groups	(Combined)	.057	3	.019	.114	.952
	Within Groups		77.265	459	.168		
	Total		77.323	462			
Consumer Preference	Between Groups	(Combined)	1.908	3	.636	1.837	.140
	Within Groups		158.975	459	.346		
	Total		160.884	462			
Willingness to pay	Between Groups	(Combined)	4.401	3	1.467	5.862	.001
	Within Groups		114.885	459	.250		
	Total		119.287	462			
Consumer green acceptance behaviour	Between Groups	(Combined)	.654	3	.218	.639	.590
	Within Groups		156.550	459	.341		
	Total		157.204	462			

Source: SPSS outcome

From the above Table-2, the **p value (sig. value)** of ecoliteracy, consumer perception, consumers' preference and consumer green acceptance behaviour **are .400, .952, .140, .590 respectively which is more than .05** ( $p>0.05$ ) which means that null hypothesis is accepted and study proves that there is no significant difference of age with ecoliteracy, consumer perception, consumers' preference and consumer green acceptance behaviour. But with respect to willingness to pay p value is less than .05 ( $p<0.05$ ), i.e. 0.004. This indicates that null hypothesis is rejected where study shows that there is significant difference between age and willingness to pay. This implies that different age group of consumers has different willingness to pay towards green attributes of hotels. Tukey's HSD Post Hoc test is conducted to know which age group has differences in their willingness to pay.

**Table-3: Multiple Comparisons**

Dependent Variable	Independent Variables	Tukey's HSD			Sig.	95% Confidence Interval	
		Mean Difference (I-J)	Std. Error			Lower Bound	Upper Bound
Willingness to Pay	29 or younger	30-39 year old	.09486	.05496	.311	-.0468	.2366
		40-49 year old	.30222*	.07996	.001	.0961	.5084
		50 or older	.20000	.09239	.135	-.0382	.4382
	30-39 year old	29 or younger	-.09486	.05496	.311	-.2366	.0468
		40-49 year old	.20736	.08666	.080	-.0161	.4308
		50 or older	.10514	.09825	.708	-.1482	.3585
	40-49 year old	29 or younger	-.30222*	.07996	.001	-.5084	-.0961
		30-39 year old	-.20736	.08666	.080	-.4308	.0161
		50 or older	-.10222	.11413	.807	-.3965	.1921
	50 or older	29 or younger	-.20000	.09239	.135	-.4382	.0382
		30-39 year old	-.10514	.09825	.708	-.3585	.1482
		40-49 year old	.10222	.11413	.807	-.1921	.3965

\*. The mean difference is significant at the 0.05 level.

Source: SPSS Outcome

The result of the Tukey's HSD Post Hoc test in Table-3 has shown that the p value of the age group of 29 or younger and 40-49 year old is 0.001 which is less than 0.05( $p<0.05$ ). This means that there is a significant difference between the willingness to pay and the age group of 29 or younger and 40-49 year old. The results show that consumers having age group of 29 or younger and 40-49 years have difference in their willingness to pay towards the green attributes of hotels.

## Discussion and Conclusion

From the analysis of current study, there is no difference among age and ecoliteracy, consumer perception towards green attributes of hotel, consumer preference towards green attributes while choosing hotel and consumer green acceptance behavior towards green attributes of the hotel industry. But with respect to willingness to pay, study analyze that there is a difference between age and willingness to pay towards green attributes. It implies that age of consumers do not have any impact on ecoliteracy, consumer perception, consumer preference and consumer green acceptance behavior towards green attributes of the hotel industry which contradicts from the study by Rezai et.al., (2013), who concluded that, consumers above 31 years old have a more positive perception towards the green movement. The level of intention to go green for older consumers who is above 35 is more than younger consumers. A study by Sahu (2013), who determined that the age have an impact on the attitude, behavior and their perception about adoption green lifestyle. "Sahu (2013) also revealed that behavior of consumer changes with age i.e. the younger generation was more into saving the environment then their older counterparts." We could see that due to increase in the usage of social media nowadays, the people would definitely be aware about the environmental issue. It was also revealed from the study by Almossawi. M (2014) that the environmental behavior of the youth can be boosted through increasing their environmental knowledge, attitudes, and concern" and this knowledge and concern could be enhanced by using various campaigns, advertisements, by using media etc. The current study has identified different perspective of Indian consumers which showed that changing time has brought a big moderation in the mentality of Indian consumers towards the environmental issues. It has been seen that youths in the present study were aware and also the population between 40-49 yrs and 50 or older were aware with the fact that changing environment is sending message to everyone to save earth by using eco friendly products and services. In India, this is the perception that the older people are more inclined to save the things rather than wasting it unnecessarily which can help to prove that along with the youths , older people are not behind the scenes and their perception, preference and their behavior are not different from the youths. According to *The Times of India* (Jan 2016), half the population in India is in the 20-59 age group while 9 percent is above the age of 60. With the growing youths in India, they will have more awareness, will have their own perception and preferences and behavior towards the environmental issues, green products and services, due to increasingly use of social media, internet and advanced technology. It has been seen that increasing consumers in India are youths and this could be said that they would be more educated and aware about the ecological issues due to extensively usage of social media. This is a fact that increasing social media, television, advertisements also forced every segment of consumers irrespective of their age. In the current study, consumer's age influenced the willingness to pay towards the green attributes of hotel. It was seen that different age group of consumers had different willingness to pay towards green attributes of hotels. The current study found out that consumers having age group of 29 years or younger and 40-49 years would have difference in their willingness to pay as compared to other age group of consumers. The result showed that 59% of the age group belonging to 29 or younger was more willing to pay than the age group of 40-49 years where only 10% of them were willing to pay. The results of this study are in tune with Dimara(2015), where younger people of less than 30 years of age were more willing to contribute than older people . Also Levy & Duverger (2010), analyzed that Generation Y

found to have strong concerns and more willing about sustainability than other age groups. According to (Chan, 2013; Shang, Basil,&Wymer, 2010), the younger consumers were more concerned about environmental issues and had a higher probability to reuse their towels in hotels whereas Chan (2013) also found that the customers aged between 20 and 29 years old were more concerned about green hotel pricing.

But this result contradicts the previous studies where a trend was observed in terms of age and willingness to pay. From the study Mensah&Mensah (2013), it was seen that there were more people under 20 years who were not willing to pay more. However, a larger number of those consumers with age group of 50 years and above were willing to pay more compared to those who were not willing to pay. It was also determined that the older a person, the greater the willingness to pay more for a eco friendly hotel, this finding was also in consistent with that of Han *et al* (2009) who concluded that older consumer had a stronger willingness to pay more for a green hotel. The result of the current study contradict the above results and have found that younger people were more willing to pay than the older people because the youths were the frequent visitors in a hotel and were a good traveler where travelling can be their hobby. The youths, are more updated towards the several environmental issues due to increase in the usage of internet and social media. The youths are more aware and concerned about the environment as the higher concern about the environment. Moreover, they were willing to pay premium for green hotel practices (Chan, 2013; Kang *et al.*, 2011) or pay conventional hotel prices for green hotels (Kim & Han, 2010). Hultman, Kazeminia, and Ghasemi (2015).

According to Nielsen's survey (2014), Millennials belonging from the age 21-34 year old appeared more responsive to sustainability actions as 51 percent of Millennials who would pay extra for sustainable products and 51 percent of those who check the packaging for sustainable labeling. The developing regions like Asia-Pacific and Middle East/Africa regions the Millennial respondents were three times more agreeable in favor of sustainability actions than Generation X (age 35-49) respondents and 12 times more agreeable, than Baby Boomer (age 50-64) respondents. Hence, the younger generations were more inclined towards taking action for the sustainability issues.

Today, we are living in a society where companies are being judged on their ethical values, social responsibility and their financial results. As understanding of people is growing about global warming and climate change, consumers expect hotels to act on their understanding towards the environment. This global trend guides hotels to move in a green direction. "Consumers are substantially aware about green products; however applying green marketing practices in business operations is not an easy task (Juwaheer, 2005)." Antonio *et al* (2009) suggested that studies on green consumerism will be the main focus area in future due to increase in the environmental consciousness. This study concluded that different age groups have similar ecoliteracy, perception, preference and consumer green acceptance behavior towards green attributes of the hotel industry. Due to increase in the usage of social media nowadays, the people are aware about the environmental issue and have positive perception and preferences for the green practices oh hotels. But when it comes for willingness to pay, consumers do not show their willingness to pay premium for the green products and services. It is also found out that consumers having age group of 29 years or younger and 40-49 years would have difference in their willingness to pay as

29 years or younger have higher willingness to pay as compared to the age group of 40-49 years. So by analyzing the above study, it is suggested that, hoteliers need to know the consumers mindset towards the green practices, they need to adopt that strategy which can make consumers aware about the best usage of green products and services. It is important to remove barriers from the mindset of consumers especially with respect to price and quality, then only consumers can be attracted with the green practices.

## References

- Almosawi, M. (2014). Promoting Green Purchase Behavior to the Youth (Case of Bahrain), *British Journal of Marketing Studies*, 2(5), pp:1-16.
- Antonio, C., Sergio, R. & Francisco, M.J. (2009). Characteristics of Research on Green Marketing, *Business Strategy and the Environment*, Vol. 18, pp. 223-239.
- Boztepe, A (2012). Green Marketing and its Impact on Consumer Buying Behavior, *European Journal of Economic and Political Studies*, 5 (1).
- Bhatia, M. & Jain, A. (2013). Green Marketing: A Study of Consumer Perception and Preferences in India, *Electronic Green Journal*, 1(36).
- Chan, E.S. (2013). Managing Green Marketing: Hong Kong Hotel Managers' Perspective, *International Journal of Hospitality Management*, 34, pp:442-461.
- Hultman, M., Kazeminia, A. & Ghasemi, V.(2015). Intention to Visit and Willingness to Pay Premium for Ecotourism: The Impact of Attitude, Materialism, and Motivation, *Journal of Business Research*, 68(9), pp:1854-1861. [Available at: <http://dx.doi.org/10.1016/j.jbusres.2015.01.013>].
- Juwaheer, T.D. (2005). Emerging Shades of Green Marketing Conscience Among the Population of a Small Island Economy-A Case Study on Mauritius. [Available at: [http://irfd.org/events/wfsids/virtual/papers/sids\\_tdjuwaheer.pdf](http://irfd.org/events/wfsids/virtual/papers/sids_tdjuwaheer.pdf)].
- Kang, K.H., Stein, L., Heo, C.Y. & Lee, S. (2011). Consumers' Willingness to Pay for Green Initiatives of the Hotel Industry, *International Journal of Hospitality Management*, 31(2), pp:564-572. [Available at:<http://dx.doi.org/10.1016/j.ijhm.2011.08.001>].
- Kim, Yunhi. & Heesup Han (2010), Intention to Pay Conventional-Hotel Prices at a Green Hotel – A Modification of the Theory of Planned Behavior, *Journal of Sustainable Tourism*, 18(8), pp:997-1014.
- Kasliwal, N. & Agarwal, S. (2016). Green Marketing Initiatives and Sustainable Issues in Hotel Industry, *Handbook of Research on Promotional Strategies and Consumer Influence in the Service Sector*, pp:197-214, USA: IGI Global.
- Kasliwal, N. & Agarwal, S. (2015). A Study on Indian Consumers' Attitude and Choice of Preferences for Green Attributes of the Hotel Industry, *Prabandhan: Indian Journal of Management*, 8(1), pp:21-33.

- Mensah, I. & Dei Mensah, R. (2013). International Tourists' Environmental Attitude Towards Hotels in Accra, *International Journal of Academic Research in Business and Social Sciences*, 3(5), P.444.
- Mensah, I. (2006). Environmental Management Practices among Hotels in the Great Accra Region, *Hospitality Management*, Vol.25, pp: 414-431.
- Park, J. (2009). The Relationship between Top Managers' Environmental Attitudes and Environmental Management in Hotel Companies, Virginia Polytechnic Institute and State University, Virginia.
- Noor, M., Nor Azila., Hasan Hasnizam., Kumar, M. & Dileep (2014). Exploring Tourists Intention to Stay at Green Hotel: The Influences of Environmental Attitudes and Hotel Attributes, *The Macrotheme Review*, 3 (7), pp: 22-33.
- Perera, H.L.N. & Pushpanathan, A. (2015). Green Marketing Practices and Customer Satisfaction: A Study of Hotels Industry in Wennappuwa Divisional Secretariat, *Tourism, Leisure and Global Change*, 2(1), pp:13-29.
- Renfro, L. A. (2010) Green Business Operations and Green Marketing, *Gatton Student Research Publication*, 2(2).
- Varghese, A. & Santhosh, J. (2015). A Study on Consumer Perception on Eco-Friendly Products with Reference to Kollam District in Kerala, *International Journal of Economics and Business Review*, 3(7).
- Rezai, G., Teng, P. K., Mohamed, Z. & Shamsudin, M.N. (2013). Going Green: Survey of Perceptions and Intentions among Malaysian Consumers, *International Business and Management*, 6(1), pp: 104-112.
- Sahu, T. (2013). Green Marketing: An Attitudinal and Behavioral Analysis of Consumers in Pune.
- Shang, J., Basil, D.Z. & Wymer, W. (2010). Using Social Marketing to Enhance Hotel Reuse Programs, *Journal of Business Research*, 63(2), pp:166-172. [Available at:<http://dx.doi.org/10.1016/j.jbusres.2009.02.012>].
- Ustad, B.H. (2010). *The Adoption and Implementation of Environmental Management Systems in New Zealand Hotels: The Managers' Perspective*. Unpublished Master of Science Dissertation, Auckland University of Technology.
- Zaiton, S., Syamsul, H., Kasimu, A.B. & Hassan, H. (2016). Sustainable Tourism Practices among Hotels in Malaysia: Financial and Non-Financial Benefits, *Journal of Sustainability Science and Management*, 11(1), pp: 73-81.

# **R elationship between SHG Women's Socio-Economic Factors and Empowerment in Medak District**

**Seema Ghosh\***

## **Abstract**

The achievement of human development is dependent on the development and empowerment of women. Their socio economic development forms the basis for sustainable growth of the economy. This paper examines the impact of socio economic conditions of self-help group women on women empowerment. The research is based on primary data collection in the Medak district of Telangana state using structured questionnaire. The overall statistical analysis is divided into two groups, namely the descriptive and inferential statistics. The former helps to describe and summarize data in a meaningful way. The latter examines what are the important factor determinants for women empowerment and the correlation between women empowerment and the socio-economic characteristics of SHG women. The result of the analysis shows that women empowerment has positive correlation with age, marital status, education, religion, caste, occupation and land holding size of SHG women. Second, women empowerment differs significantly according to all the socio-economic criteria selected in the study as indicated through one-way Anova. Lastly, exploratory factor analysis reveals that five factors were relatively significant for describing women empowerment.

**Keywords:** Self Help Group, Women Empowerment, Socio-Economic Characteristics.

## **Introduction**

The achievement of human development is dependent on the development and empowerment of women. Their socio-economic development forms the basis for sustainable growth of the economy. There is global recognition on women's contributions to economic development. Empowering women is one of the Millennium Development

---

\* Assistant Professor, Department of Economics, Bhavans Vivekananda College of Science, Humanities and Commerce, Sainikpuri, Hyderabad and can be reached at seemaghosh7@gmail.com

Goals of United Nations. This is because it is recognized that women empowerment brings about other developmental processes associated with it. It becomes important to examine women's empowerment from the context of women's socio-economic attributes, as women are categorized on the basis of class, marital status, religion or caste. There is also a need to study the differences in women empowerment- that is how the social, economic, cultural and other aspects of women interact with each other and causes inequalities among women. This issue is important to discuss as the government policies towards gender equality and empowerment should not only benefit the elite class, while leaving the disadvantaged class without any growth (Calvès 2009). Women in the society, not only needs to fight gender inequality but also the differences in their socio-economic conditions to empower themselves.

This paper thus raises the question as to how socioeconomic inequalities shape five aspects of women's empowerment, namely ability and freedom to spend, loan management, involvement in decision making, self confidence and mobility and participation in social activities. This will contribute towards the policies and programs on providing equal opportunities to the disadvantaged and vulnerable women population in the country.

## **Review of Literature**

Available studies shows that higher socio-economic status of women, mainly education and self-employment has a positive impact on empowerment. In the study related to Ghana, educated and self-employed women had better say in most of the aspects of women empowerment relative to uneducated and unemployed women (Boateng et al. 2012). Likewise, in a study in Nigeria, self-employment and formal education also positively influenced many dimension of women empowerment (Kritz and Makinwa-Adebusey 1999). In Nepal, women who were involved in entrepreneurial activities were more likely to be more empowered than those who were not involved in any income generating activities. Similarly, educated women and belonging to upper caste households were more likely to better empowered (Acharya et al., 2010).

