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Aims & Scope

SAARANSH is an international bi-annual refereed research journal published by RKGIT (MBA), Ghaziabad. The objective of the journal is to provide a forum for discussion of advancement in the area of management. The journal published research papers, articles, book reviews & case studies. The journal invites manuscripts on all aspects of management and business environment.

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FROM THE DESK OF THE EDITOR

1st July 2017, adds on to yet another remarkable day in the history of India after 9th November 2016. This day embarks the implication of Goods and Services Tax (GST) uniformly throughout India Against the prevailing current system where tax is levied at each stage separately by the Union government and the States at varying rates, on the full value of the goods. The Goods and Services Tax (GST) a historic tax reform is meant to be a unified indirect tax across the country on products and services under which, single tax will be levied only. It is a single tax (collected at multiple points) with a full set-off for taxes paid earlier in the value chain.

The GST was introduced with the idea of reducing red-tape, check leakages and paving the way for a transparent indirect tax regime.

Broadly, services are expected to become costlier under the GST regime, as the expected GST rate would be higher than the existing service tax rate of 15%. Clearly, the GST is expected to bring down prices of indigenously manufactured goods on account of current effective indirect taxes (central excise @ 12.5%, State VAT @ 5%-15% etc.) being higher as compared to recommended lower GST rate @ 5% and standard GST rates @ 12% and 18%. Thus, price of certain category of goods may come down depending on the effective rate of indirect taxes being paid at present and the tax brackets under which goods are classified under the GST

Whether the GST will be beneficial to the salaried class, common men, poor, only time will decide in future. Prices of essential commodities, vegetables and fruits are likely to change slightly under the GST regime and services such as eating at restaurants will get more expensive. What will likely get cheaper are items such as clothes, as cascading taxes at various stages of manufacturing would no longer apply to them. Collection of larger tax base through GST should boost up the confidence of the government for allocating funds for social and poverty alleviation, Infrastructural development programmes. Though GST implication may strike high inflation but in all will contribute to gradual increasing the overall GDP.

The biggest tax reform since independence - GST - will pave the way for realization of the goal of One Nation - One Tax - One Market. GST will benefit all the stakeholders namely industry, government and consumer. It will lower the cost of goods and services, give a boost to the economy and make the products and services globally competitive, giving a major boost to 'Make in India' initiative.

The present issue of SAARANSH is more towards the new models and theories of modern Indian economy & socio culture. We hope it will enlighten the management practitioners to better understand the modern India & utilize their current assets effectively. Moreover, I am thankful to all the research scholars & other management practitioners to share their valuable suggestion & guideline to improve the impact of SAARANSH. I extend my heartiest gratitude for valuable support/ suggestions and expecting your patronage in future.

–Dr Arvind Singh

EXPERT'S-COMMENTS for “SAARANSH” RKG Journal of Management

Prof. Jagdish Prakash, Ex Vice Chancellor, University of Allahabad

✍ *SAARANSH is a very standard journal in the area of management which includes empirical articles by national and international authors'*

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✍ *'I am pretty sure that the professionals and faculty of various colleges will contribute in the forthcoming issue of the journal.'*

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✍ *'It proves to be a result of great hard work & creativity'*

Dr R. K. Singh, Faculty, MONIRBA, University of Allahabad, Allahabad

✍ *'The journal is overall an excellent attempt'*

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Exchange Rate Determinants in India: An Analysis

Dr. Amit Kumar Singh *

Ms. Annu Aggarwal**

ABSTRACT

Foreign Exchange rate is one of the most important means through which a country's relative level of economic health is determined. In this paper we try to analysis provide evidence on the determinants of nominal exchange rate. Since we have considered only four macro-economic variables namely GDP, Interest rate, Money supply and Inflation. There could be other factors like government controls, expectation of future exchange rate, movement in current account etc. influencing the exchange rate. We found significant empirical evidence of the antecedents of exchange rate. The purchasing power parity theory as well as macroeconomic theory holds good. Also there is statistically significant correlation between the nominal exchange rate and all the macro economic variables.

Keywords: Exchange Rate, Fixed Exchange Rate System, nominal exchange rate, Multivariate Regression Analysis.

1.0 INTRODUCTION

Foreign Exchange rate is one of the most important means through which a country's relative level of economic health is determined. The exchange rate is defined as "the rate at which one country's currency may be converted into another." It may fluctuate daily with the changing market forces of supply and demand of currencies from one country to another.

Determinants of Exchange Rate

Determination– The demand for a country's currency depends upon the following factors:-

- **GDP**- Country's economic growth and financial stability impact its exchange rates. If the country has a strong, growing economy, then investors will buy its goods and services, and need more of its currency to do so.
- **Interest Rate**- Changes in interest rate affect currency value and dollar exchange rate. Interest rate paid by a country's central bank is a big factor. The higher interest rate makes that currency more valuable. Investors will exchange their currency for the higher-paying one. They then save it in that country's bank to receive the higher interest rate.
- **Money Supply**- By macro-economic theory, we can say that as money supply in the economy increases, the value of currency

decreases and the interest rate decreases. Thus increasing money supply decreases exchange rates.

- **Inflation Rates**- Changes in market inflation cause changes in currency exchange rates. A country with a lower inflation rate than another's will see an appreciation in the value of its currency.
- **Government Policies**- Some of the government policies are specifically intended to affect exchange rate. The government role differs depending upon the exchange rate system. Like-
 - **Fixed Exchange Rate System**- Here, the exchange rates are either held constant or allowed to fluctuate only within narrow boundaries. Thus, Central bank intervention is required to maintain a currency's value within narrow boundaries. The central bank will devalue or revalue (downward or upward adjustment) its currency against other currencies. It is different from depreciation (or appreciation) wherein currency's value is allowed to fluctuate in response to market conditions.
 - **Free Floating Exchange Rate System**- Here, exchange rates are determined by market forces with no government

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intervention. The exchange rate adjusts on continual basis in response to the demand and supply conditions for that country.

2.0 EMPIRICAL EVIDENCES

Dornbusch (1976) developed the monetary model in its sticky-price variant. Smith and Wickens (1986) introduced the monetary model with flexible prices. Nataliya Boyko (2002) studied basic and modified monetary model of exchange rate determination with flexible and sticky prices for period 1996-2001 in Ukraine considering the impact of money demand, real income, interest rate and dollarization ratio on the nominal exchange rate.

Berben and van Dijk (1998) and Berkowitz and Giorgianni (2001) assume stable cointegrating relationship among nominal exchange rates, relative money supplies, and relative output levels.

Levin and Lin (1992) suggest that panel techniques and use of long spans of data can greatly improve the power of unit root and cointegration tests.

But till now, little work has been done on Dollar-Rupee exchange rates on a period ranging from 1991 to 2015, i.e., the whole period after Liberalization-Privatization-Globalization (LPG) policy in Indian markets and India became a free economy. Our paper aims to fill this gap.

3.0 OBJECTIVES AND HYPOTHESIS OF THE STUDY

3.1 Objectives

- To study whether all macro-economic variables namely GDP, interest rate, money supply and wholesale price index have any impact on the nominal exchange rate.
- To study the correlation between the nominal exchange rate and all macro-economic variables namely GDP, interest rate, money supply and wholesale price index.

3.2 Hypothesis

Ho1: There is no impact of gross domestic product on the nominal exchange rate.

HA1: There is positive impact of gross domestic product on the nominal exchange rate.

Ho2: There is no impact of Interest rate on the nominal exchange rate.

HA2: There is negative impact of Interest rate on the nominal exchange rate.

Ho3: There is no impact of money supply on the nominal exchange rate.

HA3: There is negative impact of money supply on the nominal exchange rate.

Ho4: There is no impact of wholesale price index on the nominal exchange rate.

HA4: There is positive impact of wholesale price index on the nominal exchange rate.

Ho5: There is no correlation between nominal exchange rate and all other macro-economic variables.

HA5: There is correlation between nominal exchange rate and all other macro-economic variables.

4.0 DATA AND METHODOLOGY

Model

$$NER = f(\Delta GDP, \Delta MS, \Delta INT, \Delta WPI, \Delta GC, \Delta EXP)$$

Where

NER = Nominal Exchange Rate

ΔGDP = change in gross domestic product

ΔMS = change in money supply

ΔINT = change in interest rate

ΔWPI = change in wholesale price index

ΔGC = change in government controls

ΔEXP = change in expectation of future exchange rate

We have considered only four independent variables namely GDP, Interest rate, money supply and inflation and the purpose of this paper is to tests empirically the movements in the nominal exchange rate because of fluctuations in these variables.

Steps:-

- We ran double log equation by regressing log nominal exchange rate on all other macro-economic variables taken as the independent variables.
- We saw the correlation between nominal exchange rate and all other macro-economic variables namely GDP, money supply, interest rate and WPI.

- We construct graph based on the actual values of all the independent variables under study.
- We construct actual, fitted and residual graph for the dependent variable namely nominal exchange to check the model fitness.

Pearson's Correlation Coefficient

Most common measure of correlation in statistics is the Pearson Correlation. Pearson's Correlation Coefficient is the measure of finding correlation between sets of data in order to explain that how well they are related. In other words, the Pearson's correlation evaluates the linear relationship between the two continuous variables. A relationship is linear when a change in one variable is associated with a proportional change in the other variable. The correlation here is denoted with Greek letter rho (ρ) for a population and the letter 'r' for a sample.

$$r_{xy} = \frac{\sum (x_i - \bar{x})(y_i - \bar{y})}{\sqrt{\sum (x_i - \bar{x})^2 - \sum (y_i - \bar{y})^2}}$$

Where

r_{xy} = Pearson rank correlation

x_i = The variable X

y_i = The variable Y

\bar{x} = Mean value of variable X

\bar{y} = Mean value of variable Y

Period- As the extant literature does not give any such determination of nominal exchange rate based on the macro economic variables for the post liberalisation period.

Periodicity- Macro data is collected annually.

Source- The annual data for the nominal exchange data has been collected from IMF's e-Library. GDP, Money supply, interest rate and wholesale price index data has been collected from RBI website- Handbook of statistics on Indian economy.

Description of Variables- GDP, Interest Rate, Money Supply and Wholesale Price Index, nominal exchange rate.

5.0 ANALYSIS AND RESULTS

5.1 Impact of Macro-economic variables on the nominal exchange rate

Estimated Equation: $(LNER)_t = \alpha + \beta_1(LGDP)_t +$

$$\beta_2(LINT)_t + \beta_3(LMS)_t + \alpha_4(LWPI)_t + u_t$$

Estimating Equation: $(LNER)_t = (-4.824) + (1.739) LGDP + (-0.210) LINT + (-1.614) LMS + (1.165) LWPI + u_t$

p-value (0.003) + (0.002) + (0.183) + (0.0015) + (0.0021)

- The regression results show Table 1 that the independent variables (macro-economic variables) have a significant relationship with the explained variable (NER). The R-square is the coefficient of determination, and its value of **0.903352** indicates that all the explanatory variables in the model jointly explain 90.33% variation in the nominal exchange rate, which means that there are other variables like government controls or expectation of future exchange rate etc. responsible for the rest (9.67%) of the variation in the nominal exchange rate.
- F-statistic is also coming to be statistically significant even at 1% level of significance indicating the model to be a good fit as most of the variation is explained by the explanatory variables considered for the study.
- The intercept term is negative but statistically significant even at 1% level.
- The above table clearly indicates that if **GDP** increases by 1%, nominal exchange rate increases by 1.73% and also statistically significant even at 1% level. This indicates if a country is strong and a growing economy then investors will be more willing to invest in that country and exchange rate will be high and vice versa. **Figure 1** also shows an upward trend indicating India as an growing economy. **(Fig. 2)**

Hence we do not accept the null hypothesis and accept the alternate one stating that there is positive impact of gross domestic product on the nominal exchange rate.

- **Secondly**, If Interest rate increases by 1%, nominal exchange rate decreases by 0.21% but not statistically significant even at 10% level of significance. **(Fig. 3)**

The interest rate parity theory says that the forward rate differs from the spot rate by an amount representing the interest rate differential. Hence the currency of a country at lower interest rate should be at forward premium and vice versa. A



rise in interest rates cause a country's currency to appreciate because higher interest rates provide higher rates to lenders, thereby attracting more foreign capital, which causes a rise in exchange rates and vice versa. But, the figure shows that the behaviour of interest rate has been quite erratic during the period 1991 to 2015. There are many ups and down in the interest rate. This may be the reason for the coefficient not coming out to be statistically significant.

Hence we accept the null hypothesis stating that there is no statistically significant impact of interest rate on the nominal exchange rate.

- Thirdly, the results show that if money supply increases by 1%, nominal exchange rate decreases by 1.61% also statistically significant even at 1% level. **(Fig. 4)**

Thus the results as well as figure fully supports the macroeconomic theory indicating that a rise in money supply will cause a fall in exchange rate and vice versa.

Hence we do not accept the null hypothesis and accept the alternate one stating that there is a negative impact of money supply on the nominal exchange rate.

- **Lastly**, the results show that if wholesale price index increases by 1%, nominal exchange rate increases by 1.16% also statistically significant even at 1% level. This shows that changes in inflation affect the currency values. **(Fig. 5)**

A country having consistently lower inflation rate exhibits an appreciation in currency value and vice versa.

Hence we do not accept the null hypothesis and accept the alternate one stating that there is a positive impact of inflation on the nominal exchange rate.

6.0 CORRELATION BETWEEN THE NOMINAL EXCHANGE RATE AND MACRO-ECONOMIC VARIABLES

Since we are interested in knowing the

determination of nominal exchange rate, hence it is important to see the degree of association between the dependent variable and the independent variables considered for the study.

The **Table 2** shows the correlation results. All the four macro-economic variables are statistically significantly (at 1% significance level) correlated with the nominal exchange rate.

Hence, we do not accept the null hypothesis and accept the alternate one showing that there is a statistically significant correlation between nominal exchange rate and all other macro-economic variables.

7.0 CONCLUSION

Analysis provides more dismal evidence on the determinants of nominal exchange rate. Since we have considered only four macro-economic variables namely GDP, Interest rate, Money supply and Inflation. There could be other factors like government controls, expectation of future exchange rate, movement in current account etc. influencing the exchange rate. We found significant empirical evidence of the antecedents of exchange rate. The purchasing power parity theory as well as macroeconomic theory holds good.

Also there is statistically significant correlation between the nominal exchange rate and all the macro economic variables.

Since variables in the log form is always safe to assume because there is less of volatility. Hence the relationship between log nominal exchange rate and other macro-economic variables is more certain. Therefore, the relationship is coming out to be significant.

Lastly it can be concluded that this is just a preliminary analysis investigating the movements in the nominal exchange rate by studying the changes in macro-economic variables and more econometric models can be used to explore this relationship.

REFERENCES

- Krugman, P.R. and Obstfeld, M. (2000). *International Economics: Theory and Policy*, Addison-Wasley, New York.
- Nataliya Boyko (2002). The monetary model of exchange rate Determination: the case of Ukraine. *Thesis in Master of Arts in Economics*, The National University of "Kiev-Mohyla Academy"
- Dornbusch R. (December, 1976). Expectations and Exchange Rate Dynamics. *The Journal of Political Economy*, Volume 84, Issue 6, pp. 1161-1176.
- Smith P.N., Wickens M.R. (April, 1986). An Empirical investigation into the Causes of Failure of the Monetary Model of the Exchange Rate. *Journal of Applied Econometrics*, Volume 1, Issue 2, p.143-162.
- Berben, R.-P., van Dijk, D. (1998). Does the absence of co-integration explain the typical findings in long-horizon regressions?. *Econometrics Institute, Erasmus University*, Report 9814.
- Berkowitz, J., Giorgianni, L. (2001). Long-horizon exchange rate predictability? *Review of Economics and Statistics*, 83, 81–91.
- Mark, N.C. (1995). Exchange rates and fundamentals: evidence on long-horizon predictability. *American Economic Review* 85, 201–218.
- Levin, A., Lin, C.-F. (1992). Unit root tests in panel data: asymptotic and finite-sample properties. *Discussion Paper 92-23*, Department of Economics, University of California-San Diego.

Table 1: Multivariate Regression Analysis (Double Log Equation)

Dependent Variable	LNER		
Variables	Coefficient	t-Statistic	Prob.
C	-4.824596	-3.371248	0.0030***
LGDP	1.739135	3.505945	0.0022***
LINT	-0.210001	-1.376603	0.1839
LMS	-1.614111	-3.684641	0.0015***
LWPI	1.165900	3.521750	0.0021***
R- square	0.903352		
Adjusted R-squared	0.884022		
S.E. of regression	0.083068		
F-statistic	46.73416		
Prob. (F-statistic)	0.00000***		

Note- Values in parentheses indicates p-value.

***indicates p-value significant at 1% level of significance.

Figure 1: Actual, Fitted and Residual of Nominal Exchange Rate

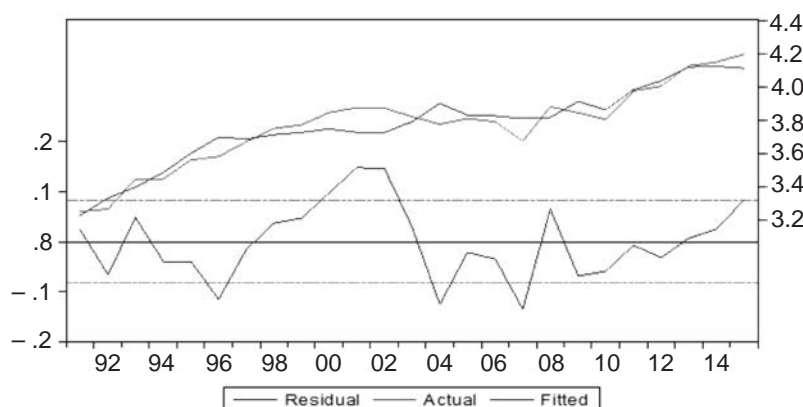




Figure 2: Growth of Gross Domestic Product



Figure 3: Growth of Interest Rate

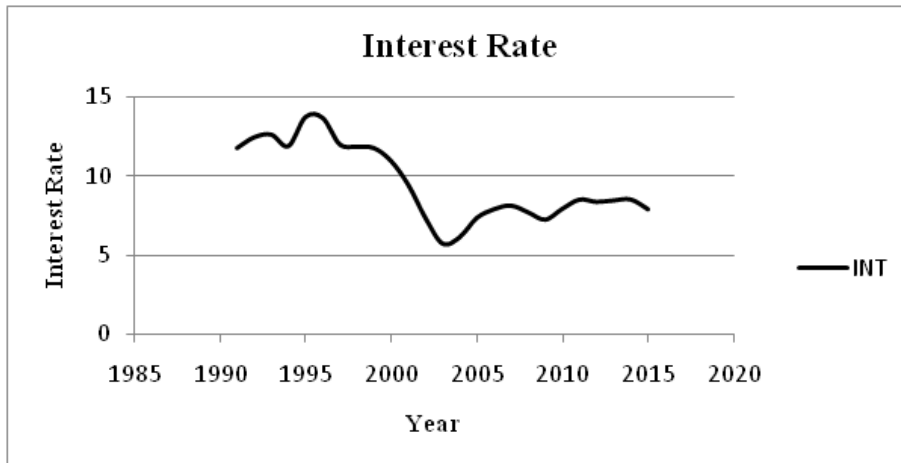


Figure 4: Growth of Money Supply

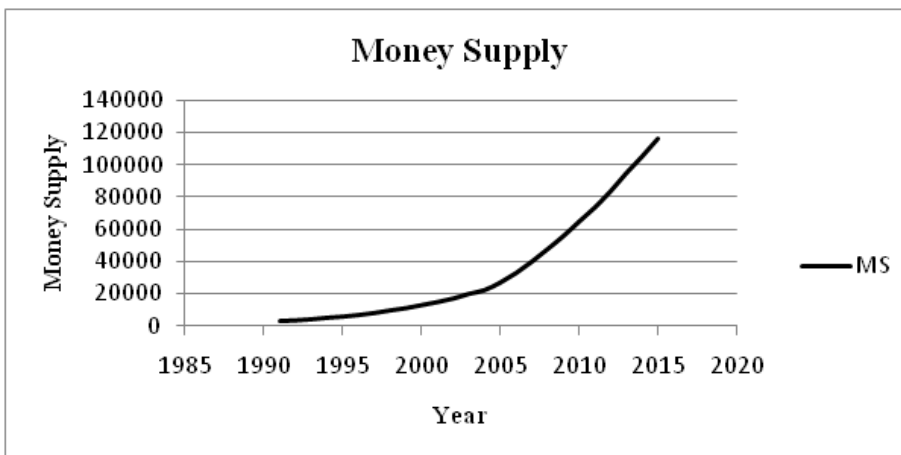


Figure 5: Growth of Wholesale Price Index

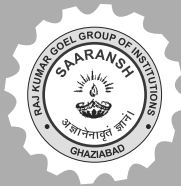


Table 2: Correlation between Nominal Exchange Rate and all other macro-economic variables

Variables	Nominal Exchange Rate
Gross Domestic Product	0.871361 (0.0000)***
Interest Rate	-0.606912 (0.0000)***
Money Supply	0.859004 (0.0000)***
Wholesale Price Index	0.889652 (0.0013)***

Note– Values in parentheses indicates p-value.

***indicates p-value significant at 1% level of significance.



Microfinance in India – Growth and Present Status

Ms. Chetna Singh*

Prof. Raj Kumar**

ABSTRACT

Purpose –The paper tries to make out the present status and role of microfinance in the development of India. Microfinance is a programme which provides a broad range of financial services such as deposits, loans, money transfers, payment services, micro-credit, savings, insurance, etc. to socially and economically disadvantaged segments of the society. It is emerging as an effective tool for poverty alleviation in India. In India the Micro-Finance is dominated by Self Help Groups - Banks linkage Program. Its main aim is to provide a cost effective mechanism for providing financial services to the poor and lower income groups.

Methodology –This is a descriptive research paper based on secondary data. Data have been collected through books, various websites and publications of recent research papers available in different websites as well as reviewing of related literature (theoretical, applied and empirical), The Bharat Microfinance Report 2016, Status of Microfinance in India 2015-16- NABARD, etc.

Findings – The major contributions and finding of this paper include all areas of microfinance and highlights the status and growth of microfinance in India in the last decades.

Practical implications – The paper brings all scattered information and data about microfinance under one umbrella that would make scholars and practitioners aware of advances in microfinance.

Originality/value – The main value or contribution of this paper is bringing together most of the available literature and secondary data available on various reports and also provides ideas to scholars for further research in the area of microfinance.

Research limitations –This research paper is based on the secondary data collection and therefore the accuracy and the reliability of the data is based on the same.

Keywords–Microfinance, SHGS, Bank linkage programme, microcredit, financial services, poverty alleviation, etc.

INTRODUCTION

In a developing country like India where 70 percent of its population lives in rural area and 60 percent depend on agriculture (according to the World Bank reports), micro-finance can play a very important role in providing financial assistance to the lower income individuals and poor peoples. Microfinance is a programme which provides a broad range of financial services such as deposits, loans, money transfers, payment services, micro-credit, savings, insurance, etc. to support the poor and lower income individuals. India is the second most populated country in the world and one of the greatest challenges faced is to fight against poverty since more than one-third of population is living below poverty. Since 1990s, poverty reduction has gained much importance at both

national and international level and for that Government of India and Central Bank has taken various initiatives. Rural people in India have very low access to formal banking facilities; in this regard the importance of microfinance in developing countries like India cannot be undermined.

Muhammad Yunus of Bangladesh while working at Chittagong University in the 1970s, has started offering small loans to impoverished basket weavers and continued this service for nearly a decade until the formation of the Grameen Bank in 1983 with the objective of providing the financial assistance to a much wider audience, from there the concept of microfinance was originated. Today, the Grameen Bank has 2,500 branches serving more than 8 million borrowers covering around

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81,000 villages. According to Grameen Bank, among its clients, 97 percent of them are women and it repays its loans more than 97 percent of the time which is a much higher recovery rate than any other banking system. In 2006, Yunus and Grameen Bank were jointly awarded the Nobel Peace Prize for their microfinancing work.

Microfinance gained the attention as an efficient tool for poverty reduction as well socio-economic development; hence it can play an imperative role for improving the standard of living of poor. But the outreach of microfinance in India is small as compared to the needs required, however remarkable progress has been made in this regard after the active role played by NABARD, formation of Self Help Groups-Bank Linkage Programme as well as micro-finance institutions and number of NGOs has also come forward into the business. In India microfinance is predominated by Self Help Groups-Bank linkage programme which aimed at providing a cost efficient mechanism for providing financial services to the unreached poor. Microfinance is available through microfinance institutions, which range from larger banks to small non-profit organizations. Microfinance institutions include both profit companies, like General Electric Consumer Finance and Citi Microfinance, as well as non-profit organizations, such as Accion and BRAC. MFIs provides small loans, helps in setting up and maintaining a savings account and money transfers, as well as they also help in obtaining insurance for a array of needs, such as death, illness or loss of property.

In India, the regulatory framework for microfinance is not unified. Microfinance is provided by commercial banks, Regional Rural Banks (RRBs), cooperative societies, the SHG's, and micro-finance institutions, NGO's and Non-Bank Financial Institutions (NBFI's). Reserve Bank of India governs the Banks and NBFI's, SHGs are regulated by NABARD, and the cooperatives are governed by Registrar of Cooperative Societies (RCS) etc.

Micro-finance is viewed as a powerful tool for poverty reduction and socio-economic upliftment in a developing country like India. It is expected to play a significant role in providing the financial assistance to the unreached poor and lower income group; thus helping them in fulfilling the basic necessities of the life and improving their standard of living. The present paper aims at highlighting the growth and present status of

microfinance in developing economies like India.

CONCEPT OF MICROFINANCE

The concept of microfinance has been used globally for centuries, but it's Bangladesh's **Muhammad Yunus** who is recognized as the founder of the modern version of microfinance.

Microfinance refers to a range of financial services, including deposits, loans, money transfers, savings and insurance, available to poor and unprivileged sections of the society; it also provides financial assistance to entrepreneurs and small business owners who don't have collateral neither qualify for a standard bank loan.

For some, microfinance is a movement whose object is "a world in which as many poor and near-poor households as possible have permanent access to an appropriate range of high quality financial services, including not just credit but also savings, insurance, and fund transfers. For others, microfinance is a way to promote economic development, employment and growth through the support of micro-entrepreneurs and small businesses.

According to the International Labor Organization (ILO), Microfinance is also defined as, "an economic development approach that involves providing financial services through institutions to low income clients"

The Asian Development Bank (2000) defines microfinance as the provision of broad range of services such as savings, deposits, loans, payment services, money transfers and insurance to poor and low income households and their micro-enterprises.

The National Microfinance Taskforce, 1999' states that, "it is the provision of thrift, credit and other financial services and products of very small amounts to the poor in rural, semi-urban or urban areas for enabling them to raise their income levels and improve living standards"

CORE VALUES OF MICROFINANCE

The microfinance institutions are working on certain values and principles to help and assist the individuals so that they can avail the services of microfinance institutions effectively. They are focused on providing the easy access of financial services to low-income and especially to women which will help in enhancing their wellbeing. The



microfinance institutions also provide the facility of formal and informal channels for feedback and suggestions to clients as well as they provide a formal and easy to access grievance redress mechanism for clients.

The core values of microfinance are:

Integrity– The microfinance institutions provide low- income clients, men and women, their families with access to financial services that are client focused, designed to enhance their wellbeing and delivered in a manner that is ethical, dignified, transparent, equitable and cost effective. **Quality of Service**– They ensure quality services to clients which are appropriate to their needs and delivered efficiently in a convenient and timely manner. Moreover, maintain high standards of professionalism based on honesty, non-discrimination and customer centricity. **Transparency**– The MFIs provide complete and accurate information to clients regaling all product and services they offered as well as create awareness and enable clients and all other stakeholders to understand the information provided with respect to financial services offered and availed. **Fair Practices**– The MFIs makes an effort to ensure that the clients are protected against fraud and misrepresentation, deception or unethical practices and also ensure that all practices related to lending and recovery of loans are fair and maintain respect for client's dignity and with an understanding of client's vulnerable situation.

Privacy of Client Information – They always try to safeguard personal information of clients, allowing disclosures and exchange of relevant information with authorised personnel only, and with the knowledge and informed consent of clients. **Integrating Social Values into Operations** – The MFIs ensure high standards of governance and management focused on not only financial performance but also social impact of business and also monitor and report social as well as financial data to assess the social performance and social relevance of the institution from time to time. **Feedback & Grievance Redressal Mechanism** – They provide clients formal and informal channels for feedback and suggestions and consistently assess the impact of services in order to enhance competencies and serve clients better as well as provide a formal and easy to access grievance redress mechanism for clients. (Fig. 1)

REVIEW OF LITERATURE

Lapenu, C. and Zeller, M. (2001) studied about the microfinance institutions(MFIs) exist in the developing world, their current performance and MFIs in Asia,Africa and Latin America in order to offer a new in-depth analysis on the distributionand performance of MFIs at the international level and found that MFIsprovide extensive coverage in Asia, Africa and Latin America and have adapted a widerange of innovations to overcome various constraints. The study concluded that MFIs require stablemacroeconomics and political environment to develop unstable countries which are stillout of reach of the international world of microfinance.

Dyck, B. (2002) discussed the microfinance programs in international development and to Nonaka's (1994) four phase organizational learning framework. The study used four phase learning model to provide a detailed examination of the replication of a microfinance program in Bolivia by the Mennonite Economic Development Associates (MEDA) and found that replicating the learning process may be more important than replicating the microfinance programs and organizational learning will improve the replication of micro financing programs.

Ananth, B. (2005) tries to discuss about the 'partnership model' of financing microfinance institutions (MFIs) and also stated the building links to capital markets for financing microfinance through securitization. The study found that there are certain key enablers for an environment of rapid microfinance growth including regulator support for hybrid models of outreach and investments in training and funding of initial expenses for emerging MFIs.

Hartarska, V. and Nadolnyak, D. (2007) explores the impact of regulation on micro finance institutions performance. The study uses the newly released data for 114 MFIs from 62 countries in anempirical model where performance is specified as a function of MFI-specific, regulatory, macroeconomics and institutional variables. The finding shows that regulatory involvement does not directly affect performance of micro finance institutions either in terms of operational self-sustainability or outreach and less leveraged MFIs have better sustainability. The study concluded that MFIs' transformation into regulated financial institutions may not lead to improved financial results and outreach.

Davis, I. (2009) explores about an effective legal framework for microfinance and the various aspects of it and found that the countries undertake efforts to establish a framework for microfinance, the Microcredit Regulatory Act of 2006 is an example of an effective law that will provide a favorable legal frame work for microfinance.

Haque, M.A. and Harbin, J. L. (2009) discussed about the micro-credit approach to get money in to the hands of the poor by extending credit to the “have-nots”. The finding shows that the issue of micro credit in other countries shows that the have-nots can be just as credit worthy as the haves and concluded that an essential ingredient to make it a success is for the micro credit establishments to work with the borrowers and make them feel they can be part of success.

Vetrivel, S.C. *et al.* (2010) stated the role of microfinance on women employment through Self Help Groups (SHGs) Bank Linkage Programs which has been successful not only in meeting financial needs of the rural poor women but also in strengthening collective self help capacities of the poor leading to their empowerment. The study found that the microfinance can contribute to solving the problems of inadequate housing and urban services as an integral part of poverty alleviation programs.

Moses, E. (2011) discussed on the origin and concept of micro finance, features and role of microfinance in India, reviewing the progress and weakness as well as suggestion for making micro finance an effective instrument of poverty elevation, rural development and women empowerment in India. The study found that the microfinance is one of the most powerful tools for uplifting the economic conditions of the asset-less poor through group approach that ensures active participation and involvement of the beneficiaries in effective implementation of the program.

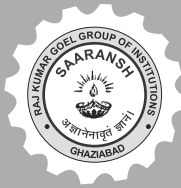
Regi, E. M. (2011) makes an effort to examine the empowerment impact of microfinance program of neighborhood groups (NHGs) in Kerala. The study is based on primary data collected from 200 respondents in 30 (NHGs) functioning in 11 Gram panchayats in Nilambur block in Kerala. The study revealed that apart from providing savings and credit to its members; NHGs were instrumental in bringing desired social change among the

members. The ability to contribute to household income as a result of the credit access and increased income from income generating activities helped the members to get respected in their family and community as well and concluded that this acceptance in turn helped to gain confidence, increased role in household decision-making, and control over resources, ability to freely interact with members of the group as well as outsiders, ability to deal with adversities and involvement in community activities.

Mahanta. P *et al.* (2012) makes an effort to discuss the factors and theoretical position associated with evolution of microfinance and its role in global scenario and concluded that Microfinance is multifaceted and works in an integrated system, lending to the poor through microcredit is not the end of the problem but beginning of a new era, If effectively handled, it can create miracle in the field of poverty alleviation. The study suggested that Government has to play proactive role, people with some special skills have to be given priority in lending microcredit and if government and MFIs act together then microcredit can play a great role in poverty alleviation.

M. Radhakrishna (2012) makes an effort to describe the role of Microfinance institutions in developing the conditions of people who are living in rural areas in his research paper Performance of Microfinance Institutions in India. The study concluded that the functioning of Microfinance institutions in India is playing an important role in rural areas since last two decades; the growth of the MFI's in South India is very high as compared to other parts of India and suggested that the government should take necessary measurements to create awareness among people to use the services of Microfinance institutions to strengthen their Economical status and improving their lively wood.

Mr Ravi Verma and Ms Rajni Sinha (2012) conducted a study on Micro-Finance – A Critical Analysis of Rural India. The purpose of the research is not only to understand the broad definition of microfinance and its structure & purpose but it is mainly to project the creation of social value by showing and proving how microfinance has been capable in proving itself for the rural dwellers. The study concluded that if the plans for microfinance are executed properly in the country then India will definitely have new dimension to it and will increase India's standard



and make it one of the powerful nations of the world economically. Moreover, the plans for microfinance if implemented will provide an ongoing financial stability and sustenance for the poor in both the rural and urban area.

Sibghatullah Nasir (2013) conducted a study on Microfinance in India: Contemporary Issues and Challenges. The objective of the study was to identify the transaction cost involved in delivering microfinance and to find the solution of the problems faced by MFIs. The data for study was collected from the primary and secondary sources. The study found that MFIs in India have so many lacunas in their running, though the MFIs paid an important role in the poverty alleviation and enhancing the living standards of the poor and concluded that If the shortcomings will be eliminate from the MFIs, it would have positive results on the economy, lead to greater efficiency and improvement of living standards of the thousands of poor.

Dr. M. Prasanna Kumar (2014) tries to examine implementation of various micro finance schemes in Karnataka in his paper entitled Implementation of various Micro Finance Schemes in Karnataka state. Study concluded that all financial regulation falls under the three issues of consumer protection, micro-prudential regulation and systemic risk. Prudential regulation is relatively minor concern: at worst, if micro-prudential regulation fails, the sophisticated financial firms that lend to MFIs will suffer unexpected losses and in order to ensure consistency and avoid regulatory arbitrage, regulation needs to be consistent across the activity of credit provision, regardless of the entity that does the activity.

Kumar. V et.al (2015) tries to identify the current status and role of microfinance in the development of India in their paper entitled An Overview of Microfinance in India. The study was descriptive in research and based on secondary data and concluded that the importance of microfinance in the developing countries like India cannot be undermined, it play a vital role for socio-economic upliftment of poor and low income peoples. The study suggested that a well developed financial system can promotes investment opportunities in an economy and therefore it is necessary that government of India must have to focus on extending financial services to both rural and urban to ensure sustainable and inclusive growth.

GROWTH AND PRESENT STATUS OF MICROFINANCE IN INDIA

Microfinance has a long history of helping the bottom of pyramid to build wealth and achieve a standard of living. The microfinance sector has grown significantly today. The Indian government puts emphasis on providing financial services to the poor and underprivileged since independence and has considerably enhanced allocation for the provision of education, health, sanitation and other facilities which promote capacity building and well being of the poor.

In support to this the national bodies like Small Industries Development Bank of India (SIDBI) and National Bank for Agriculture and Rural Development (NABARD) are dedicating significant time, energy and financial resources on microfinance. In India the strength of the microfinance organizations (MFOs) is lies in the diversity of approaches and forms that have change over a period of time.

Top 10 MFI's in India by Geographical Spread

Below graph indicates that Ujjivan Financial Services has the largest geographical spread with operations across 24 states followed by SML, Janalakshmi in 18 states and SKS Microfinance Ltd in 17 states. Annapurna, Equitas, ESAF, NERFL and Utkarsh are among the lowest microfinance institutions operating in 10 states. **(Fig. 2)**

Top 10 Microfinance Institutions Operating in Number of Indian Districts

Below figure indicates that SKS microfinance institution has the largest geographical spread with operations across 305 districts as compared to SML, Ujjivan in 207 districts and Janalakshmi in 199 districts, Spandana in 183 districts respectively. Basix, Sonata, Utlarsh has the lowest geographical spread with operations only in 102 districts. **(Fig. 3)**

Top 10 MFIs in Terms of Branch Network

Below figure indicates that SKS micro finance institutio has the largest branch network with 1191 branches followed by SML with 697 branches, Spandana with 523 branches and Cashpor with 494 branches. Janalakshni, Utkarsh has the lowest

branch network with only 341 branches. **(Fig. 4)**

Regional Outreach of MFIs

As of March 31st 2016, MFIs served total of 399 lakh clients. Client outreach of MFIs had grown substantially from 2005 to 2011, reaching a level of 317 lakh client which was only 35 lakh client in 2005, and continues to grow with a huge rise in clients of all time high of 399 lakh in 2016. Majority of these clients are being served by NBFC-MFIs (84.94%), primarily the larger ones. Out of the total client base of 399 lakh, Southern region alone contributes to 39% clients followed by 20% each in East and Central region whereas West and North have 13% and 6% of total outreach respectively. Northeast has the least client outreach numbers with 2% only. **(Fig. 5)**

Outreach to Special Segment of Borrowers (Women, SC/ST, and Minorities)

Serving women has always been the focus of microfinance. In India being an alternate vehicle of credit, microfinance serves a large segment of people from Scheduled Castes, Scheduled Tribes and Minorities. MFIs have 97% of women clients among the total clients. Similarly, SC/ST borrowers also constitute a substantial chunk (27%) of the clients. From **Table 1**, it is observed that women borrowers, SC/ST borrowers and Minority borrowers have been consistently increasing for last four years. For the first time, in 2014-15, data for differently abled borrowers and borrowers having Aadhaar Cards has been collected. Coverage of MFIs in these two segments is not satisfactory. Differently abled borrowers and borrowers with Aadhaar constitute only 0.05% and 10% of the total respectively, but it increases to 4% and 18% respectively in 2016. In 2016 microfinance constitute 15% Business correspondent and 3% Individual Borrowers only.

Top 10 MFI's with Loan Portfolio Outstanding

The total amount of loan portfolio has reached all time high of Rs 63,853 crore as on March 2016, which is a 31% growth over last year which includes a managed portfolio of nearly Rs 16914 crore and Rs. 24332 crore only in 2011. **Table 2** indicates the list of top 10 MFIs in terms of loan portfolio. In this list Janalakshmi Financial Services Ltd. microfinance institution is on the top with

Rs.10983 crore loan portfolio followed by SKS microfinance Ltd. with Rs.7682 and Ujjivan Financial Services with Rs.5389 crore of loan portfolios. Share Microfin Ltd. has the lowest loan portfolio of Rs.1540 crore only.

Loan Disbursement

Loan disbursement is a factor of funds received by the MFIs from lenders, primarily the commercial banks. Loan disbursement during 2010-11 was Rs 29330 crore as compared to Rs 35176 crore in 2011-12. Subsequent years witnessed a sharp fall in disbursement of loan amount but disbursement by MFIs in recent years indicates a positive trend since 2012-13. Loan disbursement increased by Rs 25796 crore during 2012-13 to Rs 72345 crore during 2015-16. **(Fig. 6)**

Top 10 MFIs disbursing Loan during 2015-16

Figure 7 indicates the list of top 10 MFIs disbursing loan to their clients during 2015-16. In the list SKS Microfinance Ltd was on the top with Rs 12082 crore of loan disbursement amount followed by Janalakshmi Financial Services Ltd. with Rs. 11537 crore and Ujjivan Financial Services Pvt. Ltd. with Rs 6619 crore of loan disbursement amount. Utkarsh Microfinance Pvt. Ltd disbursed the lowest amount of loan which is Rs 1713 crore.

Rural - Urban Share of MFI Borrowers

Indian microfinance has always been known for its rural phenomenon as compared to microfinance in Latin America as also in large parts of Africa and Asia. But now this is no longer valid, a very interesting trend is seen in the rural-urban focus of MFIs. The share of rural clientele which was 69% in 2012 decreased to 56% in 2014 and has drastically come down to 33%. The proportion of rural to urban clients for the year 2014-15 is 33% to 67%. In the year 2015-16, there is a slight improvement in the share of rural clientele which increased to 38% and a slight fall in the share of urban clientele which decreased to 62%. **(Fig. 8)**

Microfinance Delivery Models In India

The non-availability of banking facilities and credit to the poor and underprivileged segments of the society has always been a foremost concern in



India. The Reserve Bank and the Government have always taken numerous initiatives from time to time, such as nationalisation of banks, concessional interest rate for the weaker section of the society and recommendation of priority sector lending norms. However, it was realised that more direct efforts were required to address the credit needs of poor and underprivileged segments of the society. In regards to this requirement, the Micro finance movement started in India with the introduction of SHG bank linkage programme (SBLP) in the early 1990s. At present, there are mainly two models for deliveries of Microfinance in India are SHG – Bank Linkage Programme (SBLP) and Micro Finance Institutions (MFIs). Focusing on microfinance services towards women, SC/ST and minorities, MFIs are contributing significantly to the wellbeing of the underprivileged, leading to a rise in their welfare and assisting with the financial inclusion agenda.

SHG-Bank Linkage Programme (SBLP)

The Self Help Groups (SHGs) is the foremost microfinance methodology in India. SHGs are basically formal and voluntary association of 15 to 20 people formed to attain common objectives. People from homogenous groups and common social back ground and occupation voluntarily form the group and pool their savings for the benefit of all of members of the groups. The group is democratically formed and elects its own leaders. The Self Help Group (henceforth SHG) model has evolved in the NGO sector and works on the belief that the poor can help themselves and the NGOs can provide networking and education to them. In India almost 90% of the SHGs are female only due to the accepted fact that world's poorest households tend to rely more heavily on income generated by women of the house. In India, SHGs have been the most popular way to help the poor and make them bankable.

The SHG-Bank Linkage Model has emerged as a leading model in terms of number of borrowers and loans outstanding. This model creates independence, is more flexible, and imparts freedom of saving and borrowing according to the needs of group members. In Indian context the SHG-BLM is very suitable due to the widespread of rural bank branch network. The programme uses SHGs as a link between the rural poor and the banks to help in reducing transaction costs for the banks as well as for the rural clients. Under

this programme, loans are provided to the SHGs with three different methodologies: SHGs Formed and Financed by Banks; SHGs Formed by Agencies Other than Banks, but Directly Financed by Banks; and SHGs Financed by Banks Using Other Agencies as Financial Intermediaries.

Agency-wise distribution of SHG-BLP

During 2015-16, Commercial Banks had disbursed Rs. 25,18,497 crore to 11.32 lakh SHGs with an average of Rs. 2,22,482 per SHG, against national average of Rs. 2,03,495. Commercial banks accounted for 67.5% of bank loans disbursed to 61.8% SHGs during the year. The RRBs disbursed credit to SHGs stood at 24.6%. However, the number of SHGs declined substantially to 25.7% from 32.1%. The average loan disbursement by RRBs during the year was Rs. 1,94,833. The Cooperative Banks had disbursed Rs. 2,93,700 to 229,643 SHGs and the average loan per SHG provided by Cooperatives was Rs. 1,27,894.

Total Outstanding Bank Loans against SHGs as on March 31st 2015-16 was Rs. 57,11,923 lakh of 467,262 number of SHGs with an average of Rs. 1,222 lakh as per SHG. Among which Commercial Banks had the highest amount of loan outstanding with Rs. 37,14,562. The average loan outstanding in case of Commercial banks was Rs. 1,41,433 where as it was Rs. 1,11,447 in case of RRBs and Rs. 64,321 in case of Cooperatives. Cooperative Banks have the lowest credit outstanding due to low average lending by Cooperatives.

The total amount of Gross NPA as on March 31st 2015-16 was Rs. 3,68,623. Since Commercial Banks have the highest amount of loan disbursements so they have the highest NPA which was Rs. 2,32,140, Regional Rural Banks have Rs. 1,06,429 and Cooperative Banks have Rs. 30,054 as NPA during 2015-16. **(Table 3)**

Micro Finance Institutions- Banks Linkage Programme

The Micro Finance Institution model has also gained impetus in India in the recent past. MFI model is found worldwide whereas the SHG-BLM model is popular in Indian context. In MFI model Micro Finance Institutions borrow large amount of funds from the apex financial institutions, banks and donors for lending to the individuals or groups.

These MFIs following the concept of Joint Liability Group (JLG) lending the loan. A JLG is an informal group consists of 5 to 10 individual members who come together for the purpose of availing bank loans either individually or through the group mechanism against a mutual guarantee. MFIs in India exist in a variety of forms like trusts registered under the Indian Trust Act, 1882/Public Trust Act, 1920; societies registered under the Societies Registration Act, 1860; Co-operatives registered under the Mutually Aided Cooperative Societies Acts of the States; and non-banking financial companies (NBFC)-MFIs, which are registered under Section 25 of the Companies Act, 1956 or NBFCs registered with the Reserve Bank. In addition to their internal resources, the MFIs have been allowed to mobilize resources through various ways including obtaining of bulk loans from Banks/ other Financial Institutions.

Progress under MFI-Bank Linkage Programme

Below table shows the progress under MFI-Bank linkage programme during the last 3 years. It indicates that the amount of loan disbursed by banks / FIs to MFIs in 2015-16 is Rs.20795.57 crore as compared to Rs.10282.49 crore in 2013-14 and the number of accounts has increased from 545 to 647. Loans outstanding against MFIs are 14.50% in 2013-14 which increases to 36.22% in 2014-15 and then decreases to 13.69% during 2015-16. Amount of loan outstanding as percent of fresh loan is Rs. 160.64 crore in 2013-14, decreased to Rs. 148.13 crore in 2014-15, which further decreases to Rs. 123.00 crore. **(Table 4)**

Above table shows the **Loans disbursed to MFIs during the year** and **Loan outstanding against MFIs as on 31 March** in the past three years. The financing agencies which disbursed the loan amount to the MFIs were Commercial Banks, Regional Rural Banks, Cooperative Banks and SIDBI. Table indicates that the total amount of loan disbursed to MFIs by all the agencies in 2013-14 is Rs.10282.49 crore, increases to Rs.15190.13 crore and further increases to Rs.20795.57 crore in 2015-16. The amount of Loan outstanding against MFIs as on 31 March 2013-14 is Rs.16517.43 crore, increases to Rs.22500.46 crore in 2014-15 and in the year 2015-16 it further increases to Rs.25580.84 crore. MFIs were able to gain higher confidence of banks and financial institutions. The total loans to MFIs by banks and

financial institutions increased by over 36.90% during the current year as against 47.73% during the previous year. **(Table 5)**

CONCLUSION

The importance of microfinance in the developing countries like India cannot be undermined, it play a vital role for socio-economic upliftment of poor and low income peoples. Providing loans to the poor people through microcredit is not the end but beginning of a new era and if effectively handled, it can create miracle in the field of poverty alleviation. Microfinance has caught the attention as an effective and efficient tool for poverty reduction and socio- economic development; hence it can play a very essential role in improving the standard of living of poor peoples. In this regard Government has to play proactive role and if government and MFIs act together then microcredit can play a great role in poverty alleviation. The economic development of any country is very much influenced by the quality and availability of financial services and a well developed financial system promotes investment opportunities in an economy. Therefore it is necessary that government of India have to focus on enlarging financial services to rural as well as urban to ensure sustainable and inclusive growth and for that people with some special skills have to be given priority in lending microcredit.

From the above study it can be viewed that SHG's and MFI's are playing a pivotal role in delivery of microfinance services which shows the way of development of poor and low income people in India. MFIs have 97% of women clients among the total clients. Similarly, SC/ST borrowers also constitute a substantial chunk (27%) of the clients and it is observed that women borrowers, SC/ST borrowers and Minority borrowers have been consistently increasing for last four years. In this regard, we can say that microfinance is a very essential tool in empowering the women as well as it helps in strengthening and uplifting the condition of SC/ST and minorities; since the percentage of SC/ST and minority borrowers has increased in five years from 20% to 30% and 23% to 27% respectively. The growth of the MFI's in South India is very high as compared to other parts of India. The central government and RBI must take necessary measures to increase the performance of MFI's in other parts of India especially North and North East India. The state



governments must also take necessary measures and initiate various awareness and promotional programmes to create awareness among people

to use the services of microfinance institutions so that there may be improvement in their lively wood thus strengthening their economical status.

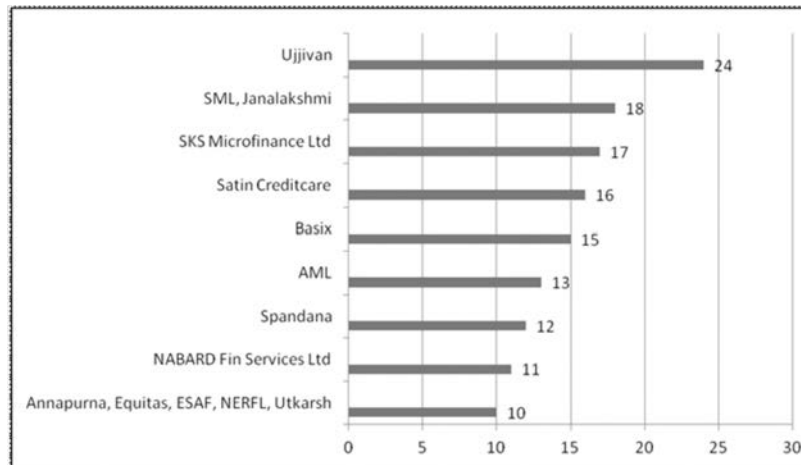
REFERENCES

- Ananth, B. (2005). Financing microfinance—the ICICI Bank partnership model. *Small Enterprise Development*, 16(1), 57-65.
- Davis, I. (2008). Rural Banking: Designing an Effective Legal Framework for Microfinance. *J. Bus. Entrepreneurship & L.*, 2, 394.
- Dr. M. Prasanna Kumar. (2014). Implementation of various Micro Finance Schemes in Karnataka state, *International Journal of Emerging Research in Management & Technology*, 3(4), 2278-9359.
- Dyck, B. (2002). Organizational learning, microfinance, and replication: The case of MEDA in Bolivia. *Journal of Developmental Entrepreneurship*, 7(4), 361.
- Hartarska, V., & Nadolnyak, D. (2007). Do regulated microfinance institutions achieve better sustainability and outreach? Cross-country evidence. *Applied economics*, 39(10), 1207-1222.
- Haque, M. A., & Harbin, J. L. (2009). Micro credit: a different approach to traditional banking: empowering the poor. *Academy of Banking Studies Journal*, 8(1/2), 1.
- Lapenu, C., & Zeller, M. (2001). Distribution, growth, and performance of microfinance institutions in Africa, Asia, and Latin America.”, IFPRI, FCND DP No. 114, pp. 1-34.
- Moses, E. (2011). An overview of microfinance in India. *International referred Research Journal*, VIII(27), 1-4.
- M. Radhakrishna. (2012). Performance of Microfinance Institutions in India, *International Journal of Computer Science and Information Technology & Security (IJCSITS)*, 2(4).
- Mr Ravi Verma and Ms Rajni Sinha. (2012). Micro-Finance – A Critical Analysis of Rural India, *Society for Human Transformation and Research*.
- Mahanta, P., & Panda, G. (2012). Sreekumar (2012). Status of microfinance in India: A review. *International Journal of Marketing, Financial Services & Management Research*, 1(11), 142-155.
- Reji, E. M. (2011). Microfinance and women empowerment: evidence from field study. *Journal of Rural Development*, 30(1), 25-44.
- Nasir, S. (2013). Microfinance in India: Contemporary issues and challenges. *Middle-east journal of scientific research*, 15(2), 191-199.
- Sashikant Panda, Basant Kumar Panda and Ambika Prasad Das (2013), *Microfinance in India: Literature Review*, I J A B E R, 11(2), 355-374.
- Vetrivel, S. C. et al. (2010). Role of microfinance on women empowerment through Self-Help Groups in Tamilnadu.3, 24-30.
- Kumar, V, et.al. (2015). An Overview of Microfinance in India, *Abhinav National Monthly Refereed Journal of Research in Commerce & Management*, 4(10).
- The Bharat Microfinance Report 2016.
- The Status of Microfinance in India- Report Published by NABARD
- <http://www.businessnewsdaily.com/4286-microfinance.html>

Figure 1: Core Values of Microfinance

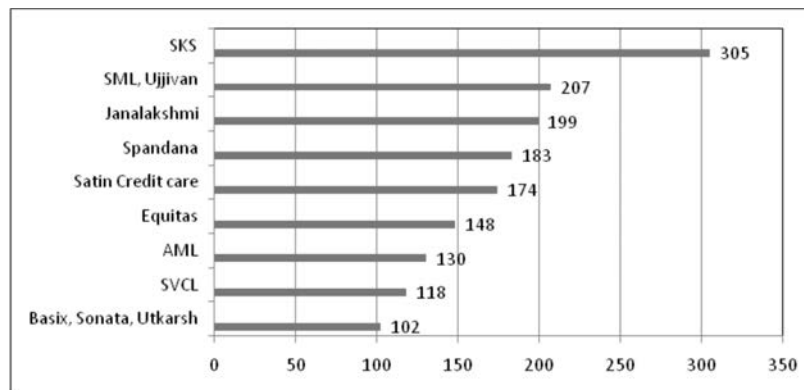


Figure 2: Top 10 MFIs Operating in Number of Indian States/Union Territories



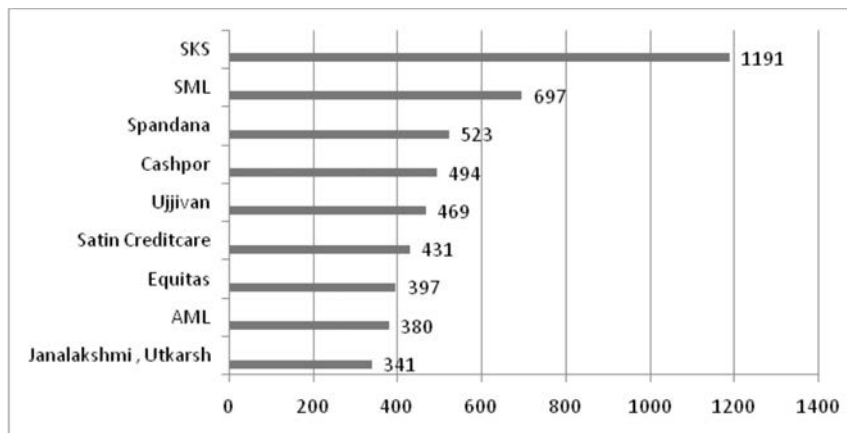
(Source: The Bharat Microfinance Report 2016.)

Figure 3: Top 10 MFIs Operating in Number of Indian Districts



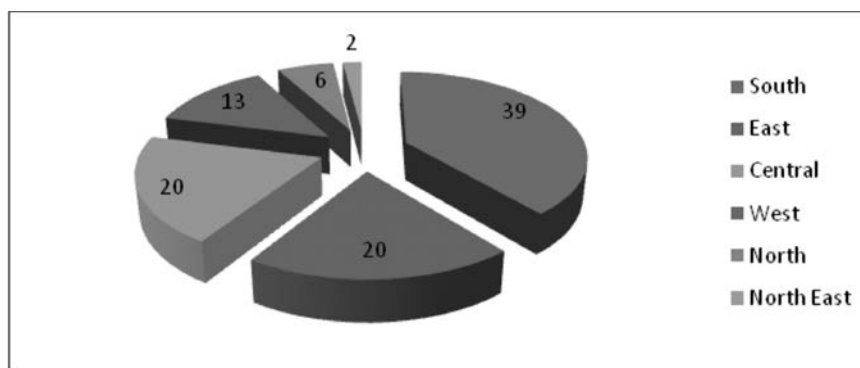
(Source: The Bharat Microfinance Report 2016.)

Figure 4: Top 10 MFIs in terms of Branch Network



(Source: The Bharat Microfinance Report 2016.)

Figure 5: Regional Break-up of Client Outreach



(Source: The Bharat Microfinance Report 2016)

Table 1: Composition of Borrowers – Category wise

Year	% to Total Borrowers						
	Women Borrowers	SC/ST Borrowers	Minority Borrowers	Differentlyabled Borrowers	Borrowershaving AadhaarCard	BC Borrowers	Individual Borrowers
2011	94%						
2012	95%	20%	23%				
2013	96%	21%	23%				
2014	97%	19%	14%				
2015	97%	28%	18%	0.05%	10%		
2016	97%	30%	27%	4%	18%	15%	3%

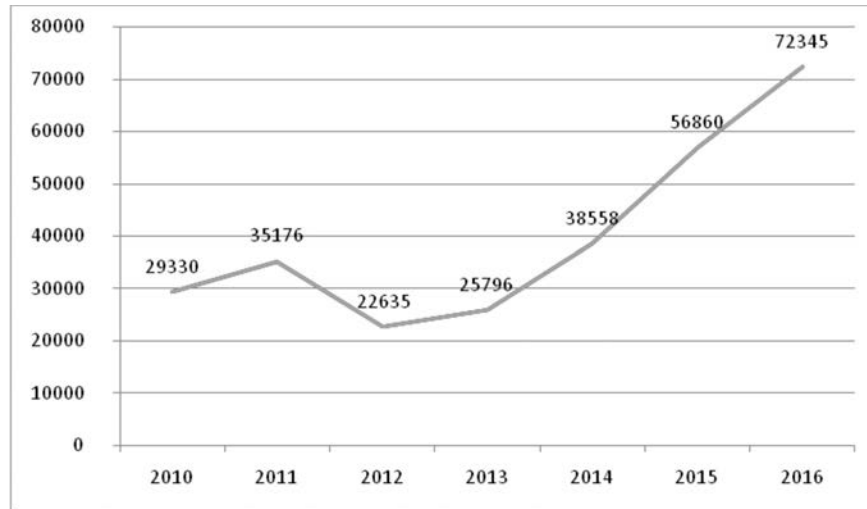
(Source: Bharat Microfinance Report, 2016)

Table 2 List of Top MFIs with Loan Portfolio as of March 2016

S.No	Name of MFI	Gross Loan Portfolio (in crore)
1	Janalakshmi Financial Services Ltd.	10983
2	SKS Microfinance Ltd.	7682
3	Ujjivan Financial Services Ltd.	5389
4	SKDRDP	4994
5	Equitas Micro Finance Ltd.	3283
6	Satin Creditcare Network Ltd.	3271
7	Grameen Koota Financial Services Pvt. Ltd.	2539
8	Spandana Sphoorty Financial Ltd.	2282
9	ESAF Microfinance & Investments Pvt. Ltd.	1925
10	Share Microfin Ltd.	1540

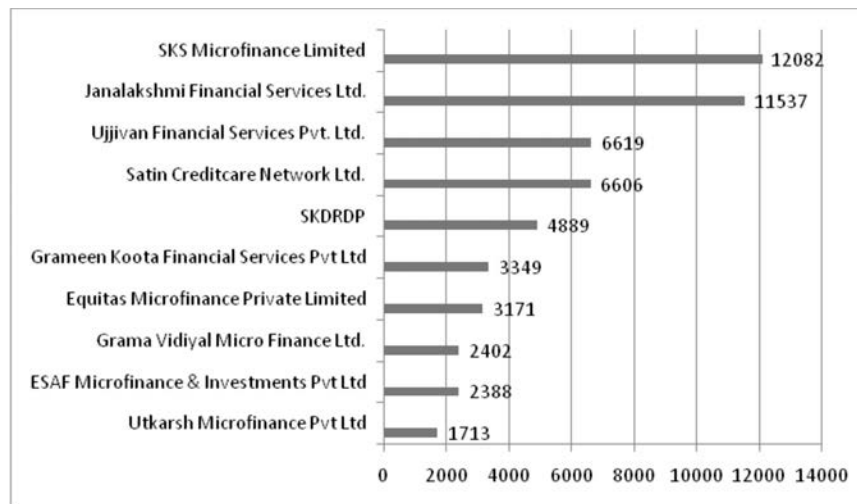
(Source: The Bharat Microfinance Report 2016.)

Figure 6: Loan Disbursement over the years (Rs. in crore)



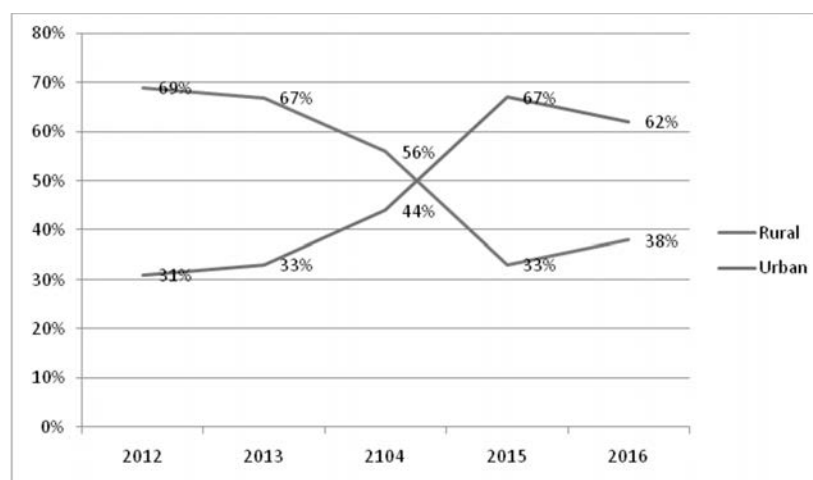
(Source: The Bharat Microfinance Report 2016.)

Figure 7: Top 10 MFIs Disbursing Loan during 2015-16 (Rs in Crore)



(Source: The Bharat Microfinance Report 2016.)

Figure 8: Trends in Rural - Urban Share of MFI Borrowers



(Source: Bharat Microfinance Report, 2016)

Table 3: Agency-wise status of SHG-BLP in 2015-16

(Amount Rs lakh)

Name of the Agency	Total Savings of SHGs with Banks as on 31 March 2016		Loans disbursed to SHGs by Banks during the year		Total Outstanding Bank Loans against SHGs		NPAs	
	No. of SHGs	Savings Amount	No. of SHGs	Loans disbursed	No. of SHGs	Loan Outstanding	Amount of Gross NPA	% NPA
Commercial Banks	4140111	903389	1132281	2518497	2626364	3714562	232140	6.25
% Share	52.6	66.0	61.8	67.5	56.2	65.0	62.98	
Regional Rural bank	2256811	248428	470399	916493	1445476	1610935	106429	6.61
% Share	28.56	18.1	25.7	24.6	30.9	28.2	28.87	
Cooperative Banks	1506080	217322	229643	293700	600781	386426	30054	7.78
% Share	19.1	15.9	12.5	7.9	12.9	6.8	8.15	
Total	7903002	1369139	1832323	3728690	4672621	5711923	368623	6.45

(Source: Status of Microfinance in India 2015-16- NABARD)

Table 4: Progress under MFI-Bank Linkage

(Amount Rs Crore)

Particulars	2013-14		2014-15		2015-16	
	No. of accounts	Amount	No. of accounts	Amount	No. of accounts	Amount
Loans disbursed by banks/FIs to MFIs	545	10282.49 (31.16%)	589	15190.13 (47.73%)	647	20795.57 (36.90%)
Loans outstanding against MFIs as on 31 March	2422	16517.43 (14.50%)	4662	22500.46 (36.22%)	2020	25580.84 (13.69%)
Loan Outstanding as % of fresh loans		160.64		148.13		123.00

(Source: Status of Microfinance in India 2015-16- NABARD)

Table 5: Loans to MFIs by Banks/Financial Institutions

Financing Agency	Period	Loans disbursed to MFIs during the year		Loan outstanding against MFIs as on 31 March	
		No. of loan accounts	Amount (Rs Crore)	No. of loan accounts	Amount (Rs Crore)
Commercial Banks	2013-14	484	9468.83	2197	14307.57
	2014-15	541	13858.64	4445	18720.61
	2015-16	564	19324.14	1561	22682.85
Regional Rural Banks	2013-14	16	163.18	124	222.00
	2014-15	15	47.69	131	1186.62
	2015-16	31	52.42	344	210.23
Cooperative Banks	2013-14	4	4.48	17	7.97
	2014-15	0	0	0	0.
	2015-16	3	6.00	17	11.76
SIDBI	2013-14	41	646.01	84	1979.90
	2014-15	33	1283.80	86	2593.23
	2015-16	49	1413.01	98	2676.00
Total by All Agencies	2013-14	545	10282.49	2422	16517.43
	2014-15	589	15190.13	4662	22500.46
	2015-16	647	20795.57	2020	25580.84

(Source: Status of Microfinance in India 2015-16- NABARD)

Teacher-Student Relationship Quality in Higher Education: Role of Formal Mentoring

Dr. Jeevan Jyoti*
Ms. Poonam Sharma**

ABSTRACT

The aim of the present study is to examine the impact of formal mentoring on teacher student relationship quality. Scholars from different university of the Jammu province have been contacted for data collection through dyadic approach (one guide and one scholar). Reliability and validity has been proved with the help of confirmatory-factor analysis. Structural equation modeling has been used for hypotheses testing. The result revealed that formal mentoring positively and significantly impact relationship quality. Further among the three function of mentoring psychosocial function impact relationship quality the most. Although the study significantly contributing the mentoring literature but the data collected is self report in nature and study is limited to service sector only (education sector).

Keyword: *Mentoring, Relationship Quality, Structural Equation Modeling, Confirmatory-Factor Analysis, Exploratory Factor Analysis*

INTRODUCTION

Kram, (1985); Huet al. (2016); Anderson & Shannon, (1988) and Zhang et al. (2016) have described mentoring as a reciprocal process of interpersonal exchanges between an experienced employee/mentor and a less experienced mentee in which the mentor helps the protege´ with career advancement and personal development. Further one of the study in education sector by Orland-Barak, (2014) describes mentoring as “the mediation of professional learning’, where mentors constantly engage in mediation between persons and content in value-laden contexts of practice”. Within the mentoring relationship there are certain functions which the mentor provides for the protégés and the organisation (Rhay et al., 2010).

Various types of mentoring exist in the organisations like formal mentoring, informal mentoring, group mentoring, peer mentoring, situational mentoring, supervisory mentoring, self-mentoring, virtual mentoring or e-mentoring, (Ensher et al., 2003) team mentoring and reverse mentoring (Ensher & Murphy, 2011). But the present study has focused only on formal. A formal mentoring program is described as structured and coordinated relationship between mentor and mentee, using standard norms, continuous action

plans, time frame, and particular objectives (Noe et al., 2002). According Wanberg et al. (2006) in formal mentoring programs employees are matched according to their development process, and then these employees are encourage to know one another. In this type of mentoring mentor is defined as a more knowledgeable and experienced person, whereas the mentee is defined as a less knowledgeable and less experienced person (Kram, 1985; Dreher & Cox, 1996; Noe et al., 2002). In formal mentoring program mentors also act as role model, teacher, sponsor, encourager, counsellor, and friend to mentees in order to increase the knowledge, update skills and inbuilt the positive attitudes (Anderson & Shannon, 1988; Kram, 1985). Further formal mentoring is also characterised as regular meeting of mentor and mentee to assigned group and individual activities (Ritchie & Genoni, 1999). In formal mentoring programmes mentor and mentees are paired or assigned by the organisation (Huet al., 2016; Wanberg et al., 2006) like in higher education sector, where scholars are paired by department with their guides. Further formal mentoring programme is time bound and arranged for a fixed duration of time (Wanberet al., 2006). Therefore the aim of the present paper is to examine the impact of formal mentoring on teacher-student relationship quality. **(Fig. 1)**

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REVIEW OF LITERATURE/ HYPOTHESIS DEVELOPMENT

Mentoring quality is reflected by the amount of career and psychosocial functions provided by the mentor (Higgins & Thomas, 2001). In the same line Xu & Payne (2014) suggested that the extent of career and psychological functions provided by the mentor, will determine the level of relationship quality. Further Noe (1988); Allen et al. (2004) examine the relationship of mentorship quality with number of mentoring functions provided and revealed that the degree of mentoring support provided by the mentor is determined by the mentoring. Similarly the level of effectiveness of mentoring programmes influences relationship quality between mentor and mentee. Based on the above literature the following hypothesis has been formulated.