The access of financial resources presents an opportunity for greater empowerment of women. In India, the concept of self-help group has been evolved as a key instrument to deliver micro credit to poor rural women to undertake the entrepreneurial activities. The SHG program helped the rural women to be associated in income generating activities which have created immense opportunity for them to be self reliant (Aruna and Jyothirmay, 2011). The income generating activities facilitate to increase the household income that improves the consumption pattern and lifestyles of their families (Navajas, et. al., 2000). The SHG also encourages women borrowers to save from their profits for their future expansion. The involvement of rural women in income generating activities also benefits in bringing a change in their attitudes with regard to education, consumption, health and sanitation. Due to increased awareness and also with more disposable income in hand, women are able to send their children to schools (Sharmina, et. al., 2008). The longer the involvement of a woman in credit program the greater the likelihood of being empowered. She is likely to contribute more to her family and the society in the long run (Sharmina, et. al., 2008).

## Theoretical Perspective

The policy makers and researchers have endorsed women empowerment as an important determinant of sustainable development. Women empowerment is central to individual and collective aspects of capacity, capability, effectiveness, influence and potential. However, the meaning and measurement of women empowerment is debatable and a complex concept (Kabeer2005; Malhotra 2003). Kabeer (1999, 2005) defines women empowerment as “ the processes by which those who have been denied the ability to make choices acquire such ability. ”Many authors describe empowerment as a process and not as an outcome. Empowerment is a process that result in the expansion of women’ s agency i.e. in their ability to make choices affecting their lives and situations (Malhotra, et al 2002). Empowerment is the process of enhancing the capacity of poor people to influence the state institutions that affect their lives, by strengthening their participation in political processes and decision-making. And it means removing the barriers – political, legal and social that work against particular groups and building the assets of poor people to enable them to engage effectively in markets. (World Development Report, 2001). According to Kishor (2000), “indicators of women’s empowerment as agency or end-result, i.e. evidence, should directly measure women’s control over their lives or environment, while indicators of process should document the existence or absence of an appropriate setting for empowerment and women’s access to different sources of empowerment.”

The approach to women empowerment can be inferred at various levels and dimensions. It can be studied at the individual, household, societal or in the public capacity (Cueva Beteta 2006). This study confines and defines women empowerment at the individual and the household levels as these are the immediate stratum of empowerment for women, and to which she can identify with easily (Cueva Beteta 2006).

Women have remained excluded from access to economic assets, which have resulted in social and political exclusions as well. While rapid economic growth has been instrumental in reducing poverty, it does not guarantee self-sustaining inclusive growth. In India, the SHG linkage program has been promoted by the government agencies and non-government agencies (NGOs). The fundamental objective of this program is to create self-employment opportunity for the rural women and thus enhance their income earning capacity. Self help group (SHG) is a self governed per controlled and small informal association of the poor, usually from socio-economically homogeneous families who are organized around savings and credit activities (National Commission for Women, 2004). The outcome of the SHG program can be explained in two dimensions. Firstly, the program assist in creating employment opportunity, improve the economic status, provide economic security, builds assets and creates wealth for the rural family (Puhazhendhi and Badatya, 2002). Secondly, the SHG program also brings the impact on social empowerment, awareness and education, self-esteem, sense of dignity, organizational and management skills, mobilization of collective strengths, etc. (Pitt and Khandaker, 1996). The positive socio-economic impact helps the rural women to come out of the vicious circle of poverty and indebtedness and become more financially stable.

## Research Problem

Women's participation in SHG program improves her status in the household and in the community, her mobility to move within and outside her village for any activity or social gatherings. It increases her involvement in community development programs like rural development, women forum, girl child development, reservation for women, sanitation, safe drinking water etc. It also leads to her active involvement in health related activities like family planning, nutrition, pulse polio immunization etc. Being empowered also influence her legal and political awareness regarding right to vote, elections in the village, campaigns against alcohol, abuse of women etc. (Pillai and Nadarajan, 2011). The positive aspects of women empowerment demonstrate the need to look closely at the mechanisms through which the socio-economic characteristics of SHG women affect the empowerment. The present study seeks to understand how socio-economic factors of SHG women explain the differences in the empowerment. Therefore, this paper examines four research questions. (i) Does women empowerment correlate with the socio-economic profile of SHG women? (ii) Is there any significant difference in women empowerment according to age, marital status, education, religion, caste, occupation and land holding size? (iii) What are the factor determinants explaining women empowerment? (iv) Does the socio-economic conditions of SHG women influence women empowerment?

With the above research questions, the objectives of the present study are:

- To determine the correlation between women empowerment and selected socio-economic conditions of SHG women.
- To analyze the difference in women empowerment according to age, marital status, education, religion, caste, occupation and land holding size of SHG women.
- To identify the factor determinants which explains women empowerment.
- To analyze the effect of socio-economic conditions of SHG women on women empowerment.

This research intends to test three main hypotheses. First, socio-economic factors of SHG women do correlate with women empowerment; second women empowerment differs according to age, marital status, education, religion, caste, occupation and land holding size and third socio-economic differences of SHG women influence women empowerment.

## Methodology

Among different districts in Telangana State, Medak district has been selected due to its geographical location; its industrial proximity to the capital city of Hyderabad and active presence of SHGs in the area. 344 SHG women have been selected for the present study by adopting random sampling technique and the data and information is for the year 2015-16. A well-structured questionnaire consisting of closed ended questions is used to collect responses. Women empowerment as a dependent variable is measured with a five point likert scale ranging from "1: strongly disagree to 5". The internal consistency and reliability was established for the study by the method of Cronbach alpha and the alpha coefficient obtained was 0.90. The criteria for selecting suitable determinants for measuring women empowerment of women are taken from the study of Anne, et.al., (2011).

Women empowerment is measured using 25 items denoting five factors namely, ability and freedom to spend, loan management, involvement in decision-making, self-confidence and mobility and participation in social activities.

In order to examine the socio-economic profile of SHG women, descriptive analysis in terms of frequency and percentage is used for summarizing. Multivariate Analysis technique such as Principal Factor Analysis with an orthogonal rotation (Varimax) using the SPSS statistical package is used to identify women empowerment factor determinants. The difference between socio-economic profile of SHG women and women empowerment is tested through ANOVA (Analysis of Variance). The impact of independent variables (age, marital status, education, religion, caste, occupation and land holding size) on the dependent variable (women empowerment) is tested through multiple regression.

## Socio-Economic Profile of Respondents

The socio-economic profile of SHG women respondents in terms of their age, marital status, education, religion, caste, occupation and land holding size was analyzed and the results are presented in Table-1. The total sample size selected for the study and analysis is 344 self-help group women. Majority of them are the members of SHG for a period of five years or more. A majority of the respondents (92 percent) are below 50 years. 84 percent of them are married. Almost 28 percent of the respondents are illiterates and 21 percent of them have primary level education. The result shows that 90 percent of the sample respondents are Hindus and 20 percent of the respondents belong to the backward class caste and 48 percent to scheduled caste. In terms of occupation 57 percent of the SHG women respondents are self-employed and 50 percent the respondents do not own any assets.

**Table-1: Socio-Economic Profile of Sample Respondents**

<b>Socio-Economic Profile</b>	<b>Frequency</b>	<b>Percentage</b>
Age		
Less than 20	4	1
20-30	52	15
30-40	144	42
40-50	118	34
Above 50	26	8
Marital Status		
Unmarried	10	3
Married	290	84
Widow	40	12
Separated	4	1
Education		
Illiterate	96	28

Socio-Economic Profile	Frequency	Percentage
Primary	72	21
Middle	82	24
High	32	9
Intermediate	52	15
Graduation	10	3
Religion		
Hindu	309	90
Muslim	31	9
Christian	4	1
Caste		
General	82	24
Backward Class	68	20
Schedule Class	166	48
Schedule Tribe	28	8
Occupation		
Agriculture-own	74	22
Daily labour	36	10
Self employed	196	57
Non-Agriculture	38	11
Land Holding Size		
less than 1 acre	68	20
1-5 acre	86	25
6-10 acre	10	3
Above 11 acres	8	2
Landless	172	50
Total	344	100

Source-Primary

## Determinants of Women Empowerment

Table-2 shows the results of exploratory factor analysis of women empowerment. There are five factors, which are extracted and they account for a total of 71.70 per cent of variations measured by 25 variables. Each of the five factors explains 22.85 per cent, 19.11 per cent, 13.94 per cent, 9.82 percent and 5.98 per cent of the variance. The results of Kaiser-Meyer-Olkin measure of sampling adequacy ( $KMO = 0.878$ ) and Bartlett's test of Sphericity (Chi-square value = 8313.20; Significance = 0.000) is supportive of factor analysis method. Higher factor loading shows the importance of each item to their respective factors. The communality values of each item of the variables are high.

**Table-2: Factor Determinants and Measurement – Women Empowerment**

<b>Factor</b>	<b>Item</b>	<b>Rotated Factor Loadings</b>	<b>Eigen Value</b>	<b>% of Variation</b>
I - Ability and Freedom to spend	Improvement in the consumption level	0.815		
	Freedom to spend to buy monthly provision	0.749		
	Contribute to buy household Assets	0.758	3.26	22.85
	Meet expenses on household emergencies	0.718		
	Ability to spend for festivals and customs	0.617		
II - Loan Management	If required, can help others financially	0.785		
	Discretion to use loan amount	0.783		
	Ability to pay interest on loan	0.712		
	Ability to repay loan amount	0.755	2.39	19.11
	Utilisation of loan amount for income generating activities	0.711		
III - Involvement in Decision Making	Household expenses	0.868		
	Additional expenditure during festival, marriages	0.705		
	Financial decisions	0.738	1.84	13.94
	Use of loan	0.746		
	Business Decisions	0.752		
IV - Self Confidence and Mobility	Improvement in Household Status	0.705		
	Attend Social Functions	0.767		
	Interact at Social Gatherings	0.763	1.39	9.82
	Ability to move outside village	0.678		
	Interaction for Business	0.697		
V - Participation in Social Activities	Involvement in Community development	0.712		
	Involvement in Health Activities	0.697		
	Community Status	0.688	1.1	5.98
	Voice my Concern	0.715		
	Influence Others	0.713		
Cumulative % of Variation		-	-	71.7
Cronbach Alpha		-	0.9	-

Extraction Method: Principal Component Analysis. Source – Primary

## Correlation between Socio-Economic Profiles and Women Empowerment

The findings in table 3 show the strength and direction of association between socio economic conditions of SHG women and women empowerment. The results indicate positive correlation between age of SHG women and women empowerment ( $r = 0.320$ ) and between marital status and women empowerment ( $r = 0.227$ ). Further, the findings also indicate that there is low and positive correlation between religion and women empowerment ( $r = 0.218$ ), caste and women empowerment ( $r = 0.395$ ), occupation and women empowerment ( $r = 0.449$ ) and land holding size and women empowerment ( $r = 0.379$ ). Education and women empowerment has the highest positive correlation of  $r = 0.509$ .

**Table-3: Correlations between Socio-Economic Profiles and Women Empowerment**

	Age	Marital Status	Education	Religion	Caste	Occupation	Land Holding Size	WE
Pearson Correlation	0.320*	0.227*	0.509*	0.218*	0.395*	0.449**	0.379**	1
WE Sig. (2-tailed)	0.030	0.040	0.030	0.033	0.020	0.006	.000	
N	344	344	344	344	344	344	344	344

\*\* Correlation is significant at 0.01 level (2- tailed).

Correlation is significant at 0.05 level (2- tailed). Source – Primary

## Relationship between Women Empowerment and Socio-Economic Profiles of SHG Women

Through Anova (Analysis of Variance), the difference between socio-economic profile of SHG women and women empowerment has been analyzed and the results are presented in Table-4. There is a significant difference between women empowerment and age with F value - 2.578,  $p < 0.05$ . Similarly, women empowerment and marital status also show significant difference with F value – 2.957,  $p < 0.05$ . Further, the finding indicates that the F-values are significant for other parameters of socio-economic profile such as education, religion, caste, occupation and land holding size also. This signifies that there is significant difference between the socio-economic profiles of SHG women and women empowerment.

**Table-4: ANOVA between Women Empowerment and Socio-Economic Profile of SHG Women**

		Sum of Squares	df	Mean Square	F	Sig.
Age	Between Groups	4.977	6	0.831	2.578	0.019
Marital Status	Between Groups	3.953	3	0.617	2.957	0.013
Education	Between Groups	3.121	3	1.192	6.875	0.003
Religion	Between Groups	1.962	2	0.981	4.614	0.011
Caste	Between Groups	7.509	3	2.503	8.036	0.000
Occupation	Between Groups	19.648	3	6.549	23.75	0.000
Land holding Size	Between Groups	9.31	4	2.327	7.579	0.000

Source – Primary

## Influence of Socio-Economic Factors on Women Empowerment

### Model Specification

The regression model used in the study is given as:

$$\text{Women Empowerment (WE)} = f(\text{Socio-economic conditions of SHG women})$$

(Socio-economic conditions of SHG women) = Age (AG), Marital Status (MS), Education (ED), Religion (RG), Caste (CE), Occupation (OC) and Land holding size (LH). Therefore,

$$\text{EEW} = \alpha + \beta_1 \text{AG} + \beta_2 \text{MS} + \beta_3 \text{ED} + \beta_4 \text{RG} + \beta_5 \text{CE} + \beta_6 \text{OC} + \beta_7 \text{LH} + \varepsilon$$

Where;

$\alpha$  = Intercept,  $\beta_1$  to  $\beta_7$  = coefficient of independent variable,  $\varepsilon$  = error term

Table-5 show that socio-economic conditions of SHG women (age, marital status, education, religion, caste, occupation and land holding size) are significant predictors of women empowerment of women with  $R^2 = 0.170$ ,  $F = 5.931$ ,  $p < 0.01$ . 17 percent of the variance in women empowerment can be explained by socio-economic conditions of SHG women. Adjusted  $R^2$  provides a less biased estimate (15.1 percent) of the extent of the relationship between the dependent and independent variables. The regression equation is Women Empowerment =  $3.375 + 0.197^* \text{Age} + 0.144^* \text{Marital Status} + 0.225^* \text{Education} + 0.117^* \text{Religion} + 0.105^* \text{Caste} + 0.166^* \text{Occupation} + 0.189^* \text{Land holding size}$ . The coefficients of all the predictors shows that socio-economic profile of SHG women have positive impact on women empowerment. As the magnitude of independent variables increases, the magnitude of dependent variables also increases.

**Table-5: Influence of Socio-Economic Factors on Women Empowerment**

<b>Socio-Economic Variables</b>	<b>Standard Coefficient</b>	<b>P-value</b>
Constant	3.375	.000
Age	0.197	.010
Marital Status	0.144	.013
Education	0.225	.020
Religion	0.117	.035
Caste	0.105	.033
Occupation	0.166	.023
Land holding size	0.189	.000
R Square	0.170	-
Adjusted R square	0.151	-
F	5.931	.000

Dependent Variable: Women Empowerment

## Discussion

This study examines the impact of socio-economic profile of SHG women on women empowerment. The analysis is undertaken by testing a model wherein the age, marital status, education, religion, caste, occupation and land holding size of SHG women are considered as predictors that influence empowerment of women. Moreover, the study also explores the difference in women empowerment according to age, marital status, education, religion, caste, occupation and land holding size of SHG women. The results of the study are based on the data collected by the researcher. The results of this paper empirically reveal that socio-economic status is crucial for the empowerment of SHG women. It also consolidates the arguments of other researchers in the literature that socio economic aspects indeed influence the empowerment of women.

In hypothesis 1, it was predicted that there is a correlation between the socio-economic aspects and empowerment of SHG women. This hypothesis is supported as the findings reveal the existence of positive correlation between the two. This study establishes that the improved economic and social conditions of women in the society make a path towards her empowerment. Thus the enhanced economic and social status provides SHG women an opportunity to become empowered.

In hypothesis 2, it was conceptualized that women empowerment differs according to age, marital status, education, religion, caste, occupation and land holding size. The finding reveals that there is a significant difference between women empowerment and all the dimensions of socio-economic context of SHG women. Our findings show that the degree of women empowerment differs according to age of SHG women. Reasons for this difference could be that, women are able to assert themselves more in their household as they age. Likewise, women empowerment demonstrates difference with the marital status of SHG women. This could be on account of the improbable prospect to question the conservative

norms that still rule the relations between husbands and wives, which would certainly not dispute the husbands' power into the household. Further, the results establishes the fact that relative to women with no formal education, women with middle education or more are more likely to be more empowered. These results can be attributed to the fact that educated women has greater prospects to become empowered. Another result is the role of caste in women empowerment. Compared with lower caste SHG women, upper caste women may have more access to opportunities, which could assist them to become more empowered. Further, the finding reveal that in the villages, having occupations identified with caste is also a factor and significantly associated with women empowerment. These occupations limit the extent of economic and social dimensions of empowerment of SHG women. Traditions and culture associated with religion also affects empowerment of woman with Hindu women being more likely to be more empowered than Muslim women. Further, the size of assets enhances women's capacity to become economically as well as socially empowered.