Hypothesis 1: formal mentoring lead to relationship quality among scholar and guide

METHODOLOGY

Measure

The scale items have been finalized with the help of following literature:

- Mentoring- Scandura & Ragins (1993) 15 items scale has been used to measure mentoring. The mentor has been replaced with guide in formal mentoring in education sector. The sample items are “my guide instructs me about my job”, “my guide helps me in coordinating my goals”, “I admire by guide’s ability to teach others” etc.
- Relationship Quality- it has been self-generated (8 items). It includes items pertaining to trust, support, respect, information sharing, collaborative problem solving and expectations (Raginet al., 2000; Karcher et al., 2005) e.g. “We respect each other”, “Both of us are there for each other in hour of need”.

Participants

Scholars from different university of the Jammu province have been contacted for data collection through dyadic approach (one guide and one scholar). Total population consisted of 267 approved guides out of this total population, only 259 complete sets of questionnaire have been received back.

RESULTS

Demographic Profile of the Mentees/Scholars:

The descriptive statistics revealed that majority of the respondents (58%) are females and most of the mentees (65%) are in the age group 25-30. 53% of the mentees have three to five years of association with their mentors.

Demographic Profile of the Guides/ Mentors:

Majority of the guides are male (66%). Most of the guides have three to five years of association with their scholars.

Exploratory factor analysis

Further, the data collected at this stage was also used for exploratory factor analysis in order to identify the factor structure of all the constructs as some of the constructs were self generated. The test of appropriateness of a factor analysis has been verified through KMO measure of sampling adequacy, where value greater than 0.50 is acceptable (Hair et al., 2009), which indicated its relevance for further analysis. The statement with factor loading less than 0.50 were deleted (Hair et al., 2009). Mentoring consisted of 15 items and after applying factor analysis these fifteen items reduced to eleven items. Similarly relationship quality consisted of eight items and one got deleted due to low communalities and rest of seven items got converged under two factors namely, psychological support and respect and helpfulness.

Confirmatory factor analysis

We assessed the validity and reliability of the constructs with the help of CFA. Second order factor models have been designed for two constructs as multiple factors emerged after EFA. Detail analysis is as follows:

Mentoring: Application of CFA resulted into deletion of one item due to low SRW value (PF1). The model yielded good fit ($\chi^2/df = 2.255$, CFI=0.950, GFI=0.957, AGFI= 0.919, NFI=0.916, RMR=.065 and RMSEA= 0.070, **(Table 1)**). The study results are similar to the study of Scandura & Ragins’ (1993) measure, which also consisted of three dimension of mentoring namely, career functions, psychosocial functions and role modeling. Role modeling is reflecting the mentoring scale the most (SRW = 0.89) followed by career function (SRW=0.66) and psychosocial functions (SRW=0.50 **Figure 2**). Further

Cronbach's alpha value for all the sub-scales are within acceptable limit (career function= 0.71, psychological function= 0.70 and role modeling= 0.71). Composite reliability got established as the value is above the threshold limit (>.70). Convergent validity has also been proved as AVE and factor loading of all the items are above 0.5 (**Table 3**). Discriminant validity got established as the square root of average variance extracted is higher than the correlation between mentoring and other scales used in this study (**Table 2, Fig. 2**).

Relationship quality: The CFA model for relationship quality contained two factors. All the items of the measurement model are significantly explaining relationship quality (SRW <0.5). The fit indices ($\chi^2/df= 1.44$, GFI= 0.980, AGFI= 0.957, CFI= 0.989, NFI=0.966, RMR=0.026 and RMSEA=0.041, Figure 3) are indicating model to be good fit (**Table 1**). The reliability value of this construct is above the permissible limit as the Cronbach alpha value is 0.74 for first factor and 0.79 is for second factor and Composite reliability is 0.96. Discriminant validity got established and results are presented in table 2. All the standardised weights are greater than 0.5 as well as AVE is also greater than 0.5, which established convergent validity (**Table 3, Fig. 3**).

Hypothesis testing

H1. Mentoring leads to better relationship quality SEM has been used to check various relations proposed. It is a multivariate technique that seeks to explain the relationship among multiple variables (Byrne, 2010). SEM result revealed significant effect of mentoring on relationship quality. The model fit indices indicated model to be fit ($\chi^2/df=2.242$, RMSEA=0.069, RMR=0.075, GFI= 0.907, AGFI= 0.871, NFI=0.847, CFI=0.907). The SRW (standard regression weights) value

came out to be 0.84 ($p<.001$), which revealed that mentoring significantly and positively affects relationship quality (Figure 4). Further the analysis also revealed that the psychosocial function (SRW=0.56, $P<.001$) affect the relationship quality the most followed by role modeling (SRW=0.32, $p<.001$) and career function (SRW=0.20, $p<.01$ Fig. 5).

DISCUSSION

Present paper investigated the role of formal mentoring in enhancing teacher student relationship quality in higher education. The result revealed that formal mentoring helps in encouragement of the relationship quality between teacher and student. Guide supports scholars at every stage i.e. from the initial stage of objective selection to the end stage of thesis submission. The guide takes personal interest in scholar's research work. He/she always encourage scholar to discuss his/her personal problem and help him/her in coordinating career goals, which helps in boosting relationship quality between guide and scholar. Finding suggests that guide/mentor should develop scholars/mentees career by encouraging them to present paper in conferences. Guide/mentor should motivate scholar/mentee to discuss research problem even after working hour.

LIMITATION AND FUTURE RESEARCH

Study is limited to Jammu province. More outcomes of mentoring can be taken into consideration in the future for better understanding of the concept. Further, the role of moderating and mediating variables between mentoring and its outcomes have been explored for future research.

REFERENCES

- Allen, T. D., Eby, L. T., Poteet, M. L., Lentz, E., & Lima, L. (2004). Career benefits associated with mentoring for proteges: A meta-analysis. *Journal of Applied Psychology, 89* (2), 127-136.
- Anderson, E. M., & Shannon, A. L. (1988). Toward a conceptualisation of mentoring. *Journal of Teacher Education, 39* (1), 38-42.
- Byrne, B. M. (2010). Structural equation modeling with AMOS (2nded.). New York/London: Routledge.
- Dreher, G. E., & Cox, T. H. (1996). Race, gender, and opportunity: A study of compensation attainment and the establishment of mentoring relationship. *Journal of Applied Psychology, 81*(3), 297-308
- Ensher, E. A., Heun, C., & Blanchard, A. (2003). Online mentoring and computer-mediated communication: New direction in research. *Journal of Vocational Behaviour, 63*(2), 264-288.



- Ensher, E.A., & Murphy, S. E. (2011). The mentoring relationship challenges scale: The impact of mentoring stage, type and gender. *Journal of Vocational Behaviour*, 79 (1), 253-266.
- Hair, J. F., Black, W. C., Babin, B. J., & Anderson, R. E. (2009). *Multivariate data analysis* (7th E.d.). Upper Saddle River, NJ: Prentice Hall.
- Higgins, M. C., & Thomas, D. A. (2001). Constellations and careers: Toward understanding the effects of multiple developmental relationships. *Journal of Organisational Behaviour*, 22 (2), 223-247.
- Hu, C., Wang, S, Wang, Y-H., Chen, C., & Jiang, D-Y. (2016). Understanding attraction in formal mentoring relationship from an affective perspective. *Journal of Vocational Behaviour*, 94(June), 104-113.
- Karcher, M. J., Nakkula, M. J., & Harris, J. (2005). Developmental mentoring match characteristics: Correspondence between mentors and mentees assessment of relationship quality. *The Journal of Primary Prevention*, 26 (2), 93-110.
- Kram, K. E. (1985). *Mentoring at work*. Glenview, IL: Scott, Foresman, and Company.
- Noe, R. A. (1988). An investigation of the determinants of successful assigned mentoring relationships. *Personnel Psychology*, 41 (2), 457-479.
- Noe, R. A., Greenberger, D. B., & Wang, S. (2002). Mentoring: What we know and where we might go, in (ed.) *Research in personnel and human resources management*. Emerald group publishing limited, (pp.129 – 173).
- Orland-Barak, L. (2014). Mediation in mentoring: A synthesis of studies in teaching and teacher education. *Teaching and Teacher Education*, 44 (November), 180-188.
- Ragins, B. R., Cotton, J. L., & Miller, J. S. (2000). Marginal mentoring: The effects of type of mentor, quality of relationship, and program design on work and career attitudes. *Academy of Management Journal*, 43 (2), 1177-1194.
- Rhay, H. W., Ching, Y. H., Wen, C.T., Li-Yu, C., Lin, S.E., & Mei, Y.L. (2010). Exploring the impact of mentoring functions on job satisfaction and organisational commitment of new staff nurses. *BMC Health Services Research*, 10, 210-240.
- Ritchie, A., & Genoni, P. (1999). Mentoring in professional associations: Continuing professional development for librarians. *Health and Information Libraries Journal*, 16(4), 216-225.
- Scandura, T. A., & Ragins, B. R. (1993). The effects of sex and gender role orientation on mentorship in male dominated occupations. *Journal of Vocational Behavior*, 43 (3), 251-265.
- Wanberg, C. R., Kammeger-Mueller, J., & Marchese, M. (2006). Mentor & protégé predictors and outcomes of mentoring in a formal mentoring program. *Journal of Vocational Behaviour*, 69 (3), 410- 423.
- Wanberg, C. R., Kammeger-Mueller, J., & Marchese, M. (2006). Mentor & protégé predictors and outcomes of mentoring in a formal mentoring program. *Journal of Vocational Behaviour*, 69 (3), 410- 423.
- Xu, X., & Payne, S. C. (2014). Quantity, quality, and satisfaction with mentoring: What matters most? *Journal of Career Development*, 41 (6), 507-525.
- Zhang, Y., Wu, Y. Q. J., Wen, F., & Zhang, Y. (2016). The effectiveness and implementation of mentoring program for newly graduated nurses: A systematic review. *Nurse Education Today*, 37 (1), 136-144.

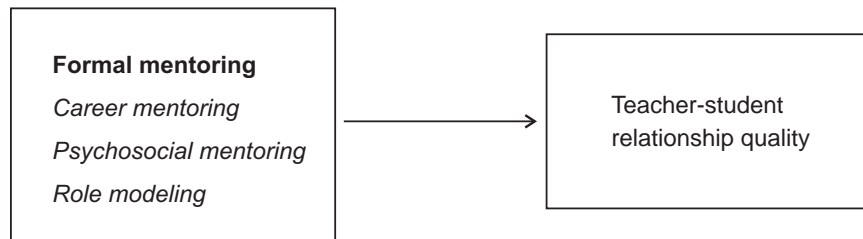


Figure1: Theoretical framework

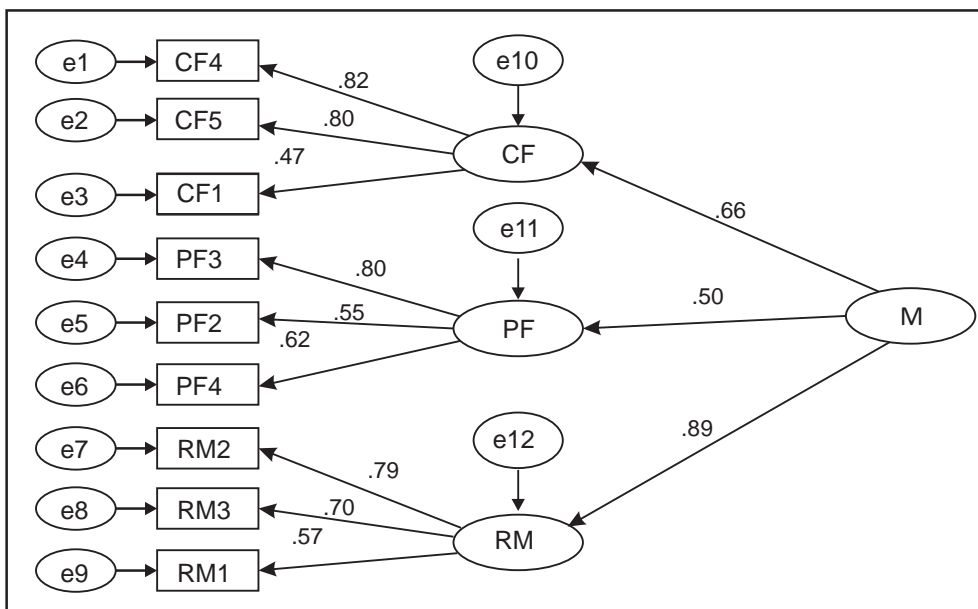


Figure 2: Second Order Factor Model of Mentoring

Key: CF= career function, PF=psychosocial function, RM=role modeling (RM), M=mentoring, CF1 to CF5= manifest variables of CF, PF2 to PF4= manifest variables of PF, RM1 to RM3=manifest variables of RM, e1-e12= error terms

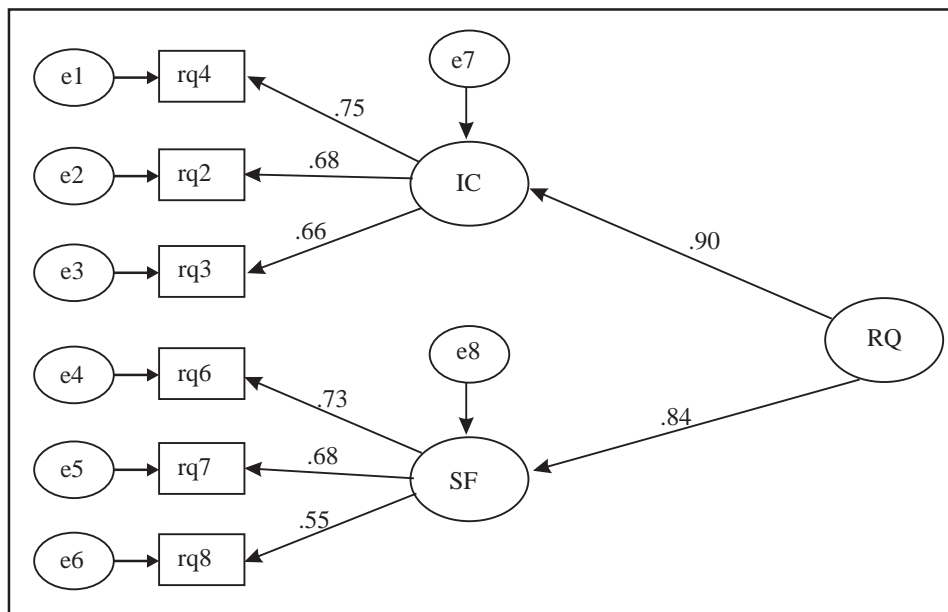


Figure 3: Second Order Factor Model of Relationship Quality

Key: RQ= relationship quality, IC= interpersonal comfort, SF= support and freedom, rq2 to rq4 = manifest variables of IC, rq6 to rq8= manifest variables of SF, e1-e8= error terms.

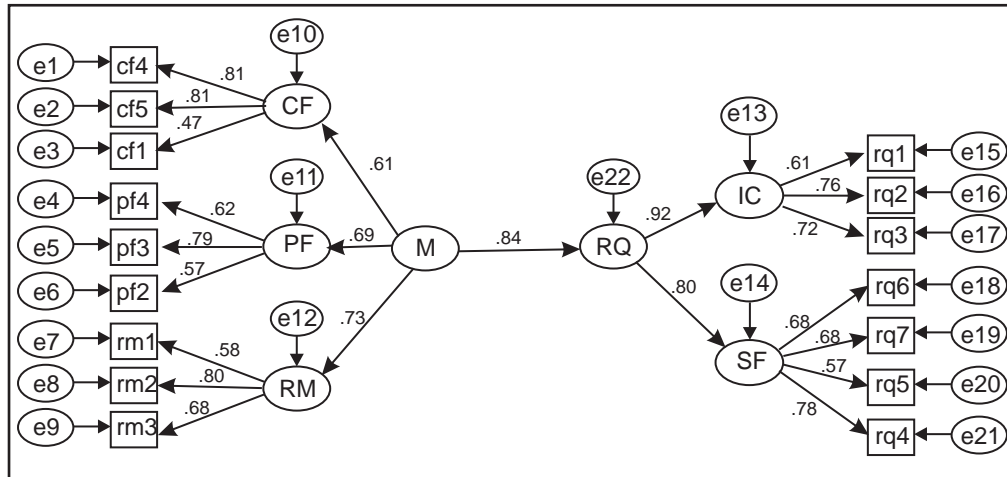


Figure 4: Impact of Mentoring on Relationship Quality

Key: M=mentoring, CF = career function, PF=psychosocial function, RM=role modeling, IC= interpersonal comfort, SP= support and freedom, RQ= relationship quality, e1-e22= error term

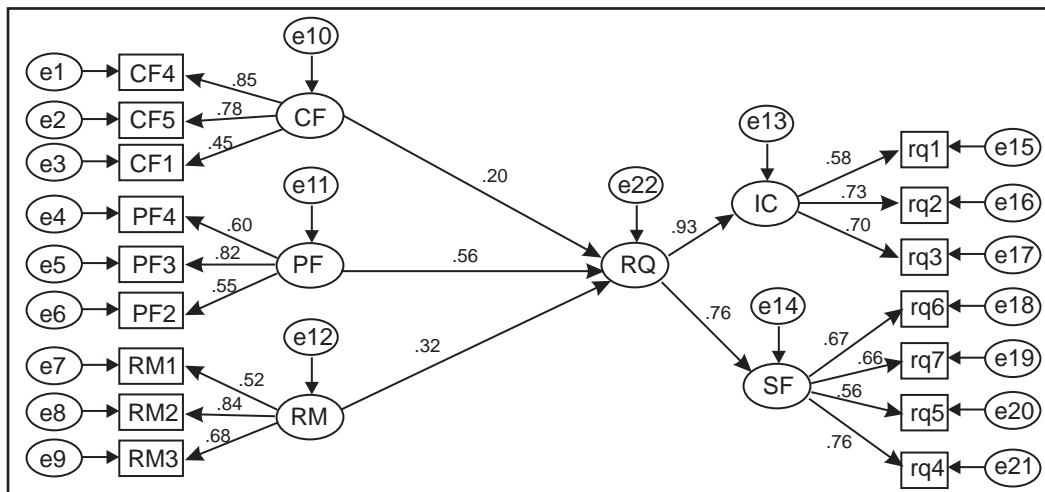


Figure 5: Impact of Career Function, Psychosocial Function and Role Modeling on Relationship Quality

Key: M=mentoring, CF = career function, PF=psychosocial function, RM=role modeling, IC= interpersonal comfort, SP= support and freedom, RQ= relationship quality, e1-e22= error term

Table 1: Summary of Goodness of Model Fit Indices

Constructs	χ^2/df	RMR	GFI	AGFI	CFI	NFI	RMSEA
Mentoring	3.018	0.049	0.961	0.926	0.955	0.936	0.072
Relationship quality	3.936	0.019	0.984	0.941	0.979	0.972	0.086

Table 2: Discriminant Validity and Correlation Analysis

Constructs	Mentoring	Relationship quality
Mentoring	0.90	
Relationship quality	.535**	0.95

Note. Values on the diagonal axis represent the square root of average variance extracted. Values below the diagonal axis are correlation **p< 0.01

Table 3: Reliability and Validity

Constructs	Mean	Standard deviation	Standardized Regression Weight	Average Variance Extracted	Composite Reliability	Cronbach's alpha
Mentoring	3.61	.820		0.82	0.98	
Career function	3.84	.832	0.66			0.71
Psychosocial function	3.14	.844	0.50			0.70
Role modeling	3.86	.786	0.89			0.71
Relationship quality	3.63	.753		0.92	0.96	
Interpersonal comfort	3.59	.753	0.69			0.74
Support and freedom	3.67	.754	0.90			0.70



Factors Influencing Socially Responsible Consumption Behaviour in Delhi & NCR

Dr. Shallu Singh*

Dr Anjali Sharma**

ABSTRACT

Environmental concerns are gaining attention across the globe. The phenomenon like social consciousness, social responsibility, green consumerism etc. are all gaining vital momentum. This study is an endeavor to study the factors influencing socially responsible consumption behavior in Delhi and NCR. The study has been conducted on a sample of 317 and the underlying factors have been explored through exploratory factor analysis. The various factors that emerge include causal consumption, self-monitoring, corrective rehabilitation, government initiatives, local society initiatives and firm's behavior. These factors can be taken into consideration to generate awareness towards social responsibility and hence thereby creating a socially alert citizen.

Key words: Consumption Behavior, Causal Consumption, Self-monitoring, Corrective Rehabilitation

INTRODUCTION

The consumers across the globe has now started acknowledging the fact that their lavish style of living and absence of responsible patterns of consumption have created a destructive impact on the earth which has now become beyond repairs. The intensity of these aftermaths have stressed consumers to comprehend the concepts of socially responsible consumption and sustainability which has a straight connect with the possible solutions to this grave concern. Thus, the world is getting more sensitive for the issues pertaining environment and socially responsible consumption.

Henion (1976) defined socially responsible consumption as "those behaviors and purchase decisions made by consumers that are related to environmental-resource problems and are motivated not only by a desire to satisfy personal needs, but also by a concern for the possible adverse consequences of their consequent effects" Antil and Bennett (1979) defined socially responsible consumption behaviour as "those consumer behavior and purchase decisions which are related to environmental and resource-related problems and are motivated not only by a desire to satisfy personal needs but also by a concern for welfare of society in general". Webster (1975) defined the socially conscious consumer as "a

consumer who takes into account the public consequences of his or her private consumption or who attempts to use his or her purchasing power to bring about social change".

It was revealed through varied public surveys that 30% consumers were ready to pay premium price for green energy (Eurobarometer 2005; Zarnikau 2003). And off lately it has been observed by (Nielsen Global Survey of Corporate Citizenship (2012) that (68%) consumers from Philippines, (55%) from Asia pacific, (53%) from Middle East and Africa, (49%) from Latin America, (35%) from North America, (32%) from Europe and lastly (21%) from Netherlands were ready to pay more for oproducts and services to the companies having socially responsible inclination. A comparative analysis was conducted (Shen and Dickson (2001) their results revealed that unethical clothing consumption patterns were more prevalent among the consumers belonging to US culture than Chinese culture.

A study undertaken by Havas Media's Brand Sustainable Futures(2010) discovered that out of the nine markets they explored, Indian consumers outshined the consumers from UK, the US, Germany, Spain, France, Brazil, Mexico and China to hit the list of consumers who prefer keeping in mind the social and environmental aspects when deciding for their purchases.

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REVIEW OF LITERATURE

The concept of ethical consumerism embraces the social and environmental repercussions of Globalization where the consumer of today's age is bothered about individual as well as social goals, ideals and ideologies (Uusitalo and Oksanen, 2004, p.215). (Antil, 1984; Leigh, Murphy and Enis, 1988; Roberts, 1995) conducted researches dealing with issues like what factors make a consumer socially and ethically responsible? Numerous studies have been undertaken to investigate the characteristics of socially and ethically responsible consumers.

It has been concluded through many researches that the personal traits of the consumers would impact as how strongly they respond to the level of social responsibility of the company. They coined one of such characteristics as socially responsible consumer behavior (SRCB), which implies to a lasting self-concept of the consumer. (Mohr, Webb, and Harris (2004, p. 47) defined consumers with SRCB characteristics as "a person basing his or her acquisition, usage, and disposition of products on a desire to minimize or eliminate any harmful effects and maximize the long-run beneficial impact on society"

There have been varied opinions formed pertaining the topic of socially responsible consumers. The main factors are related to the individual behaviors (Kohlberg et.al 1969) (Rest et.al.1979).One of the best examples of the same is of the consumers who act to safeguard the interest of the society. The high level of cognitive Moral development of a customer is concerned with an individual feeling responsible for another individual in the society. Moral development can vary from individual to individual based upon just as in case of intellectual development.

An additional factor related to individual behavior is the value judgment which directs the consumer's activities and behavior pattern. Another individual factor is recognition of effectiveness of the consumer. Varied studies conducted on environment and consumers who believe in their effectiveness have shown positive results (Ellen et.al. 1991)). It has also been observed that such consumers are also willing to pay more to purchase environmentally friendly products (Berger et.al. 1992).

The last individual factor is the knowledge level of consumers pertaining environment. It has been

observed that even if the customer possesses a positive attitude for environment but due to lack of information about the product this attitude does not get converted into positive behavior (Nelson et.al. 1994)

SCOPE OF THE PROBLEM

Changing environmental conditions are putting a lot of pressure on survival of the human mankind. The need is that people should be contributing their bit by becoming socially aware by consuming goods that pose least threat to the environment . This paper is an attempt to analyse the factors influencing socially responsible consumption behavior.

OBJECTIVES

- To investigate the factors that influence the individual's behavior regarding socially responsible consumption activities.

RESEARCH METHODOLOGY

This study imbibes an empirical investigation on 325 people from Delhi and NCR (Gurgaon and Noida only). The collection of sample has been undertaken by using convenience sampling method. The questionnaire was designed with two sections: Section I carries questions pertaining to all the vital aspects like gender, age, occupation, marital status and income. Section II has questions (statements) describing the socially responsible consumption behavior. The SRC questionnaire developed by Antil(1984) has been utilized which has been measured and also validated. Forty items have been used. The questionnaire carried statements based on Likert Scale ranging from 1=strongly disagree to 5= strongly agree).

Altman et al. stated that pilot study was a small experiment done to test the logic and to improve the information quality and efficiency collected from big study. A pretest was conducted with a random sample of 170 people across Delhi and NCR. The scale was totally based on measuring consumer attitude and hence behavior. The final survey consisted of sample of 317 (8 questionnaires were rejected due to incomplete information).

The data was subjected to SPSS version 19.0. The study employs factor analysis to find out the underlying factors from the collection of apparent



important variables. *Chua* suggested that factor analysis is the procedure which always been used by the researchers to organize, identify and minimize big items from the questionnaire to certain constructs under one dependent variable in a research. KMO test was done to identify whether the data is suitable for factor analysis. Factor analysis pulls down the total number of variables into fewer factors and also shows correlation between the factors. Secondary data has been duly collected by referring existing published research work using ebsco, magazines and newspapers also.

RESULT AND DISCUSSIONS

a) Descriptive Statistics

McClave et al. elaborates that descriptive statistics uses numerical and graphical methods search in for a pattern in the existing data set, to create a summary out of the information available in the data set and also present the data set in an understandable manner.

Descriptive Statistics that was discussed in this work was the frequency and percentages of profiles of respondents among the students. Table 1 illustrates the demographic profiles of Respondents according to variable gender, age, education and marital status etc.

b) Reliability and Validity

The most important thing about a research instrument is the fact that it should be valid and reliable (*Churchill, 1991*). Validity is about the fact that the findings really need to be the way they are to be. (*Saunders et al. 2003*). While we pay attention to validity, reliability too requires an inquisitiveness. The most important index to measure the reliability is the number of items in a questionnaire: more the number of items, more will be the reliability (*Kothari, 2003*). Therefore forty items in the questionnaire used has been found to be sufficient to generate reliability. The questionnaire developed by *Antil (1984)* has been used. However some cultural modifications were undertaken to make it more understandable in Indian Context. To measure reliability, values higher than 0.7 are considered to be acceptable. In this study, the reliability measure has been found to be 0.765 which is suggestive of one-dimensional scale. Thus, it is evident from table 2

that the reliability analysis that all items contribute well to the scale's reliability and deletion of any item does not affect much on the Cronbachalphs's value (Reliability).

Another method to study reliability of the scale is interitem correlation. In order to accrue a data to be reliable, the inter item correlation should be more than 0.30. For this study the inter item correlation has been found to be 0.39 which is well above the prescribed limit.

c) Factor analysis

In order to understand the role of dominating factors accountable for SRCB, the data collected was subjected to factor analysis. An exploratory factor analysis of the factor structure of the scale used was undertaken with SPSS 19.0, in order to analyze the factor structure beneath the data. Factor analysis is a permutation of multivariate statistical methods used to identify the underlying structure in data i.e. a technique used to determine correlation amongst large number of variables. Hence once data is subjected to this method, a summary information is available wherein large number of variables are classified into factors, depending on their relationship (*Hair et al, 1979*).

The EFA process used is 'principle component method' and in order to extract the variables 'varimax rotation' has been used. Factors with eigen value more than 1 have been retained (*Hair, Anderson, Tathem and Black, 1998*). Given the sample of 317, the factor loadings that were more than 0.50 were considered to be significant at 0.05 level of significance (*Hair. et. al., 1979*)

To check the suitability of the construct for undertaking factor analysis, Barlett's Test of Sphericity should come out to be significant. The test results are shown in Table 3 which shows that it is highly significant (sig=0.000) which is indicative of the fact that factor analysis can be undertaken for the given set of data

The KMO test is a measure of sampling adequacy. The minimum acceptable value for KMO is 0.6 (*Kim and Mueller, 1978*). For the given set of data the value of KMO achieved is 0.750. This means that the factor analysis test has proceeded correctly and the sample used is acceptable. Hence it can be concluded that the sample did not suffer from Multicollinearity (i.e. variables that are very highly correlate). One more condition for validation is that ideally communalities should be

above 0.5 which is also satisfied in the study.

Firstly the data is subjected to principle component analysis, where the forty statements have been reduced to six principle component through varimax rotation. The so obtained factors represent the different factors influencing the socially responsible consumption behavior. **(Table 4)**

The details on factors is given beneath:

Factor 1: Causal Consumption

The rotated matrix has revealed that nine out of forty statements have been loaded significantly to the factor called causal consumption. The factor has been named so as it consists of statements like: consumers should be interested in the environmental consequences of the products they purchase, Consumers should be made to pay higher prices for the products that pollute the environment, would be willing to sign a petition or demonstrate for an environmental cause, would probably never join a group that is concerned only with the ecological issues, would be willing to ride a bicycle or take a bus to work in order to reduce the air pollution, feel people worry too much about pesticides on food, would pay a day's pay to a foundation to help improve the environment, would be willing to have my clothes less bright and would like to use a nonpolluting laundry product and would be willing to pay a 5% increase in my taxes to support more government control of pollution. Thus it is observed that consumption activities need to be clear on cause and effect relationships. This is the most crucial factor considered by the respondents as this factor explained the highest variance of 15.346%.

Factor 2: Self-monitoring

The second factor accounted for 12.124% of total variance. The rotated matrix revealed that eight out of forty statements have been loaded significantly to the factor called self-monitoring . The statements included : person should stop increasing their consumption of products so that the resources last longer, benefits of modern consumer products are more important than the pollution which results from their production and use, have often thought that if we could just get by with little less; there would be more left for future generations, think that a person should urge his/her friends not to use the products that pollute or harm the environment, would be willing to pay few rupees more each month for electricity if it meant

cleaner air, would be willing to accept an increase in my family's total expenses of Rs 5000 next year to promote wise use of natural resources, would be willing to stop buying products from companies guilty of polluting the environment even though it might be inconvenient, be willing to make personal sacrifices for the sake of slowing down pollution even though the immediate results may not seem significant. Hence monitoring of self-behavior towards consumption can guard socially responsible consumption behavior.

Factor 3: Corrective Rehabilitation

The third worth noticing factor with high loadings of eight statements has been named as corrective rehabilitation. It includes statements like: Pollution is presently one of the most critical problems this nation is facing, Natural resources must be preserved even if people must do without some products, Pollution is not personally affecting my life, The whole pollution issue has never upset me too much since I feel it's somewhat overrated, Much more fuss is being made about air and water pollution than is really justified, Trying to control water pollution is more trouble than it is worth, I get angry when I think about the harm being done to plant and animal life by pollution and I rarely ever worry about the effects of smog on myself and my family. In totality they account for a variance of 10.083%.

Factor 4: Government initiative

The fourth noteworthy factor has been government initiative which exhibited a total variance of 8.123%. The statements included: I don't think we are doing enough to encourage manufacturers to use recyclable packages, I think we are just not doing enough to save natural resources from being used to, I get furious on thinking that the government doesn't do much help control pollution of the environment, The central and state governments should subsidize research on technology for recycling waste products, The government should provide its citizens with a list of agencies and organizations to which citizens should report grievances concerning pollution, It would be wise for the government to devote much more money towards supporting a strong conservation program.

Factor 5: Local society initiative

The fifth noteworthy factor has been local society



initiative with a total variance of 7.036. This includes statements like : People should be more concerned about reducing or limiting the noise in our society, Manufactures should be forced to use recycled materials in their manufacturing and processing operations, People should urge their friends to limit their use of products made from scarce resources, People should be willing to accept smog in exchange for convenience of automobiles and our schools should require all students to take a course dealing with environment and conservation problems?

Factor 6: Firm's behavior

The sixth factor is firm's behavior which explains the total variance of 6.412. This includes statements like: Non-returnable bottles and cans for soft drinks and beer should be banned by law, Commercial advertising should be forced to mention the ecological disadvantages of the products, Products which during their manufacturing or use pollute the environment

should be heavily taxed by the government and when I think of the way industries are polluting, I get frustrated and angry.

CONCLUSION

This study is an attempt to examine the factors influencing socially responsible consumption behavior in Delhi & NCR. The study uses analytical tool like factor analysis to fulfill the objective. The results achieved through factor analysis explain that the forty statements used to measure the buyer behavior were reduced to six factors: Cause related consumption, self-monitoring, corrective rehabilitation, government initiative, local society initiative and firm's behavior. The disclosure about the buying behavior reveals that people consider these factors to be the most contributing towards socially responsible consumption behavior. Government can plan their control processes towards these factors. The study has a limitation of being conducted on a limited sample from Delhi & NCR only.

REFERENCES

- Antil, John H. and Peter D. Bennett (1979). Construction and Validation of a Scale to Measure Socially Responsible Consumption Behavior K. H. Henion II and T. C. Kinnear, eds. The Consumer Society, Chicago: The American Association
- Antil, John H. (1984). Socially Responsible Consumers: Profile and Implications for Public Policy. *Journal of Macromarketing*, 4 (2), 18-39.
- Antil, John H. (1984). Socially Responsible Consumers: Profile and Implications for Public Policy. *Journal of Macromarketing*, 4 (fall), 18-39.
- Antil, John H. and Peter D. Bennett (1979). Construction and Validation of a Scale to Measure Socially Responsible Consumption Behavior. Karl E. Henion II and Thomas C. Kinnear (eds.), *The Consumer Society* (pp. 51-68), Chicago : American Marketing Association
- Bergers, I.E. and R.M. Corbon, 1992. Perceived Consumer Effectiveness and Faith in Others as Modetors of Environmentally Responsible Behaviours. *Joournal of Public Policy and Marketing*, 11(2):79-100.
- Churchill, Gilbert A., Jr. (1979). A Paradigm for Developing Better Measures of Marketing Constructs. *Journal of Marketing Research*, 16 (February), 64-73, (Read pages 64-68, i.e., pages 195-199 on the reprinted version).
- D. Altman, N. Burton, I. Cuthill, M. Festing, J. Hutton and L. Playle (2006). Why do a pilot study ? National Centre for replacement. Refinement and reduction of animal in research, 1-2
- Ellen, P.S., J.L. Wiener and C. Cobb-Walgren (1991). The Role of Perceived consumer Effectiveness in Motivating Environmentally conscious behaviours. *Journal of Public Policy and Marketing*, 10(Fall); 102-117.
- Eurobarometer (2003). Energy: Issues, Options and Technologies, Science and Society. A report produced by The European Opinion Research Group (EORG) for the Directorate-General for Research. Luxembourg, 2005. The Attitudes of European Citizens Towards the Environment. European Commission, Brussels. Retrieved (http://ec.europa.eu/public_opinion/archives/ebs/ebs_217_sum_en.pdf).
- Hair, Joseph F., Jr. et al. (1979). *Multivariate Data Analysis*, Tulsa, Oklahoma: Petroleum Publishing Company, Chapter 6, 223-253.

- Hair, J.F.J., Anderson, R.E., R.L., Black, W.C. (1998). *Multivariate Data Analysis*, 5th Edition, Prentice Hall, Upper Saddle River, New Jersey
- Henion, K. E. (1976). *Ecological Marketing*. Columbus: Grid, Inc.
- J.T. McClave, P.G. Benson and T. Sincin, *Statistics for business and economics* (2005). Upper Saddle River, New Jersey, Pearson Prentice Hall
- Kim, Jae-on & Charles W. Mueller. (1978). *Introduction to factor analysis: what it is and how to do it*. Beverly Hills, Calif.: Sage Publications.
- Kim, Jae-on & Charles W. Mueller. (1978). *Factor analysis: statistical methods and practical issues*. Beverly Hills, Calif.: Sage Publications.
- Kohlerg, L., Stagead Sequece. *The cognitive developmental approach to socialization in handbook of socialization Theory and Research*. Ed. by Goslin, D.A. Chicago; Rand McNally and company, pp:347-480.
- Leigh, J. H., Murphy, P. E. and Enis, B. M. 1988. *A New Approach to Measuring Socially Responsible Consumption Tendencies*. *Journal of Macro Marketing*. 8, 5-20.
- Nelson, K.A. (1994). *Consumer decision making and Image Theory: Understanding the socially responsible consumer*. UMI, Dissertation services A Bell and Howel company. An Arbor, Michigan.
- Mohr, L. A., Webb, D. J. and Harris, K. E. (2004). *Do Consumers Expect Companies To Be Socially Responsible? The Impact of Corporate Social Responsibility on Buying Behavior*. *Journal of Consumer Affairs*. 35 (1), 45-72
- Rest, J.R. (1979) *Development in Judging Moral Issues*, Minneapolis. MN: University of Minnesota Press.
- Roberts, J. A. (1995). *Profiling Levels Of Socially Responsible Consumer Behavior: A Cluster Analytic Approach and Its Implications For Marketing*. *Journal of Marketing Theory and Practice*. 3 (4), 97-117.
- Saunders, M., Lewis P., & Thornhill, A. (2009). *Research Methods for Business Students* (5th edition). New Jersey: Prentice Hall.
- Shen, D. and M. A. Dickson (2001). "Consumers' Acceptance of Unethical Clothing Consumption Activities: Influence of Cultural Identification, Ethnicity, and Machiavellianism." *Clothing and Textiles Research Journal* 19(2):76-87.
- Uusitalo, O. and Oksanen, R. (2004). *Ethical Consumerism: A View from Finland*. *International Journal of Consumer Studies*. 28 (3), 214-221.
- Webster, F. E. (1975). *Determining the Characteristics of the Socially Conscious Consumer*." *Journal of Consumer Research* 2(3):188-196.
- Y.P. Chua, *Statistik Penyelidikan Lanjutan Ujian Regresi, Analisis Faktordan Ujian SEM*. McGraw Hill Malaysia, 2009
- Zarnikau, J. 2003. *Consumer Demand for 'Green Power' and Energy Efficiency*. *Energy Policy* 31(15):1661-1672.

Table 1: Descriptive Statistics

Characteristics		N of participants	%
Gender	Males	178	56%
	Females	139	44%
Age	18-30	48	15%
	30-45	133	42%
	45-55	136	43%
Education	Under graduates	42	13.2%
	Graduates	85	26.8%
	Post-graduates	190	60%
Marital status	Single	122	38.2%
	Married	187	59.1%
	Divorcee	8	2.5%



Table 2 : Reliability Statistics

Cronbach's alpha	0.765
No of items	40

Table 3 KMO and Barlett's Test

Kaiser-Meyer-Olkin Measure of Sampling Adequacy.	0.750
Bartlett's Test of Sphericity	Approx. Chi-Square 258.224
	df 240
	Sig. .000

Table 4: Factor names and their loadings

Sr No	Name of the factor	Statements	Factor Loadings	Cronbach alpha	Eigen value	% of variance
1	Causal consumption	A8. All consumers should be interested in the environmental consequences of the products they purchase	0.90	0.689	3.314	15.346
		A10. Consumers should be made to pay higher prices for the products that pollute the environment	0.78			
		A13. I would be willing to sign a petition or demonstrate for an environmental cause	0.74			
		A16 I would be willing to ride a bicycle or take a bus to work in order to reduce the air pollution	0.73			
		A17 I would probably never join a group that is concerned only with the ecological issues	0.70			
		A18 I feel people worry too much about pesticides on food.	0.66			
		A20 I would pay a day's pay to a foundation to help improve the environment.	0.62			
		A21 I would be willing to have my clothes less bright and would like to use a nonpolluting laundry product.	0.61			
		A27 I would be willing to pay a 5% increase in my taxes to support more government control of pollution.	0.59			
		2	Self-monitoring			
A3The benefits of modern consumer products are more important than the pollution which results from their production and use.	0.72					
A14 I have often thought that if we could just get by with little less; there would be more left for future generations	0.71					
A23 I think that a person should urge his/her friends not to use the products that pollute or harm the environment.	0.58					
A31 I would be willing to pay few rupees more each month for electricity if it meant cleaner air.	0.57					
A33 I would be willing to accept an increase in my family's total expenses of Rs 5000 next year to promote wise use of natural resources.	0.56					
A38 I would be willing to stop buying products from companies guilty of polluting the environment even though it might be inconvenient.	0.54					
A39 I'd be willing to make personal sacrifices for						

	the sake of slowing down pollution even though the immediate results may not seem significant.	0.52				
3	Corrective rehabilitation	A4 Pollution is presently one of the most critical problems this nation is facing.	0.78	0.824	1.968	10.083
		A7 Natural resources must be preserved even if people must do without some products	0.72			
		A9 Pollution is not personally affecting my life	0.69			
		A19 The whole pollution issue has never upset me too much since I feel it's somewhat overrated	0.67			
		A25 Much more fuss is being made about air and water pollution than is really justified.	0.66			
		A28 Trying to control water pollution is more trouble than it is worth.	0.65			
		A29 I get angry when I think about the harm being done to plant and animal life by pollution	0.64			
		A40 I rarely ever worry about the effects of smog on myself and my family.	0.63			
4	Government initiative	A5 I don't think we are doing enough to encourage manufacturers to use recyclable packages	0.80	0.754	1.859	8.123
		A6 I think we are just not doing enough to save natural resources from being used to .	0.79			
		A11 I get furious on thinking that the government doesn't do much help control pollution of the environment.	0.59			
		A15The central and state governments should subsidize research on technology for recycling waste product..	0.54			
		A26 The government should provide its citizens with a list of agencies and organizations to which citizens should report grievances concerning pollution	0.53			
		A32 It would be wise for the government to devote much more money towards supporting a strong conservation program	0.50			
5	Local society initiative	A1 People should be more concerned about reducing or limiting the noise in our society.	0.89	0.854	1.658	7.036
		A22 Manufactures should be forced to use recycled materials in their manufacturing and processing operations	0.83			
		A30 People should urge their friends to limit their use of products made from scarce resources.	0.82			
		A35 People should be willing to accept smog in exchange for convenience of automobiles.	0.77			
		A37 Our schools should require all students to take a course dealing with environment and conservation problems.	0.50			
6	Firm's behavior	A12 Non returnable bottles and cans for soft drinks and beer should be banned by law.	0.85	0.567	1.164	6.412
		A24 Commercial advertising should be forced to mention the ecological disadvantages of the products.	0.84			
		A34 Products which during their manufacturing or use pollute the environment should be heavily taxed by eth government.	0.75			
		A36 When I think of the way industries are polluting, I get frustrated and angry.	0.63			



Organizational Citizenship Behaviour of Academic and Non-Academic Work Force in Institutions of Higher Education: An Empirical Study

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ABSTRACT

Professionals are supposed to perform a wide variety of extra role activities known as **Organizational Citizenship Behaviour (OCB)**. Organizational citizenship behaviour is a valuable instrument for accomplishing the organizational goals rather than fulfilling duties. In simple words, it means behaviours of an individual that are favourable to the organization at large but not directly recognized by the formal reward system. The present paper aims to obtain a greater understanding of the consequences of organizational citizenship behaviours of academic and non-academic workforce of private higher education institutions. The purpose of the study is to compare organizational citizenship behaviours of academic and non-academic employees. Respondents included 373 academic and non-academic employees of various Engineering colleges in Bhubaneswar. The results of the study revealed that there is a striking degree of similarity in organizational citizenship behaviours of both teaching as well as non-teaching employees of the educational institutes surveyed.

Key words: Organizational Citizenship Behaviour, Rewards, Extra role Behaviour, Educational institutes, Academic workforce, Non- Academic workforce.

INTRODUCTION

In their tenure of the job, an employee is expected to pursue some rules and guidelines framed by the company for the healthy work environment of the company and for the smooth functioning of the business operations. But in today's era, these rules & guideline are not so adequate for the healthy work atmosphere in the company. Employee's attrition rate is growing day by day in every company in every sector. The reason for its growth is the discontent of the employee with the company, but the reasons behind that discontent are many, they may be lured away by elevated pay, better development opportunities, better remuneration, job safety etc but besides all these reasons there are many other reasons which can't be compared or calculated easily like the salary difference between two companies, or the development opportunities provided by the companies. The major reasons for the unhappiness of employees may include: the

association between the senior and junior, reliability towards the company, relation between the colleagues, support from the top management, job satisfaction, sportsmanship, civic virtue, conscientiousness, courtesy & altruism etc. These all factors are implied in nature. You can't compel any employee to show this kind of behaviour because this type of behaviour is exclusively based on the aspiration of the employee. This behaviour which consists of the above-mentioned elements is called as Organization Citizenship Behaviour.

OCB refers to the act that employees perform, impulsively and of their own accord, which is not in their specified contractual obligations. In other words, it is optional. OCB may not always be open and officially acknowledged or rewarded by the employer, through salary increase or promotions. OCB may be shown in constructive supervisor and co-worker ratings, or better performance appraisals. In this way, it can aid future reward

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gain indirectly. OCB must 'encourage the efficient performance of the organisation'. The most popular way of conceptualising OCB is as going 'the extra mile' or 'above and beyond' to help others in the workplace.

What constitutes a good quality worker in a 21st-century place of work? It is important to have fine relations with co-workers. Being helpful and compassionate of colleagues, working towards the organisation's goals – this is personified in the description of citizenship behaviour. Organisational citizenship behaviour (OCB) has garnered much intellectual interest since its origin. It is perceived to be something insubstantial; OCB is not all the time formally acknowledged or compensated, and concepts like 'helpfulness' or 'friendliness' are also not easy to measure. OCB has a substantial positive contact at the organisational level; it enhances organisational efficiency from 18% to 38% across different magnitude of measurement.

Organizational citizenship behaviour is not rewarded by the company & also not proclaimed. It may be an action that is not clearly part of the job profile and not incorporated in Performance Appraisal. This is not described by the top management in their official rules & neither regulations nor they evaluate it. An employee shows this type of behaviour when he feels himself as the proper employee of the organization, as a true citizen of the company. The long period of endurance of the company completely depends upon the Organization citizenship behaviour of the workforce of that company. This type of behaviour does not come through enforcement, this is absolutely depends upon the inclination of the employees towards the company.

The perception of the employee plays a very important role in performing this kind of behaviour. OCB is expected from employee's conduct but is not associated with contractually defined duties. Like citizens of a country, employees are likely to preserve and endorse the organisation. Organizational citizenship behavior (OCB) has been a fundamental construct in the area of management. The proximity of OCB is increasing day by day. The span of organizational citizenship behaviour is so ample that it relates with almost every discipline directly or indirectly. According to Organ (1988), 'OCB is an important feature that can add to the continued existence of an organization'. Therefore, it is essential to value the

variables that extensively and optimistically aid in creating this favourable behaviour in the organization.

Basically, the upper limit of task performance is largely limited by a person's knowledge, skills, and ability, and the lower border line is restricted by the terror of losing one's job. This means the employee performing the job does not have a great deal of scope to differ in performance based on their satisfaction with the context. In contrast, helping a co-worker does not essentially depend on proficiency in helping, and because doing so is not usually attached to an employee's job description that employee may decide not to show the behaviour at all. In this sense, citizenship has more autonomy to vary than task performance.

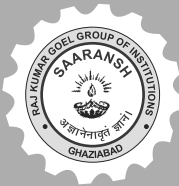
The subsistence of any company not only depends on its customers because they are the principal sources of any organization's revenue but also on the inner customer of the organization i.e. workforce of the company. Organization citizenship behaviour devised by the worker without hope leads every organization in an ethical way which is the foundation of the organization survival. Employees are always measured as the resources of the company and when company's resources fully show their dedication towards the organization, it shows the strength of the organization which gives aggressive gain to the organization. Organization citizenship behaviour is indispensable for every organization & which is the mixture of various characteristics performed by employees. In this research, we will study the connection of various traits of employees with organization citizenship behaviour.

DIMENSIONS OF OCB

Organ (1988), has highlighted five different kinds of behaviours and tries to explore how such behaviour helps to increase efficiency and growth of the organization:

a) Altruism: it means helping new employees and generously giving time to help others. It is mainly focussed toward other employees but contributes to group goal and efficiency by augmenting the performance of an individual employee.

b) Conscientiousness: It stands for proper utilisation of time and giving extra input to their job which is ahead of minimum expectations from the job holder. It also contributes towards enhancing the competence of both an employee



and the organisation.

c) Sportsmanship: it means avoiding complaining attitude and whining behaviour. It helps an employee to spend time on constructive endeavours in the organization.

d) Courtesy: it involves giving advance notices, reminders, and communicating suitable information in order to prevent confusion and facilitates proper utilisation of time and resources of the organisation.

e) Civic Virtue: it means helping committees and willingly attending functions for promoting the interests and well-being of the organization.

ANTECEDENTS OF OCB:

a) Motivation: The study reveals that motives are playing very vital and important role in reinforcement of OCB. Management may encourage faculties to actively participate in several developmental activities, which may include the seminars, conference, workshops, soft skill training sessions and various faculty development programmes for their self-development as well as for the development of the institute. Motivation is a significant antecedent of OCB.

b) Job Satisfaction: Job satisfaction denotes the favourable or unfavourable attitude of an employee towards his job. Job satisfaction has a constructive and positive relationship with performance and OCB which affects the job stress, intention to quit, self-esteem and morale of faculties. A satisfied employee shows less intention to leave his job.

c) Organisational Commitment: Organisational commitment is the loyalty and dedication of individual employee towards the organisation. It may be conceptualised as a strong faith and confidence in organisational goal and also a strong aspiration to sustain job in the organisation. Organisational commitment is one of the important and vital antecedents of OCB.

d) Leadership: Leadership has a very positive and strong influence on an employee's inclination to involve in OCB. It is optimistically connected to OCB. Effective leadership enhances a sense of team spirit, high morale and feeling of cohesiveness among faculties which ultimately leads to better organisational performance and employee commitment.

e) Employee Engagement: Employee

Engagement is has a positive and strong impact on OCB. It is the measure of degree of an employee's positive or negative feeling and attachment to his job and organisation. Employee engagement is said to be one of important antecedent of OCB.

f) Competence: Competence means the capacity of an individual employee to do the job effectively. Competence is amalgamation of knowledge, skills, education, attitude and abilities to execute the job to the maximum level. Competence has positive and strong association with organisational citizenship behaviour.

g) Organisational Justice: Organizational justice is all about how an employee perceives the behaviour of the organization and their resulting mind-set and performance that comes from this. Organisational Justice is an antecedent of OCB.

LITERATURE REVIEW

Organisational citizenship behaviour of Academic workforce

Teaching is a service profession, in which the academicians have considerable autonomy in his or her work. They have the power to choose how they manage their work in a variety of ways, such as: design of lessons, order of lessons, management of their classroom and others. Teachers unknowingly exhibit OCB and may categorize his behaviour as part of their job duty and not as going above and beyond the call of duty. Some examples may be staying late to help struggling students, making calls to parents on their personal time and volunteering to assist with activities for students. Teacher may view these as ways to help further and not as organizational citizenship behaviour. For this study, teacher OCB will be defined as behaviours that exceed their contractual obligations and extend beyond the call of duty. OCB in education centres primarily in the area of altruism. Altruistic behaviour is the most commonly observed behaviour in education because of the clientele of the profession.

The readiness of employees to exert endeavour beyond the prescribed obligations dictated by their job has been accepted as a vital element of efficient organizational performance. For example, Barnard (1938) stated that the "eagerness of employees to give positive efforts to the organization was crucial to valuable accomplishment of organizational goals". Barnard

noted that “efforts must be given not only to carry out the functions those add to the goals of the organization but also to maintain the efficiency of the organization itself.”

Katz and Kahn's (1966), extended this statement further. They claimed that in any organization, the system would not function properly if employees don't exhibit “countless acts of cooperation” They further noted that the rewards that motivate such impulsive, informal contributions are totally different from those rewards that stimulate task proficiency. These views encouraged a lot of subsequent research in this area.

According to Organ (1988), in OCB an individual's behaviour is optional. This behaviour is not directly recognized by the prescribed reward system and it promotes the effective operation of the organization in a collective manner. Katz's (1964) paid extra attention to the concept of employees' extra-role behaviours. Katz pointed out that that employee gladly adds extra efforts for the accomplishment of the organizational consequences. Organ developed his OCB construct based upon the notions of Barnard (1938) and Katz (1964). Despite ample of research in this area, argument continues over the specific definition of OCB.

Organ (1997), again has noted that the supervisors regularly evaluate and reward OCB shown by the employees both directly and indirectly. Another significant statement, particularly in Organ's beginning work on OCB, is that such behaviours are internally motivated, coming from within and continued by an individual's inherent need for a feeling of accomplishment, efficiency or affiliation. Organ (1988), noted that OCB is different from other related constructs such as “organizational commitment” developed by several organizational researchers. It is important here to highlight that OCB is associated with particular class of worker behaviours, while constructs such as organizational commitment is fundamentally attitude-based.

Van Dyne (1995), propounded a broader concept of “extra-role behaviour” (ERB), which may be defined as “behaviour that benefits the organization at large or is intentional to benefit the organization and it is totally discretionary in nature and goes ahead of expected role expectations”. But Organ (1997), argued that this

definition did not give much precision and clarity, noting that one's “job role “depends on the expectations and communication of the employer. The “sent role” could be lesser or greater than the actual work requirements. This role theory definition thus places OCB or ERB in the sphere of phenomenology, which is unobservable and completely subjective in nature.

Motowidlo and Borman and (1993, 1997), developed another notion known as ‘contextual performance’ associated with OCB that also gives input to the efficiency of the organization by providing a superior profile to organizational, psychological and social aspects that may serve as the device for betterment of task related activities As opposed to “task performance” which means the effectiveness of the incumbents in performing various activities that ultimately contributes to the organization's technical hub by “contextual performance” these scholars referred to those job related behaviours where employees engage himself in many job behaviours and that fall outside the routine of job performance. Their categorization of contextual performance includes enthusiasm and extra role effort as necessary to complete their own task successfully, coming forward to carry out those jobs related activities that are not formally an element of their own job, serving and supporting others, following formal organizational rules and regulations of the organisation and advocating, supporting, and protecting organizational objectives.

According to Motowidlo and Van-Scotter (1996), the contextual performance can be divided into the two narrower constructs of “interpersonal cooperation” and “job devotion,” which are similar to Organ's interpersonally focussed and organizationally-directed behaviours respectively. However, Organ (1997), also suggested that Borman and Motowidlo's (1993), construct of “contextual behaviours” has propounded a mere justifiable definition of OCB. These contextual behaviours do not endorse the efforts for the achievement of the organizational consequences.

Jo (2008), Higher education, with its mix of academic, professional, and support workforce (along with a multi-focused mission on teaching, research, and service) is a complex organization and highly bureaucratic. In spite of these facts, human resource and personnel issues in higher education have garnered only moderate attention in the research literature.



DiPaola and Costa Neves (2009) state that “teachers routinely perform behaviours that are directed toward helping individuals, both students and colleagues, as part of their professional identity”.

DiPaola & Hoy (2007), the faculties by nature have the calling to go beyond the call of duty, doing more than what is specifically required of the position Turnipseed & Murkison(1996), OCB is desirable because this behaviour assist resource transformation, adaptability and innovation in order to increase the organizational efficiency

Rajkumar and Akarsh (2014), Organizational Citizenship Behaviour is one of the most significant concepts in controlling the efficiency and effectiveness of an organization in terms of productivity and quality of the organization.

Organ, Podsakoff, & MacKenzie, (2006). OCBs influence organizational effectiveness, because they enhance co-worker and managerial productivity, adapts to environmental changes, improves organizations ability to attract and retain the best people and obtain stability of organizational performance and organizational effectiveness by creating social capital.

Todd (2003), OCB should have a particular impact on the overall effectiveness of organizations by adding to the social framework of the work environment.

According to Yucel (2008), Academicians may play a very significant role in escalating the image of institutes and wellbeing of the students. Faculties with high level of OCB are more valuable for an institute as compared to others because the quality of an educational institution is solely dependent on them.

According to Graham (1991), Organ & Ryan (1995), “OCB can be understood as the worker behaviours which support to endorse the efficient functions of the organization, and these behaviours are not overtly stimulated by the formal reward system of the organization.

Shann (1998), narrated ‘the relationship of an Academician with students is stronger in high achieving institutes’ schools as compared to lower achieving institutes.

Researchers have also found that the citizenship behaviour of an academician has positively linked with students academic achievement (Allison, Voss, & Dryer, 2001; Khalid, Jusoff, Othman,

Ismail, & Rehman, 2010).

Oplatka (2006), recommended that a head of the institute should establish an environments that can promote organizational citizenship behaviour among academicians, which is in the best interest of institution as well better impartment of better knowledge to students.

DiPaola & Neves (2009), confirmed that ‘A faculty who is voluntarily involves in OCB, enthusiastically may help students and counterparts, and can also execute duties that not only help them in the career progression but also other employees in the organization. Such acts may include enthusiastically serving on committees, mentoring, helping weak students, coordinating curricular and co-curricular activities for the betterment of the institute. In order to involve in such behaviours motivation on the part of the faculty is required. The faculty must be eager to offer such contribution at his own prudence’.

Organ (1988), OCB, may be described as the behaviour or action outside the formal reward structure of the organisation and is not an element of the distinct job description and are performed by the employees for the wellbeing of the organization.

Organisational citizenship behaviour of Non-Academic workforce

According to Johnsrud and Rosser (2000), non-academic workforces are a very significant force in higher learning institutes. They serve in many key roles such as student services (e.g., student affairs, student advising, student welfare, student health services), administration (e.g., finance, human resources and IT), and also academic support services (e.g., academic advising). Because of their boundary-spanning role among faculty and students, the Non-Academic workforce has great prospective to control the overall performance of institution as a whole.

Johnsrud and Rosser (2000), revealed that in higher education literature, there is still very limited understanding about the importance of this critical group of administrators – their roles, responsibilities, skills, training needs, and career pathways.

Volkwein & Parmley (2000), it could also be said that little is understood about the direct and indirect contributions of non-academic workforces to higher education.

In educational institutions, students are the main focus for the goals of the organization. Therefore, any behaviour exhibited to help students also will improve or help the organization. OCB will, overtime, improves the organization's effectiveness. The OCB exhibited by academic and non-academic workforce make institute more effective by allowing the institute to be flexible, adaptable, innovative and efficient.

The researcher, in this study, sought to address this gap in literature i.e. to study the contribution of Academic and Non-Academic workforce in the success of educational institutes. It is apparent that both OCBI and OCBO are decisive determinants of an organisation's efficiency, efficiency, productivity and overall performance, research with respect to the specific factors that promote OCB under different types of organisation is insufficient and very limited (Erturk, 2007), especially in the context of educational organisations.

In education organisations voluntary behaviour of employees is imperative because, in the educational institutions, the additional roles are performed along with the official tasks and is frequently part of such official roles. Therefore, it is likely that the relationship between management and employee within the educational context may differ from that of the corporate situation. Hence, by attempting to address this specific problem at the institutions of higher education, this study may contribute to developing OCBs of employees of educational institutes and will ultimately augment the efficiency of higher education institutions.

Although the research in the area of citizenship behaviours has amplified outstandingly in the last few years, little effort has been given on the comparative study of organizational citizenship behaviours of the academic and non-academic workforce of education institutes. This study will help the other researchers in analyzing the effect of different types of organizational citizenship behaviours depicted by these two divergent groups of employees in an educational institute. It will also represent the importance of OCB in increasing the efficiency of the educational organization and will determine the factors that create OCB of employees of an Academic institution.

SIGNIFICANCE OF THE STUDY

The present study is being conducted in the times

when private universities are moving a step ahead in the form of the highly technological labs and improved infrastructure and posing a challenge on the universities for maintaining their status and rankings as the leading universities. Higher Education Commission has developed a criterion for ranking universities in different domains. Employees are one of the significant factors among them and their profiles are playing a substantial role in ranking. Therefore the major challenge for the public and private universities is to retain their competent workforce and to provide them an environment that induces them so that they not only stay trustworthy but do something extra beyond their duty for their university. Hence psychological and behavioural dimensions of employees of higher learning institutions are important to study so that their implications can be anticipated in the long run. This study also indirectly explores the satisfaction and motivation level of the employees by the examination of their voluntary behaviour and their willingness to participate informally in the organisation.

OBJECTIVES OF THE STUDY

The objectives pertaining to this study are:

1. To measure the difference/similarity of organizational citizenship behaviour of academic and non-academic employees.
2. To determine the extent to which employees of educational institution exhibit the citizenship behaviour.

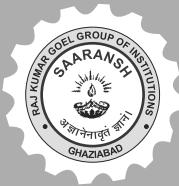
RESEARCH METHODOLOGY

Measure

The items of OCB were measured by using a 5-point Likert-type scale (1 = strongly disagree, 5 = strongly agree). Examples of the items for OCBI are "I help co-workers when required" and "I welcome good change without resistance" Examples of the items for OCBO are "I try to boost the image of my organization" and "I protect the organizational resources":

Data Collection

The study is based on primary data collected from 373 academic non-academic employees working in various B.Tech institutes in Bhubaneswar city. An analytical and self-administered questionnaire based on Likert's five point rating scale was



distributed among the sample. Convenience sampling technique is used for choosing the respondents.

The demographic characteristics of the respondents are given in Table 1. From the study of 373 employees of private engineering colleges it is found that majority of the respondents belong to below 30 yrs. of age (65.68 percent) and rest are between 31 to 50 years of age (34.32 percent). Concerning marital status, majority of respondents are unmarried (65.68 percent) followed by married employees (34.32). As far years of work experience is concerned majority of respondents have less than 5 years of experience (48.53 percent), followed by employees having experience of 5-10 years in their job. Only (13.4 percent) of employees have 10-15 years of experience. Concerning educational qualification (71.85 percent) of employees have masters degree, (4.82 percent) have Doctoral, (12.87 percent) of employees have Bachelor's Degree and (6.17 percent) of employees have degree of Intermediate. It is also found that majority of respondents of institutes are Male (50.67 percent) followed by their female counterparts who are (49.33 percent) of the total population. The majority of population belongs to teaching employees (55.23 percent) whereas the total strength of non-teaching workforce is (44.77 percent).

DATA ANALYSIS AND FINDINGS

Construct reliability test is conducted to ensure that a scale consistently yielded the same response Nunnally, (1978). Construct reliability is determined by Cronbach's alpha (α). A minimum recommended value for Cronbach's alpha coefficient is .7 (Chin, 1998; Fornell & Larcker, 1981). The Cronbach's alpha value of the responses on OCB scale is determined as **0.839**. Also in order to estimate the sampling adequacy and suitability of data for factor analysis, KMO test and Bartlett's Test of Sphericity test was conducted using SPSS package 20.0 (Figure 1), which provides with a value of **0.737** that is higher than the needed 0.5 and can be classified as middling (Kaiser, 1974). The Chi-square value is 3334.261 and it is highly significant ($p = 0.000$), with 171 as the degree of freedom. (Fig. 1)

DESCRIPTIVE STATISTICS

The mean and standard deviation of the

responses obtained from the academic workforce, for each statement in the questionnaire are tabulated as shown in the above table (**Table 2**). Of all the statements presented in the table, the statement "*Not resisting good change*" had highest rank, with a mean score of 4.59, implying that teaching workforce had a co-operative and supportive attitude towards the organization and its management. The statement "*Actions ensuring no issues with peer*" was ranked second with a mean value of 4.34, suggesting that the academic workforce ensured and maintained a healthy relationship among their colleagues. The statements "*Taking initiative for new assignments*" and "*Protecting org. resources*" had closer mean scores of 4.16 and 4.17 respectively, implying the proactive attitude of the academic workforce. Lastly, "*Saving organization resources*" was ranked last, with the lowest meanscore of 3.51, which implies that majority of the academic workforce were least concerned with saving the financial resources of the organization they worked for.

The mean and standard deviation of the responses obtained from the non-academic workforce, for each statement in the questionnaire are tabulated as shown in the above table (Table 3). Of all the statements presented in the table, the statement "*Spreading goodwill in the org.*" had highest rank, with a mean value of 4.67, implying that the non-academic workforce spread a positive word-of-mouth about the organization and its management. The statement "*Projecting good image of the org*" was ranked second with a mean value of 4.54, suggesting a similarity to their previous response and displaying a sense of loyal towards the organization they worked for. The statements "*Boosting org. image*" and "*Not resisting good change*" had equal mean scores of 4.31, implying the co-operative and involving attitude of the non-academic workforce. Lastly, "*Not complaining about insignificant things*" was ranked last, with the lowest mean score of 3.51, which implies that majority of the non-academic workforce did not have a complaining and petty attitude.

FACTOR ANALYSIS

Extraction Method: Principal Component Analysis

The **Table 4 & 5** depicts the factor loadings in the

form of rotated component matrix; the idea of rotation is to reduce the number factors on which the variables under investigation have high loadings. Factor loadings having Eigen values above 0.5 have been considered and highlighted. We can see that six variables are substantially loaded on Factor component 1. Four factor components are loaded heavily loaded on factor component two, followed by the loading of three variables on component four. “*Listening and suggesting solutions*” is the only variable loaded on component six. **Table 5** shows all the factors extractable from the analysis along with their Eigen values. The Eigenvalue table has been divided into three sub-sections, i.e. Initial Eigen Values, Extracted Sums of Squared Loadings and Rotation of Sums of Squared Loadings. For analysis and further interpretation we are only concerned with Extracted Sums of Squared Loadings. It is observed that the first factor component accounts for 36.878 per cent of the variance, the second factor component accounts for 12.791 per cent of variance and the sixth factor component accounts for 5.598 per cent. All components combined account for 80.467 of the total variance. All the remaining factors have Eigen values below 0.5 and have been removed.

Extraction Method: Principal Component Analysis

Table 6 provides with the factor loading of the variables under each of the six extracted factors. Out of 19 variables, six factors were extracted on rotation of the variables and in order to interpret the results, a similar cut-off point of 0.5 is decided for each variable to group them into factors by forming a rotated component matrix. Table-7 represents the results of the factor analysis using principal component method shows that 72.115% of the total variance is explained by classifying these 19 variables into 6 components or factors. (Table 8)

REFERENCES

1. Alper Erturk, (2007). “Increasing organizational citizenship behaviours of Turkish academicians: Mediating role of trust in supervisor on the relationship between organizational justice and citizenship behaviours”, *Journal of Managerial Psychology*, 22 (3)
2. Allison, B. J., Voss, R. S., & Dryer, S. (2001). Student classroom and career success: The role of organizational citizenship behaviour. *Journal of Education for Business*, 76
3. C. Borman & S. J. Motowidlo, (1997). Task performance and contextual performance: the meaning for personnel selection research. *Human Performance*, 10

CONCLUSION

The purpose behind the study was to estimate the differences in OCB of academic and non-academic employees. After the study carried out in various Engineering colleges of Bhubaneswar, it is quite apparent that there is a striking similarity in the OCB displayed by both types of employees. The reason can be clarity in vision and mission of the organization and conveying this clearly to all the employees. An important aspect for this similarity in the results can be the culture adopted by the organizations surveyed. Defining a culture is an arduous task as it is based on a complex combination of people’s shared attitudes, beliefs, assumptions and behaviour’s. However, observing the results suggest that the institutions have a high possibility of adopting/following a “*Clan Culture*”, collaboration being the foundation.