In Hypothesis 3, it is maintained that socio-economic aspects of SHG women has an influence on empowerment of women. This hypothesis is also affirmed as the finding indicates that the socio-economic status has a significant effect on empowerment of SHG women with  $R^2 = 0.151$ ,  $F = 5.931$ ,  $p < .01$ . The result reveals that 15.1% of variance in women empowerment is explained by the socio-economic factors of SHG women. This implies better the socio-economic conditions of SHG women; greater is the impact on their empowerment.

## Conclusion

In line with the objectives of the study, which sought to examine the difference in women empowerment according to age, marital status, education, religion, caste, occupation and land holding size of SHG women and further determine the impact of socio-economic conditions on empowerment of SHG women, the study concludes that the socio-economic aspects indeed influence the empowerment of women. Moreover, women empowerment differs according to age, marital status, education, religion, caste, occupation and land holding size of SHG women. Considering the outcome variable included in this research, women empowerment, it appears that education and self- employment play key roles as resources that enhance women's ability to become self – reliant. Among all the socio-economic factors, the findings confirm the prominent role of education for women's empowerment. This provides for the continuity of policy in favor of girl's education at higher levels of schooling in addition to the primary level. SHG acts as an alternate financial intermediary for making accessible the basic financial services to the poor and vulnerable rural woman. With the SHG expansion, the poor rural woman who has remained unbanked for generations now has the opportunity to access the financial services and come under the fold of formal banking facility. In the wake of accessing basic financial services through SHG, the poor rural women are encouraged to get involved in certain income generating activities. The effective support from SHG enhances her ability to handle and manage the activities profitably, thus facilitating her to be economically and socially empowered. The SHG outreach has considerably able to bring financial access to the poor rural women and thus providing her the opportunity to become self-reliant.

The study concludes that there is a two-way impact concerning women empowerment and her socio-economic conditions. If the socio-economic conditions of women improve, she achieves empowerment. With improved empowerment, her socio-economic status is strengthened. Thus, women empowerment and the socio-economic aspects of a woman act as a cause as well as an effect. Thus, the paper suggests that if the SHG operates and functions competently, then, SHG has an ability to act as a catalytic for women empowerment. Finally, women empowerment is a multi dimensional, complex issue and also a very contextual and individualistic in nature. Therefore, the validity of the findings may not have universal acceptance. Moreover the use of quantitative data and other methodological issues remains a limitation of the study. Furthermore, the SHG women maybe reluctant to disclose information related to the issues concerning her empowerment.

## References

- Acharya, D.R. et al. (2010). Women's Autonomy in Household Decision-Making: A Demographic Study in Nepal, *Reproductive Health*, 7(15).
- Ahmed, S.U. (1982). Entrepreneurship and Economic Development, *Dhaka University Studies, Part-C*, 3(1), pp: 41-53.
- Aragow, Y. (2011). Rural Micro Financing and Women's Empowerment: A Case Study on Rural Women Clients in Dessie Zuria District, Ethiopia, *International Journal of Rural Development and Management Studies*, 5(1).
- Aruna, M. & Rema, J. (2011). The Role of Microfinance in Women Empowerment – A Study on the SHG Bank Linkage Program in Hyderabad, *Indian Journal of Commerce and Management Studies*, Vol II.
- Boateng, G.O. et al. (2012). Women's Empowerment in the Context of Millennium Development Goal 3: A Case Study of Married Women in Ghana, *Social Indicators Research*, 1(22).
- Cueva Beteta, H. (2006). What is Missing in Measures of Women's Empowerment?, *Journal of Human Development*, 7(2), pp: 221-241.
- Kabeer, N. (2001). Conflicts over Credit: Reevaluating the Empowerment Potential of Loans to Women in Rural Bangladesh, *World Development*, 29(1)
- Kabeer, N. (2005). Gender Equality and Women's Empowerment: A Critical Analysis of the Third Millennium Development Goal, *Gender and Development*, 13(1), pp: 13-24.
- Kabeer, N. (2001). Reflection on the Measurement of Women's Empowerment – Theory and Practice in Discussing Women's Empowerment – Theory and Practice, Stockholm: The Swedish International Development Cooperation Agency.
- Kabeer, N. (1999). The Conditions and Consequences of Choices: Reflections on the Measurement of Women's Empowerment, Geneva, Switzerland: UNRISD.

- Kishor, S. (2000). Empowerment of Women in Egypt and Links to the Survival and Health of their Infants, in: Presser, H.B. & Sen, G. (Eds), *Women's Empowerment and Demographic Processes: Moving Beyond Cairo*, pp: 119-156, USA: Oxford University Press.
- Kritz, M.M., & Makinwa-Adebusoye, P. (1999). Determinants of Women's Decision-Making Authority in Nigeria: The Ethnic Dimension, *Sociological Forum*, 14(3), pp:399-424.
- Malhotra, A. (2003). Conceptualizing and Measuring Women's Empowerment as a Variable in International Development, In: Measuring Empowerment: Cross-Disciplinary Perspectives, USA: World Bank.
- Malhotra, A., Schuler, S.R. & Boender, C. (2002). *Measuring Women's Empowerment as a Variable in International Development*, USA: The World Bank.
- Navajas, S. et al.(2000). Micro Credit and the Poorest of the Poor: Theory and Evidence From Bolivia, *World Development*, 28 (2&3).
- Pitt, M., & Khandaker, S.R. (1996). Household and Intra-household Impacts of the Grameen Bank and Similar Targeted Credit Programs in Bangladesh, *World Bank Discussion Papers No.320*.
- Puhazhenendhi, V. & Badatya, K.C. (2002). SHG Bank Linkage Program for Rural Poor – An Impact Assessment, National Bank for Agriculture and Rural Development.
- RanjuJa, B.S. & Fan, Y.W. (2007). Does Micro Finance Empower Women? Evidence from Self-Help Groups in India, *Working Paper Series*, Department of Economics, Uppsala University, Sweden.
- Sharmina, A., Nazrul, I. & Shahid, U.A. (2008). A Multivariate Model of Micro Credit and Rural Women Entrepreneurship Development in Bangladesh, *International Journal of Business and Management*, 3(8).
- Solava, I. & Sabina, A. (2007). Agency and Empowerment: A Proposal For Internationally Comparable Indicators, Oxford Poverty and Human Development Initiatives.
- Sorensen, J.B. & Chang, P.M.Y. (2006). Determinants of Successful Entrepreneurship: A Review of the Recent Literature, MIT Sloan School of Management.
- Thalavai, P. N. & Nadarajan, S. (2011). Impact of Micro Finance – An Empirical Study on the Attitude of Self Help Group Leaders in Kanya Kumari District – Tamil Nadu, *International Journal of Enterprise and Innovation Management Studies*, 1(3).
- Eleventh Five year plans (2007-12), Planning ommission.nic.in/p1ans.
- Millennium Development Goals,[www.un.org/millenniumgoals](http://www.un.org/millenniumgoals).
- Society for Elimination of Rural Poverty, [www.serap.gov.in](http://www.serap.gov.in)
- United Nations Human Development Report. (2013). UNDP
- World Bank (2001). World Bank Report: Attacking Poverty, New York: Oxford Press.

# Inclusive vs Exclusive Approach to Talent Management: A Review Agenda

**Geeta Shree Roy<sup>1</sup>**  
**V. Rama Devi<sup>2</sup>**

## Abstract

The paper centers on the debate between inclusive and exclusive approaches to talent management. Inclusive approach put forward that talent management should encompass all workers as all employees of an organization are seen as having strengths that can potentially create added value for the organization whereas exclusive approach sees a subset of employees occupying key positions in the organization who create more value for the organization. The aim of this paper is to contribute to the theory and practice of talent management through literature review concerning both the approaches. The study of talent management is in a growing state and this review would contribute to an expanding group of talent management literature pushing to make the transition from a growing into a mature field of study.

**Keywords:** Talent Management, Inclusive Approach, Exclusive Approach.

---

## Introduction

Talent management, a contemporary practitioner generated term has become the dominant human capital topic of the early twenty-first century (Cascio & Aguinis, 2008). Remarkably, although the literature on the war for talent is quite specific as to why talent management is important, it is much less explicit on what talent management is, exactly (Huang & Tansley, 2012).

A debate has emerged from the attempts to draw conceptual boundaries around the term talent management. It centers on the distinction between inclusive and exclusive approaches to talent management. Inclusive approaches put forward that talent management should encompass all workers. All employees of an organization are seen as having strengths that can potentially create added value for the organization. In contrary, exclusive approaches

---

<sup>1</sup> Ph.D research scholar, Dept. of Management, Sikkim University, 6th mile, Tadong, Gangtok, Sikkim – 737102

<sup>2</sup> Professor & Head, Dept. of Management, Dean, School of Professional Studies, Sikkim University, 6<sup>th</sup> mile, Tadong, Gangtok, Sikkim – 737102 and can be reached at vrdevi@cus.ac.in, vangapanduramadevi1970@gmail.com

see a subset of employees or jobs as creating disproportionate value (Gallardo et.al, 2013). It is quite important that the debate between these two approaches has to be addressed as the practical implication of these two approaches concerns the investment of scarce resources- money, effort and time. The aim of this paper is to contribute to the theory and practice of talent management through literature review concerning both the approaches.

## Exclusive Approach

Strategic talent management is defined as activities and processes that involve the systematic identification of key positions which differentially contribute to the organisation's sustainable competitive advantage, the development of a talent pool of high potential and high performing incumbents to fill these roles, and the development of a differentiated architecture to facilitate filling these positions with competent incumbents and to ensure their continued commitment to the organisation (Collings & Mellahi, 2009). Talent management (TM) refers to the deliberate and organised efforts by firms to optimally select, develop, deploy and retain competent and committed knowledge employees for key positions which bear significant influences on the overall performance of the organization (Chadee & Raman, 2012). Talent management is a concept that includes the attraction, training, development and retention of key employees while also taking into account the strategic goals of the client (Lockwood, 2005; Barkhuizen, 2014). Managing leadership talent strategically is to put the right person in the right place at the right time (Sloan et al., 2003).

Talent management is the systematic attraction, identification, development, engagement/retention and deployment of those individuals who are of particular value to an organization, either in view of their 'high potential' for the future or because they are fulfilling business/operation-critical roles. (McCartney, 2006; Cappell, 2008). Talent management is the differential management of employees based on their relative potential to contribute to the competitive advantage of their organizations (Lepak and Snell, 1999; Dries et al., 2012). It is a distinctive process that focuses explicitly on those persons who have the potential to provide competitive advantage for a company by managing those people in an effective and efficient way and therefore ensuring the long-term competitiveness of a company (Bethke-Langenegger et al., 2011).

Global talent management (GTM) includes all organizational activities for the purpose of attracting, selecting, developing, and retaining the best employees in the most strategic roles (those roles necessary to achieve organizational strategic priorities) on a global scale. Global talent management takes into account the differences in both organizations' global strategic priorities as well as the differences across national contexts for how talent should be managed in the countries where they operate (Scullion, Collings & Caligiuri, 2010). GTM is defined as the strategic integration of resourcing and development at the international level that involves the proactive identification, development and strategic deployment of high performing and high-potential strategic employees on a global scale (Collings & Scullion, 2008).

TM is an organisational activity, which starts with the systematic identification of key positions (through talent review and talent evaluation), creation of talent pool for these

positions (through internal talent segmentation and talent nomination), followed by succession planning, development, and retention of the talent, i.e., the high performers, who help in achieving organisation's strategic priorities as well as sustainable competitive advantage (Jyoti & Rani, 2014). Talent, in the context of the workplace, provides a distinction between those individuals that have the potential to make a difference, and the rest of the workforce. Those identified as talented are usually linked with leadership and managerial, technical or specialist positions thus talent serves to refer to those 'limited number of people who possess the highest quality of managerial and leadership skills' (Ford *et al.*, 2010). Talent management needs to continue to train and develop high performers for potential new roles, identify their knowledge gaps, and implement initiatives to enhance their competencies and ensure their retention (Cairns, 2009). In the talent management context, succession planning focuses on how the organization plans to replace key knowledge holders and how to ensure that high potential successors have been prepared to fill these key roles (Lengnick-Hall & Andrade, 2008). Hills (2009) suggest five strategies for effective succession planning: 1) aligning succession planning with business strategy; 2) assessing leadership potential based on the 3Cs of fit – competence, connection and culture; 3) involving talent in the succession planning process; 4) using a mix of experience, outside or executive coaching and formal learning experiences in talent development and; 5) drawing from a wider net of potential successors.

## **Inclusive Approach**

Talent management system not only works strategically as a part of overall business strategy but also implements in the organizational routine processes throughout the organization. It cannot be left exclusively on human resource department to attract and retain workforce instead it shall be proficient at all levels of hierarchy of the organization (Smith, 2009). Talent management strategies centralize around five basic areas such as attracting, selecting, engaging, developing and retaining employees (Perrin, 2003). It is generally concerned with practices associated with developing strategy, identifying talent gaps, succession planning, and recruiting, selecting, educating, motivating and retaining talented employees human resource through a variety of initiatives (Ringo *et al.*, 2010). Talent management, which is 'the implementation of integrated strategies or systems designed to increase workplace productivity by developing improved processes for attracting, developing, retaining, and utilizing people with the required skills and aptitude to meet current and future business needs (Lockwood, 2006; Hausknecht *et al.*, 2009)., TM can be defined as attracting and integrating highly skilled workers and developing and retaining existing workers (Powell *et al.* , 2013). Talent management refers to the implementation of integrated human resource strategies to attract, develop, retain and productively utilize employees with the required skills and abilities to meet current and future business needs (Kontoghiorges and Frangou, 2009; Barkhuizen *et al.*, 2014). According to Stockley (2005), talent management is a conscious, purposeful approach undertaken to attract, develop and retain people with the aptitude and abilities to meet current and future organisational needs. TM is a process that ensures that an organisation has the quality and quantity of people in place to meet current and future business priorities. The process covers all the aspects of an employer's lifecycle, i.e. selection, succession, and performance management (Wellins *et al.*, 2004;

Chahal & Kumari, 2013). Talent management concerns the way in which organizations recruit, promote, and terminate employees to streamline the workforce and maximize productivity (Funk *et al.*, 2013).

Talent management is the systematic attraction, identification, development, engagement/retention and deployment of those individuals with high potential who are of particular value to an organization (CIPD, 2006, 2008). Talent management is top management's deliberate and organized efforts to optimally select, develop, deploy and retain competent and committed employees who bear significant influence on the overall performance of the organization (Raman *et al.*, 2013). TM is the identification of talented employees (Puvitayaphan, 2008). TM is focused on identification of pivotal talent pools, where human capital makes the biggest difference to strategic success (Boudreau and Ramstad, 2005). Talent management starts with identifying the most suitable individuals within an organisation, who will ultimately contribute to the organisation's sustainable competitive advantage (vanDijk, 2008). Talent Management according to Lewis and Heckman's (2006) comprises of three different conceptions which are as follows a) a collection of typical human resource department practices, b) the flow of human resources throughout the organization, and thirdly c) sourcing, developing and rewarding employee talent. TM is associated with a set of typical HRM/HRD practices or functions, such as recruitment, training, and development (Heinen & O'Neill, 2004). Bassett *et al.*, (2007) pointed out that talent management practices help employees stay, focus on "fit", ease transitions, make the position attractive, and manage the "folklore factor".

Talent management includes sourcing, screening, selection, retention, development, and renewal of the work forces with analysis and planning (Schweyer, 2004). Talent management as described by Schweyer (2004) includes sourcing (finding talent); screening (sorting of qualified and unqualified applicants); selection (assessment/testing, interviewing, reference/background checking, etc. of applicants); on boarding (offer generation/acceptance); retention (measures to keep the talent that contributes to the success of the organization); development (training, growth, assignments, etc.); deployment (optimal assignment of staff to projects, lateral opportunities, promotions, etc.) and renewal of the workforce, with analysis and planning as the adhesive, overarching ingredient. According to Lewis and Heckman (2006), Talent management is a collection of typical HR department practices such as recruiting, selection, development and career and succession management. Talent management processes include workforce planning, talent gap analysis, recruiting, staffing, education and development, retention, talent reviews, succession planning, and evaluation (McCauley and Wakefield, 2006). The various aspects of talent management are recruitment, selection, on-boarding, mentoring, performance management, career development, leadership development, replacement planning, career planning, recognition and reward (Bhatnagar, 2007).