Sometimes the culture which is to be followed by the employees generally becomes the satisfactory or dissatisfactory factor for the employees. Encouraging fulfilment of all employees, a *Clan Culture* empowers individuals to share shared traits and see themselves are a piece of one major family who are dynamic and included. Authority appears as mentorship, and the association is bound by responsibilities and conventions. The principle esteems are established in cooperation, correspondence and accord. In our survey, both academic and non-academic employees displayed the same high degree of OCB, based on the results of the variables analysed, namely; employees giving constructive suggestions to each other, adhering to organizational protocols and holistically appreciating the working conditions. The non-academic workforces seem to be focused on spreading goodwill about the organization; on the other hand, the academic workforce seems to also display a high sense of OCB by not being resistant to change for a good cause.



4. Cetin, (2006). Pre-service Teacher's teaching-learning conceptions and their attitudes towards teaching profession, 5(2)
5. C. I. Barnard,(1988).The functions of the executive. Cambridge, MA: Harvard University Press (1938).
6. D.W.Organ.(1988). Organizational citizenship behavior: The good soldier syndrome. Lexington, MA: Lexington
7. D. W. Organ.(1997). A reappraisal and reinterpretation of the satisfaction-causes-performance hypothesis.*Academy of Management Review*, 2
8. D. W. Organ, (1997). Organizational citizenship behaviour: It's construct clean-up time. *Human Performance*, 10
9. Dhiman Raj Kumar, Sharma Akarsh, (2014). Organizational citizenship behaviour among teacher educators International Research Journal of Human Resources and Social Sciences, 1(7)
10. DiPaola, M., & Hoy, W. K. (2004).Organizational citizenship of faculty and achievement of high school students.The High School Journal, 88
11. DiPaola, M.F.&Neves, P. M. (2009).Measuring organizational citizenship behaviour across cultures: A construct comparison between American and Portuguese secondary teachers. *Journal of Educational Administration*, 47 (4)
12. Graham, J. W. (1991). An Essay on Organizational Citizenship Behaviour.Employee Responsibilities & Rights Journal, 4(4)
13. J D. Katz, & R. L. Kahn,(1966).The social psychology of organizations. New York: Wiley
14. Johnsrud, L. K., & Rosser, V. J. (Eds.) (2000). Understanding the work and career paths of midlevel administrators. New Direction for Higher Education, 111
15. Jo, V. H. (2008). Voluntary turnover and women administrators in higher education.Higher Education, 56(5)
16. Ohnsrud, L. K., Heck, R. H, & Rosser, V. J. (2000). Morale matters: Midlevel administrators and their intent to leave. Journal of Higher Education, 71(1)
17. Morrison, E. (1996). Organizational citizenship behaviour as a critical link between HRM Practices and Service Quality.Human Resource Management, 35
18. Nunnally, J. C. (1978). Psychometric theory. McGraw-Hill, 2
19. Oplatka, I. (2006). Going beyond role expectations: Toward an understanding of the determinants and components of teacher organizational citizenship behaviour. Educational Administration Quarterly, 42(3)
20. Organ, d. W., & Ryan, k. (1995). A Meta-Analytic Review of Attitudinal and Dispositional Predictors of Organizational Citizenship Behavior.Personnel psychology, 48(4)
21. Organ, D. W., Podsakoff, P. M., &MacKenzie, S. B.,(2006).Organizational citizenship behaviour: Its nature, antecedents,and consequences. USA: Sage Publications, Inc
22. Shann, M. H. (1998). Professional commitment and satisfaction among teachers in urban middle schools.Journal of Educational Research, 92(2)
23. ShaifulAnnuar Khalid, Hj.Kamaruzaman Jusoff, Mahmud Othman, Mohammad Ismail, Norshimah Abdul Rahman, (2010). Organizational Citizenship Behavior as a Predictor of Student Academic Achievement. International journal of Economics and finance, 2(1)
24. Todd, S. Y., & Kent, A. (2006). Direct and indirect effects of task characteristics on organizational citizenship behavior. North American Journal of Psychology, 8(2),
25. Turnipseed, D. and Murkison, G. 1996. Organization citizenship behaviour: an examination of the influence of the workplace, Leadership & Organization Development Journal 17(2)
26. Van Scotter, J. R., Motowidlo, S. J., & Cross, T. C. (2000).Effects of task performance and contextual performance on systemic rewards. Journal of Applied Psychology, 85(4)
27. Volkwein, J. F., &Parmley, K. (2000). Comparing administrative satisfaction in public and private universities.*Research in Higher Education*, 41(1)
28. Yucel, C. (2008). Teacher burnout and organizational citizenship behaviour in Turkish elementary schools.Educational Planning, 7(1) .

Table 1: Illustration of Demographics

Demographic Characteristics (N= 373)	Frequency	
	Number	Percentage
Age		
Below 30	245	65.68
31 – 40	82	21.98
41 – 50	46	12.34
Gender		
Male	189	50.67
Female	184	49.33
Marital Status		
Single	245	65.68
Married	128	34.32
Years of experience		
0 to 5	181	48.53
5 to 10	104	27.88
10 to 15	50	13.40
> 15	38	10.19
Nature of Job		
Teaching	206	55.23
Non-Teaching	167	44.77
Educational Qualification		
Matriculation	16	4.29
Intermediate	23	6.17
Graduation	48	12.87
Masters	268	71.85
PhD	18	4.82

Figure 1 - KMO and Bartlett's Test

Kaiser-Meyer-Olkin Measure of Sampling Adequacy.		.737
Bartlett's Test of Sphericity	Approx. Chi-Square	3334.261
	Df	171
	Sig.	.000

Table 2: Mean & Standard Deviation Values of Academic workforce

Statements	N	Minimum	Maximum	Mean	Std. Deviation
Listening and suggesting solutions	206	3	5	4.1	0.609
Spreading goodwill about the org.	206	3	5	4.1	0.596
Helping co-workers	206	3	5	4.29	0.609
Giving constructive suggestions	206	3	5	4.23	0.634
Not complaining about insignificant things	206	2	5	3.67	0.836
Enthusiasm regarding job	206	2	5	4.32	0.792
Self-develop as per changes	206	3	5	4.29	0.611
Putting extra effort	206	2	5	4.13	0.673
Saving organization resources	206	2	5	3.51	0.848
Opposing favouritism in the org.	206	1	5	3.83	0.984
Boosting org. image	206	1	5	3.92	0.786
Projecting good image of the org.	206	3	5	4.23	0.588
Appreciating working conditions	206	2	5	3.85	0.884
Following org. protocols	206	3	5	4.13	0.623
Not resisting good change	206	2	15	4.59	1.943
Taking initiative for new assignments	206	3	5	4.16	0.591
Protecting org. resources	206	3	5	4.17	0.589
Actions ensuring no issues with peer	206	3	5	4.34	0.585
Feeling of "my company is the best"	206	1	5	4.05	0.865
Valid N (listwise)	206				



Table 3: Mean & Standard Deviation values of Non-Academic workforce

Statements	N	Minimum	Maximum	Mean	Std. Deviation
Listening and suggesting solutions	167	4	5	4.6	0.492
Spreading goodwill about the org.	167	3	5	4.67	0.596
Helping co-workers	167	3	5	4.7	0.532
Giving constructive suggestions	167	3	5	4.28	0.774
Not complaining about insignificant things	167	1	5	3.4	1.13
Enthusiasm regarding job	167	2	5	4.23	0.843
Self-develop as per changes	167	2	5	4.4	0.8
Putting extra effort	167	1	5	4.18	1.031
Saving organization resources	167	1	5	3.62	1.096
Opposing favouritism in the org.	167	2	5	3.75	0.966
Boosting org. image	167	3	5	4.31	0.734
Projecting good image of the org.	167	3	5	4.54	0.608
Appreciating working conditions	167	1	5	4.02	0.954
Following org. protocols	167	1	5	3.98	0.979
Not resisting good change	167	2	5	4.31	0.782
Taking initiative for new assignments	167	3	5	4.27	0.635
Protecting org. resources	167	1	5	4.17	0.988
Actions ensuring no issues with peer	167	1	5	4.34	0.986
Feeling of "my company is the best"	167	1	5	4.1	1.028
Valid N (listwise)	167				

Table 4: Rotated Component Matrix^a- Non-Academic workforce

	Component					
	1	2	3	4	5	6
Projecting good image of the org.	0.874	-0.01	0.16	0.273	0.012	-0.05
Feeling of "my company is the best"	0.788	0.176	0.329	0.043	0.023	0.032
Spreading goodwill of the org.	0.772	0.453	0.089	0.036	-0.16	-0.01
Giving constructive suggestions	0.710	-0.05	-0.12	0.434	0.256	0.34
Appreciating working conditions	0.695	0.41	0.286	-0.26	0.048	-0.24
Boosting org. image	0.617	0.287	0.03	0.355	0.146	-0.08
Helping co-workers	0.055	0.844	-0.1	0.142	-0.09	0.185
Self-develop as per changes	0.265	0.800	0.093	0.085	0.102	0.067
Putting extra effort	0.521	0.659	0.063	0.207	0.257	-0.04
Not resisting good change	0.483	0.562	0.424	0.312	-0.03	-0.27
Following org. protocols	0.149	0.198	0.893	0.181	0.017	-0.1
Not complaining about insignificant things	0.143	-0.17	0.635	-0.17	0.546	0.192
Enthusiasm regarding job	0.238	-0.15	0.635	-0.17	-0.44	0.097
Taking initiative for new assignments	0.332	0.496	0.53	0.121	0.057	0.474
Protecting org. resources	0.153	0.245	-0.1	0.806	0.037	-0.14
Actions ensuring no issues with peer	0.215	0.081	0.152	0.767	0.204	-0.02
Opposing favouritism in the org.	0.105	-0.05	-0.13	0.113	0.817	-0.2
Saving organization resources	-0.03	0.417	0.178	0.333	0.641	0.069
Listening and suggesting solutions	-0.09	0.155	0.024	-0.16	-0.15	0.930

Table 5 - Total Variance Explained – Non Academic

Component	Initial Eigenvalues			Extraction Sums of Squared Loadings			Rotation Sums of Squared Loadings		
	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %
1	7.007	36.878	36.878	7.007	36.878	36.878	4.228	22.254	22.254
2	2.43	12.791	49.669	2.43	12.791	49.669	3.197	16.825	39.079
3	1.902	10.009	59.678	1.902	10.009	59.678	2.405	12.659	51.738
4	1.623	8.542	68.22	1.623	8.542	68.22	2.116	11.139	62.877
5	1.263	6.65	74.87	1.263	6.65	74.87	1.837	9.667	72.544
6	1.064	5.598	80.467	1.064	5.598	80.467	1.505	7.923	80.467

Table 6 - Rotated Component Matrix^a- Academic workforce

	Component					
	1	2	3	4	5	6
Giving constructive suggestions	0.862	0.115	0.062	-0.12	-0.06	0.012
Helping co-workers	0.788	0.047	0.201	0.199	0.306	0.096
Listening and suggesting solutions	0.726	-0.02	0.389	0.123	0.186	-0.12
Self-develop as per changes	0.576	0.354	0.25	0.171	-0.03	0.169
Taking initiative for new assignments	0.56	0.517	0.101	-0.02	-0.28	-0.18
Enthusiasm regarding job	0.148	0.800	0.153	0.234	-0.08	-0.25
Feeling of "my company is the best"	-0.09	0.773	0.15	0.255	-0.08	-0.09
Actions ensuring no issues with peer	0.256	0.752	0.022	-0.2	0.216	0.189
Projecting good image of the org.	0.231	0.562	0.398	0.172	0.29	0.143
Opposing favouritism in the org.	0.08	-0.06	0.743	-0.32	-0.23	0.221
Appreciating working conditions	0.09	0.416	0.684	0.244	0.084	-0.19
Putting extra effort	0.321	0.159	0.659	0.08	-0.03	0.081
Following org. protocols	0.349	0.159	0.655	0.231	-0.15	-0.23
Protecting org. resources	0.179	0.396	0.547	0.117	0.232	0.334
Spreading goodwill of the org.	0.191	0.193	0.032	0.822	0.08	0.076
Boosting org. image	-0.02	0.078	0.084	0.760	-0.15	0.028
Not complaining about insignificant things	-0.01	-0.03	0.358	0.326	-0.76	-0.02
Not resisting good change	0.174	0.023	0.188	0.142	0.655	-0.46
Saving organization resources	0.046	-0.08	0.09	0.109	-0.11	0.863

Table 7: Total Variance Explained –Academic workforce

Component	Initial Eigenvalues		Extraction Sums of Squared Loadings			Rotation Sums of Squared Loadings			
	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %
1	5.973	31.437	31.437	5.973	31.437	31.437	3.028	15.936	15.936
2	1.994	10.493	41.93	1.994	10.493	41.93	2.963	15.594	31.53
3	1.892	9.955	51.886	1.892	9.955	51.886	2.836	14.926	46.456
4	1.44	7.581	59.467	1.44	7.581	59.467	1.914	10.072	56.528
5	1.279	6.733	66.2	1.279	6.733	66.2	1.536	8.083	64.611
6	1.124	5.915	72.115	1.124	5.915	72.115	1.426	7.504	72.115

Table 8: Factors explained: Academic workforce & Non-Academic workforce

Academic workforce			Non –Academic workforce	
Variables	Name of Factor	Factor	Variables	Name of Factor
Giving constructive suggestions , Helping co-workers, Listening and suggesting solutions, Self-develop as per changes	Apathetic	Factor 1	Projecting good image of the org., Feeling of "my company is the best", Spreading goodwill of the org., Giving constructive suggestions, Appreciating working conditions, Putting extra effort, Boosting org. image	Beneficiary
Taking initiative for new assignments, Enthusiasm regarding job, Feeling of "my company is the best", Actions ensuring no issues with peer , Projecting good image of the org.	Proactive	Factor 2	Helping co-workers, Self-develop as per changes, Putting extra effort, Not resisting good change	Holistic
Putting extra effort, Following org. protocols, Protecting org. resources	Realistic	Factor 3	Following org. protocols, Not complaining about insignificant things, Enthusiasm regarding job	Pro-Cultured
Spreading goodwill of the org., Boosting org. image	Representative	Factor 4	Protecting org. resources, Actions ensuring no issues with peer	Responsible
Not resisting good change	Modern	Factor 5	Opposing favoritism in the org., Saving organization resources	Unbiased
Saving organization resources	Calculative	Factor 6	Listening and suggesting solutions	Considerate



A Study on Impact of Spiritual Intelligence on Job Performance of Faculties in BSACET, Mathura

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ABSTRACT

Spiritual intelligence is the mind's capacity to handle real and spiritual aspects of life. This study explores the relationship between spiritual intelligence and job performance of faculties in B.S.A College of Engineering and Technology, Mathura. The primary and secondary data were used in this research. Here, the sample size is taken of forty one faculties. The study shows that Spiritual Intelligence helps them to develop optimistic outlook towards life & work which in turn provides positive result to both faculties and the organization. It has been found in the research that Spiritual Intelligence enhances the work efficiency & effectiveness of their decisions.

Keywords: Spiritual Intelligence, job performance, optimistic outlook, work efficiency & effectiveness.

INTRODUCTION

Job performance is the way employees perform their task. For being productive and performing up to job's standard involves setting goals and objectives and striving to obtain them by following organization's rules, policies and procedures.

In order to understand the term spiritual intelligence, two words should be made clear: First, being spiritual; it means to think, act and interact from an awareness of self as a soul and not physical body. It means to know that our true spiritual nature is peaceful, loving and joyful; anger, sadness and other emotions that are always the result of ego misidentification that blocks the access to our true spiritual nature. Secondly, having intelligence means to know the right way, at right time in right place and having right intentions.

Thus, spiritual intelligence is the expression of innate spiritual qualities, which are love, peace, purity and bliss, through our thoughts, attitudes and behavior. It is the ability to see every human being as soul or spirit and having an awareness to recognize and connect with the supreme power.

REVIEW OF LITERATURE

Campbell, Maccloy, Oppler & Sager (1993) states that job performance is a parameter for measuring the level of functioning of individuals at workplace. They consider performance as an action of an employee, not an outcome.

Noble (2001) state that spiritual intelligence integrates the qualities of flexibility and emotional resilience which plays a role in psychological health and behavior.

Tee et al (2011) found that in workplace, spiritual intelligence helps workers in the context of relationships and align personal values with a clear sense of purpose that demonstrates a high level of integrity in work.

Emmons (2000) proposes four components for spiritual intelligence – ability to utilize spiritual resources to solve problem; ability to enter into heightened states of consciousness; ability to invest everyday activities and relationships with a sense of the; and capacity for transcendence.

Nasel (2004) finds some features associated with Spiritual Intelligence are: Love, kindness, honesty, patience, tolerance, inner peace or balance in the face of existential challenges of life.

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RESEARCH GAP

This research is being undertaken to analyze the impact of Spiritual Intelligence on workplace performance of faculties because this area of study has the potential of exploration due to inadequate research data.

OBJECTIVES OF THE STUDY

- To study the relationship between spiritual intelligence and job performance.
- To study whether spiritual intelligence increase level of job performance.
- To study whether spiritual intelligence helps in building harmonious relations with colleagues.
- To study the impact of Spiritual Intelligence on following qualities of faculties at workplace: Peace, Satisfaction, Optimism, Tolerance, Patience, Honesty, Kindness, and Emotional Balance.

RESEARCH METHODOLOGY

- Universe of the Study* : Various Department of BSACET, Mathura was covered.
- Sample Size* : 41 Faculties.
- Sampling Unit* : Faculties of various Department
- Sampling Procedure*: Simple Random Sampling.
- Sampling Time-frame* : January, 2017 – February, 2017.
- Research Instrument* : Structured Questionnaire

RESULTS & DISCUSSION

Reliability

The reliability of the questionnaire was checked by using Cronbach's Alpha test in SPSS for 13 number of items and it 0.701 which indicates a high level of internal consistency for our scale with this specific sample.

Reliability Statistics

Cronbach's Alpha	Cronbach's Alpha Based on Standardized Items	N of Items
.701	.765	13

(Source: SPSS Table)

Age wise classification of respondents

Age	Number of Respondents
20-30	15
30-40	23
40-50	03
Total	41

(Source: Data collected)

The questions were distributed among questionnaire into 3 parts – Job Performance, Spiritual Intelligence, and Impact of Spiritual Intelligence on Job Performance. The analysis is done within different age-group.

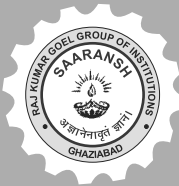
Job Performance

In the above **Table 1**, **27%** of respondents practice **Honesty** followed by 18% Patience, 17% Optimism, 12% Peace, 11% Tolerance, 9% Kindness and 8% Perseverance. **It implies that Faculties in BSACET practice Honesty more as compared to other traits while on job**, irrespective of the age group, followed by patience and optimism in 20-30 and 30-40 age group respectively.

In the above **Table 2**, **56%** of respondents **mostly** complete their work followed by **41%** who **always** meet deadlines and **2%** **missed** their deadlines usually. **It implies that Faculties in BSACET mostly meet their work deadlines**. Further, tendency of timely work completion is seen mostly in age group of 20-30 followed by 30-40 and 40-50 respectively. It can be inferred that **ageing** affects work promptness.

In the above **Table 3**, **95%** of respondents take initiative to **propose solutions** to problems as compared to 5% who do not take initiative to propose solutions. Faculties of 20-30 and 40-50 ages take more initiative to propose solutions as compared to faculties in age group 30-40. **It implies that nearly all faculties in BSACET propose solutions to problems as initiatives in which mostly youngest and oldest generations are initiators**. A concern for initiative is less may be due to loads of responsibilities in 30-40 age group.

In the above **Table 4**, **75%** of respondents have **good** working relationships with other faculties followed by 22.5% excellent and 2.5% average. **It implies that most faculties in BSACET have good working relationships (but not excellent) among each other**. Further, faculties in **40-50** age groups have **excellent working relationship**



among them which reveals that older generation can sustain relationships better, which may be due to their experience.

In the above **Table 5**, **88%** of respondents are **improving** their performance at the job while **12%** are **neutral**. It implies that **majority of faculties in BSACET are improving their work performance irrespective of the age groups**. It can further be analyzed that newer generation have finer approach to their performance enhancement than their older counterparts.

In the above **Table 6**, **41%** of respondents **often** remain emotionally balance during working hours when situation is against followed by 24% always, 17% occasionally and 12% rarely while 5% are never balanced emotionally. **It implies that majority of faculties in BSACET often remain emotionally balance irrespective of age groups**. Further, it can be inferred that determination and will power facilitate balancing emotions and no situation can dominate one's feelings until chosen so.

In the above **Table 7**, **56%** of respondents are **satisfied** with their job followed by 34% neutral, 7% strongly satisfied, and 2% strongly dissatisfied. **It implies that most faculties in BSACET are satisfied with their job**. More respondents in 20-30 age group are satisfied as compared to respondents in 30-40 and 40-50 age group. But only a handful of younger people are strongly satisfied with their jobs as compared to older ones may be due to their vision for advance position on job.

SPIRITUAL INTELLIGENCE

In the above **Table 8**, **98%** of respondents **affirm** while only 2% refute their feeling of bond with the Divine power. **It implies that most faculties in BSACET feel that they are connected or linked with the Divine Energy in spite of distinct age groups**. Further as a person becomes mature, inclination towards belief on divinity become strengthen.

In the above **Table 9**, **95%** of respondents are **grateful** towards the Divine power for their talents and abilities while only 5% are unappreciative. **It implies that the majority of faculties in BSACET are appreciative towards the Divine Power for their talents and abilities regardless of the discrete age groups**.

In the above **Table 10**, **71%** of respondents are

satisfied with their life as compared to 27% who are discontented though they take liability for their own action while only 2% blame others for their own mistakes. **It implies that a good number of faculties in BSACET are satisfied with their life although they belong to different age groups**. Further, it can be construed that as people grow older their satisfaction levels starts decreasing though they take responsibility of their actions despite being dissatisfied.

In the above **Table 11**, **59%** of respondents **sometimes** feel other peoples' distress and 41% who always feels it. **It implies that faculties in BSACET are perceptible towards the suffering of other people irrespective of the age groups**.

In the above **Table 12**, **71%** of respondents uphold an opinion that there is a link between various stages of life, 24% also affirms the same although they do not know its reason while only 5% reject this notion. **It implies that majority of faculties in BSACET affirms that there is a relationship between different events in life while they may or may not know its reason**. It can be inferred that most people believe that behind every cause there is a reason which may or may not be known to them.

In the above **Table 13**, **40%** of respondents' **chants God's name**, 30% of respondents reads scriptures, 17% perform meditation and 13% perform prayers. Respondents in age group 40-50 read scriptures more than the respondents of other age groups who primarily do chanting. **It implies that majority of faculties in BSACET practice chanting of God's name followed by reading scriptures**.

In the above **Table 14**, **98%** of respondents confront adverse situations with an open mind or **handle** it while only 2% each complain and try to escape from it. **It implies that faculties in BSACET predominantly combat adverse situations with an open mind regardless of different age groups they belong to**.

IMPACT OF SPIRITUAL INTELLIGENCE ON JOB PERFORMANCE

In the above **Table 15**, **54%** of respondents believe in Divine Power because of **Self realization**, 24% Knowledge, 19% Family practice, and only 3% on advice of others. **It implies that majority of**

faculties in BSACET believe in the Divine Power due to Self Realization irrespective of different age groups. It can be inferred that people not only believe in Divine Power but have practical realizations too.

In the above Table 16, 65% of respondents deal positively at the time of difficulty at workplace, 22% see it as an opportunity for spiritual growth and 13% become depressed. It implies that majority of faculties in BSACET deals positively with difficulties at workplace regardless of age groups. Further, faculties in age group 30-40 are more positively inclined than other age groups which show that middle-aged faculties are more optimistic and confident than in younger and older ages. While middle-aged faculties are more optimistic, new and old aged faculties are more spiritually inclined.

In the above Table 17, 59% of respondents always think that the Divine Energy helps them in overcoming difficulties at workplace, and 41% sometimes think so. It implies that most faculties in BSACET always think that the Divine energy helps them in overcoming problems at workplace.

In the above Table 18, 37% of respondents have balanced workplace relationship due to better quality of person, 35% higher consciousness, 18% rules and regulations of BSACET and 10% compassion. It implies that majority of faculties in BSACET have stable workplace rapport owing to better quality of person irrespective of distinct age groups. It can be inferred that healthier relationships can be sustained due to certain attributes in persons which are mutually likeable as well as higher consciousness wherein people see themselves and others as parts of the Divine Energy.

In the above Table 19, 45% of respondents propose solutions to problems because they enjoy challenges, 39% as their job's part and 16% see everything from higher consciousness. It implies that majority of faculties in BSACET propose solutions to problems as they enjoy challenges. It can be inferred that younger generation perceive giving solutions as job's part and as people start aging they start seeing problems as challenges for which they enjoy finding solutions.

In the above Table 20, 61% of respondents always practice optimism at their workplace, 34%

often, and 5% somewhat. It implies that majority of faculties in BSACET always practice optimism at their workplace. It can be inferred that spiritual practices help in remaining optimistic at workplace.

In the above Table 21, 76% of respondents always remain honest at their workplace and 24% often do so. It implies that majority of faculties in BSACET always remain honest at their workplace irrespective of distinct age groups. It can be inferred that spiritual practices help in remaining honest at workplace.

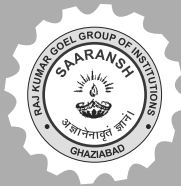
In the above Table 22, 56% of respondents always remain kind at their workplace, 41% often, and 2% somewhat. Respondents in older age groups are more inclined towards kindness than respondents in younger age groups. It implies that majority of faculties in BSACET always remain kind at their workplace. It can be inferred that spiritual practices help in remaining kind at workplace.

In the above Table 23, 54% of respondents always stay peaceful at their workplace, 41% often, and 5% somewhat. It implies that majority of faculties in BSACET always remain peaceful at their workplace irrespective of their age groups. It can be inferred that spiritual practices help in remaining peaceful at workplace.

In the above Table 24, 49% of respondents often stay tolerant at their workplace, 34% always, 10% somewhat, 5% not very much and 2% never. Respondents in 20-30 age group are more tolerant than respondents in other age groups. It implies that majority of faculties in BSACET often remain tolerant at their workplace. It can be inferred that spiritual practices help in remaining tolerant at workplace.

In the above Table 25, 63% of respondents always have patience at their workplace, 34% often, and 2% not very much. Respondents in 20-30 age group have more patience than respondents in other age groups. It implies that majority of faculties in BSACET always have patience at their workplace because of SI. It can be inferred that younger and older generations have more patience than middle-aged may be due to middle-aged persons are burdened with more responsibilities.

In the above Table 26, 51% of respondents often have perseverance at their workplace, 32% always, and 12% somewhat, 2% not very much



and 2% never. Respondents in **40-50** age group are **more determined** than respondents in other age groups. **It implies that majority of faculties in BSACET often have perseverance at their workplace due to SI.** It can also be inferred that older generation people are more determined, enduring and diligent.

In the above **Table 27**, **54%** of respondents **sometimes** feel that spiritual practices helps them in improving their performance level at their job and 46% always thinks so. Respondents in 20-30 and 40-50 age group acknowledge more that spiritual practices helps them in improving their performance level at their job than respondents in 30-40 age group.

It implies that majority of faculties in BSACET think that spiritual practices help them in improving their performance level at their job.

It can be inferred that spiritual practices such as chanting God's names, reading scriptures, etc support formation of positive and constructive attitude among those who practice it which as a consequence improves their performance at job.

In the above **Table 28**, **51%** of respondents **sometimes** feel that spiritual practices helps them in remaining satisfied at their job regardless of situations, good or bad, that may come at any time, 46% always and 2% never. **It implies that**

majority of faculties in BSACET think that spiritual practices sometimes helps them in remaining satisfied at their job regardless of situations, good or bad, that may come at any time.

CONCLUSION

Humans have different yet interrelated intelligence levels that affect their lives to substantial level. This includes intelligence levels in terms of intellectual, emotional and spiritual. It is found in the study that Spiritual Intelligence significantly influences level of job performance of faculties in BSACET. Spiritual Intelligence is commonly misunderstood as something related to religion but in reality it is possible to be 'spiritual' without being religious.

High spiritual intelligence leads to more job satisfaction among faculties in BSACET. The results indicate that SI not only helps faculties in remaining optimistic during difficulties but also in finding ways to overcome them. It also facilitate in applying positive traits on the job which is reflected in improvement in job performance and healthy work relations among faculties.

Thus, in addition to unravel problems, spiritual intelligence may be applied in life to discover and experience larger wellbeing even in the midst of difficulties.

REFERENCES

- Ahangar, R.G. (2015). Emotional intelligence: the most potent factor of job performance among executives. In Annamaria Di Fabio (Ed.), *Emotional intelligence - New perspectives and applications*. Rijeka, Croatia: InTech. Available on <http://www.intechopen.com/books/emotional-intelligence-newperspectives-and-applications/emotional-intelligence-the-most-potent-factor-of-job-performance-among-executives>.
- Ahmadian, E., Hakimzadeh, A. & Kordestani, S. (2013). Job stress and spiritual intelligence: A case study. *World Applied Sciences Journal*, 22(11), 1667-1676. doi: 10.5829/idosi.wasj.2013.22.11.2974.
- Amram, Y., & Dryer, C. (2007). The integrated spiritual intelligence scale (ISIS): Development and preliminary validation. Paper presented at the 116th Annual Conference of the American Psychological Association, Boston, MA.
- Anbugeetha, D. (2015). An analysis of the spiritual intelligence self report inventory. *International Journal of Management*, 6(7), 28-38. Retrieved from <http://www.iaeme.com/IJM/issues.asp?JTypeIJM&VType=6&IType=7>
- Anwar, M.A. & Osman-Gani, A.M. (2015). The Effects of Spiritual Intelligence and its Dimensions on Organizational Citizenship Behaviour. *Journal of Industrial Engineering and Management*, 8(4), 1162-1178. doi: 10.3926/jiem.1451.
- Azizi, M. & Zamaniyan, M. (2013). The relationship between spiritual intelligence and vocabulary learning strategies in EFL learners. *Theory and Practice in Language Studies*, 3(5), 852-858. doi:10.4304/tpis.3.5.852-858.
- Campbell, J.P., McCloy, R.A., Oppler, S.H. & Sager, C.E. (1993). A Theory of Performance, In N. Schmitt & W.C. Borman (Eds.), *Personnel in Organizations*, 258-299.
- Dharma, R.S. and Lakshmi L.K. (2014). Relationship between spiritual intelligence and job satisfaction- A

conceptual study. *Global Journal for Research Analysis*, 3(3), 95-97.

- Emmons, R. (2000). Is spirituality and intelligence? Motivation, cognition and the psychology of the ultimate concern. *International Journal for the Psychology of Religion*, 10(1), 3-26.
- Emmons, Robert. (2000). Spirituality and intelligence: Problems and prospects. *International Journal for the Psychology of Religion*, 10(1), 57-64.
- George, R. & Visvam, S. (2013). Spiritual intelligence, its correlation with teacher effectiveness and academic achievement – A study. *International Journal of Education and Psychological Research*, 2(2), 106-110.
- Isfahani, A.N. & Nobakht H. (2013). Impact of spiritual intelligence on the staff happiness (Case study: Golpayegan petrochemical company). *International Journal of Academic Research in Business and Social Sciences*, 3(7), 253-266. Retrieved from <http://dx.doi.org/10.6007/IJARBSS/v3-i7/43>
- Jeloudar, S.Y. & Goodarzi, F.L. (2012). What is the relationship between spiritual intelligence and job satisfaction among MA and BA teachers? *International Journal of Business and Social Science*, 3(8), 299-303. Retrieved from www.ijbssnet.com.
- Kalantarkousheh, S.M., Sharghi, N., Soleimani, M. & Ramezani, S. (2014). The role of spiritual intelligence on organizational commitment in employees of universities in Tehran province, Iran. *Procedia - Social and Behavioral Sciences*, 140, 499-505. Retrieved from www.sciencedirect.com
- Keshtegar, M. & Jenaabadi, H. (2015). Relationship among emotional intelligence, spiritual intelligence and resilience of students at university of Zabol. *International Journal of Clinical Medicine*, 6, 759-768. doi: 10.4236/ijcm.2015.610102.
- King, D.B. and DeCicco, T. L. (2009). A viable model and self-report measure. *International Journal of Transpersonal Studies*, 28, 68-85.
- Moreno-Murcia, J.A., Torregrosa, Y.S. & Pedreño, N.B. (2015). Questionnaire evaluating teaching competencies in the university environment. Evaluation of teaching competencies in the university. *New Approaches in Educational Research*, 4(1), 54-61. doi: 10.7821/naer.2015.1.106.
- Nasel, D.D. (2004). Spiritual orientation in relation to spiritual intelligence: A new consideration of traditional Christianity and new age/individualistic spirituality. Doctoral Dissertation, University of South Australia: Australia.
- Noble, K.D. (2001). *Riding the windhorse: Spiritual intelligence and the growth of the self*. Cresskill, NJ: Hampton Press, Inc.
- Pugno, M. & Depedri, S. (2009). Job performance and job satisfaction: An integrated survey. *Discussion Paper No. 4*.
- Rani, A.A., Abidin, I. & Hamid, M.R.A. (2013). The impact of spiritual intelligence on work Performance: Case studies in government hospitals of east coast of Malaysia. *The Macrotheme Review*, 2(3), 46-59.
- Sadasivan, K., Kumari, K.V. and Suganthi, P. (2015). Spirituality, emotional intelligence and work stress - A scrutiny. *International Journal of Pharmaceutical Sciences Review and Research*, 33(1), 115-118. Retrieved from www.globalresearchonline.net.
- Tee, S.C., Anantharaman, R.N. and Yoon, K.T. (2011). The roles of emotional intelligence and spiritual intelligence at the workplace. *Journal of Human Resources Management Research*, 2011(2011), 1-9. doi: 10.5171/2011.582992.
- Zamani, M.R. & Karimi, F. (2015). Relationship between spiritual intelligence and job satisfaction among female high school teachers. *Educational Research and Reviews*, 10(6), 739-743. doi: 10.5897/err2015.2130.