Talent management begins with the identification of candidates for the pool (Sumardi and Othman, 2009). Employees' knowledge, skills and competencies are an important competitive weapon, hence talent needs to be maximized and recognized as one of the discrete source of organizational competitive advantage (Collings and Mellahi, 2009). Talent management may be defined as a core sub-system of an organization's strategic

management system, to develop a human resource asset base that is capable to support current and future organizational growth directions and objectives (Hajikaimisari *et al.*, 2010). Talent management encompasses managing the supply, demand, and flow of talent through the human capital engine (Pascal, 2004). TM is a strategic and holistic approach to both HR and business planning or a new route to organizational effectiveness. This improves the performance and the potential of people—the talent—who can make a measurable difference to the organization now and in future and it aspires to yield enhanced performance among all levels in the workforce, thus allowing everyone to reach his/her potential, no matter what that might be (Ashton & Morton, 2005). In the broadest possible terms, TM is the strategic management of the flow of talent through an organization. Its purpose is to assure that a supply of talent is available to align the right people with the right jobs at the right time based on strategic business objectives (DuttaGupta, 2005). At its heart, talent management is simply a matter of anticipating the need for human capital and setting out a plan to meet it (Cappelli , 2008). Talent management is an integrated set of processes, programs, and cultural norms in an organization designed and implemented to attract, develop, deploy, and retain talent to achieve strategic objectives and meet future business needs (Silzer & Dowell, 2010). From the perspective of human resources management task as well as particular personnel activities, the concept of talent management does not place any special requirements on the organization. It only involves a careful application of the best principles and approaches that have been proven in practice especially in the field of acquisition and choice, education and development, remuneration, and socio-cultural and welfare activities for employees (Horvathova & Davidova, 2012).

## Inclusive and Exclusive Approach

Some consider talent management as both inclusive and exclusive. Talent management is defined as both a philosophy and a practice. It is both an espoused and enacted commitment –shared at the highest levels and throughout the organization by all those in managerial and supervisory positions – to implement an integrated, strategic and technology enabled approach to human resources management (HRM), with a particular focus on human resource planning, including employee recruitment, retention, development and succession practices, ideally for all employees but especially for those identified as having high potential or in key positions (Piansoongnern *et al.*, 2011). In its broadest sense, the term can be seen as the identification, development, engagement, retention and deployment of talent, although it is often used more narrowly to describe the short- and longer-term resourcing of senior executives and high performers (Warren, 2006).

## Inclusive vs Exclusive Approach – Which is More Appropriate?

It is important to understand that, when it comes to talent management, no single perspective on talent is objectively better than another (Boudreau & Ramstad, 2005). As Garrow and Hirsch (2008) assert, talent management is not a matter of best practices, but rather, of best fit—i.e. fit with strategic objectives, fit with organizational culture, fit with other HR practices and policies, and fit with organizational capacity. For example, an exclusive and output-oriented approach to talent management is more likely to fit well in an organization with a meritocratic, competitive culture and an up-or-out promotion system

than in an organization that promotes egalitarianism, diversity and teamwork (Larsen *et al.*, 1998). The inclusive-exclusive divide is to be seen as a continuum with two extremes. At the exclusive extreme, we might find organizations that allocate 90% of their resources (e.g., monetary and non-monetary rewards, training budgets, promotion opportunities) to 5% of their employees. The investment of disproportionate resources where one expects disproportionate returns—i.e., in those specific jobs and those specific people within jobs that help create strategic success—is what is referred to in the RBV literature as ‘workforce differentiation’ (Becker *et al.*, 2009; Huselid & Becker, 2011; Ledford & Kochanski, 2004). At the inclusive extreme, we might find organizations that allocate all of their resources equally among employees—or even, allocate more resources to low-performing than to high-performing employee groups with the goal of achieving overall ‘good’ levels of performance and satisfaction (Bothner, Podolny, & Smith, 2011).

## **Superiority of Inclusive over Exclusive Approach**

A dictionary definition of ‘talent’ is people, who possess special attitude or faculty. Talent, in other words, is a person who regularly demonstrates exceptional ability and achievement (Williams-Lee, 2008) and potential for further development (Armstrong, 2006; Blass, 2007; Boxall and Purcell, 2008). The HRM literature operationalizes talent as capital (e.g. Pascal, 2004). Human capital is the stock of competencies, knowledge, social and personality attributes, embodied in the ability to perform labor so as to produce economic value. In this context, the inclusive approach is more justifiable as talent includes all employees who can create value to the organization.

Though people in the key positions play a vital role, they by themselves may not in isolation contribute to be the source of competitive advantage. Talent should percolate at all levels of the organization. At the top level talent is required to play the strategic roles efficiently, at the middle level talent is required in functional areas of expertise and at the lower levels talent is required for operational efficiency. Each level requires different types of talents and organization can function effectively when people at all levels have requisite talent depending on the roles they are performing. Talent is all pervasive throughout an organization. In today’s cut throat competitive era, CEOs of many forward looking companies acknowledge the contribution of all people in the organization who can bring in positive value to the organization.

## **Conclusion**

Attracting and retaining talented people is becoming more challenging now-a-days. As organizations are increasingly less able to promise stable, long-term employment, employees are distancing themselves from their organizations in turn (Tucker *et al.*, 2005). An inclusive approach to talent management is believed to lead to a more pleasant working environment characterized by openness, trust, and overall employee well being (Warren, 2006). The study of talent management is in a growing state. This review would contribute to an expanding group of talent management literature pushing to make the transition from a growing into a mature field of study. Advances in the academic literature may help both organizations and individual employees make more sense of how strategic talent management decisions may or may not affect them.

## References

- Armstrong, M. (2006). *A Handbook of Human Resource Management Practice*. London: Kogan Page.
- Ashton, C., & Morton, L. (2005). Managing Talent for Competitive Advantage, *Strategic HR Review*, 4(5), pp:28-31.
- Barkhuizen, N. (2014). How Relevant is Talent Management in South African Local Government Institutions?, *Mediterranean Journal of Social Sciences*, 5(20), pp:2223-2230.
- Barkhuizen, N., Mogwene, P. & Schutte, N. (2014). Talent Management, Work Engagement and Service Quality Orientation of Support Staff in a Higher Education Institution, *Mediterranean Journal of Social Sciences*, 5(4), pp:69-77.
- Bassett, P. et al. (2007). *Talent Management is Key to India's Pharma Future*.
- Becker, B.E., Huselid, M.A. & Beatty, R.W. (2009). *The Differentiated Workforce: Transforming Talent into Strategic Impact*, Boston: MA: Harvard Business Press.
- Bethke-Langenegger, P., Mahler, P. & Staffelbach, B. (2011). Effectiveness of Talent Management Strategies, *European Journal of International Management*, 5(5), pp:524-539.
- Bhatnagar, J. (2007). Talent Management Strategy of Employee Engagement in Indian ITES Employees: Key to Retention, *Employee Relations*, 29(6), pp:640-663.
- Blass, E. (2007). Talent Management: Maximizing Talent for Business Performance, Chartered Management Institute and Ashridge Consulting.
- Bothner, M., Podolny, J. M. & Smith, E. (2011). Organizing Contests for Status: The Matthew Effect Versus the Mark Effect, *Management Science*, 57(3), pp:439-457.
- Boudreau, J.W. & Ramstad, P. (2005). Talentship and The Evolution of Human Resource Management: From Professional Practices to Strategic Talent Decision Science, *Human Resource Planning Journal*, 28(2), pp:17-26.
- Boudreau, J.W. & Ramstad, P.M. (2005). Talentship, Talent Segmentation and Sustainability: A New HR Decision Science Paradigm for a New Strategy Definition, *Human Resource Management*, 44(2), pp:129-136.
- Boxall, P. & Purcell, P. (2008). *Strategy and Human Resource Management*, Basingstoke: Palgrave Macmillan.
- Cairns, T. (2009). Talent Management at Homeland Security: A Corporate Model Suggests a Recipe for Success, *Employment Relations Today, Fall*, pp:19-26.
- Cappell, P. (2008). Talent Management for the Twenty-First Century, *Harvard Business Review*, 86(3).
- Cappelli, P. (2008). *Talent on Demand: Managing Talent in an Age of Uncertainty*, Boston: MA: Harvard Business School Press.

- Cascio, W. & Aguinis, H. (2008). Research in Industrial and Organizational Psychology from 1963 to 2007: Changes, Choices, and Trends, *Journal of Applied Psychology*, 93(5), pp:1062-81.
- Chadee, D. & Raman, R. (2012). External knowledge and Performance of Offshore IT Service Providers in India: Mediating Role of Talent Management, *Asia Pacific Journal of Human Resources*, 50(4), pp:459-482.
- Chahal, H. & Kumari, A. (2013). Examining Talent Management Using CG as Proxy Measure: A Case Study of State Bank of India, *The International Journal of Business in Society*, 13(2), pp:198-207.
- CIPD. (2006). *Talent Management: Understanding the Dimensions*. London: CIPD.
- CIPD. (2008). *Talent Management: An Overview*. London: CIPD.
- Collings, D.G. & Mellahi, K. (2009). Strategic Talent Management: A Review and Research Agenda, *Human Resource Management Review*, 19(4), pp:304-313.
- Collings, D. G. & Scullion, H. (2008). Resourcing international assignees. In: A. Dickman, C. Brewster, & P. Sparrow, *International Human Resource Management: A European Perspective*, pp: 87-106, Abingdon: Routledge.
- Dries, N., Vantilborgh, T. & Pepermans, R. (2012). The Role of Learning Agility and Career Variety in the Identification and Development of High Potential Employees, *Personnel Review*, 41(3), pp:340-358.
- DuttaGupta, R. (2005). *Identifying and Managing your Assets: Talent Management*, London, UK: PricewaterhouseCoopers.
- Ford, J., Harding, N. & Stoganova, D. (2010). *Talent Management and Development. An Overview of Current Theory and Practice*.
- Funk, L.M. et al.(2013). Hospital Management Practices and Availability of Surgery in Sub-Saharan Africa: A Pilot Study of Three Hospitals, *World Journal of Surgery*, 37(11), pp:2520-2528.
- Gallardo-Gallardo, E., Dries, N. & Gonzalez-Cruz, T. (2013). What is the Meaning of Talent in the World of Work? *Human Resource Management Review*, 23(4), pp:290-300.
- Garrow, V. & Hirsch, W. (2008). Talent Management: Issues of Focus and Fit, *Public Personnel Management*, 37(4), pp:389-402.
- Hajikaimisari, M., Ghalambor, M.A. & Hajikarimi, A. (2010). Talent Management: An Effective Key to Manage Knowledgeable Workers to Fabricate Safer Steel Structure, *International Journal of Simulation: Systems, Science and Technology*, 11(3), pp:66-74.
- Hausknecht, J.P., Rodda, J. & Howard, M.J. (2009). Targeted Employee Retention: Performance Based and Job-Related Differences in Reported Reasons for Staying, *Human Resource Management*, 48(2), pp:269-288.

- Heinen, J.S. & O'Neill, C. (2004). Managing Talent to Maximize Performance, *Employment Relations Today*, 31(2), pp:67-82.
- Hills, A. (2009). Succession Planning – Or Smart Talent Management?, *Industrial and Commercial Training*, 41(1), pp:3-8.
- Horvathova, P. & Davidova, M. (2012). The Level of Talent Management Usage in Organizations of the Czech Republic Including ICT Utilization, *Journal of Communication and Computer*, P.9 & pp:759-770.
- Huang, J. & Tansley, C. (2012). Sneaking through the Minefield of Talent Management: The Notion of Rhetorical Obfuscation, *International Journal of Human Resource Management*, 23(17), pp:3673-3691.
- Huselid, M.A. & Becker, B.E. (2011). Bridging Micro and Macro Domains: Workforce Differentiation and Strategic Human Resource Management, *Journal of Management*, 37(2), pp:421-428.
- Iles, P. (1997). Sustainable High Potential Career Development: A Resource-Based view, *Career Development International*, 2(7), pp:347-353.
- Jyoti, J. & Rani, R. (2014). Exploring Talent Management Practices: Antecedents and Consequences, *International Journal Management Concepts and Philosophy*, 8(4), pp:220-248.
- Larsen, H.H., London, M., Weinstein, M. & Raghuram, S. (1998). High-Flyer Management Development Programs: Organizational Rhetoric or Self-Fulfilling, *International Studies of Management & Organisation*, 28(1), pp:64-90.
- Ledford, G. & Kochanski, J. (2004). Allocating Training and Development Resources based on Contribution. In: L. Berger, & D. Berger, *The Talent Management Handbook: Creating Organizational Excellence by Identifying, Developing and Promoting Your Best People*, pp: 218-229. New York: NY: McGraw-Hill.
- Lengnick-Hall, M.L. & Andrade, L.S. (2008). Talent Staffing Systems for Effective Knowledge Management. In: V. Vaiman, & C.M. Vance, *Smart Talent Management – Building Knowledge Assets for Competitive Advantage*, pp: 33-65. UK: Elgar Publishing.
- Lewis, R.E. & Heckman, R.J. (2006). Talent Management: A Critical Review, *Human Resource Management Review*, 16(2), pp:139-154.
- McCartney, C. & Garrow, V. (2006). *The Talent Management Journey*. Horsham:Roffey Park Institute.
- McCauley, C. & Wakefield, M. (2006). Talent Management in the 21st Century: Help Your Company Find, Develop and Keep its Strongest Workers, *Journal for Quality and Participation*, 29(4), pp:4-7.
- Pascal, C. (2004). Foreword. In: A. Schweyer, *Talent Management Systems: Best Practices in Technology Solutions for Recruitment, Retention and Workforce Planning*, P.9. San Francisco: CA: John Wiley & Sons.

- Perrin, T. (2003). *Working Today: Understanding What Drives Employee Engagement.*
- Piansoognern, O., Anurit, P. & Kuiyawattananonta, S. (2011). Talent Management in Thai Cement Companies: A Study of Strategies and Factors Influencing Employee Engagement, *African Journal of Business Management*, 5(5), pp:1578-1583.
- Powell, J. et al.(2013). Has the British National Health Service (NHS) Got Talent? A Process Evaluation of the NHS Talent Management Strategy, *Policy Studies*, 34(3), pp:291-309.
- Puvitayaphan, A. (2008). Talent Management Practices in Selected Companies Listed on the Stock Exchange of Thailand, *Educational Journal of Thailand*, 2(1), pp:1-9.
- Raman, R. et al. (2013). Effects of Partnership Quality, Talent Management and Global Mindset on Performance of Offshore IT Service Providers in India, *Journal of International Management*, 19(4), pp:333-346.
- Ring, T. et al.(2010). *Integrated Talent Management – Turning Talent Management into a Competitive Advantage – An Industry View*, IBM Global Business Services.
- Schweyer, A. (2004). *Talent Management Systems: Best Practices in Technology Solutions for Recruitment, Retention and Workforce Planning*. Toronto: Wiley.
- Scullion, H., Collings, D.G. & Caligiuri, P. (2010). Global Talent Management, *Journal of World Business*, 45(2), pp:105-108.
- Silzer, R. & Dowell, B.E. (2010). Startegic Talent Management Matters. In: R. Silzer, & B. E. Dowell, *Strategy-Driven Talent Management: A Leadership Imperative* (pp. 3-72). San Francisco: CA: Jossey-Bass.
- Sloan, E.B., Hazucha, J.F. & Van Katwyk, P.T. (2003). Strategic Management of Global Leadership Talent. In: W. H. Mobley, & P. W. Dorfman, *Advances in Global Leadership*, Vol. 3, pp: 235-274. New York: NY:JAI.
- Smith, R. (2009). Greed Is Good, *Wall Street Journal*, W1.
- Sumardi, W.A. & Othman, R. (2009). The Three Faces of Talent Management in Malaysia, *International Journal of Business Research*, 10(1), pp:181-185.
- VanDijk, H. (2008). The Talent Management Approach to Human Resource Management: Attracting and Retaining the Right People, *Journal of Public Administration*, 43(1), pp:385-395.
- Warren, C. (2006). Curtain Call: Talent Management, *People Management*, pp:24-29.
- Williams-Lee, A. (2008). Accelerated Leadership Development: Tops The Talent Management Menu at McDonald's, *Global Business and International Excellence*, pp:15-31.

# **C**ustomers' Perspective Towards Perceived Risk with Special Reference to E-Banking Products: A Comparative Analysis

**Naresh G Shirodkar\***

## **Abstract**

The study analyses the customer's perspectives towards perceived risk in using electronic banking products among the different customer sections viz., government employees, self employed, housewives, students and corporate customers of the respective banks in the state of Goa. It is decided to include 2 public sector banks (SBI & Corporation Bank) and 2 private sector banks respectively (ICICI & Axis Bank). The study is mainly based on primary data, with a sample size of total 460 respondents. The data is entered using SPSS and chi-square and statistical percentage methods are employed to analyse the data. The focus of the study is particularly on electronic products. The electronic products selected for this study are ATM card, Credit Card, Internet Banking, RTGS / NEFT and Phone Banking.

The study also opined that a large percentage of the customers use the service of ATM Card. However, majority of them perceive the risk of system failure and PIN leakage. This is observed across all the customer sections included in the study.

In the case of credit cards, a negligible percentage of customers possess credit card, but majority of the customers having it, have used the service of the same. Similarly, a high percentage of the customers perceive the risk of inflating the due amount in using the service of credit card. (This is applicable to government employees and self employed customers only).