Table 1. Trait(s) practiced on the job

Options	Number of Responses							
	20-30		30-40		40-50		Total	
	No.	(%)	No.	(%)	No.	(%)	No.	(%)
Optimism	7	17	11	16	1	20	19	17
Integrity/ Honesty	11	27	17	25	2	40	30	27
Tolerance	4	10	7	10	1	20	12	11
Perseverance	2	5	7	10	0	0	9	8
Patience	10	24	10	15	0	0	20	18
Humility/ Kindness	3	7	6	9	1	20	10	9
Peace	4	10	9	13	0	0	13	12
Total	41	100	67	100	5	100	113	100

(Source: Data collected)

Table 2. Completing work and meeting deadlines

Options	Number of Responses							
	20-30		30-40		40-50		Total	
	No.	(%)	No.	(%)	No.	(%)	No.	(%)
Always	7	47	9	39	1	33	17	41
Mostly	7	47	14	61	2	67	23	56
Missed dead- lines usually/ often	1	7	0	0	0	0	1	2
Total	15	100	23	100	3	100	41	100

(Source: Data collected)

Table 3. Propose solutions to problems as initiative

Options	Number of Responses							
	20-30		30-40		40-50		Total	
	No.	(%)	No.	(%)	No.	(%)	No.	(%)
Yes	15	100	21	91	3	100	39	95
No	0	0	2	9	0	0	2	5
Total	15	100	23	100	3	100	41	100

(Source: Data collected)

Table 4. Working Relationships with other faculties:

Options	Number of Responses							
	20-30		30-40		40-50		Total	
	No.	(%)	No.	(%)	No.	(%)	No.	(%)
Excellent	1	7	6	26	2	67	9	22.5
Good	12	86	17	74	1	33	30	75
Average	1	7	0	0	0	0	1	2.5
Below Average	0	0	0	0	0	0	0	0
Poor	0	0	0	0	0	0	0	0
Total	14	100	23	100	3	100	40	100

(Source: Data collected)

Table 5. Improving performance at the job

Options	Number of Responses							
	20-30		30-40		40-50		Total	
	No.	(%)	No.	(%)	No.	(%)	No.	(%)
Improving	14	93	20	87	2	67	36	88
Neutral	1	7	3	13	1	33	5	12
Not Improving	0	0	0	0	0	0	0	0
Total	15	100	23	100	3	100	41	100

(Source: Data collected)

Table 6. Remain Emotionally Balance during working hours when situation is in against:

Options	Number of Responses							
	20-30		30-40		40-50		Total	
	No.	(%)	No.	(%)	No.	(%)	No.	(%)
Always	4	27	6	26	0	0	10	24
Often	6	40	10	43	1	33	17	41
Occasionally	2	13	4	17	1	33	7	17
Rarely	3	20	1	4	1	33	5	12
Never	0	0	2	9	0	0	2	5
Total	15	100	23	100	3	100	41	100

(Source: Data collected)

Table 7: Satisfied with job

Options	Number of Responses							
	20-30		30-40		40-50		Total	
	No.	(%)	No.	(%)	No.	(%)	No.	(%)
Strongly Satisfied	1	7	1	4	1	33	3	7
Satisfied	10	67	12	52	1	33	23	56
Neutral	3	20	10	43	1	33	14	34
Dissatisfied	0	0	0	0	0	0	0	0
Strongly Dis-satisfied	1	7	0	0	0	0	1	2
Total	15	100	23	100	3	100	41	100

(Source: Data collected)

Table 8. Connected with divine power

Options	Number of Responses							
	20-30		30-40		40-50		Total	
	No.	(%)	No.	(%)	No.	(%)	No.	(%)
Connected	14	93	23	100	3	100	40	98
Not Connected	1	7	0	0	0	0	1	2
Total	15	100	23	100	3	100	41	100

(Source: Data collected)

Table 9. Feel grateful for the talents and abilities towards divine power

Options	Number of Responses							
	20-30		30-40		40-50		Total	
	No.	(%)	No.	(%)	No.	(%)	No.	(%)
Grateful	14	93	23	100	2	67	39	95
Not Grateful	1	7	0	0	1	33	2	5
Total	15	100	23	100	3	100	41	100

(Source: Data collected)

Table 10. When you look at your life, you feel:

Options	Number of Responses							
	20-30		30-40		40-50		Total	
	No.	(%)	No.	(%)	No.	(%)	No.	(%)
Contented (satisfied)	12	80	16	70	1	33	29	71
Put faults on others	1	7	0	0	0	0	1	2
Take responsibility of own action	2	13	7	30	2	67	11	27
Total	15	100	23	100	3	100	41	100

(Source: Data collected)

Table 11. Feel others' suffering:

Options	Number of Responses							
	20-30		30-40		40-50		Total	
	No.	(%)	No.	(%)	No.	(%)	No.	(%)
Always	6	40	10	43	1	33	17	41
Sometimes	9	60	13	57	2	67	24	59
Never	0	0	0	0	0	0	0	0
Total	15	100	23	100	3	100	41	100

(Source: Data collected)

Table 12. Connection between different events in life:

Options	Number of Responses							
	20-30		30-40		40-50		Total	
	No.	(%)	No.	(%)	No.	(%)	No.	(%)
No	1	7	1	4	0	0	2	5
Everything happens for reason	11	73	15	65	3	100	29	71
Everything is meaningfully connected, even when we cannot easily know	3	20	7	30	0	0	10	24
Total	15	100	23	100	3	100	41	100

(Source: Data collected)

Table 13. Spiritual practices that faculties do most in daily routine

Options	Number of Responses							
	20-30		30-40		40-50		Total	
	No.	(%)	No.	(%)	No.	(%)	No.	(%)
Chanting of God's name	6	33	14	45	1	25	21	40
Reading Scriptures	5	28	9	29	2	50	16	30
Prayers	2	11	5	16	0	0	7	13
Meditation	5	28	3	10	1	25	9	17
Total	18	100	31	100	4	100	53	100

(Source: Data collected)

Table 14. When things don't go your way, you

Options	Number of Responses							
	20-30		30-40		40-50		Total	
	No.	(%)	No.	(%)	No.	(%)	No.	(%)
Face it with an open mind/ handle it	15	100	22	96	3	100	40	98
Complain about it	0	0	1	4	0	0	1	2
Pretending it is not happening/run away	0	0	0	0	0	0	0	0
Total	15	100	23	100	3	100	41	100

(Source: Data collected)

Table 15. Do you believe in Divine power because of?

Options	Number of Responses							
	20-30		30-40		40-50		Total	
	No.	(%)	No.	(%)	No.	(%)	No.	(%)
Knowledge	5	25	8	24	1	20	14	24
Self Realization	12	60	17	50	3	60	32	54
Family Practice	3	15	7	21	1	20	11	19
On advice of others	0	0	2	6	0	0	2	3
Total	20	100	34	100	5	100	59	100

(Source: Data collected)

Table 16. During the time of great suffering/ difficulty at your workplace, you:

Options	Number of Responses							
	20-30		30-40		40-50		Total	
	No.	(%)	No.	(%)	No.	(%)	No.	(%)
Become depressed	2	13	3	12	1	25	6	13
Deals with it positively	10	63	18	69	2	50	30	65
Use anti-depression medicines	0	0	0	0	0	0	0	0
See it as an opportunity for spiritual growth	4	25	5	19	1	25	10	22
Total	16	100	26	100	4	100	46	100

(Source: Data collected)

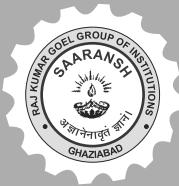


Table 17. Do you think that the Divine energy helps you to overcome difficulties at your workplace?

Options	Number of Responses							
	20-30		30-40		40-50		Total	
	No.	(%)	No.	(%)	No.	(%)	No.	(%)
Always	8	53	15	65	1	33	24	59
Sometimes	7	47	8	35	2	67	17	41
Never	0	0	0	0	0	0	0	0
Total	15	100	23	100	3	100	41	100

(Source: Data collected)

Table 18. Reason(s) for balanced working/ workplace relationships

Options	Number of Responses							
	20-30		30-40		40-50		Total	
	No.	(%)	No.	(%)	No.	(%)	No.	(%)
Higher Con- sciousness	6	33	10	37	1	25	17	35
Compassion	2	11	3	11	0	0	5	10
Better quality of person	6	33	10	37	2	50	18	37
Rules and Regulations of BSACET	4	22	4	15	1	25	9	18
Total	18	100	27	100	4	100	49	100

(Source: Data collected)

Table 19. Propose solutions to problems

Options	Number of Responses							
	20-30		30-40		40-50		Total	
	No.	(%)	No.	(%)	No.	(%)	No.	(%)
You see every- thing from Higher consciousness	3	17	5	19	0	0	8	16
You enjoy challenges	7	39	12	44	3	75	22	45
It's your job's part	8	44	10	37	1	25	19	39
You are forced by others	0	0	0	0	0	0	0	0
Total	18	100	27	100	4	100	49	100

(Source: Data collected)

**Table 20. Spiritual practice(s) helps in applying following traits at workplace:
Optimism**

Options	Number of Responses							
	20-30		30-40		40-50		Total	
	No.	(%)	No.	(%)	No.	(%)	No.	(%)
Always	10	67	14	61	1	33	25	61
Often	4	27	8	35	2	67	14	34
Somewhat	1	7	1	4	0	0	2	5
Not very much	0	0	0	0	0	0	0	0
Never	0	0	0	0	0	0	0	0
Total	15	100	23	100	3	100	41	100

(Source: Data collected)

Table 21. Honest

Options	Number of Responses							
	20-30		30-40		40-50		Total	
	No.	(%)	No.	(%)	No.	(%)	No.	(%)
Always	10	67	18	78	3	100	31	76
Often	5	33	5	22	0	0	10	24
Somewhat	0	0	0	0	0	0	0	0
Not very much	0	0	0	0	0	0	0	0
Never	0	0	0	0	0	0	0	0
Total	15	100	23	100	3	100	41	100

(Source: Data collected)

Table 22. Kindness

Options	Number of Responses							
	20-30		30-40		40-50		Total	
	No.	(%)	No.	(%)	No.	(%)	No.	(%)
Always	8	53	13	57	2	67	23	56
Often	6	40	10	43	1	33	17	41
Somewhat	1	7	0	0	0	0	1	2
Not very much	0	0	0	0	0	0	0	0
Never	0	0	0	0	0	0	0	0
Total	15	100	23	100	3	100	41	100

(Source: Data collected)

Table 23. Peace

Options	Number of Responses							
	20-30		30-40		40-50		Total	
	No.	(%)	No.	(%)	No.	(%)	No.	(%)
Always	8	53	13	57	1	33	22	54
Often	6	40	10	43	1	33	17	41
Somewhat	1	7	0	0	1	33	2	5
Not very much	0	0	0	0	0	0	0	0
Never	0	0	0	0	0	0	0	0
Total	15	100	23	100	3	100	41	100

(Source: Data collected)

Table 24. Tolerance

Options	Number of Responses							
	20-30		30-40		40-50		Total	
	No.	(%)	No.	(%)	No.	(%)	No.	(%)
Always	6	40	7	30	1	33	14	34
Often	6	40	12	52	2	67	20	49
Somewhat	2	13	2	9	0	0	4	10
Not very much	0	0	2	9	0	0	2	5
Never	1	7	0	0	0	0	1	2
Total	15	100	23	100	3	100	41	100

(Source: Data collected)

- Akanksha Sharma
- Shivani Shrivastava
- Gaurav Agrawal

Table 25. Patience

Options	Number of Responses							
	20-30		30-40		40-50		Total	
	No.	(%)	No.	(%)	No.	(%)	No.	(%)
Always	11	73	13	57	2	67	26	63
Often	4	27	9	39	1	33	14	34
Somewhat	0	0	1	4	0	0	1	2
Not very much	0	0	0	0	0	0	0	0
Never	0	0	0	0	0	0	0	0
Total	15	100	23	100	3	100	41	100

(Source: Data collected)

Table 26. Perseverance

Options	Number of Responses							
	20-30		30-40		40-50		Total	
	No.	(%)	No.	(%)	No.	(%)	No.	(%)
Always	5	33	6	26	2	67	13	32
Often	8	53	13	57	0	0	21	51
Somewhat	2	13	3	13	0	0	5	12
Not very much	0	0	0	0	1	33	1	2
Never	0	0	1	4	0	0	1	2
Total	15	100	23	100	3	100	41	100

(Source: Data collected)

Table 27. Do you think that spiritual practice(s) helps you in improving your performance level at your job?

Options	Number of Responses							
	20-30		30-40		40-50		Total	
	No.	(%)	No.	(%)	No.	(%)	No.	(%)
Always	9	60	8	35	2	67	19	46
Sometimes	6	40	15	65	1	33	22	54
Never	0	0	0	0	0	0	0	0
Total	15	100	23	100	3	100	41	100

(Source: Data collected)

Table 28. Do you think your spiritual practice(s) helps you to remain satisfied at your job regardless of situations, good or bad, that may come at any time?

Options	Number of Responses							
	20-30		30-40		40-50		Total	
	No.	(%)	No.	(%)	No.	(%)	No.	(%)
Always	9	60	9	39	1	33	19	46
Sometimes	6	40	13	57	2	67	21	51
Never	0	0	1	4	0	0	1	2
Total	15	100	23	100	3	100	41	100

(Source: Data collected)



Availability of Financial Inclusion in India: An Interstate Analysis

Mr. Kajole Nanda*

ABSTRACT

Financial Inclusion is such a process that aims to cover each individual in the economy in the canopy of formal finance, by providing them timely and adequate financial services, and that too at an affordable cost. Ensuring access and availability to basic banking services are the very basis of financial inclusion. Although the Government of India is trying laboriously to ensure inclusion of 'every individual', there is a great disparity in the inclusion stance of different states of the country. The current article is an aim in this regard, and brings out the discrepancy across the Indian states in terms of the 'availability' aspect of financial inclusion. The results highlight that there is a wide and vivid gap between the 'banking availability' levels of the Northern states vis-s-vis the North Eastern States of the country. The efforts need to therefore be streamlined towards those in the economically downtrodden states of the country to up-pace the effectiveness of the task of financial inclusion in the country.

Keywords: Financial Inclusion, Financial Availability, Bank Availability.

INTRODUCTION

Driven by the objective of reaching out to the 'bottom of the pyramid', financial inclusion assumes an overtly important role in a class inequality smitten, developing country like India. For a country, characterized by a wide and a vivid gap in the inclusion stance across geographic areas and socioeconomic classes; the need for a study focusing on the extent and adequacy of financial access and availability becomes explicit. The need becomes even more pronounced for facilitating a comparison of the status of financial inclusion, before and after 2005-06 (the period wherein RBI directed banks to make financial inclusion a policy objective).

According to RBI's Financial Inclusion Plan, (FIP) 2010, every village, located in even the remotest corner of the country, with a population greater than 2000, needs to be financially covered through a bank or any other means of Point of Sale (PoS). Availability of banks in the form of brick and mortar branches, ATMs, internet or mobile banking helps in the adequate utilization of financial services. The need, however, of physical brick and mortar branches, even in an age of technological revolution and branchless banking cannot be ruled out. Considering demographic penetration as a measure of banks' outreach in being available to

an adequate number of individuals; the number of bank branches per 1,00,000 adults has been used as a measure for it. Higher demographic branch availability can therefore be considered as a testimonial of easier access, owing to fewer potential clients per outlet (Ravi Kumar, 2013).

Geographic branch availability or geographic branch penetration is one of the most important measures of financial inclusion (Beck et al, 2007; Chakravarty and Pal, 2010). Penetration of branches is important to ensure availability of branches to people in terms of geographic access (Ravikumar, 2013). Number of branches of SCBs per 1000 square kilometers has, therefore, been used as a measure for it. Higher geographic bank availability has implications for shorter distance to banks, and thus, unproblematic geographic access. Ensuring penetration of branches at reasonably small distances is therefore, essential to ensure greater bank linkage (with individuals). ATM availability is another significant dimension of financial inclusion, but the same could not be incorporated in the current research, due to paucity of consistent data pertaining to it.

DEFINING FINANCIAL INCLUSION

In the earlier periods, the term 'financial exclusion', was used to highlight limitations in access to the

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banking network (Anderloni et al., 2008). Before the era of liberalization, the term was used to describe both, demand and supply side bottlenecks to adequate financial access (Rahim et al, 2009). Early literature on financial exclusion has been defining it in the broader context of social exclusion (Kempson and Whyley, 1999; Sarma, 2008). The modern day definitions of financial inclusion consider its importance in not only providing access to the formal financial system, but also in ensuring the availability of timely, easy and affordable range of financial products and services to the vulnerable groups (RBI, 2008). Development agendas today, thus consider inclusion as means, and not an end in solving the developmental problems (Kodan and Chhikara, 2013). An inclusive financial system not only helps to enhance efficiency and welfare of the population at large, but also facilitates effective utilization of productive resources, thereby reducing the cost of capital (Sarma, 2012). In addition, it also improves the management of finances and prevents the growth of informal sources of credit supply (such as moneylenders), which are often found to be exploitative (Sarma, 2008). Various definitions of financial inclusion, proposed by different authors and/or institutions have been presented in a summarized form in **Table 1**.

DATABASE AND RESEARCH METHODOLOGY

Sample and Reference Period

The study spans 25 states, 4 union territories and 6 geographic areas of the country; and considers a period from April 1994 to March 2014.

Database

Data for the indicators has been sourced from RBI's Basic Statistical Report of Scheduled Commercial Banks in India, and the Census of India Reports for various years.

Methodology

The scores for the demographic and geographic availability of financial inclusion have been arrived at by computing number of bank branches per 1,00,000 adults, and per 1000 kilometer square respectively, for all states, UTs and the geographical areas. They have subsequently been analyzed using descriptive statistics and

Compounded Annual Growth Rates (CAGRs).

RESULTS AND DISCUSSION

Demographic Availability

Tables 2 (a) and (b) reflect the country's elevation from 11.316 branches per 1,00,000 adults in 1994-95, to 13.845 in 2013-14. Further, the mean demographic branch availability increased from 13.527 in 1994-95, to 17.712 in 2013-14. While the highest value for demographic branch availability increased from 31.519 in 1994-95, to 54.204 in 2013-14; the minimum value, however, marginally declined from 7.044 in 1994-95, to 6.339 in 2013-14. This, in turn, clarifies presence and even increase in variability in terms of demographic availability across the areas.

Region-wise, demographic availability of bank branches was observed to be high in the Northern, Southern and Western regions; while it was low in Central, Eastern and North Eastern regions. State-wise (including UTs), Chandigarh (1994-95 to 1998-99) and Goa (1999-2000 and thereafter) demonstrated highest penetration of bank branches per 1,00,000 adults during different years. The demographic availability in Manipur emerged to be the least. With the exceptions of Mizoram, Meghalaya and Arunachal Pradesh, all North-Eastern states exhibited inferior demographic branch availability. The coefficient of variation, increased from 40.0 per cent in 1994-95 per cent to 56.5 in 2013, depicting increasing inter-region/state variability in demographic bank availability.

Table 3 reflects a CAGR of meager 0.602 per cent in terms of demographic branch availability in the country. This however, does not mean stagnation in growth of the number of bank branches. The bank branches in the country have although almost doubled from 63790 branches (in absolute terms) in 1994-95, to 120857 in 2013-14 (Basic Statistical Returns of Scheduled Commercial Banks, various issues), but the population has increased at a faster rate and has resulted in a low CAGR. However, the growth rates (CAGRs) of Southern (1.207 per cent) and Northern (1.106 per cent) regions were found to be greater than the all-India growth rate (CAGR). On the downward side, the growth rates of the Eastern and North-Eastern regions were found to be negative. Considering the growth rates in the



states, it was only in Sikkim, Haryana and Kerala, that the demographic branch availability exhibited a CAGR greater than 2 per cent. In most of other states and UTs, the CAGRs were found to be extremely low. The figures iterated almost negligible (and even negative) CAGRs in the states of the North-Eastern region. Compared to earlier periods, it was only during 2009-10 to 2013-14, that the regions/states UTs depicted moderate average annual growth rates.

Geographic Availability

Tables 4(a) and (b) reflect a surge in geographic branch penetration of the country from 19.402 branches per 1000 square kilometers in 1994-95, to 36.772 in 2013-14. However, the geographic penetration score of the country indicates that people have to travel considerable distance to avail banking services. The mean geographic penetration score more than doubled from 85.621 in 1994-95, to 215.576 in 2013-14. While the maximum value for geographic penetration soared from 1315.789 in 1994-95, to 1938.596 in 2003-04, and 3578.947 in 2013-14; the minimum value could only increase scantily from 0.824 in 1994-95 to 1.528 in 2013-14. This, therefore, testifies presence and increase in the inter-region/state discrepancies. Owing to increase in the gap between the best and worst geographically included regions and states (and UTs), the indicator of the inter-region/state variability (CV), rose from an already high 300 per cent in 1994-95 to 321.11 per cent in 2013-14.

Region-wise analyses reveal that the geographic branch availability in the Southern, Eastern and Western regions is high, and also greater than (or equal to) the geographic availability of bank branches in India as a whole. North Eastern region, owing to a deficient bank network, exhibited not only the least, but also inadequate geographic branch penetration. In addition to the inter-region variability, existence of intra-region discrepancy was found to be acute in the Northern region. In the Northern region, the geographic penetration of Chandigarh (348.947 in 2013-14) and Delhi, (2194.875 in 2013-14) was found to be in sharp contrast to that of Jammu and Kashmir (6.907 in 2013-14) and Rajasthan (17.260 in 2013-14). Reflecting the poorest level of geographic bank access, bank availability in Arunachal Pradesh was found to be less than one (per 1000 kilometer square) for most of the years.

Table 5 reflects a growth rate (CAGR) of 2.942 per cent in geographical branch availability for the country as a whole. The Northern (3.769 per cent) and Southern (3.149 per cent) regions exhibited CAGRs greater than the growth rate (CAGR) in geographic availability for India as a whole. Not only was the geographic availability poorest in the North East, similar was the position of its growth rate (CAGR 1.918 per cent). The states and UTs of Pondicherry (5.338 per cent), Sikkim (5.232 per cent), Delhi (5.232 per cent), Chandigarh (5.232 per cent), Haryana (5.127 per cent), Punjab (3.977 per cent), Goa (3.769 per cent), Andhra Pradesh (3.355 per cent), Tamil Nadu (3.045 per cent) and Kerala (3.045 per cent) exhibited CAGRs, greater than the all-India value (CAGR). Experiencing growth from 3.941 bank branches per 1000 km square in 1994-95, to 6.002 in 2013-14; the state of Manipur exhibited the poorest CAGR of 0.803 per cent. Period-wise analysis revealed that the regions/UTs/states experienced higher average annual growth during 2004-05 to 2008-09, and 2009-10 to 2013-14. The average annual growth rates during all earlier years were found to be very low.

CONCLUSION

Through the article, it becomes clear that there is a distinct presence of inter-state variation in terms of both indicators of availability of banking services. In addition to the inter region variability there is acute intra region variability in terms of the geographic availability of bank branches amongst the states of the Northern Region. While there are evidences for high availability in the Northern (typically in Chandigarh and Delhi), Western (typically in Goa) and Southern regions of the country; poor inclusion stance was reflected by the country's North-Eastern region. Additionally, although efforts to up-scale financial inclusion have been taking place in the country, they have not been able to adequately keep-pace with the population growth.

The need of the hour, therefore is to upscale the efforts to ensure financial access and availability, typically in the BIMARU and the North Eastern sister states of the country. For this, recognizing the need to spread greater financial literacy and awareness is pivotal to the stimulation of financial demand. Financial inclusion is inevitably a road that needs to be transversed to actualize the country's objectives of development and prosperity. The task

of financial inclusion, however does not end in opening bank branches and cajoling people to open a bank account, but involves actuating them to make full use of the services. This in turn will

improve national development and productivity by ensuring full utilization of the economic potential by people in their productive years and then reaping its benefits when they retire.

REFERENCES

- Anderloni, L., Bayot, B., Bledowski, P., Iwanicz-Drozowska, M., & Kempson, E. (2008). *Financial services provision and prevention of financial exclusion*. Brussels: European Commission.
- Beck, T., Demirguc-Kunt, A., & Peria, M. S. M. (2007). Reaching out: Access to and use of banking services across countries. *Journal of Financial Economics*, 85(1), 234-266.
- Chakravarty, S. R., & Pal, R. (2010). *Measuring financial inclusion: An axiomatic approach*. Mumbai: Indira Gandhi Institute of Development Research.
- Leyshon, A., & Thrift, N. (1995). Geographies of financial exclusion: Financial abandonment in Britain and the United States. *Transactions of the Institute of British Geographers*, 20 (3), 312-341.
- Kodan, A.S. & Chhikara, K.S (2013). A theoretical and quantitative analysis of financial inclusion and economic growth. *Management and Labour Studies*, 38(1 & 2), 103-134.
- Kempson, E., & Whyley, C. (1999). Undersatnding and combating financial exclusion. *Insurance Trends*, 21, 18-22.
- Ravikumar, T. (2013). *Assessing Role of Banking Sector in Financial Inclusion Process in India*. Vels Management Journal, Vels University.
- RBI (2015). *Basic statistical returns of scheduled commercial banks (2013-14)*. Mumbai: Reserve Bank of India.
- RBI (2015). *Report on trend and progress of banking in India, 2013-14*. Mumbai: Reserve Bank Of India.
- RBI (2008). *Report of the committee on financial inclusion*. Mumbai: Government of India.
- Sarma, M. (2008). *Index of financial inclusion*. New Delhi: Indian Council for Research on International Economics Relations.
- Sarma, M. (2012). *Index of financial inclusion - A Measure of financial sector inclusiveness (Working Paper No. 07/2012)*. New Delhi: Centre for International Trade and Development.
- World Bank (2008). *Access to finance and development: Theory and measurement*. Washington, DC: World Bank.

Table 1: Definitions of Financial Inclusion/Exclusion

Title	Author/Institution	Year	Term	Definition
Geographies of Financial Exclusion: Financial Adandonment in Britain and United States	Leyshon and Thrift	1995	Financial Exclusion	“The processes that serve to prevent certain social groups and individuals from gaining access to the formal financial system”
Repot of the Committee on Financial Inclusion, India	Rangarajan Committee (RBI)	2008	Financial Inclusion	“The process of ensuring access to financial services and timely and adequate availability of credit where needed by vulnerable groups such as the weaker sections and low income groups at an affordable cost”.
Access to Finance and Development: Theory and Measurement	World Bank	2008	Financial Inclusion	“Broad access to financial services implies an absence of price and non price barriers in the use of financial services”.
Index of Financial Inclusion – A measure of financial sector inclusiveness	MandiraSarma	2012	Financial Inclusion	“A process that ensures the ease of access, availability and usage of formal financial system for all members of an economy”.

Source: Author’s compilation on the basis of review of literature.



Table 2(a): Extent of Demographic Availability of Bank (SCBs) Branches in India.

REGION / STATE / UNION TERRITORY	Years																			
	1994-95	1995-96	1996-97	1997-98	1998-99	1999-00	2000-01	2001-02	2002-03	2003-04	2004-05	2005-06	2006-07	2007-08	2008-09	2009-10	2010-11	2011-12	2012-13	2013-14
NORTHERN REGION	14.172	14.028	13.883	13.772	13.646	13.370	13.138	12.971	12.779	12.645	12.675	12.627	12.906	13.517	13.907	14.533	15.185	16.379	17.543	19.110
Haryana	12.485	12.285	12.172	12.214	12.130	11.874	11.684	11.621	11.585	11.507	11.547	11.709	12.061	12.824	13.390	14.485	15.546	16.987	18.655	21.070
Himachal Pradesh	21.637	21.170	20.739	20.501	20.135	19.725	19.274	18.929	18.657	18.297	18.214	18.150	18.689	19.265	19.978	20.820	21.623	22.918	24.406	26.244
Jammu & Kashmir	14.881	14.522	14.207	13.950	13.747	13.432	13.123	13.038	12.737	12.575	12.542	12.210	12.200	12.623	12.784	12.842	12.877	14.459	16.063	17.638
Punjab	16.190	16.283	16.323	16.345	16.267	16.045	15.813	15.708	15.629	15.500	15.572	15.573	15.988	16.723	17.191	18.199	19.301	21.080	23.046	25.779
Rajasthan	11.481	11.379	11.190	10.976	10.799	10.529	10.300	10.072	9.823	9.608	9.504	9.324	9.426	9.738	9.845	10.069	10.403	11.079	11.696	12.536
Chandigarh	30.832	31.439	32.526	32.937	33.445	33.359	32.742	31.968	32.525	33.196	34.265	35.131	36.792	39.886	41.483	43.127	43.649	46.031	47.550	49.593
Delhi	18.056	17.595	17.353	17.240	17.241	16.838	16.674	16.484	16.204	16.405	16.920	17.166	17.817	19.124	20.172	21.229	22.124	23.562	24.287	25.276
NORTH EASTERN REGION	9.532	9.318	9.118	8.890	8.672	8.441	8.245	7.975	7.762	7.617	7.537	7.392	7.424	7.551	7.719	7.843	8.035	8.439	8.932	9.862
Arunachal Pradesh	12.495	12.197	11.905	11.621	11.343	11.073	10.808	10.550	10.231	9.634	9.483	9.332	9.443	9.412	9.498	9.570	9.977	10.800	11.565	13.544
Assam	8.848	8.693	8.534	8.332	8.142	7.930	7.785	7.529	7.317	7.203	7.130	6.974	6.999	7.160	7.269	7.384	7.555	7.828	8.164	8.874
Manipur	7.044	6.813	6.666	6.522	6.455	6.316	5.898	5.428	5.261	5.036	4.882	4.732	4.528	4.333	4.477	4.339	4.311	4.732	5.417	6.339
Meghalaya	16.427	15.970	15.526	15.095	14.675	14.347	13.948	13.560	13.246	12.868	12.707	12.611	12.445	12.216	12.540	12.657	12.758	13.291	13.947	15.136
Mizoram	17.233	16.688	16.160	15.649	15.154	14.675	14.211	13.936	13.416	13.078	12.911	12.586	13.036	13.456	13.701	13.925	13.851	14.988	16.060	18.094
Nagaland	8.281	7.857	7.454	6.973	6.615	6.188	5.954	5.649	5.631	5.613	5.752	5.734	6.107	6.321	6.612	6.979	7.343	8.320	9.522	10.793
Tripura	10.206	9.873	9.655	9.494	9.234	9.031	8.832	8.684	8.444	8.346	8.205	8.065	8.096	8.328	8.787	9.025	9.518	10.210	11.087	12.749
EASTERN REGION	9.558	9.390	9.202	9.060	8.910	8.748	8.567	8.403	8.201	8.058	7.983	7.862	7.867	8.021	8.146	8.361	8.612	9.086	9.488	10.283
Bihar	9.219	9.029	8.834	8.676	8.504	8.312	8.127	7.939	7.735	7.568	7.442	7.274	7.205	7.257	7.358	7.620	7.801	8.233	8.645	9.479
REGION / STATE / UNION TERRITORY	Years																			
	1994-95	1995-96	1996-97	1997-98	1998-99	1999-00	2000-01	2001-02	2002-03	2003-04	2004-05	2005-06	2006-07	2007-08	2008-09	2009-10	2010-11	2011-12	2012-13	2013-14
Orissa	10.182	10.022	9.810	9.735	9.672	9.523	9.347	9.220	9.039	8.901	8.864	8.800	8.994	9.384	9.727	10.039	10.371	11.146	11.719	12.906
Sikkim	15.543	14.979	14.436	13.912	13.407	14.151	13.934	13.714	13.393	13.353	14.637	14.555	15.483	17.600	17.188	17.496	18.934	20.069	21.582	24.303
West Bengal	9.607	9.464	9.299	9.152	8.992	8.857	8.681	8.533	8.327	8.210	8.173	8.086	8.088	8.255	8.322	8.441	8.736	9.124	9.430	9.989
Andaman & Nicobar Islands	15.261	15.239	14.726	14.230	13.751	13.288	12.841	12.408	12.235	12.454	12.664	12.865	13.805	13.612	13.422	13.235	14.814	15.998	18.175	19.950
CENTRAL REGION	10.182	9.998	9.825	9.664	9.533	9.321	9.149	8.993	8.745	8.566	8.450	8.292	8.299	8.577	8.821	9.138	9.369	10.004	10.540	11.460
Madhya Pradesh	10.535	10.294	10.121	9.899	9.736	9.543	9.363	9.143	8.870	8.654	8.518	8.292	8.275	8.483	8.756	9.015	9.206	9.762	10.245	11.070
Uttar Pradesh	10.010	9.855	9.681	9.550	9.434	9.214	9.045	8.920	8.684	8.523	8.417	8.293	8.310	8.624	8.852	9.198	9.450	10.122	10.684	11.652
WESTERN REGION	11.684	11.507	11.408	11.285	11.195	10.973	10.813	10.546	10.292	10.138	10.092	9.962	10.049	10.390	10.719	11.208	11.660	12.448	13.142	14.105
Goa	31.519	31.807	31.963	33.065	33.378	33.256	33.530	33.286	33.084	32.979	33.541	33.707	34.890	37.331	38.252	39.864	41.789	45.770	49.477	54.204
Gujarat	12.594	12.244	12.084	11.882	11.740	11.548	11.394	11.030	10.754	10.583	10.453	10.305	10.428	10.789	11.111	11.589	12.140	12.976	13.907	15.065
Maharashtra	10.890	10.797	10.730	10.631	10.563	10.327	10.159	9.947	9.707	9.563	9.556	9.433	9.489	9.793	10.121	10.604	10.987	11.710	12.243	13.059
SOUTHERN REGION	12.540	12.476	12.385	12.285	12.241	12.141	12.015	11.853	11.717	11.608	11.663	11.591	11.817	12.404	12.863	13.427	13.934	14.999	16.009	17.212
Andhra Pradesh	10.926	10.824	10.726	10.631	10.571	10.520	10.397	10.287	10.186	10.075	10.111	10.034	10.183	10.823	11.300	11.927	12.432	13.436	14.400	15.391
Karnataka	14.789	14.662	14.499	14.348	14.268	14.099	13.893	13.648	13.426	13.274	13.296	13.157	13.327	13.769	14.138	14.569	14.806	15.851	16.932	18.313
Kerala	14.660	14.647	14.607	14.584	14.585	14.518	14.501	14.529	14.604	14.730	14.970	15.090	15.554	16.215	16.736	17.474	18.515	19.600	21.086	22.561
Tamil Nadu	11.519	11.516	11.459	11.355	11.325	11.197	11.074	10.825	10.619	10.443	10.459	10.364	10.613	11.226	11.709	12.226	12.710	13.874	14.680	15.871
Pondicherry	12.409	12.429	12.280	11.976	12.286	12.721	12.406	11.817	11.618	11.155	11.612	11.532	12.179	13.252	14.715	16.196	17.255	18.029	19.156	20.403
ALL-INDIA	11.316	11.170	11.028	10.896	10.786	10.602	10.433	10.251	10.045	9.899	9.861	9.747	9.851	10.218	10.512	10.920	11.302	12.085	12.800	13.845

Note: Demographic Availability is the number of branches of Scheduled Commercial Banks (SCBs) per 1,00,000 adults.