In the case of internet banking, a small percentage of customers have net banking account, but majority of them having it, have used the service of net banking. It is also noticed that a high percentage of the customers perceive the risk of hackers in

---

\* Assistant Professor, Dnyanprassarak Mandals College and Research Centre, Assagao, Goa and can be reached at naresh\_dmc@rediffmail.com

using the service of net banking. This is noticed commonly across all the customer sections included in the study.

As regards phone banking, the percentage of customers using the service of phone banking is highest amongst corporate customers. However, in other customer sections, the percentage of customers using this service is negligible. Majority of the customers using the service of phone banking perceive the risk of absence of privacy and unknown person inquiring about ones account position. This is particularly observed in the case of government employees, self employed and corporate customers only.

In the case of government employees, self employed, students and corporate customers, the percentage of customers using the service of RTGS / NEFT is negligible. In the case of housewives, the use of RTGS / NEFT is absent. Lastly, the study suggests that banks should create awareness regarding the various electronic products and encourage the customers to use such products.

**Keywords:** Bank, ATM, Credit Card, Internet Banking, Phone Banking, RTGS/NEFT

---

## Introduction

Electronic or E-banking implies banking done through electronic systems for customer transactions and internal accounting and book keeping, instead of using the traditional manual system of banking. E-banking is one of the latest emerging trends on the Indian banking scenario. Prior to liberalization of banking system in 1991, the usage of electronic banking, though present in India, was restricted to foreign banks and specialized foreign exchange branches of some leading banks in the public sector. Furthermore, the usage too was sporadic and its impact was confined to metros and few particular sectors of banking.

Presently, the banking industry is on a major technological upgradation drive after having successfully absorbed the international standard in its operating norms. The banking sector in India has made remarkable progress since the economic reforms in 1991. New private sector banks have brought the necessary competition into the industry and spearheaded the changes towards higher utilization of technology improved customer service and innovative products. Customers are now becoming increasingly conscious of their rights and are demanding more than ever before. Better service quality, innovative products, better bargains are all greeting the Indian customers. Competition in the banking sector gets intensified because of low product differentiation and easy capability of most banks are shifting from a product-centric mode to a customer-centric model, as customer satisfaction has become one of the major determinants of business growth.

## Objectives of the Study

To make a comparative analysis of different customer sections with respect to possession, usage and types of perceived risk towards e-banking products.

## Research Methodology

- **Data Source:** The study is based on primary as well as secondary data. The primary data is collected through a field survey through a questionnaire method.
- **Sampling Procedure:** The sampling procedure employed for selection of banks, bank customers is as follows:
  - **Selection of the Banks:** It is decided to choose 2 public sector and 2 private sector banks for a detailed investigation. Altogether there are four banks to be studied. For the present study, it is decided to include State Bank of India, Corporation Bank, ICICI Bank and Axis Bank.
  - **Selection of Customer Respondents:** It is decided to choose 100 respondents from each select bank with a total sample size of 400 respondents. For the present study, it is also decided to select 25 government employees, 25 self-employed, 25 house wives and 25 student customers from each select bank. The study is also based on 60 firms / companies as bank customers of public sector and private sector banks.
  - **Identification of Parameters:** The variables which address the objectives effectively are identified and included in the questionnaire. For instance customer perception towards quality of service, customer satisfaction, possession, usage, risk perceived etc. are addressed.
- **Data Collection Instrument:** The necessary primary data from the selected bank customers is collected with an appropriate questionnaire.
- **Analytical Tools:** To achieve the objectives of the study, the data collected is entered using SPSS.14. The following tools suiting to the data are employed in analyzing the data: viz. chi square and percentage method.
- **Coverage of the Study:** The present study intends to examine the customer's perception and risk involved towards the e-banking products in the state of Goa.

## Review of Literature

After referring the various research articles / reports, Ph.D. and M.Phil thesis, it can be concluded that a lot of studies have been undertaken on customer perceptions, customer satisfaction, customer complaints, e-banking and so on. But there have been very few studies on customers perception towards bank attributes, types of risk perceived, product specific customer complaints, customers opinion towards electronic products etc.

The above reviewed literature clearly indicates the various aspects of the customer's perception. According to Biradar (2008) changing lifestyles of people are the compelling reasons for the banking sector to change according to the needs of customers for providing satisfactory services. Jha *et al* (2008) indicated that the majority of the customers use e-banking products due to the hectic lifestyle of the people.

Hazra *et al* (2009) revealed that the customers of private banks are more committed and loyal, as they receive better quality of service. Gupta (2008) indicated that the location of the bank, customer friendliness and brand image are the important factors for selecting

the banks. Shresthi (2002) opined that good service is the most influential factor in the selection of a particular bank.

Uppal and Chawla (2009) revealed that the customers of all banks are interested in electronic banking products and are also found to be more demanding with the passage of time. In the case of ATM card, The RBI Report (2011) depicted that the use of ATM cards was found more amongst the youth. Kumar *et al* (2009) revealed that the use of ATM and internet banking is more in the urban areas as compared to rural areas. Anitha (2008) indicated that the number of fraud cases involved in the case of ATM cards are higher in private sector banks than the public sector banks.

As regards internet banking, Joshi (2008) opined that internet banking is cost effective and convenient means to carry out banking transactions. However, Nagesh (2008) revealed that internet banking is associated with the different types of risk viz. threat to privacy of individual transactions and security of data. Similarly, Nath *et al* (2001) indicated that the internet banking has led to the reduction in customer trust and degradation in the customer banker relationship. Kumar *et al* (2009) indicated that income and education level are positively related to the adoption of new technology by the bank customers. According to Bapat (2009) although newer payment products are being developed but the traditional products such as cheques are still used to make/ receive payments.

Lastly, according to The Times News Network Report (2013) banks do not compensate the customers on the account of gross negligence on the part of the customers. However, Times News Network also revealed that the Consumer disputes redressal forum, while disposing a complaint, directed the SBI to compensate its customer due to the malfunctioning of the ATM. Also, Navhind Times Network reported that the debit card fraud cases in the Goa state have increased over a period of time. The government employees, housewives and students are victims of such scamsters.

## Analysis and Discussion

Comparative Perception Analysis of Government employees, Self employed, housewives, students and corporate customers with regard to electronic products is discussed below:

**Table-1: Gender**

		Gender		<b>Total</b>
		<b>Male</b>	<b>Female</b>	
<b>Comp.</b>	<b>Gov. emp.</b>	<b>Count</b>	60	100
		% within comp	(60)	(40)
	<b>Self emp.</b>	<b>Count</b>	73	100
		% within comp	(73)	(27)
	<b>Housewives</b>	<b>Count</b>	0	100
		% within comp	(0)	(100)
<b>Students</b>	<b>Count</b>	63	100	
	% within comp	(63)	(37)	100.0%
<b>Total</b>	<b>Count</b>	196	204	400
	% within comp	49.0%	51.0%	100.0%

Source: Primary survey conducted during 2011-12

Note: Figures in the bracket indicate percentage

It is noticed from the above table that, 60%, 73% and 63% of the government employees, self employed and student customers are male customers. It is evident from the above table that a high percentage of government employees, self employed and students customers are found to be male customers.

The possible reason for this could be that the decision regarding financial transactions are mostly taken by the male counterparts. This reduces the female participation in the financial transactions.

**Table-2: Annual Income**

<b>Sr. No.</b>	<b>Variables</b>	<b>Government Employees</b>	<b>Self Employed</b>
		<b>No. of Respondents</b>	
1)	Less than 50000	2 (2)	8 (8)
2)	50001 to 100000	6 (6)	12 (12)
3)	100001 to 150000	6 (6)	13 (13)
4)	150001 to 200000	15 (15)	15 (15)
5)	200001 to 250000	16 (16)	7 (7)
6)	250001 to 300000	22 (22)	20 (20)
7)	300001 and above	33 (33)	25 (25)

Source: Primary Survey Conducted during 2011-12

Note: Figures in the bracket indicate percentage

It is noticed from the above table that a high percentage of self employed and government employees belong to the higher income group. Thus, the analysis revealed that, majority of the customers earn high income level. This reflects higher standard of living of the customers.

**Table-3: Age Analysis**

		<b>Age</b>						<b>Total</b>
		<b>Less than 21 yrs</b>	<b>21 to 25 yrs</b>	<b>26 to 30 yrs</b>	<b>31 to 35 yrs</b>	<b>36 to 40 yrs</b>	<b>40 yrs &amp; above</b>	
<b>Comp.</b>	<b>Count</b>	0	10	32	32	18	8	100
<b>Govt. emp.</b>	<b>% within comp</b>	(0)	(10)	(32)	(32)	(18)	(8)	25%
<b>Self Emp.</b>	<b>Count</b>	4	13	26	38	14	5	100
	<b>% within comp</b>	(4)	(13)	(26)	(38)	(14)	(5)	25%
<b>House Wives</b>	<b>Count</b>	2	9	21	28	22	18	100
	<b>% within comp</b>	(2)	(9)	(21)	(28)	(22)	(18)	25%
<b>Students</b>	<b>Count</b>	68	32	0	0	0	0	100%
	<b>% within comp</b>	(68)	(32)	(0)	(0)	(0)	(0)	25%
<b>Total</b>	<b>Count</b>	74	64	79	98	54	31	400
	<b>% of Total</b>	18.50%	16.00%	19.80%	24.50%	13.50%	7.80%	100%

Source: Primary Survey Conducted during 2011-12

Note: Figures in the bracket indicate percentage

It is observed from the above table that a sizeable percentage of the respondents belong to the younger age group. This is noticed across all the customer sections included in the study. It is also evident that a small percentage of the respondents are found in the older age group. This mainly observed in the case of government employees, house wives and self employed customers. However, student customers belong to a very younger age group.

The result indicates that majority of the customers belong to the younger age group.

**Table-4: Education**

		Education							
		Primary	High School	SSC	HSSC	Graduate	Post Graduate	others	Total
<b>Comp</b>	Gov. emp.	Count	0	0	10	13	58	18	1 100
		% within comp	(0)	(0)	(10)	(13)	(58)	(18)	(1) 100%
	Self emp.	Count	2	1	19	23	45	4	6 100
		%within comp	(2)	(1)	(19)	(23)	(45)	(4)	(6) 100%
	House wives	Count	2	9	24	35	26	4	0 100
		%within comp	(2)	(9)	(24)	(35)	(26)	(4)	(0) 100%
	Students	Count	0	0	0	14	73	12	1 100
		%within comp	(0)	(0)	(0)	(14)	(73)	(12)	(1) 100%
<b>Total</b>		Count	4	10	53	85	202	38	8 400
		% within comp	1.0%	2.5%	13.3%	21.3%	50.5%	9.5%	2.0% 100%

Source: Primary Survey Conducted during 2011-12

Note: Figures in the bracket indicate percentage

It is evident from the above table that a high percentage of the customers have higher education level. This is observed particularly in the case of government employees and student customers, whereas, in the case of housewives and self employed customers, sizeable percentage of them have lower education level.

**Table-5: Length of Association**

		Association						
		less than 1 yr	1 to 3 yrs	3 to 6 yrs	6 to 10 yrs	10 yrs & above	Total	
<b>Comp</b>	Gov. emp.	Count	5	39	33	15	8	100
		% within comp	(5)	(39)	(33)	(15)	(8)	100.0%
	Self emp.	Count	13	36	34	15	2	100
		% within comp	(13)	(36)	(34)	(15)	(2)	100.0%
	House wives	Count	7	52	29	8	4	100
		% within comp	(7)	(52)	(29)	(8)	(4)	100.0%
	Students	Count	37	40	17	3	3	100
		% within comp	(37)	(40)	(17)	(3)	(3)	100.0%
	Corporates	Count	0	15	22	14	9	60
		% within comp	(0)	(25)	(36)	(23)	(15)	100.0%
<b>Total</b>		Count	13.5%	39.6%	29.3%	12.0%	5.7%	100.0%
		% within comp						

Source: Primary Survey Conducted during 2011-12

Note: Figures in the bracket indicate percentage

It is observed from the above table that majority of the customers are associated with the respective banks for a short period of time (up to six years). This is noticed across all the customer sections included in the study.

**Table-6: Attributes of the Bank**

Sr. No.	Variables	Govt. Empl.	Self emp.	Housewives	Students	Corporates
		No. of Respondents				
1.	Quality of service	34 (34)	31 (31)	44 (44)	39 (39)	19 (32)
2.	Technology	41 (41)	33 (33)	18 (18)	37 (37)	19 (32)
3.	Trust	23 (23)	31 (31)	33 (33)	26 (26)	22 (37)
4.	Location	23 (23)	34 (34)	37 (37)	23 (23)	20 (33)
5.	Type of Bank	11 (11)	16 (16)	5 (5)	3 (3)	15 (25)

Source: Primary Survey Conducted during 2011-12

Note: Figures in the bracket indicate percentage

It is observed from the above table that, among the various factors, technology is valued by the government employees as the most important factor. This factor is preferred by the highest number of customers. In the case of housewives and student customers, quality of service is the most valued attribute of the bank. In the case of self employed and corporate customers, location of the bank and trust factor is preferred by the maximum number of customers. Lastly, corporate customers value the trust factor the most because they deal in large scale transactions.

**Table-7: Satisfaction**

Chi-Square Tests		Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square		22.055	4	0.000

**Table-8: Satisfaction level**

		Satisfaction		
		Yes	No	Total
Comp	Gov. emp.	Count	87	13
		% within comp.	(87)	(13)
	Self.emp.	Count	87	13
		% within comp.	(87)	(13)
	Housewives	Count	94	6
		% within comp.	(94)	(6)
Students	Count	72	28	100
	% within comp.	(72)	(28)	100%
	Count	54	6	60
Corporates	% within comp.	(90)	(10)	100%
	Count	394	66	460
Total		85.70%	14.30%	100.00%

Source: Primary Survey Conducted during 2011-12

Note: Figures in the bracket indicate percentage

It is observed from the above table that the pearson chi square value is significant. This implies that there is a significant difference in the satisfaction level among the different customer sections. (as shown in table no.7).

It is evident that from table no. 8 that, in the case of student customers, the percentage of satisfied customers is lowest as compared to that of other customer sections. This may be because the student customers are pursuing higher education and are aware about the recent developments in the banking sector. Hence, the expectations of the student customers are quite higher as compared to that of other customer sections.

In order to find the significant difference within the different groups, with respect to the customer satisfaction, chi-square test is conducted.

**Table-9: Difference within the Groups**

Component		Value	df	Asymp. Sig. (2-sided)
Government Employees and Self Employed	Pearson chi-square	0.000	1	1.000
Government Employees and House wives	Pearson chi-square	2.850	1	0.091
Government Employees and Students	Pearson chi-square	6.903	1	0.009
Government Employees and Corporate	Pearson chi-square	0.323	1	0.570
Self Employed and House wives	Pearson chi-square	2.850	1	0.091
Self Employed and students	Pearson chi-square	6.903	1	0.009
Self Employed and Corporate	Pearson chi-square	0.323	1	0.570
House wives and Students	Pearson chi-square	17.151	1	0.000
House wives and Corporates	Pearson chi-square	0.865	1	0.352
Students and Corporates	Pearson chi-square	7.261	1	0.007

It is observed from the above table that there exist a significant difference between in the case of customers satisfaction among student customers and government employees, self employed, housewives, students and corporate. However, there is no significant difference observed between the other components included in the study.

**Table-10: Possession of ATM Card**

Chi-Square Tests	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	6.123	3	0.106

**Table-11: Possession of ATM card**

			ATM Possession			
			Yes	No	Total	
Comp	Gov.emp.	Count	92	8	100	
		% within comp	(92)	(8)	100%	
	Self emp.	Count	86	14	100	
		% within comp.	(86)	(14)	100%	
	Housewives	Count	85	(15)	100	
		% within comp.	(85)	15	100%	
	Students	Count	94	6	100	
		% within comp.	(94)	(6)	100%	
Total		Count	357	43	400	
		% of Total	89.3%	10.8%	100.0%	

Source: Primary Survey Conducted during 2011-12

Note: Figures in the bracket indicate percentage

It is evident from the Table-10, that there is no significant difference in the possession of ATM card among different customer sections. This depicts that all the customer sections possesses ATM cards.

The result shown in the Table-11 also confirms the similar findings. This shows the popularity of ATM card facility among the different customer sections.

**Table-12: Use of ATM Card**

Chi-Square Tests			
		Value	df
			Asymp. Sig. (2-sided)
Pearson Chi-Square		16.757	3 .001

**Table-13: Use of ATM Card**

			Use of ATM			
			Yes	No	Total	
Comp	Gov. emp.	Count	90	2	92	
		% within comp	(98)	(2)		
	Self emp.	Count	80	6	86	
		% within comp	(93)	(7)		
	Housewives	Count	68	17	85	
		% within comp	(80)	(20)		
	Students	Count	84	11	95	
		% within comp	(88)	(12)		
Total		Count	322	36	358	
		% of Total	89.9%	10.1%	100.0%	

Source: Primary Survey Conducted during 2011-12

Note: Figures in the bracket indicate percentage

It is evident from the above table that there exist a significant difference in the use of ATM card across the different customer sections (as shown in table no. 12).

It is also seen in table no. 12 that the percentage of housewives using ATM card is lower as compared to that of other customer sections. The housewives mostly visit the bank branch for availing banking services and hence the use ATM service does arise much in the case of housewives.

In order to find the significant difference within the different groups, chi square test is conducted between the different customer sections.

**Table-14: Difference within the groups**

<b>Component</b>		<b>Value</b>	<b>df</b>	<b>Asymp. Sig.</b>
Government Employees and Self Employed	Pearson chi-square	2.389	1	0.122
Government Employees and House wives	Pearson chi-square	14.651	1	0.000
Government Employees and Students	Pearson chi-square	6.391	1	0.011
Self Employed and House wives	Pearson chi-square	6.228	1	0.013
Self Employed and students	Pearson chi-square	1.123	1	0.289
House wives and Students	Pearson chi-square	2.422	1	0.120

It is noticed from the above table that there exist a significant difference with respect to the use of ATM card between government employees and housewives and students. It is also observed that there is a significant difference among self employed and housewives. Similarly there is no significant difference among the other groups in the case of use of ATM card.

**Table-15: Risk perceived in Using ATM Card**

<b>Chi-Square Tests</b>		<b>Value</b>	<b>df</b>	<b>Asymp. Sig. (2-sided)</b>
Pearson Chi-Square		2.564	3	.464

**Table-16: Risk Perceived in Using ATM Card**

Comp			<b>Risk</b>		
			<b>Yes</b>	<b>No</b>	<b>Total</b>
Gov. emp.	Count	32	58	(64.4)	90
	% within comp	(35.6)			
Self emp.	Count	32	47	(59.5)	79
	% within comp	(40.5)			
Housewives	Count	20	48	(70.6)	68
	% within comp	(29.4)			
Students	Count	35	52	(59.8)	87
	% within comp	(40.2)			
Total	Count	119	205	63.3%	324
	% within comp	36.7%			

Source: Primary Survey Conducted during 2011-12

Note: Figures in the bracket indicate percentage

It is observed from above table that there is no significant difference in the risk perceived in using the service of ATM card (as shown in table no. 15).

Similarly, it is also observed in the table no. 16 that majority of the customers do not perceive risk in using ATM card. This is observed among all the customer sections included in the study. Thus, this reflects the ease of using the ATM facility among the different customer sections.

**Table-17: Types of Risk Perceived in Using ATM Card**

Sr. No.	Variables	Govt.Employy.	Self Employed	Housewives	Students
1)	Risk of PIN leakage	7 (22)	5 (16)	5 (25)	14 (40)
2)	Risk of theft of cash after withdrawing	5 (16)	7 (22)	3 (15)	3 (9)
3)	Risk of carrying cash after withdrawal	9 (28)	5 (16)	5 (25)	4 (11)
4)	Risk of system failure	12 (38)	13 (41)	0	9 (26)
5)	Risk of cash withdrawal Limit	3 (9)	12 (38)	1 (5)	5 (14)
6)	Risk of unavailability of cash	11 (34)	13 (41)	9 (45)	11 (31)
7)	Risk of unavailability of cash access point	4 (13)	2 (6)	0	6 (17)
8)	Any other	0	0	0	0

Source: Primary Data Collected During 2012-13

Note: Figures in the bracket indicate percentages

It is observed from the above table that government employees and self employed customers mainly perceive the risk of system failure, whereas, as in the case of housewives and student customers, largely perceive the risk of unavailability of cash and PIN leakage respectively.

**Table-18: Possession of Credit Card**

		Credit card		
		Yes	No	Total
<b>Comp Gov. emp.</b>	Count	38	62	100
	% within comp	(38)	(62)	100%
<b>Self emp.</b>	Count	35	65	100
	% within comp	(35)	(65)	100%
<b>Total</b>	count	73	127	200
	% within comp	(37)	(63)	100%

Source: Primary Survey Conducted during 2011-12

Note: Figures in the bracket indicate percentage

- Credit cards are not issued to housewives and student customers

It is revealed from the above table that the percentage of customers having credit card is quite lower. This is observed in the case of government employees as well as in the case self employed customers. Lack of information, different risk associated with credit card etc., could be some of the reasons for the same.

**Table-19: Use of Credit Card**

<b>Chi-Square Tests</b>		<b>Value</b>	<b>df</b>	<b>Asymp. Sig. (2-sided)</b>
Pearson Chi-Square		8.519	1	.004

**Table-20: Use of Credit Cards**

		<b>Use of Credit card</b>		
		<b>Yes</b>	<b>No</b>	<b>Total</b>
Comp	Gov. emp.	Count % within comp	34 (89)	4 (10) 38 100.0%
	Self emp.	Count % within comp	21 (60)	14 (40) 35 100.0%
	Total	Count % within comp	55 75.3%	18 24.7% 73 100.0%

Source: Primary Survey Conducted during 2011-12

Note: Figures in the bracket indicate percentage

- Credit cards are not issued to housewives and student customers

As shown in the above table no. 19, there exist a significant difference in the use of credit card among the government employees and self-employed customers.

Also, the percentage of customers using the credit cards is higher in the case of government employees (as shown in table no 20). The possible reason for this could be that the government employees belong to higher income group and also have higher education level, which may enable them to use the same.

**Table-21: Risk Perceived in Using Credit Card**

<b>Chi-Square Tests</b>		<b>Value</b>	<b>df</b>	<b>Asymp. Sig. (2-sided)</b>
Pearson Chi-Square		0.459	1	0.498

**Table-22: Risk perceived towards Credit Card**

		<b>Risk Perceived Cred. Card</b>		
		<b>Yes</b>	<b>No</b>	<b>Total</b>
Comp	Gov.emp.	Count % within comp	23 (68)	11 (32) 34 100.0%
	Self emp.	Count % within comp	16 (76)	5 (23) 21 100.0%
	Total	Count % within comp	39 70.9%	16 29.1% 55 100.0%

Source: Primary Survey Conducted during 2011-12

Note: Figures in the bracket indicate percentage

- Credit cards are not issued to housewives and student customers

It is observed from the table no. 21, that there is no significant difference in the risk perceived in using the service of credit card.

**Table-23: Types of Risk Perceived in Using Credit Card**

Sr. No.	Variables	Government Employees	Self Employed
1)	Risk of inflating the due amount	20 (59)	15 (71)
2)	Risk of Theft and Misuse	4 (12)	2 (10)
3)	Risk of Occurrence of Mistake	6 (18)	5 (23)
4)	Risk of Non acceptance	2 (6)	0
5)	Any other	0	0

Source: Primary Data Collected During 2012-13

Note: Figures in the bracket indicate percentages

It is observed in the above table that majority of government employees and self employed customers perceive the risk of inflating the due amount. A negligible percentage of customers perceive the risk of occurrence of mistake and non acceptance of the credit card.

**Table-24: Possession of Internet Banking Account**

Chi-Square Tests		Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square		43.542	4	.000

**Table-25: Possession of Internet Banking Account**

Comp			Internet Bankg. Acct.		
			Yes	No	Total
Gov. emp.	Count	23	77	100	
	% within comp	(23)	(77)		100.0%
Self emp.	Count	18	82	100	
	% within comp	(18)	(82)		100.0%
Housewives	Count	4	96	100	
	% within comp	(4)	(96)		100.0%
Students	Count	19	81	100	
	% within comp	(19)	(81)		100.0%
Corporates	Count	28	32	60	
	% within comp	(46)	(53)		100.0%
Total	Count	92	368	460	
	% within comp	20.0%	80.0%		100.0%

Source: Primary Survey Conducted during 2011-12

Note: Figures in the bracket indicate percentage

It is revealed from the above table no. 24, that there exists a significant difference in the possession of net banking account among all the customer sections included in the study.

The percentage of customers having net banking account is highest among the corporate customers and lowest among the housewives. (As shown in table no.25)

In order to find the significant difference within the different customer sections, chi square test is conducted.

**Table-26: Difference within the Groups**

Component		Value	df	Asymp. Sig. (2-sided)
Government Employees and Self Employed	Pearson chi-square	0.767	1	0.381
Government Employees and House wives	Pearson chi-square	15.457	1	0.000
Government Employees and Students	Pearson chi-square	0.482	1	0.487
Government Employees and Corporate	Pearson chi-square	9.673	1	0.002
Self Employed and House wives	Pearson chi-square	10.010	1	0.002
Self Employed and students	Pearson chi-square	0.033	1	0.856
Self Employed and Corporate	Pearson chi-square	15.044	1	0.000
Housewives and Students	Pearson chi-square	11.054	1	0.001
Housewives and Corporates	Pearson chi-square	42.667	1	0.000
Students and Corporates	Pearson chi-square	13.836	1	0.000

It is observed from the above table that there exist a significant difference among government employees and housewives and corporate customers with respect to the possession of internet banking account. It is also noticed from the above table that there exist significant difference among self employed customers and housewives and corporate customers. Similarly, there exist a significant difference among housewives and students as well as corporate customers and also between student customers and corporate customers in the case of possession of internet banking among these customer sections.

**Table-27: Use of Internet Bank**

Chi-Square Tests		Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square		32.724	4	.000

**Table-28: Use of Internet Banking**

Comp	Gov.emp.	Use internet bankg.		
		Yes	No	Total
Self emp.	Count	21	2	23
	% within comp	(91)	(9)	100.0%
Housewives	Count	18	0	18
	% within comp	(100)	(0)	100.0%
Students	Count	3	1	4
	% within comp	(75)	(25)	100.0%
Corporates	Count	16	5	21
	% within comp	(76)	(24)	100.0%
Total	Count	25	35	60
	% within comp	(41)	(59)	100.0%
		83	43	126
		65.9%	34.1%	100.0%

Source: Primary Survey Conducted during 2011-12

Note: Figures in the bracket indicate percentage

It is observed from the above Table-27, that there exists a significant difference in the use of net banking across the different customer sections.

The percentage of customers using net banking is highest among the self employed customers (as shown in Table-28).

In order to find the significant difference within the different customer sections with respect to the usage of internet banking, chi square test is conducted.

**Table-29: Difference within the Groups**

Component		Value	df	Asymp. Sig. (2-sided)
Government Employees and Self Employed	Pearson chi-square	1.645	1	0.200
Government Employees and House wives	Pearson chi-square	0.917	1	0.338
Government Employees and Students	Pearson chi-square	1.874	1	0.171
Government Employees and Corporate	Pearson chi-square	16.581	1	0.000
Self Employed and House wives	Pearson chi-square	4.714	1	0.030
Self Employed and students	Pearson chi-square	4.916	1	0.027
Self Employed and Corporate	Pearson chi-square	19.047	1	0.000
House wives and Students	Pearson chi-square	0.003	1	0.959
House wives and Corporates	Pearson chi-square	1.693	1	0.193
Students and Corporates	Pearson chi-square	7.417	1	0.006

It is observed from the above table that there exist a significant difference between corporate customers and government employees, self employed and student customers with respect to the use of internet banking. Also, there exist a significant difference between self employed customers and housewives as well as student customers in using the service of internet banking.

**Table-30: Risk Perceived in Using Internet Banking**

Chi-Square Tests		Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square		53.276	4	.000

**Table-31: Risk Perceived in Using Internet Banking**

Comp	Gov. emp.		Risk Internt. Bankg.		
			Yes	No	Total
<b>Self emp.</b>	Count	21	0	21	
	% within comp	(100)	(0)		100.0%
<b>Housewives</b>	Count	18	0	5	
	% within comp	(100)	(0)		100.0%
<b>Students</b>	Count	3	0	3	
	% within comp	(100)	(0)		100.0%
<b>Corporates</b>	Count	12	0	12	
	% within comp	(100)	(0)		100.0%
<b>Total</b>	Count	16	9	25	
	% within comp	(64)	(36)		100.0%
		70	9	66	
		88%	12%		100.0%

Source: Primary Survey Conducted during 2011-12

Note: Figures in the bracket indicate percentage

It is observed from the above Table-30, that there exists a significant difference in the risk perceived in using net banking across the different customer sections.

In order to find the significant difference within the different customer sections with respect to the risk perceived, chi square test is conducted.

**Table-32: Difference within the Groups**

Component		Value	df	Asymp. Sig. (2-sided)
Government Employees and Corporate	Pearson chi-square	33.714	1	0.000
Self Employed and Corporate	Pearson chi-square	11.349	1	0.001
House wives and Corporates	Pearson chi-square	7.295	1	0.007
Students and Corporates	Pearson chi-square	22.629	1	0.000

It is noticed from the above table that there exist a significant difference towards risk perceived between the corporate customers and government employees, self employed, housewives and student customers, whereas, among other customer sections no significant difference is observed in the risk perceived by the respective customers.

**Table No 33: Types of Risk Perceived in Using Internet Banking**

Sr. No.	Variables	Govt. Employ.	Self Employed	Housewives	Students	Corporate
1)	Risk of hackers	13 (57)	6 (40)	2 (50)	6 (29)	10 (91)
2)	Risk of leakage of password	5 (22)	4 (27)	2 (50)	3 (14)	2 (18)
3)	Risk of error in transaction	8 (35)	5 (33)	0	3 (14)	3 (27)
4)	Risk of phishing	8 (35)	0	1 (25)	1 (5)	4 (36)
5)	Any other	0	0	0	0	0

Source: Primary Data Collected During 2012-13

Figures in the bracket indicate percentages

It is noticed from the above table that the government employees, self employed, housewives, student as well as corporate customers mainly perceive the risk of hackers.

**Table-34: Use of Phone Banking**

#### Chi-Square Tests

	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	55.695	4	0.000

**Table-35: Use of phone banking**

			Use phone bank		<b>Total</b>
			<b>Yes</b>	<b>No</b>	
Comp	Gov. emp.	Count	47	53	100
		% within comp	(47)	(53)	100.0%
	Self employed	Count	35	65	100
		% within comp	(35)	(65)	100.0%
	Housewives	Count	13	87	100
		% within comp	(13)	(87)	100.0%
	Students	Count	23	77	100
		% within comp	(23)	(77)	100.0%
	Corporates	Count	38	22	60
		% within comp	(63)	(36)	100.0%
	Total	Count	156	304	460
		% within comp	33.9%	66.1%	100.0%

Source: Primary Survey Conducted during 2011-12

**Note:** Figures in the bracket indicate percentage

It is evident from the above table that there exists a significant difference with respect to the use of phone banking among the different customer sections. (as shown in no. 34)

The percentage of customers using the service of phone banking is highest among the corporate customers and lowest among the housewives (as shown in table no. 35). This is may due to the fact that corporate customers are having a large number of transactions mainly related to receiving and making payments as a result of this the use of phone banking is more in the case of corporate customers.

In order to find the significant difference within the different customer sections with respect to the use of phone banking, chi square test is conducted.

**Table-36: Difference within the Groups**

<b>Component</b>		<b>Value</b>	<b>df</b>	<b>Asymp. Sig. (2-sided)</b>
Government Employees and Self Employed	Pearson chi-square	2.976	1	0.084
Government Employees and House wives	Pearson chi-square	27.524	1	0.000
Government Employees and Students	Pearson chi-square	12.659	1	0.000
Government Employees and Corporate	Pearson chi-square	4.017	1	0.045
Self Employed and House wives	Pearson chi-square	13.268	1	0.000
Self Employed and students	Pearson chi-square	3.497	1	0.061
Self Employed and Corporate	Pearson chi-square	12.135	1	0.000
House wives and Students	Pearson chi-square	3.388	1	0.066
House wives and Corporates	Pearson chi-square	43.751	1	0.000
Students and Corporates	Pearson chi-square	25.860	1	0.000

It is noticed from the above table that there exist a significant difference in the use of phone banking among corporate customers and government employees, self employed, housewives and student customers. Also, there exist a significant difference between housewives and government employees, self employed and corporate customers. Similarly there is a significant difference in the use of phone banking between government employees and student customers.

**Table-37: Risk Perceived in Using Phone Banking**

<b>Chi-Square Tests</b>			
	<b>Value</b>	<b>df</b>	<b>Asymp. Sig. (2-sided)</b>
Pearson Chi-Square	43.770	4	.000

**Table-38: Risk Perceived in Using Phone Banking**

		<b>Risk Perceived in Phone Bnkg.</b>		
		<b>Yes</b>	<b>No</b>	<b>Total</b>
Comp	Gov.emp.	Count	27	47
		% within comp	(57.4)	(42.6)
	Self emp.	Count	26	35
		% within comp	(74.3)	(25.7)
	Housewives	Count	3	13
		% within comp	(23.1)	(76.9)
	Students	Count	14	24
		% within comp	(58.3)	(41.7)
	Corporates	Count	8	60
		% within comp	(13.3)	(86.7)
Total		Count	78	179
		% within comp	43.6%	56.4%
100.0% 100.0%				

Source: Primary Survey Conducted during 2011-12

Note: Figures in the bracket indicate percentage

It is revealed from the above Table-37, that there exists a significant difference in the risk perceived in using the service of phone banking.