Source: Based on data provided in Basic Statistical Returns of Scheduled Commercial Banks (various issues) and Census of India Reports (1991, 2001 and 2011).

Table 2(b): Descriptive Statistics of Demographic Availability of Bank (SCBs) Branches.

Descriptive	1994-95	1995-96	1996-97	1997-98	1998-99	1999-00	2000-01	2001-02	2002-03	2003-04	2004-05	2005-06	2006-07	2007-08	2008-09	2009-10	2010-11	2011-12	2012-13	2013-14
Mean	13.527	13.351	13.185	13.04	12.90	12.72	12.50	12.26	12.07	11.94	12.021	11.96	12.2	12.8	13.1	13.6	14.2	15.238	16.271	17.71
Min	7.044	6.813	6.666	6.522	6.455	6.188	5.898	5.428	5.261	5.036	4.882	4.732	4.52	4.33	4.47	4.33	4.31	4.732	5.417	6.339
Max	31.519	31.807	32.526	33.06	33.44	33.35	33.53	33.28	33.08	33.19	34.265	35.13	36.7	39.8	41.4	43.1	43.6	46.031	49.477	54.20
Median	12.409	12.197	11.905	11.62	11.34	11.19	11.07	10.82	10.61	10.44	10.453	10.30	10.4	10.8	11.3	11.9	12.4	13.291	13.947	15.13
Standard Deviation	5.405	5.505	5.642	5.823	5.927	5.937	5.934	5.881	5.952	6.047	6.261	6.412	6.75	7.37	7.63	7.99	8.27	8.877	9.388	10.00
Coefficient of Variation (%)	40.00	41.20	42.80	44.7	45.9	46.7	47.5	48.0	49.3	50.6	52.10	53.6	55.	57.	57.	58.	58.	58.30	57.70	56.5
All-India demographic availability of banking services	11	11.170	11.028	10.89	10.78	10.60	10.43	10.25	10.04	9.899	9.861	9.747	9.85	10.2	10.5	10.9	11.3	12.085	12.800	13.84
Total Number of Observations	35	35	35	35	35	35	35	35	35	35	35	35	35	35	35	35	35	35	35	35
Number of States/UTS/Regions with demographic availability greater than mean value	13	13	13	13	13	13	13	13	13	13	13	13	12	13	13	12	12	12	12	13
Number of States/UTS/Regions with demographic availability less than mean value	22	22	22	22	22	22	22	22	22	22	22	22	23	22	22	23	23	23	23	22
Number of States/UTS/Regions with demographic availability greater than all-India availability of banking services	21	21	21	21	21	20	20	21	21	20	20	20	20	20	20	20	20	20	20	20
Number of States/UTS/Regions with demographic availability less than all-India availability of banking services	14	14	14	14	14	15	15	14	14	15	15	15	15	15	15	15	15	15	15	15
Skewness	2.117	2.206	2.320	2.423	2.488	2.492	2.513	2.481	2.526	2.556	2.553	2.579	2.56	2.58	2.59	2.55	2.45	2.462	2.419	2.404
Kurtosis	5.121	5.601	6.180	6.684	7.025	7.103	7.241	7.133	7.306	7.434	7.415	7.536	7.46	7.57	7.63	7.44	6.91	6.929	6.754	6.759
JarqueBera	55.930	64.135	75.054	85.43	92.72	94.13	97.05	94.34	98.54	101.6	101.20	104.0	102.	105.	106.	101.	90.0	90.421	86.402	86.03
Probability	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.00	0.00	0.00	0.00	0.00	0.000	0.000	0.000

Source: Author's own calculations based on Table 1 (a).

Table 3: Growth Rates of Demographic Availability of Bank Branches

REGION / STATE / UNION TERRITORY	Average Annual Growth Rate 1994-95 to 1998-99	Average Annual Growth Rate 1999-00 to 2003-04	Average Annual Growth Rate 2004-05 to 2008-09	Average Annual Growth Rate 2009-10 to 2013-14	CAGR
NORTHERN REGION	-1.157	-1.059	2.791	7.096	1.106* (2.945)
Haryana	-0.995	-0.555	4.666	9.839	2.224* (4.631)
Himachal Pradesh	-1.833	-1.579	2.723	5.967	0.602*** (1.78)
Jammu & Kashmir	-2.027	-1.358	0.493	8.365	0.200 (0.445)
Punjab	-0.177	-0.596	3.187	9.114	1.715* (4.376)
Rajasthan	-1.714	-2.026	1.177	5.642	0.000 (-0.224)
Chandigarh	1.595	0.563	4.726	3.566	2.429* (10.513)
Delhi	-1.382	0.113	4.660	4.465	1.918* (5.416)
NORTH-EASTERN REGION	-2.403	-2.236	0.810	5.932	-0.399 (-1.233)
Arunachal Pradesh	-2.388	-3.041	0.188	9.174	-0.598 (-1.407)
Assam	-2.167	-2.100	0.716	4.728	-0.499 (-1.664)
Manipur	-2.156	-5.000	-2.286	10.153	-2.078* (-4.258)
Meghalaya	-2.671	-2.397	-0.064	4.609	-0.995* (-3.346)
Mizoram	-3.163	-2.526	1.547	6.874	-0.399 (0.912)
Nagaland	-5.660	-1.412	3.968	11.581	1.005 (1.36)
Tripura	-2.416	-1.899	1.954	9.078	0.401 (0.947)
EASTERN REGION	-1.755	-1.812	0.940	5.327	-0.100 (-0.389)
Bihar	-2.050	-2.186	0.492	5.642	-0.499 (-1.506)
REGION / STATE / UNION TERRITORY	Average Annual Growth Rate 1994-95 to 1998-99	Average Annual Growth Rate 1999-00 to 2003-04	Average Annual Growth Rate 2004-05 to 2008-09	Average Annual Growth Rate 2009-10 to 2013-14	CAGR
Orissa	-1.327	-1.422	2.536	6.511	0.803** (2.24)
Sikkim	-1.793	0.773	3.788	8.591	2.327* (5.511)
West Bengal	-1.613	-1.591	0.653	4.304	-0.200 (-0.649)
Andaman & Nicobar Islands	-2.723	-0.932	0.942	10.825	0.803 (1.689)
CENTRAL REGION	-1.750	-1.942	1.600	5.849	0.100 (0.225)
Madhya Pradesh	-1.959	-2.246	1.167	5.290	-0.300 (-0.829)
Uttar Pradesh	-1.643	-1.791	1.812	6.116	0.200 (0.719)
WESTERN REGION	-1.248	-1.656	2.140	5.923	0.501 (1.468)
Goa	1.087	0.175	3.537	8.002	2.327* (7.424)
Gujarat	-1.717	-1.969	2.105	6.785	0.401 (1.104)
Maharashtra	-1.055	-1.537	2.126	5.353	0.501 (1.522)
SOUTHERN REGION	-0.644	-0.799	2.878	6.417	1.207* (3.732)
Andhra Pradesh	-0.756	-0.788	3.393	6.592	1.410* (3.935)
Karnataka	-0.952	-1.164	1.859	5.916	0.602*** (2.063)
Kerala	-0.195	0.617	3.150	6.598	2.020* (6.947)
Tamil Nadu	-0.565	-1.351	3.198	6.760	1.207* (3.193)
Pondicherry	0.522	-1.760	6.967	5.946	2.429* (5.043)
ALL-INDIA	-1.295	-1.437	2.080	6.127	0.602 (1.703)

Source: Based on data provided in Table 2(a).

Notes: CAGR is the Compounded Annual Growth Rate; All figures are in percentage form; Figures in parenthesis indicate t-values; *, **, *** indicate significance at 99 per cent, 95 per cent and 90 per cent confidence levels, respectively.

Table 4(a): Extent of Geographic Availability of Bank (SCBs) Branches in India.

REGION / STATE / UNION TERRITORY	Years																			
	1994-95	1995-96	1996-97	1997-98	1998-99	1999-00	2000-01	2001-02	2002-03	2003-04	2004-05	2005-06	2006-07	2007-08	2008-09	2009-10	2010-11	2011-12	2012-13	2013-14
NORTHERN REGION	13.745	13.990	14.235	14.520	14.794	14.904	15.060	15.291	15.458	15.696	16.144	16.502	17.309	18.602	19.641	21.062	22.582	24.996	27.475	30.713
Haryana	30.874	31.304	31.960	33.045	33.814	34.108	34.583	35.443	36.325	37.094	38.270	39.899	42.251	46.187	49.579	55.143	60.843	68.352	77.174	89.614
Himachal Pradesh	13.813	13.831	13.867	14.028	14.100	14.136	14.136	14.208	14.280	14.280	14.495	14.729	15.465	16.256	17.190	18.267	19.345	20.908	22.704	24.895
Jammu & Kashmir	3.627	3.631	3.645	3.672	3.712	3.721	3.730	3.802	3.807	3.852	3.937	3.928	4.023	4.266	4.428	4.558	4.684	5.391	6.138	6.907
Punjab	45.372	46.722	47.953	49.164	50.097	50.594	51.050	51.924	52.778	53.473	54.883	56.074	58.814	62.845	66.002	71.383	77.340	86.295	96.382	110.143
Rajasthan	9.406	9.569	9.660	9.727	9.824	9.832	9.873	9.911	9.940	9.999	10.171	10.262	10.668	11.334	11.784	12.395	13.169	14.423	15.659	17.260
Chandigarh	1315.78 9	1394.73 7	1500.00 0	1578.94 7	1666.66 7	1728.07 0	1763.15 8	1789.47 4	1859.64 9	1938.59 6	2043.86 0	2140.35 1	2289.47 4	2535.08 8	2692.98 2	2859.64 9	2956.14 0	3184.21 1	3359.64 9	3578.94 7
Delhi	844.235	858.395	883.345	915.711	955.496	973.702	1006.06 9	1037.76 1	1047.87 6	1089.68 3	1154.41 7	1202.96 7	1282.53 5	1414.02 6	1532.03 0	1656.10 2	1772.75 8	1939.31 2	2053.27 0	2194.87 5
NORTH EASTERN REGION	7.578	7.590	7.609	7.601	7.598	7.578	7.586	7.519	7.488	7.519	7.613	7.641	7.852	8.174	8.550	8.891	9.322	10.020	10.855	12.267
Arunachal Pradesh	0.824	0.824	0.824	0.824	0.824	0.824	0.824	0.824	0.824	0.800	0.812	0.824	0.860	0.884	0.919	0.955	1.027	1.146	1.266	1.528
Assam	16.064	16.140	16.204	16.178	16.166	16.102	16.166	15.987	15.898	16.013	16.217	16.229	16.663	17.441	18.116	18.830	19.710	20.895	22.298	24.797
Manipur	3.941	3.897	3.897	3.897	3.941	3.941	3.762	3.538	3.538	3.494	3.494	3.494	3.449	3.404	3.628	3.628	3.717	4.210	4.972	6.002
Meghalaya	8.025	8.025	8.025	8.025	8.025	8.070	8.070	8.070	8.114	8.114	8.248	8.427	8.560	8.650	9.140	9.497	9.853	10.567	11.414	12.751
Mizoram	3.747	3.747	3.747	3.747	3.747	3.747	3.747	3.795	3.747	3.747	3.795	3.795	4.032	4.269	4.459	4.649	4.744	5.265	5.787	6.688
Nagaland	4.343	4.343	4.343	4.283	4.283	4.222	4.283	4.283	4.283	4.283	4.403	4.403	4.705	4.886	5.127	5.429	5.730	6.514	7.479	8.505
Tripura	17.643	17.452	17.452	17.547	17.452	17.452	17.452	17.547	17.452	17.643	17.738	17.833	18.310	19.264	20.790	21.839	23.555	25.844	28.705	33.759
EASTERN REGION	26.810	26.946	27.015	27.214	27.380	27.502	27.555	27.652	27.617	27.769	28.157	28.380	29.061	30.326	31.521	33.110	34.906	37.689	40.281	44.678
Bihar	28.670	28.773	28.848	29.032	29.159	29.205	29.262	29.291	29.279	29.394	29.659	29.745	30.228	31.240	32.500	34.530	36.273	39.281	42.317	47.608
REGION / STATE / UNION TERRITORY	Years																			
	1994-95	1995-96	1996-97	1997-98	1998-99	1999-00	2000-01	2001-02	2002-03	2003-04	2004-05	2005-06	2006-07	2007-08	2008-09	2009-10	2010-11	2011-12	2012-13	2013-14
Orissa	13.994	14.046	14.020	14.187	14.373	14.431	14.444	14.527	14.521	14.579	14.803	14.983	15.613	16.608	17.552	18.471	19.453	21.316	22.851	25.657
Sikkim	5.919	5.919	5.919	5.919	5.919	6.483	6.623	6.764	6.764	6.905	7.751	7.892	8.596	10.006	10.006	10.428	11.556	12.542	13.811	15.924
West Bengal	49.475	49.835	50.072	50.388	50.624	50.985	51.097	51.357	51.221	51.616	52.517	53.103	54.286	56.630	58.342	60.483	63.976	68.291	72.134	78.094
Andaman & Nicobar Islands	3.637	3.758	3.758	3.758	3.758	3.758	3.758	3.758	3.758	3.879	4.000	4.122	4.485	4.485	4.485	4.485	5.092	5.576	6.425	7.152
CENTRAL REGION	18.002	18.085	18.180	18.294	18.460	18.466	18.542	18.645	18.617	18.726	18.968	19.115	19.643	20.848	22.015	23.419	24.658	27.035	29.248	32.657
Madhya Pradesh	10.128	10.125	10.186	10.193	10.258	10.288	10.328	10.319	10.285	10.310	10.425	10.427	10.691	11.260	11.941	12.631	13.251	14.437	15.567	17.281
Uttar Pradesh	29.863	30.074	30.220	30.495	30.814	30.783	30.913	31.184	31.167	31.402	31.836	32.200	33.127	35.291	37.190	39.669	41.839	46.011	49.855	55.817
WESTERN REGION	19.340	19.545	19.886	20.188	20.550	20.670	20.903	20.923	20.881	21.033	21.413	21.614	22.298	23.577	24.874	26.598	28.297	30.894	33.356	36.611
Goa	75.095	77.256	79.146	83.468	85.900	87.250	89.681	90.762	91.302	92.112	94.814	96.434	101.026	109.40 0	113.452	119.665	126.958	140.735	153.971	170.719
Gujarat	18.289	18.238	18.462	18.620	18.870	19.038	19.268	19.130	19.084	19.217	19.421	19.589	20.283	21.472	22.625	24.145	25.879	28.303	31.037	34.399
Maharashtra	19.339	19.684	20.080	20.425	20.834	20.909	21.117	21.224	21.179	21.335	21.800	22.004	22.635	23.886	25.241	27.041	28.650	31.224	33.382	36.407
SOUTHERN REGION	27.171	27.542	27.856	28.153	28.581	28.882	29.123	29.272	29.467	29.728	30.418	30.787	31.966	34.171	36.092	38.369	40.554	44.461	48.337	52.933
Andhra Pradesh	17.881	18.066	18.259	18.459	18.721	19.001	19.153	19.328	19.491	19.633	20.066	20.280	20.960	22.687	24.123	25.930	27.526	30.297	33.067	35.994
Karnataka	23.583	23.927	24.214	24.521	24.954	25.236	25.450	25.585	25.742	26.028	26.664	26.988	27.958	29.543	31.023	32.697	33.985	37.212	40.654	44.971
Kerala	80.256	81.337	82.289	83.344	84.553	85.377	86.509	87.924	89.108	90.626	92.865	94.383	98.088	103.10 6	107.300	112.961	120.680	128.811	139.722	150.735
Tamil Nadu	35.776	36.353	36.768	37.030	37.537	37.722	37.922	37.675	37.691	37.799	38.606	39.013	40.743	43.950	46.748	49.778	52.776	58.751	63.395	69.892
Pondicherry	154.489	158.664	160.752	160.752	169.102	179.541	179.541	175.365	177.45 3	175.365	187.891	192.067	208.768	233.82 0	267.223	302.714	331.942	356.994	390.397	427.975
ALL-INDIA	19.409	19.603	19.802	20.019	20.277	20.394	20.535	20.648	20.702	20.875	21.278	21.523	22.258	23.626	24.873	26.441	28.007	30.645	33.220	36.772

Note: Geographic Availability is the number of branches of Scheduled Commercial Banks (SCBs) per 1,000 square kilometers of area.

Source: Based on data provided in Basic Statistical Returns of Scheduled Commercial Banks (various issues); Census of India Reports (1991, 2001 and 2011).

Table 4(b): Descriptive Statistics of Geographic Availability of Bank (SCBs) Branches.

Descriptive	1994-95	1995-96	1996-97	1997-98	1998-99	1999-00	2000-01	2001-02	2002-03	2003-04	2004-05	2005-06	2006-07	2007-08	2008-09	2009-10	2010-11	2011-12	2012-13	2013-14
Mean	85.621	88.639	92.648	96.153	100.311	103.044	105.164	106.859	109.317	112.907	118.588	123.157	131.012	143.939	153.961	164.840	173.508	188.235	200.315	215.576
Min	0.824	0.824	0.824	0.824	0.824	0.824	0.824	0.824	0.824	0.800	0.812	0.824	0.860	0.884	0.919	0.955	1.027	1.146	1.266	1.528
Max	1315.78	1394.737	1500.00	1578.94	1666.66	1728.07	1763.15	1789.47	1859.64	1938.59	2043.86	2140.35	2289.47	2535.08	2692.98	2859.64	2956.140	3184.21	3359.649	3578.94
Median	18.002	18.085	18.259	18.459	18.721	19.001	19.153	19.130	19.084	19.217	19.421	19.589	20.283	21.472	22.625	24.145	25.879	28.303	31.037	34.399
Standard Deviation	256.513	268.930	286.107	300.125	316.081	326.531	334.185	340.500	351.541	366.343	386.828	404.745	432.772	478.950	511.306	545.423	568.769	615.019	649.391	692.178
Coefficient of Variation (%)	299.60	303.40	308.8	312.1	315.1	316.9	317.8	318.6	321.6	324.5	326.2	328.6	330.3	332.7	332.1	330.9	327.80	326.7	324.20	321.1
All-India geographic availability of banking services	19.409	19.603	19.802	20.019	20.277	20.394	20.535	20.648	20.702	20.875	21.278	21.523	22.258	23.626	24.873	26.441	28.007	30.645	33.220	36.772
Total Number of Observations	35	35	35	35	35	35	35	35	35	35	35	35	35	35	35	35	35	35	35	35
Number of States/UTS/Regions with geographic availability greater than mean value	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3
Number of States/UTS/Regions with geographic availability less than mean value	32	32	32	32	32	32	32	32	32	32	32	32	32	32	32	32	32	32	32	32
Number of States/UTS/Regions with geographic availability greater than all-India availability of banking services.	14	15	16	16	16	16	16	16	16	16	16	16	16	15	16	16	16	16	16	14
Number of States/UTS/Regions with geographic availability less than all-India availability of banking services.	21	20	19	19	19	19	19	19	19	19	19	19	19	20	19	19	19	19	19	21
Skewness	4.229	4.287	4.354	4.380	4.397	4.419	4.404	4.385	4.427	4.436	4.428	4.438	4.441	4.447	4.414	4.384	4.330	4.309	4.300	4.291
Kurtosis	17.970	18.602	19.315	19.582	19.766	20.022	19.837	19.608	20.072	20.141	20.059	20.150	20.195	20.258	19.912	19.595	19.020	18.789	18.708	18.632
JarqueBera	481.192	511.189	546.285	559.848	569.209	582.304	572.866	561.295	585.099	588.792	584.555	589.338	591.664	594.950	576.884	560.618	531.821	520.545	516.483	512.724
Probability	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000

Source: Author's own calculation based on table 3(a).

Table 5: Growth Rates of Geographic Availability of Bank Branches.

REGION / STATE / UNION TERRITORY	Average Annual Growth Rate 1994-95 to 1998-99	Average Annual Growth Rate 1999-00 to 2003-04	Average Annual Growth Rate 2004-05 to 2008-09	Average Annual Growth Rate 2009-10 to 2013-14	CAGR
NORTHERN REGION	1.633	1.613	5.480	9.902	3.769* (10.385)
Haryana	2.016	2.331	7.607	12.926	5.127* (10.879)
Himachal Pradesh	0.465	0.505	4.747	8.055	2.737* (7.814)
Jammu & Kashmir	0.516	1.138	2.992	11.060	2.737* (7.103)
Punjab	2.205	1.642	5.417	11.472	3.977* (10.177)
Rajasthan	0.892	0.682	4.049	8.640	2.737* (7.967)
Chandigarh	5.610	3.424	6.967	5.782	5.232* (33.219)
Delhi	2.900	3.476	7.503	7.303	5.232* (18.604)
NORTH-EASTERN REGION	0.000	0.096	3.164	8.417	1.918* (5.743)
Arunachal Pradesh	0.000	-0.281	3.309	12.575	2.327* (5.093)
Assam	0.048	0.146	3.046	7.151	1.816* (5.979)
Manipur	0.003	-2.353	0.800	13.632	0.803 (1.495)
Meghalaya	0.111	0.440	2.873	7.683	1.918* (6.617)
Mizoram	0.000	0.256	4.166	9.631	2.429* (6.348)
Nagaland	-0.559	0.849	4.303	11.941	2.840* (6.032)
Tripura	-0.216	0.327	4.277	11.564	2.737* (5.934)
EASTERN REGION	0.511	0.473	3.305	7.798	2.224* (7.266)
Bihar	0.370	0.310	3.108	8.393	2.020* (6.272)
REGION / STATE / UNION TERRITORY	Average Annual Growth Rate 1994-95 to 1998-99	Average Annual Growth Rate 1999-00 to 2003-04	Average Annual Growth Rate 2004-05 to 2008-09	Average Annual Growth Rate 2009-10 to 2013-14	CAGR
Onssa	0.618	0.513	4.542	8.594	2.737* (7.860)
Sikkim	1.905	3.726	6.273	11.191	5.232* (14.297)
West Bengal	0.603	0.596	2.871	6.602	2.020* (8.128)
Andaman & Nicobar Islands	0.667	1.270	2.371	12.394	2.840* (7.394)
CENTRAL REGION	0.510	0.540	4.329	8.692	2.634* (7.301)
Madhya Pradesh	0.315	0.267	3.939	8.174	2.327* (6.600)
Uttar Pradesh	0.610	0.676	4.520	8.938	2.840* (7.637)
WESTERN REGION	1.340	0.711	4.454	8.323	2.942* (8.627)
Goa	3.054	1.681	4.788	9.307	3.769* (13.227)
Gujarat	0.809	0.402	4.471	9.260	2.840* (7.491)
Maharashtra	1.575	0.841	4.428	7.727	2.840* (9.191)
SOUTHERN REGION	1.229	1.044	4.774	8.389	3.149* (9.311)
Andhra Pradesh	1.222	1.099	5.296	8.554	3.355* (9.272)
Karnataka	1.364	1.110	4.177	8.326	2.942* (9.678)
Kerala	1.245	1.696	4.004	7.481	3.045* (11.615)
Tamil Nadu	1.065	0.469	5.242	8.874	3.045* (7.900)
Pondicherry	3.077	0.966	10.097	9.046	5.338* (10.431)
ALL-INDIA	0.995	0.854	4.459	8.609	2.942* (8.528)

Notes: Based on data provided in Table 4(a); All figures are in percentage form; Figure in parenthesis indicate t-values; * indicates significance at 99 per cent confidence levels.



Financial Inclusion Through PMJDY

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ABSTRACT

Financial inclusion is an aspect of inclusive growth and the process of ensuring access to financial services and timely and adequate credit where needed by vulnerable groups such as weaker sections and low income groups at an affordable cost. It stimulates people to invest and save money in their capacity, which will be a step towards removing vicious circle of poverty and unemployment. It acts as a source of empowerment, better control of finance and allows people to participate more effectively in the economic and social up gradation of the country as more financial access will attract more global market players to our country that will result in increasing employment and business opportunities.

Keywords: Financial Inclusion, Economic Growth, Poverty, PMJDY

INTRODUCTION

Financial inclusion refers to universal access to a wide range of financial services at a reasonable cost and it is not only about credit, but involves providing a wide range of financial services, including saving accounts, insurance, and remittance products. The financial system of the country is unbalanced since independence and in this backdrop; the nationalization of commercial banks in 1969 was a crucial step that had been taken for the establishment of systematic and organized financial system. The Government of India and the Reserve Bank of India have been making concentrated efforts periodically to bring extending or balancing financial system by promoting financial inclusion being one of the important national objectives of the country, but we have not able to reach to the households or persons living in the rural areas of country. People residing in the rural areas like weaker sections of society, low income groups mainly depend on moneylenders and sahkars for meeting financial emergency like health, irrigation, education, drought and other household needs. In this backdrop, the main goal of *financial inclusion* is to improve the range, quality and availability of financial services and products. The objective of nationalization of bank was bringing people into the economic mainstream, but it had not been achieved till date. After 68 years of independence, not even 68% of India's population had access to banking. Today, it is easy for the rich to get a loan at low interest rates, but the poor are forced to seek

loans from money-lenders at five times the rate charged to the rich. A few of the efforts which have been taken in the past six decades are nationalization of banks in 1969 and 1980, building up of robust branch network of scheduled commercial banks, co-operatives and regional rural banks, introduction of mandated priority sector lending target, lead bank schemes, formation of SHGs in 1989-90, and Permitting BCs, No frills (2005), Pradhan Mantri Jan Dhan Yojana 2014 etc. The fundamental objective of all these initiatives is to reach to those sections of Indian population who have been financially excluded.

PRADHAN MANTRI JAN DHAN YOJANA

Pradhan Mantri Jan Dhan Yojana is a crucial step towards improving the state of financial inclusion in India. PMJDY is a scheme for comprehensive Financial Inclusion launched by the Prime Minister Shri Narendra Modi on 28 August 2014 with the aim to open new bank accounts for those households who still do not have a bank account. The scheme is a national mission on financial inclusion encompassing an integrated approach to bring about comprehensive financial inclusion of all the households in the country. The plan envisages universal access to banking facilities with at least one basic banking account for every household. The scheme is especially made to help the poor to grow and provide them financial stability. The scheme will

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not only help poor people of the country but also help the economy of the country to grow. PMJDY is national mission for financial inclusion to ensure access to financial services, viz, Banking, Remittance, Credit, Insurance, and Pension in an affordable manner. It focuses on coverage of households of rural as well as urban areas of whole country. Under the PMJDY any individual above the age of 10 years can open the account and the person who has already a bank account with any bank does not need to open a separate account. The person will just have to get issued a RuPay Card in his existing account to get benefit of insurance. Credit facility can be extended in the existing account if it is being operated satisfactorily. The people opening new bank account with the scheme will get various benefits without any extra cost. The highlights of the scheme may be seen in the following sub-headings:

Basic Services

The services available include deposit and withdrawal of cash at bank branch as well as ATMs; receipt/credit of money through electronic payment channels or by means of collection/deposit of cheques.

Zero Balance Account

There is no requirement of minimum balance. The accounts will be zero balance accounts and account holders do not need to maintain any bank balance.

Rupay Card

The account holder will receive a Rupay Debit Card to withdraw money from any ATM and also use it to make payments at merchant establishments. Rupay Debit Card is an indigenous domestic debit card introduced by National Payment Corporation of India. This card is accepted at all ATMs (for cash withdrawal) and at most of the PoS machines (for making cashless payment for purchases) in the country. The overdraft (credit) is withdrawn through an ATM using this card. No scope for any corruption on the part of bank employees. Every card holder gets the overdraft facility

Insurance Coverage

The Card holder will also insure with accident insurance of up to Rs 1 Lakh from HDFC Ergo

and Medical Insurance of up to ₹ 30,000 for sick account holders. RuPay Debit Card must be used at least once in 45 days to get benefit of Accidental Insurance Cover. Accidental insurance cover is available only in one account.

Pass Book and Cheque Books

This is an additional feature of the yojana and can be availed by account holders only if they feel the need for it.

Direct Benefit Transfers

The account which is linked to Aadhaar can avail government subsidies directly into their accounts by electronic transfer. The government might transfer food subsidies it provides to ration card holders directly into their bank account.

Overdraft

Under the scheme overdraft of Rs 5000 will be provided to those account holders who transact regularly with their rupay card and maintain a good balance in their bank accounts. Overdraft facility is available in only one account per household, preferably lady of the household after 6 months of satisfactory conduct of the account. Aadhaar number will be required to avoid duplication and if Aadhaar number is not available then Bank will do additional due diligence and also seek declaration from the beneficiary.

Banks

The account can be opened in any bank branch or Business Correspondent (Bank Mitra) outlet of the following 10 Public Sector Banks and 10 Private Sector Banks are taking part in this scheme.

SN	Public Sector Banks	Private Sector Banks
1	Bank of Baroda	Axis Bank
2	Bank of India	Federal Bank
3	Canara Bank	HDFC Bank
4	Corporation Bank	ICICI Bank
5	IDBI Bank	IndusInd Bank
6	Indian Bank	ING Vysya Bank
7	Punjab national Bank	Karnataka Bank
8	Union Bank of India	Kotak Mahindra Bank
9	State bank of India and its affiliates	Yes Bank
10	Oriental Bank of Commerce	Dhanalakshmi Bank



CONCEPT OF PMJDY

PMJDY gives equality opportunity to the people of the country because availability of cheap credit is an essential requirement for escaping poverty. Imagine a hard working 25 year old Shahsi who does not have land or money and he had left school after class 2. He lives in Karchna village of Allahabad district with little economic activity. The only way he can earn any money is through manual labour and it does not pay him enough funds to start and provide for a family or build a home. He is stuck in an unending vicious cycle of poverty, and so will be his kids. Now, under PMJDY Shashi is able to get a loan and with the help of the scheme he can buy a rickshaw or auto or taxi and drive it around to earn a better income. He can even expand to 2 of these vehicles later and he can buy land and cultivate it, He can start a trading business, he can buy any capital good to start production, like a sewing machine, an attachakki, etc. and he can get education or any skill-based training and use these skills to get a decent job. The credit will not necessarily improve economic condition of Mr Shahsi, but with credit he has the opportunity to come out of poverty.

Without inclusion Shahsi has no option but to turn to a money lender for credit and money lender can charge anything from 24% to 60% interest per annum for this credit that is much more than 12%-18% charging by a bank. The money lender will also threaten or hurt Shahsi if he fails to pay. The high cost and the threat will deter Shahsi from taking the loan, so he will continue looking for manual labour. He may be bright or hard working, but he still has no opportunity to get a better life. Imagine another situation, where Shahsi has a piece of land but he has no money to cultivate it. In this case both he will end up selling the land or going to a money lender for credit and if the crop fails, it is possible that the moneylender takes away his land.

This scheme is a mega financial inclusion plan. If the lowest rung of society cannot get loans at an affordable rate, how will the country develop? It will provide an insurance cover of Rs. 1,00,000 to crores of people without bank accounts. If you look at this map from the World Bank, only 35% of adults in India have a bank account. Out of the BRICS countries, India has the lowest percentage of financial inclusion. Now, look at other developed and developing countries. In China 65%, USA 87% and Canada 95% adults have a bank account. If

we see, all developed countries have a high percentage of individuals in the banking system. The benefits are two-fold, lesser amount of black money circulates in the economy and it is easier to get loans, which help in the development of any economy. The loans will be used for setting up a business which will in turn generate jobs. This is the core vision behind this scheme. Get the people in the banking system, reduce their dependence on informal credit and watch the country grow.

Creation of a financial inclusion tool which caters to every citizen of the country

The people of the country are forced to keep their money under the mattress because they do not have access to banks, or at best they convert it into gold and make a dead financial asset, which has zero economic value for them and the country. Under the PMJDY scheme more than 10 Cr accounts have been activated in past few months. Now, even if 50% of these accounts maintain a bare minimum average balance of Rs 100, it will increase deposits of the country by Rs 5,000 crores and imagine what will be happened if they maintain somewhere around Rs 1000 on average, which they will in the months to come. This money can be utilized for long-term economic use.

A step towards cash-less transactions

Cash has been a massive headache for a country like India and government cannot put restrictions on cash transactions of any volume because the poor people do not have bank account and hence they will not be able to purchase things if it's not sold via cash. With the opening of bank accounts, cash transactions per day are going to decrease. Be it your local kirana guys, or buying anything from houses to land to gold, everything will start moving to white money transactions sooner than you believe. Days of cash-transaction are limited now.

What impact will it have on the macroeconomics? Well, if transactions start to happen in white money more, a lot of things would come under control, especially the big-ticket items like Houses and Lands. And this means, the uncontrolled rate at which houses are becoming un-affordable for most people, will start making some sense.

I am optimistic, that this particular thing-cash-less transaction, will start to happen in the very long-term, but this is the starting point of the journey. I am hopeful those 10 years from now, even our

local street vendors will start accepting money via cards! This has to happen.

Rolling-Out of Pension Scheme + Insurance Scheme

Now, that 15 Crore (150 million) accounts are opened under the Jan Dhan Yojna, government is in a very strategically strong position to incentivize the account holders to start transacting via these accounts. The two schemes recently launched - Pension Scheme and Insurance Scheme, are definite win-win for both the account holders and the government. Pension Scheme asks for around Rs 220 per year per account (for a pension of Rs 1000/-), and the Insurance Scheme asks for Rs 12/- per person per year. Imagine, even if half of these account holders get enrolled for these schemes, Government will safely generate investments worth Rs 1300 Cr for its long-term projects. And this number is just the tip of the iceberg, once people start transacting via these accounts, the numbers will get multiplied by several hundred folds. Also, these schemes are just the starting point. Once government sees sizable enrollments in such programs, it would start several dozen programs in the times to come.