The percentage of customers perceiving risk is highest among the self employed customers and lowest among the corporate customers. (as shown in Table-38).

In order to find the significant difference within the customer sections with respect to the risk perceived, chi square test is conducted.

**Table-39: Difference within the Groups**

<b>Component</b>		<b>Value</b>	<b>df</b>	<b>Asymp. Sig. (2-sided)</b>
Government Employees and Self Employed	Pearson chi-square	2.488	1	0.115
Government Employees and House wives	Pearson chi-square	4.812	1	0.028
Government Employees and Students	Pearson chi-square	0.005	1	0.943
Government Employees and Corporate	Pearson chi-square	23.301	1	0.000
Self Employed and House wives	Pearson chi-square	10.394	1	0.001
Self Employed and students	Pearson chi-square	1.659	1	0.198
Self Employed and Corporate	Pearson chi-square	35.707	1	0.000
House wives and Students	Pearson chi-square	4.220	1	0.040
House wives and Corporates	Pearson chi-square	0.793	1	0.373
Students and Corporates	Pearson chi-square	17.958	1	0.000

It is noticed from the above table that there exist a significant difference with respect to the risk perceived among government employees and housewives and corporate customers. Also, there exist a significant difference between self employed customers and housewives as well as corporate customers. Similarly, there exist a significant difference among housewives and students and between students and corporate customers.

**Table-40: Types of Risk Perceived in Using Phone Banking**

<b>Sr. No.</b>	<b>Variables</b>	<b>Govt. Emp.</b>	<b>Self. Emp.</b>	<b>Housevs</b>	<b>Students</b>	<b>Corporate</b>
1)	Absence of Privacy	7 (26)	10 (38)	1 (33)	6 (43)	5 (63)
2)	Risk of unknown person inquiring about account position	11 (41)	7 (27)	2 (67)	9 (64)	1 (13)
3)	Risk of getting wrong information	11 (41)	10 (38)	1 (33)	5 (36)	4 (50)
4)	Any other	0	0	0	0	0

Source: Primary Survey Conducted during 2011-12

Note: Figures in the bracket indicate percentage

It is observed from the above table that majority of the housewives and student customers perceive the risk of getting wrong information and unknown person inquiring about ones account position. In the case of corporate and self employed customers, most of them perceive the risk of absence of privacy. The government employees mainly perceive the risk of getting wrong information and unknown person inquiring about ones account position.

**Table-41: Use of RTGS/NEFT**

<b>Chi-Square Tests</b>		<b>Value</b>	<b>df</b>	<b>Asymp. Sig. (2-sided)</b>
Pearson Chi-Square		42.476	4	.000

**Table-42: Use of RTGS/NEFT**

		<b>RTGS / NEFT</b>		
		<b>Yes</b>	<b>No</b>	<b>Total</b>
Gov. emp.	Count	20	80	100
	% within comp	(20)	(80)	100.00%
Self. empd.	Count	8	92	100
	% within comp	(8)	(92)	100.00%
Comp	Housewives	0	100	100
	% within comp	(0)	(100)	100.00%
	Students	10	90	100
	% within comp	(10)	(90)	100.00%
	Corporates	20	40	60
	% within comp	(33.30)	(66.70)	100.00%
	Total	58	402	460
	% within comp	12%	88%	100.00%

Source: Primary Survey Conducted during 2011-12

Note: Figures in the bracket indicate percentage

It is evident from above table no. 41, that the pearson chi square value 0.000, is significant at 95% confidence level. This indicates that there is a significant difference in the use of RTGS / NEFT among the different customer sections.

It is observed from Table-42 that the percentage of customers using the service of RTGS/ NEFT particularly among the government employees, self employed, students and corporate customers is negligible, whereas, in the case of housewives it is absent.

In order to find the significant difference within the different customer sections, with respect to the use of RTGS / NEFT, chi square test is conducted.

**Table-43: Difference within the groups**

<b>Component</b>	<b>Value</b>	<b>df</b>	<b>Asymp. Sig. (2-sided)</b>
Government Employees and Self Employed	Pearson chi-square	5.980	1 0.014
Government Employees and House Wives	Pearson chi-square	19.207	1 0.000

Government Employees and Students	Pearson chi-square	3.922	1	0.048
Government Employees and Corporate	Pearson chi-square	3.556	1	0.059
Self Employed and House Wives	Pearson chi-square	5.701	1	0.017
Self Employed and Students	Pearson chi-square	0.244	1	0.621
Self Employed and Corporate	Pearson chi-square	16.670	1	0.000
House Wives and Students	Pearson chi-square	7.792	1	0.005
House Wives and Corporates	Pearson chi-square	34.383	1	0.000
Students and Corporates	Pearson chi-square	13.402	1	0.000

It is observed from the above table that there exist a significant difference in the use of RTGS / NEFT among government employees and self employed, housewives and students customers. It is also observed that there exist a significant difference between corporate customers and self employed, housewives and students customers. Similarly, a significant difference is also observed among self employed customers and housewives and also among housewives and student customers in the use of RTGS / NEFT.

**Table-44: Risk Perceived in Using RTGS / NEFT**

<b>Chi-Square Tests</b>			
	<b>Value</b>	<b>df</b>	<b>Asymp. Sig. (2-sided)</b>
Pearson Chi-Square	13.104	4	.011

**Table-45: Risk Perceived Operating RTGS / NEFT**

Comp		<b>Risk Perceived RTGS / NEFT</b>		
		<b>Yes</b>	<b>No</b>	<b>Total</b>
Govt. emp.	<b>Count</b>	3	17	20
	% within comp	(15)	(85)	100.0%
Self. emp.	<b>Count</b>	4	4	8
	% within comp	(50)	(50)	100.0%
Housewives	<b>Count</b>	0	0	0
	% within comp	(0)	(0)	0%
Students	<b>Count</b>	4	5	9
	% within comp	(44.4)	(55.6)	100.0%
Corporates	<b>Count</b>	6	54	60
	% within comp	(10)	(90)	100.0%
<b>Total</b>	<b>Count</b>	17	81	98
	% within comp	17.3%	82.7%	100.0%

Source: Primary Survey Conducted during 2011-12

Note: Figures in the bracket indicate percentage

It is evident from the above table that the chi square value is 0.011 (as shown in Table-44), is significant. This implies that there is a significant difference in the risk perceived among the different customer sections.

In order to find the significant difference within the different customer sections, with respect to the perceived risk, chi square test is conducted.

**Table-46: Difference within the groups**

Component		Value	df	Asymp. Sig. (2-sided)
Government Employees and Self Employed	Pearson chi-square	3.733	1	0.053
Government Employees and House wives	Pearson chi-square	0.175	1	0.676
Government Employees and Students	Pearson chi-square	2.939	1	0.086
Government Employees and Corporate	Pearson chi-square	0.376	1	0.540
Self Employed and House wives	Pearson chi-square	0.900	1	0.343
Self Employed and students	Pearson chi-square	0.052	1	0.819
Self Employed and Corporate	Pearson chi-square	9.004	1	0.003
House wives and Students	Pearson chi-square	0.741	1	0.389
House wives and Corporates	Pearson chi-square	0.111	1	0.739
Students and Corporates	Pearson chi-square	7.493	1	0.006

It is noticed from the above table that there exist a significant difference in the case of risk perceived between corporate customers and self employed and student customers only.

**Table-47: Types of Risks Perceived in Using RTGS / NEFT**

Sr. No.	Variables	Govt Empl.	Self Employed	Students	Corporate
1)	Risk of Absence of Acknowledgement	1 (33)	2 (50)	0 (0)	2 (33)
2)	Risk of Errors in Transactions	2 (67)	1 (25)	4 (100)	4 (67)
3)	Risk of unavailability of RTGS/NEFT	0 (0)	3 (75)	0 (0)	0 (0)
4)	Any other	0	0	0	0

Source: Primary Survey Conducted during 2011-12

Note: Figures in the bracket indicate percentage

It is observed from the above table that majority of the customers perceive the risk of error in transactions. This is mainly noticed among the government employees, students and corporate customers. As regards the self-employed customers, majority of them perceive the risk of unavailability of RTGS / NEFT service in the bank.

## Findings, Conclusion and Suggestions

The following are the findings of the study:

- 1) The technology is considered to be the most valued attribute of the bank particularly in the case of government employees. In the case of housewives and student customers, location of the bank is preferred by the highest number of customers. The location of the bank is the most valued attribute of the bank in the case of self employed respondents. However, in the case of corporate customers, trust factor is chosen by the maximum number of customers as the most valued attribute of the bank.
- 2) Though majority of the customers are satisfied with quality rendered by the respective banks, however, the percentage of satisfied student customers is found to be lower as compared to other customer sections included in the study. Thus, there is a significant difference in the satisfaction level among the different customer sections.
- 3) A high percentage of the customers possess the ATM card. Thus, there is no significant difference in the possession of ATM card between the customer sections. However, there is a significant difference in the use of ATM card among the customer sections.
- 4) The government employees as well as self employed customers mainly perceive the risk of system failure. As regards, housewives and student customers perceive the risk of unavailability of cash and risk of PIN or code leakage.
- 5) A small percentage of customers posses credit card, but majority of them having it have used the service of credit card. This is observed in the case of government employees as well as self employed customers.
- 6) A high percentage of government employees as well as self employed customers mainly perceive the risk of inflating the due amount in using the service of credit card.
- 7) A small percentage of customers have net banking account, but majority of them having it have used the service of the same. This is observed across all the customer sections included in the study.
- 8) The customers using the service of net banking mainly perceive the risk of hackers and risk of errors in transaction in using the service of net banking. This is observed across all the customer sections included in the study.
- 9) The percentage of customers using the service of phone banking is highest in the case of corporate customers. However, among the other customers, the percentage of customers using the service of phone banking is negligible. Thus, there exists a significant difference in the use of phone banking among the different customer sections.
- 10) Majority of the government employees, self employed and housewives perceive the risk of getting wrong information from the bank officials, whereas, the student and corporate customers, perceive the risk of absence of privacy in using the service of phone banking.

11) A negligible percentage of the customers use the service of RTGS/NEFT. This is noticed in the case of government employees, self employed, student and corporate customers. However, in the case of housewives, the use of RTGS / NEFT is absent. Thus, there exist a significant difference in the use of RTGS / NEFT among the different customer sections.

## Suggestions

- 1) Banks should also provide information to the customers regarding the different risks associated with electronic products.
- 2) Banks must set up a counter to handle and solve the difficulties of the customers particularly regarding electronic products.
- 3) A large number of customer's possess electronic products viz. ATM/Credit Card, internet banking account etc. However, many of them hardly use these e-banking products. In this regard, banks should create awareness regarding the various electronic products and encourage the customers to use such products.
- 4) A large number of customers are not aware about RTGS / NEFT service provided by the banks. Even those customers, who are aware of this, do not prefer to use the same. In this case banks should alert the customers and convey the advantages of such transfer services to the customers.

## References

- Ambawade, H. (1995). *Marketing of Bank Services and Consumers Satisfaction: A Case Study of Co.op.Banks in Sangli City.*" M. Phil Thesis. Kolhapur: Dept. of Commerce, Shivaji University.
- Ashiya, M. (2006). Electronic Payments, *Professional Banker*, pp: 55-62.
- Azzam A.Z. (2013). Managers' Perspective Towards Perceived Risks Associated with Technology Based Self-Services: A Case of Jordan Banks, *Interdisciplinary Journal of Contemporary Research In Business*, 4(11), pp:46-64.
- Balakrishnan, T.V. (2007). Aligning to Techo-Banking, *Professional Banker*, pp: 49-53.
- "Bank Password Sharing Costs Customer Dear," *Times of India*, 13 Dec, 2012.
- Bargal, H. & Sharma, A. (2008). Role of Service Marketing in Banking Sector, *Service Marketing*, 6(1), pp:62-68.
- Biradar, R.D. (2006). Customer Service in Indian Banking: A Challenge, *Recent Trends in Commerce and Management Science*, pp: 28-33.
- Datt, R. & Sundaram, K.P.M. (2012). *Indian Economy*, 6<sup>th</sup> Revised ed, pp: 858-878. New Delhi: S. Chand,
- Desai, H.P. (2004). *Determinants of Expedited Redressal in Banks*. PhD. Thesis. Taleigao Plateau, Goa: Dept. of Management Studies, Goa University.

- Desai, V. (2008). *The Indian Financial System and Development* (ed). New Delhi: Himalaya Publishing House.
- Guledgudd, M. L. (2004). "Marketing of Services by Nationalized Banks in Karnataka: A Case Study of Gadag district. PhD. Thesis. Dharwad: Karnatak University.
- Gupta, S. & Verma, R. (2008). Changing A Paradigm In Indian Banking, *Professional Banker*, pp: 21-25.
- Indian Institute of Banking and Finance (2011). *Central Banking*, Mumbai: Indian Institute of Banking and Finance, Macmillan, pp. 69-80.
- Jha, B. K., Gupta, S. L. & Yadav, P. (2008). Use and Effectiveness of New Technologies in Indian Banking: A Study, *Service Marketing*, 6(1), pp: 6-22.
- Joshi, K. M. (2008). Internet Banking Authentication: The Need of the Hour, *Professional Banker*, pp: 25-28.
- Kasturi, R. (2007). Emerging Trends in Indian Retail Banking, *Professional Banker*; pp: 73-77.
- Khan, M.Y. (2007). *Indian Financial System*, 5<sup>th</sup> ed. New Delhi: Tata McGraw Hill. pp: 10.3-10.12.
- Khurana, S. (2009). Customers Preferences Towards Internet Banking, *Marketing Management*, ICFAI University Press, 8(3-4), pp:96-112.
- Kumar, D., Kumar, D. & Saini, A. K. (2009). Adoption of Electronic Banking Technologies by Indian Consumers: An Empirical Study, *Journal of Bharati Vidhyapeeth University*, 2(1), pp: 76-82.
- Kumar, V.T. (2008). Organizational Systems and Controls for Effective Risk Management, *Professional Banker*, ICFAI University Press, pp: 30-33.
- Kumari, S.A. & Narasaiah, S. (2008). Efficient Database and Customer Satisfaction, *Professional Banker*, ICFAI University Press, pp: 29-34.
- Lenka, U., Suar, D. & Mohapatra, K. J. (2009). Customers Perception Towards Service Quality, *Journal of Entrepreneurship*, 18(1), pp: 47-62.
- Luther, S.C.T. (2008). Emerging Foreign Banks: Customer Service is the Key Factor, *Professional Banker*, ICFAI University Press, pp: 27-33.
- Mishra & Puri (2008). *Indian Economy*, 26<sup>th</sup> ed. New Delhi: Himalaya Publishing House, pp: 69-80,834-852.
- More, B. S. (1994). Role of Indian Banks Association (IBA) In The Development of Indian Banking Industry. PhD. Thesis. Kolhapur: Dept. of Commerce, Shivaji University.
- Mulla, R. (1999). Marketing of Services In Bank: A Study of Selected Urban Co-op., Banks Hubli. M. Phil Thesis. Dharwad: Dept., of Commerce, Karnataka University.
- Naguesh, T.R. (2007). Internet Banking – A Regulatory Challenge, *Professional Banker*, ICFAI University Press, pp: 36-47.

- Naik, P.V. (1995). Urban Cooperative Banks in North Kanara District: A Study. PhD., Dharwad: Karnataka University.
- Nath, R., Schrick, P. & Parzinger, M. (2001). Bankers' Perspectives on Internet Banking, *Service Journal*, 1(1), pp: 21-36.
- Parthasarathi, B. R. (2005). Customer Service in Banks and its Importance, *Professional Banker*; ICFAI University Press, pp: 17-22.
- Rathiha, R. & Gnanadhas, E. M. (2007). Truths and Myths of Service Quality in Banks, *Professional Banker*, ICFAI University Press, pp: 33-37.
- Ratnam, V.N. & Kumari, S.V. (2005). Customers Service in Commercial Banks in the New Era, *Professional Banker*; ICFAI University Press, pp: 42-47.
- Sarangapani, A. & Mamatha, T. (2008). Customer Relationship Management in Banking Sector, *Professional Banker*, ICFAI University Press, pp: 39-42.
- Saraswat, S.B. (1995). Marketing of Bank Services with Special Reference to Selected Private Sector Commercial Banks in India. PhD. Thesis. Kolhapur: Dept. of Commerce Shivaji University.
- Sarma, N.V. (2011). *Banking and financial Systems*, New Delhi: Cambridge University Press. Pp: 1-2, 351-375.
- Satish, D. (2007). Teller-Assisted Self Service: Providing The Human Touch, *Professional Banker*, ICFAI University Press, pp: 57-59.
- Shajahan, S. (2005). A Study on The Level of Customer's Satisfaction on Various Modes of Banking Service in India, *Journal of Bank Management*, ICFAI University Press, pp: 79-84.
- Shetty M, "Global Gang Skims Indian Credit Card Industry of Rs. 30 Cr In 2 Months," *Times of India* 6 Feb, 2013.
- Shetty, M., "Customers Don't Have to Pay for Credit Card Fraud," *Times of India* 6 Feb. 2013.
- Shivanand, H. (1995). Performance and Impact of Regional Rural Banks: A Case Study of Malaprabha Grameen Bank in Karnataka. PhD. Thesis. Dharwad: Dept. of Agricultural Economics, University of Agricultural Sciences.
- Shresthi, K. (2002). A Comparative Study of Bank-Customer Relationship in Scheduled Commercial Banks and Urban Cooperative Banks. PhD. Thesis. Kolhapur: Dept. of Commerce, Shivaji University.
- Shrotriya, V. (2007). Techno-Banking Gateway to Market Leadership, *Professional Banker*, ICFAI University Press, pp: 28-31.
- Subbaraju, H.M. (2005). Appraisal of Cost Effectiveness and Profitability in Commercial Banks: A Case Study of SBI. PhD. Thesis. Dharwad: Karnataka University.
- Subbiah, A. & Jayakumar, S. (2009). Growth of ATM's India, *Monthly Public Opinion Surveys*,

- The Indian Institute of Public Opinion, 55 (1), pp: 8-11.
- Subbiah, A. & Jayakumar, S. (2009). Perception of Customers Towards the Services of Commercial Banks, *Monthly Public Opinion Surveys*, The Indian Institute of Public Opinion, 55 (1), pp:10-16.
- Tripathi, R, "Glitch Allows Man to Spend Rs 3 cr on ATM-Debit Cards," *Indian Express* 29 Dec. 2012.
- Tripathy, N.S. (2007). An Empirical Study Of Complaint Management Strategies followed by Banks, *Management Research*, ICFAI University Press, 6(4), pp:45-56.
- Tripathy, P.N. (2006). A Service Quality Model for Customers in Public Sector Banks, *Journal of Bank Management*, pp: 77-82.
- Uppal, R. K. & Chawala, R. (2009). E-Delivery Channel Based Bank Services: An Empirical Study, *Journal of Management Research*, The ICFAI University Press, 8(7), pp:7-33.
- Vijayaragavan, G. (2008). *Bank Credit Management*, ed. New Delhi: Himalaya Publishing House. pp: 146-149
- Yalagatti, G. (2001). Product Portfolio Management by Urban Co-op., Credit Banks in Gokak. M. Phil Thesis. Dharwad: Dept. of Commerce, Karnatak University.
- Yallati, R. M. (2003). Marketing of Bank Services with Special Reference to Sangli District, Maharastra. PhD. Thesis. Kolhapur: Dept. of Commerce, Shivaji University.

## Questionnaire

- 1) Gender: Male  Female
- 2) What is your present age?

1)	Less than 21 years	<input type="checkbox"/>
2)	Between 21 to 25 years	<input type="checkbox"/>
3)	Between 26 to 30 years	<input type="checkbox"/>
4)	Between 31 to 35 years	<input type="checkbox"/>
5)	Between 36 to 40 years	<input type="checkbox"/>
6)	40 years and above	<input type="checkbox"/>

3) What is your educational qualification?

1)	S.S.C.	<input type="checkbox"/>
2)	H.S.S.C.	<input type="checkbox"/>
3)	Graduate	<input type="checkbox"/>
4)	Post Graduate	<input type="checkbox"/>
5)	Any other (specify)	<input type="checkbox"/>

4) What is your annual income?

1)	Less than 50,000/-	<input type="checkbox"/>
2)	Between 50,000/- to 1 Lakh	<input type="checkbox"/>
3)	Between 1 Lakh to 1.5 Lakhs	<input type="checkbox"/>
4)	Between 1.5 Lakhs to 2 Lakhs	<input type="checkbox"/>
5)	Between 2 Lakhs to 2.5 Lakhs	<input type="checkbox"/>
6)	Between 2.5 Lakhs to 3 Lakhs	<input type="checkbox"/>
7)	3 Lakhs and above	<input type="checkbox"/>

5) How long have you been associated with this bank?

1)	Less than one year	<input type="checkbox"/>
2)	1 to 3 years	<input type="checkbox"/>
3)	3 to 6 years	<input type="checkbox"/>
4)	6 to 10 years	<input type="checkbox"/>
5)	10 years and above	<input type="checkbox"/>

6) Which of the following attributes of the bank do you value the most?

Quality of service <input type="checkbox"/>	Technology used <input type="checkbox"/>	Trust <input type="checkbox"/>	Location <input type="checkbox"/>	Type of Bank <input type="checkbox"/>
---------------------------------------------	------------------------------------------	--------------------------------	-----------------------------------	---------------------------------------

7) Are you satisfied with the quality of services provided by your bank?

Yes  No

8) Do you have ATM card?

Yes  No

If yes,

a) Do you use your ATM card for any transaction?

Yes  No

If yes,

a) Do you face any risk while using ATM card?

Yes  No

If yes,

a) What are the different types of risk involved in operating ATM card?

1)	Risk of code leakage	<input type="checkbox"/>
2)	Risk of theft of cash after withdrawing	<input type="checkbox"/>
3)	Risk of carrying cash after withdrawal	<input type="checkbox"/>
4)	Risk of unavailability of cash	<input type="checkbox"/>
5)	Risk of cash withdrawal limit	<input type="checkbox"/>
6)	Risk of unavailability of cash access point	<input type="checkbox"/>
7)	Risk of system failure	<input type="checkbox"/>

9) Do you have a credit card?

Yes  No

If yes,

a) Have you ever used it for any transaction?

Yes  No

If yes,

a) Do you face any risk while using credit card?

Yes  No

If yes,

a) What are the different types of operational risks faced by you in operating a credit card?

1)	Risk of pin code leakage	<input type="checkbox"/>
2)	Risk of theft	<input type="checkbox"/>
3)	Risk of inflating due amount	<input type="checkbox"/>
4)	Risk of occurrence of mistake	<input type="checkbox"/>
5)	Risk of double billing	<input type="checkbox"/>
6)	Risk of Non acceptance	<input type="checkbox"/>

10) Do you have an internet banking account?

Yes  No

If yes,

a) Have you ever used it for any transaction?

Yes  No

If yes,

a) Do you face risk in using internet banking?

Yes  No

If yes,

a) What are the different types of risk faced while operating internet banking?

1)	Risk of hackers	<input type="checkbox"/>
2)	Risk of occurrence of mistake	<input type="checkbox"/>
3)	Risk of not receiving funds	<input type="checkbox"/>
4)	Phishing	<input type="checkbox"/>
5)	Risk of Leakage of ID and Password	<input type="checkbox"/>
6)	Any other (specify)	<input type="checkbox"/>

11) Have you ever utilized the service of RTGS / NEFT?

Yes  No

If yes,

a) Which of the following services RTGS / NEFT provides?

1)	Receiving payment	<input type="checkbox"/>
2)	Making payment	<input type="checkbox"/>
3)	Any other (specify)	<input type="checkbox"/>

a) Do you face any risk while operating RTGS service?

Yes  No

If yes,

a) What are the different types of risk have you faced while using RTGS / NEFT service?

1)	Absence of acknowledgement	<input type="checkbox"/>
2)	Risk of transferring/receiving funds to others account	<input type="checkbox"/>
3)	Risk of non availability of RTGS service	<input type="checkbox"/>
4)	Any other (specify)	<input type="checkbox"/>

12) Have you ever utilized the service of phone banking?

Yes  No

If yes,

a) Do you face any risk while using phone banking?

Yes  No

If yes,

a) What are the different types of risks do you face while using the service of phone banking?

1)	Absence of privacy	<input type="checkbox"/>
2)	Risk of unknown person inquiring about account position	<input type="checkbox"/>
3)	Risk of getting wrong information from bank officials	<input type="checkbox"/>
4)	Any other (specify)	<input type="checkbox"/>



**IPE INSTITUTE OF PUBLIC ENTERPRISE**

# IPE Journal of Management

## ADVERTISEMENT TARIFF

**IPE Journal of Management** will accept a limited number of corporate and institutional advertisements. The size of the journal is 9.5" X 7.0". The tariff rates for the advertisement in the journal are as follows w.e.f. 01-January-2015.

Rs 1 lakh valid for 1 year	Advertisement (Back side cover page - Multi colour in two consecutive issues)
<b>Issue-wise details</b>	
Rs.75,000/-	Backside Cover Page - Multi Colour
Rs.50,000/-	Inner Cover Page - Multi Colour
Rs.40,000/-	One Full Page - Multi Colour
Rs.30,000/-	One Full Page - Black & White
Rs.20,000/-	Half Page - Multi Colour
Rs.15,000/-	Half Page - Black & White

Enquiries about corporate advertisements and appropriate art work should be sent to:

**The Editor**

IPE Journal of Management  
Institute of Public Enterprise  
OU Campus, Hyderabad - 500007

**Contact Details** : E-mail: [editorgpp@ipeindia.org](mailto:editorgpp@ipeindia.org)      Mobile: 9391932156

## COMMON SUBSCRIPTION FORM

To  
 The Publications Division,  
 Institute of Public Enterprise,  
 OU Campus, Hyderabad - 500 007  
 Telangana, India.

Dear Sir / Madam,

I/We wish to subscribe for the following Journal(s) for \_\_\_\_\_ year(s) from \_\_\_\_\_ to \_\_\_\_\_.

S. No.	Journal Title	Annual Subscription Rates				Put a Tick (✓) for Selection
		For India		For other countries		
		Individuals ₹	Academic Libraries ₹	Corporates ₹	Foreign Subscribers (US\$)	
1	Journal of Economic Policy & Research	1500/-	2000/-	3000/-	200	
2	Journal of International Economics	1500/-	2000/-	3000/-	200	
3	Journal of Marketing Vistas	1500/-	2000/-	3000/-	200	
4	The Journal of Institute of Public Enterprise	1500/-	2000/-	3000/-	200	
5	Journal of Governance & Public Policy	1500/-	2000/-	3000/-	200	
6	IPE Journal of Management	1500/-	2000/-	3000/-	200	

Please find enclosed herewith a Demand Draft / Cheque, bearing No. \_\_\_\_\_ drawn on Bank \_\_\_\_\_ dated \_\_\_\_\_ for Rs/US\$. \_\_\_\_\_

(In words) \_\_\_\_\_ drawn in favour of '**Institute of Public Enterprise**', payable at Hyderabad. Please effect the subscription from next issue onwards.

**Names of the Journals for which subscription is sent:**

1. \_\_\_\_\_
2. \_\_\_\_\_
3. \_\_\_\_\_
4. \_\_\_\_\_
5. \_\_\_\_\_
6. \_\_\_\_\_

**Journal Dispatch Address:**

Name of the Individual / Organization \_\_\_\_\_

Address \_\_\_\_\_

City \_\_\_\_\_ Pin \_\_\_\_\_ Country \_\_\_\_\_ Ph. No. \_\_\_\_\_

Mobile No. \_\_\_\_\_ E-mail Address \_\_\_\_\_

**Signature:**

**Office Seal:**



## JOURNAL SUBSCRIPTION RATES

'IPE Journal of Management' is published twice in a year (January-June & July-December). The subscription rates of the Journal per annum are as follows:

India			Foreign Countries
Individuals	Academic	Corporates	
₹ 1,500/-	₹ 2,000/-	₹ 3,000/-	US\$ 200

The subscription amount is payable in advance by Demand Draft / Banker's Cheque only in favour of 'Institute of Public Enterprise' payable at Hyderabad. The Bank Draft / Banker's Cheque may be sent along with the 'Subscription Request Form' given below:

## SUBSCRIPTION REQUEST FORM

To  
The Editor  
IPE Journal of Management  
Institute of Public Enterprise  
OU Campus, Hyderabad - 500007  
Telangana, India

Dear Sir / Madam,

I / We wish to subscribe to 'IPE Journal of Management' for \_\_\_\_\_ year(s). Accordingly, a Demand Draft / Cheque, bearing No.\_\_\_\_\_ dated \_\_\_\_\_ for ₹ / US\$\_\_\_\_\_ drawn in favour of 'Institute of Public Enterprise' payable at Hyderabad' is enclosed herewith. Please effect the subscription from next issue onwards.

Name\_\_\_\_\_

Address\_\_\_\_\_

City\_\_\_\_\_ PIN\_\_\_\_\_ Country\_\_\_\_\_

Phones\_\_\_\_\_

E-mail Address\_\_\_\_\_

\_\_\_\_\_  
*Signature*



## Institute of Public Enterprise

**Institute of Public Enterprise** (IPE), Hyderabad, is a non-profit educational society devoted to Education, Training, Research and Consultancy for business enterprises in public and private sectors. IPE is a premier B-School and is recognised as a 'Centre of Excellence' by the Indian Council of Social Science Research (ICSSR), Ministry of HRD, Government of India, for doctoral studies. It is also recognised by nine universities for guidance of PhD scholars. It has developed strong links

with industry and academic institutions and is the founder member of the Association of Indian Management Schools (AIMS).

IPE strongly believes that HR development including education is crucial for economic growth. As part of its long-term education programme, the Institute runs an AICTE-approved PG Diploma in Business Management, which is also recognised as equivalent to MBA by the Association of Indian Universities (AIU). Added to it, the Institute offers MBA in Public Enterprise for practicing managers in collaboration with Osmania University. With the changing needs of the industry, the Institute also runs sector-specific PGDM programmes in Retail & Marketing, Banking, Insurance and Financial Services, Biotechnology and International Business, as well as an Executive PGDM programme.

The Institute has a strong research wing with a number of research scholars, sponsored by ICSSR and IPE, working on topics of current interest. Its PhD programme is one of the largest in social sciences. Research, both basic and applied, is the forte of the Institute and helps it in its training and educational activities. IPE's research studies are extensively used by the Committee on Public Undertakings (COPU), other Legislative and Government Committees, the Economic Advisory Council to the Prime Minister, several Ministries of the Government of India, Planning Commission, Standing Committee on Public Enterprises (SCOPE) and several Finance & Pay Commissions.

Apart from IPE Journal of Management, IPE also publishes six other journals titled:

- The Journal of Institute of Public Enterprise
- Journal of Economic Policy and Research
- Journal of Marketing Vistas
- Journal of Governance & Public Policy
- Indian Journal of Corporate Governance
- Journal of International Economics



## INSTITUTE OF PUBLIC ENTERPRISE

Shamirpet Campus, Medchal-Malkajgiri Dist, Hyderabad - 500101

Ph: +91-40-234 90 900 Fax: +91-40-234 90 999

Website: [www.ipeindia.org](http://www.ipeindia.org)



# INSTITUTE OF PUBLIC ENTERPRISE

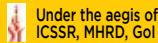
SHAMIRPET, HYDERABAD



South Asian Quality  
Assurance System



Association of  
Indian Universities



Approved  
by AICTE

TRANSFORMING STUDENTS INTO  
GLOBAL BUSINESS LEADERS

## ADMISSIONS OPEN 2018-20

### Why Join IPE?

- RANKED
  - ▶ 8th All India in Top Govt. B-Schools (CSR-GHRDC 2017)
  - ▶ 33rd Rank All India in Best B-Schools (Outlook 2017)
  - ▶ 15th Rank South Zone in Best B-Schools (The Week 2017)
  - ▶ 20th Rank South Zone in Best B-Schools (Business Today 2017)
  - ▶ B+ Rank in Best B-Schools (TIME MBA Education & Careers 2017)
- Excellent Placement and Internship Assistance
- State-of-the-art infrastructure with separate AC hostels for boys and girls
- Strong Industry Interface with Industry Associates and Corporate



- Post Graduate Diploma in Management\*\*\*\*\$
- PGDM - Banking, Insurance and Financial Services\*\*\*\$
- PGDM - International Business\*\*\*\$
- PGDM - Retail Marketing\*\*\$
- PGDM - Human Resource Management\*\$
- PGDM - Executive\*

\*\*\* Approved by AICTE, recognized as MBA equivalent by AIU, NBA Accredited

\*\* Approved by AICTE, recognized as MBA equivalent by AIU

\* Approved by AICTE

\$ AICTE approved program for Foreign Nationals, PIO, OCI, Gulf residents



Institute of Public Enterprise,  
State of Art Shamirpet  
Campus - Awarded 'Five  
Star' rating by GRIHA



Member of EUROPEAN  
FOUNDATION  
FOR MANAGEMENT  
DEVELOPMENT

Attractive Merit Scholarships for top scorers of  
**CAT / XAT / GMAT / MAT / CMAT / ATMA**

For eligibility and other details visit [www.ipeindia.org](http://www.ipeindia.org)  
Tollfree: 1800 3000 4473

Contact: 9949507969 / 9391932129 Email: [admissions@ipeindia.org](mailto:admissions@ipeindia.org)