Its impact on the microeconomics is going to be tremendous - a) A financial support mechanism for the poor's family after the death of the breadwinner, hitherto unknown in India; b) A dependable monthly financial mechanism for the aged population of this country; c) A tool to generate sustained demand-supply in the rural areas (by virtue of the pension money); d) A constant source of investment money for the government (by virtue of monthly premium payments by those scheme holders), etc.

Imagine bank accounts as those primary schooling centers which government opens in each and every village (and has been doing so since many decades now), have those primary schools not produced any thrust for other better things to happen in this country? Probably they have. Because when we see that each year some of the students develop an interest to study further and enroll in higher level schools and then colleges, the mission is getting fulfilled. This bank-account is like that primary school, it might not show all the positives right now, but it will certainly provide wings to the ambitions of most people who were deprived till now.

Agriculture

The poorest people in our country often survive on agriculture. Because of this scheme these people will benefit the most. If a farmer wants a loan, he would generally go to a money lender, who would charge him exorbitant rates, generally to the tune of 20% or more and this is simply unaffordable. The interest quickly climbs up leaving the farmer in debt. This debt then becomes a vicious circle. This leads to many farmer suicides. However, if the same farmer has a bank account, he will get loan from the bank at less than half the rate. Not only will he have less interest to pay, he can also save money. One more thing, due to less debt, he might invest in more productive agricultural technologies, which reduce the ecological burden on the land.

Economy

Have you ever wondered why our PDS system is so inefficient? It is due to lack of accountability. Cash transfers do not induce accountability. You can never enforce accountability through a cash transfer. However, a bank account will remedy this. The banking system leaves a trail of money which can easily be traced. This vastly reduces the amount of black money which can circulate in the economy. These accounts can be used for cash transfers, handing out subsidies and other stuff. They will minimize leakage and ensure that subsidies reach beneficiaries.

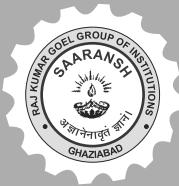
PROS AND CONS OF SCHEME

Let us discuss in the following sub-headings about the pros and cons of the scheme:

Pros

1) Banking the unbanked: As many as 65% of adult citizens of India still live without bank account. The giant scale of the scheme holds the potential to cover huge chunk of these people. Only on launching day, 1.5 Crore accounts were opened. These accounts can bring unbanked people into formalized financial system where they can avail wide range of financial services like savings, credit, remittances and insurance. They can break free from trap of moneylenders who often charge usurious interest rates for short term credit.

2) Targeting households: The earlier financial inclusion scheme (2011) focused on and targeted



villages. This scheme is one step ahead and targets directly households.

3) Technology backed banking: National Payment Corporation of India (NPCI) has a huge role to play in this 'financial and technological inclusion'. All banks and telecom operators have been suggested to collaborate greatly to provide quick mobile banking facilities to these beneficiary households. Not only smartphones but even ordinary phones of beneficiaries would be able to perform tasks like balance inquiry and money transfer. This is in line with Mr. Modi's emphasis on technology backed governance be it allocation of natural resources or integration of financial systems.

4) Indianization of payment methods: The scheme with its provision of Rupay debit card is a clear indication for promotion of Indian payment cards as against Master or Visa. This is in line with our PM's 'Make in India' approach. With this, a huge amount of financial resources would be geared towards Rupay backed systems.

5) Plugging leakages: The cash transfers to bank accounts would become possible and beneficiaries can avail social scheme benefits directly into their accounts. With this, mercerization of subsidies can be prevented.

6) CASA for the banks: The banks (mainly cash strapped PSBs) would be able to avail huge amount of current and savings account deposits. These are the low cost money which, given the high interest rates, banks can greatly benefit from.

7) Systematic approach: The fundamental scheme approach focuses in first phase on savings and credit (insurance given is free here) and in second phase on micro insurance and pension. This is an important feature aimed at avoiding any sort of clutter at any level - household, bank or administration.

8) Know your customer: The KYC norms have been simplified by the RBI. KYC norms makes it mandatory for banks to get essential documents from the person before opening his/her account. Relaxation has been made i.e. person can provide the documents within six months of opening the account. A small account with few limitations in term of transaction would be opened in his/her name on the basis of self attested photograph or just the signature. As soon as one provides the documents the limitations will be lifted.

Cons

1) Huge burden on PSBs: The banks (mainly public sector) are the main responsible entities for scheme implementation. In the current macroeconomic ecosystem, all PSBs are cash-strapped, have loads of stressed assets (bad loans and restructured loans) and are mostly performing inefficiently due to number of reasons. The program implementation relies heavily on financial and administrative efficiency of PSBs which don't have produced credentials to do so. There are certain differences between government and RBI too. They may affect the actual implementation of scheme.

2) Risk of becoming SHG part 2: The very concept of mammoth program called SHG-Bank linkage by NABARD was very benign to cover women who usually are good financial managers and provide financial cover to all member households. If this scheme had succeeded, there would not have been such huge pressure now on this scheme. Nevertheless, the failure (or at least minimal impact) of SHG program offers a very important lesson that schemes of such scale are extremely difficult to monitor on ground level. The same can be feared about this scheme.

3) Limitation in plugging: In many villages, under NREGA work, people share their money with Panchayat as a part of 'mutual understanding' of 'No-work-share-money'. People share their wages with panchayat officials in return of being allowed for only half day or no work. The scheme doesn't address this issue.

4) Defunct accounts: This is really what can enervate PSBs already in trouble due to reasons cited in point 1. The huge amount of financial and administrative resources spent on accounts can go in drain without efficient training to households on financial services.

5) Financial literacy: We have not been able to produce effective financial literacy tools so far. The financial literacy toolkit designed by RBI and launched in 2013 focuses excessively on giving moral lessons on savings to people rather than developing a client-centric approach that can really understand client's perspective and problem and address it.

6) Support infrastructure: This is one of the most important bottlenecks that has to be addressed. The present availability of bank branches in rural areas or BCs and ATMs poses critical challenge

for government. Nevertheless, lack of support services to beneficiary households like product counseling and micro-entrepreneurship training will have great potential to overshadow the benefits of the scheme.

CONCLUSION

India is a country having more than 1.2 billion population, spread across 29 states and seven union territories. There are around 6, 00,000 villages and 640 districts in the country. India is among the world's most efficient financial markets in terms of technology, regulation and systems. It also has one of the highest saving rates in the world. In spite of the same, Poverty and exclusion continue to dominate socio-economic and political discourse in India. A vast majority of the population, especially in rural areas, is excluded

from the easy access to finance. Access to safe, easy and affordable credit and other financial services by the poor, vulnerable groups, disadvantaged areas and lagging sectors is recognized as a precondition for accelerating growth and reducing income disparities and poverty. In this direction, PMJDY created world history for poor persons and villagers. Ever since PMGDY was launched this year there have been misgivings over the haste shown by the government to open banks accounts to cover all rural households. Overall, the scheme has tried to plug multiple loopholes in the existing schemes, like leakages due to corrupt middlemen, KYC requirements for opening an account, unwillingness on the part of customers, etc. But the implementation challenges remain. The scheme wouldn't succeed if the government is unable to implement all that it has planned.

REFERENCES

- GOI, (2006), Towards Faster and more Inclusive Growth – An Approach to the 11th Five Year Plan, Planning Commission.
- Kaur H. and Singh K(2015),PradhanMantri Jan DhanYojana: A Leap towards Financial Inclusion in India” International Journal of Emerging Research in Management &Technology, 4(1)
- Kochhhar, S. (2009). Speeding Financial Inclusion. New Delhi, Academic Foundation
- Kumar P.(2014),Financial Inclusion in India- Current Position and Challenges, The Asin journal of multidisciplinary research, 2(7)
- Nayak, R. (2012). “Financial Inclusion through Cooperative Banks: A Feasible Option for Inclusive Growth”, Indore management Journal, 4(3)
- Paramasivan C. & Ganeshkumar V.(2013).”Overview of Financial Inclusion in India”. International Journal of Management and Development Studies,2(3), 45-49.
- Rakesh, Mohan (2006), ‘Economic Growth, Financial Deepening and Financial Inclusion, <http://rbidocs.rbi.org.in/rdocs/Speeches>
- Rao N (2013),Status of Financial Inclusion Among Rural Household in Andhra Pradesh”
- RBI, (2008), Financial Literacy and Credit Counseling Centers, Concept Paper, RBI, April, 2008.
- Sarma, Mandira (2007), Index of Financial Inclusion,Indian Council for Research on International Economic Relations
- Wambua, C. &Dathe E. (2013), Innovative Factors That Affect Financial Inclusion In Banking Industry, International Journal of Sciences: Basic and Applied Research (IJSBAR), 12(1), 37-56.
- World Bank (2009) The Case For Financial Literacy in Developing Countries: Promoting Access to Finance by Empowering Consumers. Washington, World Bank
- <http://indiamicrofinance.com/jan-dhan-yojana.html>
- <http://www.jandhanyojna.info/>



Women Entrepreneurship and Innovation in Today's Scenario

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Dr. Amit Tyagi**
Dr. Mani Tyagi***

ABSTRACT

An entrepreneur is an innovator who introduces something new in an economy. Entrepreneurship can be viewed as a creative and innovative response to the environment and an ability to recognize, initiate and exploit an economic opportunity. Innovation may be in introducing a new manufacturing process that has not yet been tested and commercially exploited, introduction of a new product with which the customers are not familiar or introducing a new quality in an existing product, locating a new source of raw material or semi-finished product that was not exploited earlier, opening a new market, hitherto unexploited, where the company products were not sold earlier, developing a new combination of means of production.

Women of 21st century is no more a traditional resource confined to homes only rather an educated, knowledgeable and innovative part of the overall population possessing the capacity to transform economies into thriving enterprises. Parallel to the male counterparts, female entrepreneurs are catalytic in job creation, innovation and more than tangible contribution to the economy of the country. Despite developments made in gender equality, many gaps remain between males and females in realms such as education, employment and entrepreneurship. Beyond being a basic human right, women empowerment and gender equality is also a way to generate broad productivity gains. From a development perspective, empowering women and granting them equal rights in areas such as entrepreneurship and innovation has also positive spillover effects on key development outcomes. Women entrepreneurship is a growing field around the world. Moreover, several knowledge gaps remain on the obstacles hindering women's role in the promotion of sustainable development and economic growth through the creation of high growth, innovative enterprises.

The objective of this paper is to explore studies related to Women Entrepreneurship and Innovation in India. Its results cannot be generalized, but provide interesting and thought-provoking insights on drivers and obstacles to entrepreneurship and innovation from a gender perspective.

Keywords: Women Entrepreneurship, Innovation, Entrepreneurship

INTRODUCTION

Drucker (1985) argued that innovation is the tool of entrepreneurship.

No entrepreneur or enterprise, however successful and big, can continue to hold a place of leadership unless it recognizes that modern business operates in a world of galloping change which creates new problems, risk and opportunities and for which they have to mobilize the enterprise's resources before changes make their impact felt. To do successfully, the entrepreneur and enterprise should know where this firm is going and how the firm will get there.

This in turn requires a clear definition of the company's business which will enable it to continually adopt operations to the realities of the market place, "the very corner stone of survival and growth". Innovation is defined as adding something new to an existing product or process. The key words are adding and existing. The product or process has already been created from scratch and has worked reasonably well. When it is changed so that it works better or fulfills a different need, then there is innovation on what already exists. Innovation is the successful exploitation of new ideas.

Moreover, innovation studies have frequently focused on male dominated high-tech industries,

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while it is widely acknowledged that traditional and service-related industries where women are more prominent may also be innovative. To tackle these issues, comparative survey of innovation in women- and men-owned firms. In this study, the definition of innovation extends beyond products and processes and includes organizational behaviors and marketing, as well as any innovative practice new to an already existing firm. Entrepreneurs responded to a variety of questions about their:

- Entrepreneurial motivations;
- Strategies for growth;
- Networks and support systems;
- Barriers to growth;
- Views on innovation;
- Innovative practices;

RESEARCH METHODOLOGY

This is an exploratory study related to Women Entrepreneurship and Innovation in India and also to understand how innovation in Entrepreneurship leads to success and growth of an enterprise. The researchers has adopted the method of reviewing articles, journals and case studies, collected data about entrepreneurship and women entrepreneurship which is consequently incorporated. A quantitative survey and qualitative interviews were conducted: 50 quantitative interviews among owner-managed small businesses – 25 among women-owned firms and 25 among men-owned firms – and up to 10 qualitative case study interviews among women and men respondents. Sample selection criteria is based on following factors:

- Registered businesses.
- Businesses running from last three years (not necessarily registered).
- Independent firms.
- More than one full time employee other than owner.
- Owned by one or more persons.
- Women owned (major stake with women)
- Variety of productive sector.

OBJECTIVES OF STUDY

- Investigate the drivers of entrepreneurship and innovation according to gender.

- Examine impediments to entrepreneurship and innovation and analyze whether these impediments vary by gender and development context.
- Provide recommendations for policy in the area of women entrepreneurship, fostering a greater level of innovation in women-owned enterprises.

The group was focused consisting of 200 males and female's high growth entrepreneurs have been surveyed. The findings and conclusions are grouped into three main topics: entrepreneurial motivations and drivers of innovation, innovative practices and barriers to innovation. The survey questionnaire specified that innovation encompasses innovative practices not only in products and processes, but also in organizational behaviors and in marketing. It referred to any method or product that is new to the firm (not necessarily to the rest of the world).

RATIONALE OF THE STUDY

Findings of the research have been characterized into four categories:

- Entrepreneurial motivations
- Drivers of innovation
- Innovative practices
- Barriers to innovation

Each criteria focus on women entrepreneur but comparative analysis is done to generate differences between men and women.

FINDING OF QUANTITATIVE SURVEY

Entrepreneurial motivations:

Primary purpose for starting the business for women reported variety of motivations other than necessity. Most of the women stated that their motivations include fulfilling of dream, accomplishing passion or gaining independence. Men more likely to report innovation related motivation for starting business. Maximum of them responded that they find a place in market for innovation products or improved products and services like UBER, OLA, URBAN CLAP.

Drivers of innovation

In the survey it was asked to define innovation



what they felt after the establishment of business. They were given few characteristics from which they can choose as many as they felt, Responses were amazing by the men and women, they agreed on three characteristics of innovation:

- Developing new products or services.
- Exploring new opportunities and ideas that are no commercialized.
- Investing in new technologies or processes.

Innovative practices

Study revealed that there is a huge gap between the number of men and women entering into science, technology, engineering and mathematics, overall findings of the survey also reveal that whether it was self-driven or by the need of market women entrepreneur put their innovative ideas into practice as much as men entrepreneurs.

Barriers of Innovation:

Study revealed that there are few internal barriers for innovation but maximum are external barriers which are faced by women entrepreneurs, primary among them are:

- o Insufficient access to capital;
- o Limited access to new markets;
- o Limited access to ICTs;
- o Cultural constraints;
- o Lack of capacity-building.

Limited access to capital is one of the key challenges faced by women entrepreneur when the launch their business and is still the obstacle they face when they continue to innovate or grow their business. Accessing of new markets is another barrier faced by women in growth oriented innovation. There is always a gap between the number of women and the number of men in grabbing new markets at national and international level.

Maximum women business owners use computers for business, limited access to internet is in developing countries and also depends on their areas whether they belong to rural or urban areas. Women business owners who are more focused on growth have a strong craving for introducing new ICT tools. Improvement in basic access to information and communications

technologies can help in enhancing innovation and entrepreneurial creativity.

Social and cultural constraints on women are vanishing for women business owners and innovation in country. Many challenges make it difficult for women to engage in an entrepreneurial activity independently from the development context, such as the problem of dealing with taking care of family and business at the same time.

Lack of capacity building is also the measure hindrance faced by women entrepreneur among the women surveyed least women had attended specialized education program including financial management, marketing or technology-focused skill building.

FINDING OF QUALITATIVE SURVEY

Motivation

In India especially in northern part women are most likely to start a business in a sector that they already have knowledge or they have interest in that business. Only one entrepreneur was interviewed among the target group who started her business as new opportunity Rita Singh began with a small dairy and khandsari(cottage sugar) unit at Hapur near Delhi, before getting into the export of leather garments. Her meteoric rise was in the early 1990s when the Mesco group forayed into footwear retailing, aviation, shipping, and putting up a pig iron plant and integrated steel complex in Orissa.

Innovation

Women Entrepreneur have a clear view about innovation in their method of production and processes. They implemented wide of innovations like new method of production, change in marketing process or utilizing some new information's and applying it commercially.

Obstacles

All women entrepreneurs face problems in accessing finance as their main obstacle. Also more likely than men they had to deal with social culture or family and children [pre occupation. They also face discrimination by the bankers and the funding agencies as they show less interest in their proposals because they are women.

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Support:

Women entrepreneur are less confident while starting their business and felt to acquire more confidence. Majority of women have their role models and common choice is nearly to successful women entrepreneur. Also, women are entrepreneurs because they are facing family financial problems so they follow nearby successful women entrepreneurs as role models.

POLICY RECOMMENDATIONS

Indian Government is providing sound financial structure to encourage women entrepreneur still many are not able to start their business due to lack of proper knowledge for arranging finances on how to start up.

Create Information centre

Sources should be created where entrepreneurs can obtain information to obtain financial grants and about government funding schemes and methods to learn more about the business environment.

Organizing Trade fares at District levels

To provide access for new entrepreneurs to visit trade fairs that cannot afford to attend and negotiate lower rates for government-recommended entrepreneurs. HATT system can be introduced at this level to provide market or platform to entrepreneurs for selling their products.

Fill the gap between Government and Business Program providers

Educate government and business programme providers about the difficulties women entrepreneurs face when trying to access networks, government support and funding

Provide training courses for existing women entrepreneurs

Skill training is effective part of entrepreneurial activity. Provide information about government programs and funding, market business training and networking sessions differently to attract more women

Face to face interaction with role models

It may also help to increase women's confidence and encourage more women to innovate due to

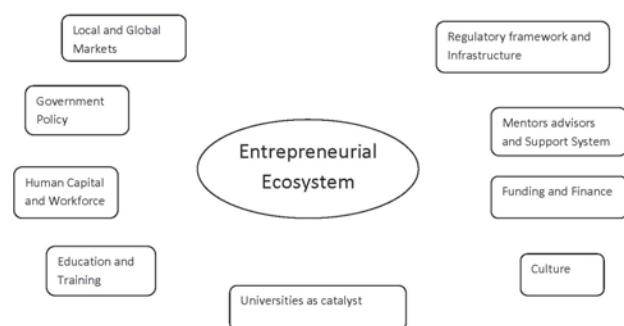
opportunity rather than necessity

Trainings by sector experts

Provide training to women who have developed a deep knowledge of their preferred sector, either by working or studying and train them by the expert.

Developing entrepreneurial ecosystem

This concept should be introduced the diagram below shows the nine elements that are considered important for the generation of entrepreneurial ecosystem



CONCLUSION

With these criteria results can be generalized for all business populations however parameter of the study suggests gender difference.

This study provides that the drivers of entrepreneurs and innovations among growth oriented females owned firms are different from men owned firms. Study shows that women entrepreneurial motivators are moreover fulfillment of dreams accomplishing passion or to be independent.

Men are more towards in production of new goods and services to markets, searching new markets or improvement in existing products and services. Drivers of innovation for women and men entrepreneurs, women are more towards accomplishment of social needs in community,

In spite of different motivators, female surveys had same approach to innovation as male business owners.

In nut shell women entrepreneurs tend to focus their innovations to business organizations rather than on products and processes, they are more towards cohesiveness and collaborative work structure.



As surveyed it was found high growth men entrepreneur too face similar problems as women entrepreneur so they suggested some specific suggestions in mainstreaming gender in entrepreneurship and innovation policies:

- Creating special program for social enterprises nurturing through training and investment by financing innovation and more focused growth oriented innovation.

- More access to new markets and ICTS by increasing assistance through ICT training programs.
- Empowerment of women's by increasing cultural acceptance, highlighting successful women entrepreneurs and raising public awareness.

Policymakers, educators and key stakeholders could consider undertaking actions to address the needs and constraints identified in this survey.

REFERENCES

1. Aldrich, H. (1989), "networking among women entrepreneurs", in O. Hagan, C. Rivchun, and D. Sexton. Eds., "women owned businesses". New york: praeger, pp. 103-132.
2. Allen, S., and Truman, C., eds. (1993), "women in business: perspectives on women entrepreneurs", London: rutledge press.
3. Batra Promod, Batra Vijay, Outside the Box- Great Ideas that transformed Business, published by Promod batra Vijay batra and Associates, New Delhi
4. Bedi Kanishka, Management and Entrepreneurship, oxford university press, New Delhi
5. Hisrich D Robert, Peters P Michael, Shepherd A Dean, Entrepreneurship, sixth edition (2007), Tata McGraw-hill publishers, New Delhi
6. Dr. Nasreen Aslam shah (2002), "Changing role of women in Pakistan: a study of social and economic activities of women entrepreneurs". University of Karachi.
7. Hisrich, R., and S.A. Ozturk (1999). "Women entrepreneurs in a developing economy". The journal of management development, 18(2): 114-25.
8. Manolova, T.S., C. G. Brush, and I. F. Edelman (2008). "What do women entrepreneurs want"? Strategic change, 17(3-4): 69-82.
9. Scott, C. E. (1986). "Why women are becoming entrepreneurs," journal of small business management 24 (4), 37-45.
10. Oats David, A Guide to Entrepreneurship, second edition (2007), Jaico publishing house, Mumbai
11. http://smarteconomy.typepad.com/entrepreneurship_and_inno/ How to double and triple the success rate of all entrepreneurs in a country
12. <http://hbswk.hbs.edu/item/6168.html>/Do Innovation and Entrepreneurship Have to Be Incompatible with Organization Size?
13. <http://creativityandinnovation.blogspot.com/> Creativity and Innovation Driving Business - Innovation Index

Indirect Taxation System in India – What Next? With Reference to GST

Mr. Nitin Saxena

ABSTRACT

Goods and Services Tax (GST), a historic tax reform, is effective from tomorrow i.e. 1st July, 2017. GST will completely transform the Indirect Taxation landscape in the country involving both the Central and State levies. In a departure from the normal practice, GST will be administered together by the Centre and States.

There are mixed response, inexplicit, arguments and opinions among the Manufactures, traders and society about the Goods and Services Tax (GST) to be implemented by Government of India from 1st April 2017 this year. Various news organizations from all around the world focused on the bill unifying the country and it being an achievement of the government. As the Goods and Services Tax Bill was passed in the Rajya Sabha, it also brought India at the center of the global economy. With the passing of the bill, many international newspapers published their views on how the GST Bill brings a new wave of economic reform in the country. The paper highlights the background, Prospectus and challenges in Implementation of Goods and services Tax (GST) in India. Finally, the paper examines and draws out a conclusion.

Keywords: Goods and Services Tax (GST), Economic Reform, Input Tax Credits, Indian Economy

INDIAN TAXATION SYSTEM

India has got a well-structured and simplified taxation system, wherein an authoritative segregation has been done among the Central Government, the different State Governments as well as the Local Bodies. The Department of Revenue under the Government of India's Ministry of Finance is solely responsible for the computation of tax. This department levy taxes on individuals or organizations for income, customs duties, service tax and central excise. However, the agriculture based income taxes are levied by the respective State Governments. Local bodies have got the power to compute and levy taxes on properties and other utility services like drainage, water supply and many others. The past 15 years have witnessed tremendous reformations of the taxation system in India. Apart from the rationalization of the rates of tax, simplification of the different laws of taxation has even been done during this period. However, the process of tax rationalization is still in progress in the Republic of India. Courtesy New Business Maps of India)

WHY GST?

The biggest tax reform since independence - GST - will pave the way for realization of the goal of One Nation - One Tax - One Market. GST will benefit all the stakeholders namely industry,

government and consumer. It will lower the cost of goods and services, give a boost to the economy and make the products and services globally competitive, giving a major boost to 'Make in India' initiative. Under the GST regime, exports will be zero-rated in entirety unlike the present system where refund of some of the taxes does not take place due to fragmented nature of indirect taxes between the Centre and the States. GST will make India a common market with common tax rates & procedures and remove economic barriers. GST is largely technology driven and will reduce the human interface to a great extent. GST is expected to improve ease of doing business in India.

In majority of supplies of goods, the tax incidence approved by the GST Council is much lower than the present combined indirect tax rates levied [on account of central excise duty rates / embedded central excise duty rates / service tax post-clearance embedding, VAT rates or weighted average VAT rates, cascading of VAT over excise duty and tax incidence on account of CST, Octroi, Entry Tax, etc.] by the Centre and State(s)

Currently, we have Value-Added Tax (VAT) systems both at the central and state levels. But the central VAT or CENVAT mechanism extends tax set-offs only against central excise duty and service tax paid up to the level of production.

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CENVAT does not extend to value addition by the distributive trade below the stage of manufacturing; even manufacturers cannot claim set-off against other central taxes such as additional excise duty and surcharge.

Likewise, state VATs cover only sales. Sellers can claim credit only against VAT paid on previous purchases. The VAT also does not subsume a host of other taxes imposed within the states such as luxury and entertainment tax, octroi, etc.

Once GST comes into effect, all central- and state-level taxes and levies on all goods and services will be subsumed within an integrated tax having two components: a central GST and a state GST.

This will ensure a complete, comprehensive and continuous mechanism of tax credits. Under it, there will be tax only on value addition at each stage, with the producer/seller at every stage able to set off his taxes against the central/state GST paid on his purchases. The end-consumer will bear only the GST charged by the last dealer in the supply chain, with set-off benefits at all the previous stages.

Old Taxation System?

In a full non-GST system, there is a cascading burden of “tax on tax”, as there are no set-offs for taxes paid on inputs or on previous purchases.

Thus, if we consider the same example as above, the manufacturer buys raw materials/inputs at Rs 100 after paying tax of Rs 10. The gross value of the shirt (good) he manufactures would be Rs 130, on which he pays a tax of Rs 13. But since there is no set-off against the Rs 10 he has already paid as tax on raw materials/inputs, the good is sold to the wholesaler at Rs 143 (130 + 13).

With the wholesaler adding value of Rs 20, the gross value of the good sold by him is, then, Rs 163. On this, the tax of Rs 16.30 (at 10%) takes the sale value of the good to Rs 179.30. The wholesaler, again, cannot set off the tax on the sale of his good against the tax paid on his purchase from the manufacturer.

The retailer, thus, buys the good at Rs 179.30, and sells it at a gross value of Rs 208.23, which includes his value addition of Rs 10 and a tax of Rs 18.93 (at 10% of Rs 179.30). Again, there is no mechanism for setting off the tax on the retailer's sale against the tax paid on his previous purchase.

The total tax on the chain from the raw material/ input suppliers to the final retailer in this full no-GST regime will, thus, work out to $Rs\ 10 + 13 + 16.30 + 18.93 = Rs\ 58.23$. For the final consumer, the price of the good would then be $Rs\ 150 + 58.23 = Rs\ 208.23$.

UNDER GST?

Stage 1

Imagine a manufacturer of, say, shirts. He buys raw material or inputs — cloth, thread, buttons, tailoring equipment — worth Rs 100, a sum that includes a tax of Rs 10. With these raw materials, he manufactures a shirt.

In the process of creating the shirt, the manufacturer adds value to the materials he started out with. Let us take this value added by him to be Rs 30. The gross value of his good would, then, be $Rs\ 100 + 30$, or Rs 130.

At a tax rate of 10%, the tax on output (this shirt) will then be Rs 13. But under GST, he can set off this tax (Rs 13) against the tax he has already paid on raw material/inputs (Rs 10). Therefore, the effective GST incidence on the manufacturer is only Rs 3 ($13 - 10$).

Stage 2

The next stage is that of the good passing from the manufacturer to the wholesaler. The wholesaler purchases it for Rs 130, and adds on value (which is basically his ‘margin’) of, say, Rs 20. The gross value of the good he sells would then be $Rs\ 130 + 20$ — or a total of Rs 150.

A 10% tax on this amount will be Rs 15. But again, under GST, he can set off the tax on his output (Rs 15) against the tax on his purchased good from the manufacturer (Rs 13). Thus, the effective GST incidence on the wholesaler is only Rs 2 ($15 - 13$).

Stage 3

In the final stage, a retailer buys the shirt from the wholesaler. To his purchase price of Rs 150, he adds value, or margin, of, say, Rs 10. The gross value of what he sells, therefore, goes up to $Rs\ 150 + 10$, or Rs 160. The tax on this, at 10%, will be Rs 16. But by setting off this tax (Rs 16) against the tax on his purchase from the wholesaler (Rs 15), the retailer brings down the effective GST

incidence on himself to Re 1 (16 –15).

Thus, the total GST on the entire value chain from the raw material/input suppliers (who can claim no tax credit since they haven't purchased anything themselves) through the manufacturer, wholesaler and retailer is, Rs 10 + 3 + 2 + 1, or Rs 16.

CONSTITUTIONAL AMENDMENT ACT FOR GST

The One Hundred and First Amendment of the Constitution of India, officially known as The Constitution (One Hundred and First Amendment) Act, 2016, introduced a national Goods and Services Tax in India from 1 April 2017. The GST is a Value added Tax (VAT) and is proposed to be a comprehensive indirect tax levy on manufacture, sale and consumption of goods as well as services at the national level. It will replace all indirect taxes levied on goods and services by the IGST is a single tax on the supply of goods and services, right from the manufacturer to the consumer. Credits of input taxes paid at each stage will be available in the subsequent stage of value addition, which makes GST essentially a tax only on value addition at each stage. The final consumer will thus bear only the GST charged by the last dealer in the supply chain, with set-off benefits at all the previous stages Indian Central and State governments. It is aimed at being comprehensive for most goods and services.

The below table shows list of taxes centre and state level are being subsumed into GST Keeping in mind the federal structure of India, there will be two components of GST – Central GST (CGST) and State GST (SGST). Both Centre and States will simultaneously levy GST across the value chain. Tax will be levied on every supply of goods and services. Centre would levy and collect Central Goods and Services Tax (CGST), and States would levy and collect the State Goods and Services Tax (SGST) on all transactions within a State. The input tax credit of CGST would be available for discharging the CGST liability on the output at each stage. Similarly, the credit of SGST paid on inputs would be allowed for paying the SGST on output. **(Table 1 & 2)**

CHALLENGES AHEAD?

1. The impact of the November 8 demonetization of high-value currency on their respective

economies to underline that it is not the appropriate time to implement. That could have a unstable effect on the economy.

2. The Centre continues to be un compromising on the issue of jurisdiction over assesses, the states maintain.
3. Manufacturers and Traders are still in dilemma for implementing GST.
4. GST will also have impact on cash flow and working capital. Cash flow and working capital of business organizations which maintain high inventory of goods in different states will be adversely affected as they will have to pay GST at full rate on stock transfer from onestate to another. Currently CST/VAT is payable on sale and not stock transfers.
5. Implementing GST in unorganized sectors like howkers, daily street markets, etc will be a tough task.
6. Changes in MRP on old stock (guidelines issued and published in news papers on 4th July, 2017) will might take long time and may be a hassle for traders holding huge stocks.
7. Reality sector is facing challenges due to demonetization and in time ahead Sales in Reality sector might get effected till the clarification comes (ET- 3rd July, 2017)
8. Registration formalities are still pending under GST for many sectors.
9. According to Nikkei India Manufacturing PMI file low growth in June due to fear of GST.
10. Long process for new MRP implementation like printed tags, advertisements in newspapers for difference increase in prices.

CONCLUSION

1. GST will bring One Nation One Tax Policy.
2. Input Tax Credit will provide cushion to customers and manufacturers.
3. Indirect Tax revenue might get increase for Government.
4. E-filing of GST return through GSTNET will reduce corruption.
5. For achieving the target government must organize some training programmes for all levels of traders and Manufacturer.
6. Stock Market has shown positive side on 4th July, 2017.



REFERENCES

1. Bird Richard M. The GST/HST: Creating an integrated Sales Tax in a Federal Country. The School of Public Policy, SPP Research Papers, 2012; 5(12):1-38
2. Empowered Committee of Finance Ministers First Discussion Paper on Goods and Services Tax in India, The Empowered Committee of State Finance Ministers, New Delhi, 2009.
3. Garg Girish. Basic Concepts and Features of Good and Services Tax in India. International Journal of scientific, research and Management. 2014; 2(2):542-549
4. Indirect Taxes Committee, Institute of Chartered Accountants of India (ICAI) Goods and Services Tax (GST). 2015. Retrieved from: <http://idtc.icai.org/download/Final-PPT-on-GST-ICAI.pdf>
5. Kumar Nitin. Goods and Services Tax in India: A Way Forward. Global Journal of Multidisciplinary Studies, 2014; 3(6):216-225
6. Indian journal of Finance
7. Indian journal of Marketing
8. Finance India
9. Economics Times
10. Indian Express

Table 1: Taxes At The Centre And State Level Are Being Subsumed Into GST

S.No	At The Centre	State Level
1	Central Excise Duty,	a. Subsuming of State Value Added Tax/Sales Tax,
2	Additional Excise Duty,	b. Entertainment Tax (other than the tax levied by the local bodies), Central SalesTax (levied by the Centre and collected by the States),
3	Service Tax,	c. Octroi and Entry tax,
4	Additional Customs Duty commonly known as Countervailing Duty, and	d. Purchase Tax,
5	Special Additional Duty of Customs.	e. Luxury tax, and

Table 2: List of Asian Countries Implementing VAT/GST

No.	Country	GDP Per Capita (World Bank, 2011, USD)	Year of Implementation	Current Rate (%)
1	Bangladesh	743	1991	15.0
2	China	5,445	1994	17.0
3	India	1,509	2005	12.5
4	Iran	NA	2008	5.0
5	Japan	45,903	1989	5.0
6	Jordan	4,666	2001	16.0
7	Kazakhstan	11,357	1991	12.0
8	Kyrgyzstan	1,124	1999	20.0
9	Lebanon	9,413	2002	10.0
10	Mongolia	3,129	1998	10.0
11	Nepal	619	1997	13.0
12	Pakistan	1,189	1990	16.0
13	Papua New Guinea	1,845	2004	10.0
14	South Korea	22,424	1977	10.0
15	Sri Lanka	2,835	2002	12.0
16	Taiwan	NA	1986	5.0
17	Tajikistan	935	2007	20.0
18	Turkmenistan	5,497	1993	15.0
19	Uzbekistan	1,546	1992	20.0

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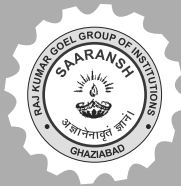
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