NICE Journal of Business

Promoting and Preserving Business Research

ISSN : 0973-449X

Listed in Cabell's Directory, USA
Included in EBSCO's Database, USA
Included in Ulrich's Directory of Periodicals (USA)

Volume 9, Numbers 1&2

January-December, 2014

RESEARCH PAPERS

Shobhit University

Shobhit Institute of Engineering & Technology, Meerut

A University declared by GoI u/s 3 of UGC Act 1956

HALF-YEARLY JOURNAL OF
SHOBHIT UNIVERSITY, MEERUT (INDIA)

Financial Analysis of State Bank of India Using Various Ratios

Asma Khan*

Abstract

This paper focuses on financial performance of State Bank of India by using various ratios. The ratios used are Cash Deposit Ratio, Return on Equity, Net Profit Ratio and Operating ratio. The author found that Cash Deposit Ratio is satisfactory, Return on Equity and Net Profit ratio was acceptable till 2012-13 but showed pitiable performance after that. Operating ratio showed improvement till 2011-12 but started desecrating after that.

Keywords: *Financial Analysis, SBI,CDR, Return on equity, Net profit ratio, Operating ratio*

INTRODUCTION

Banking plays a silent, yet crucial role in our day-to-day lives. The banks work as financial intermediaries, pooling savings and channelizing them into investment, helps in economic development of a country. A banking system also referred as a system provided by the bank which offers cash management services for customers, reporting the transactions of their accounts and portfolios, throughout the day. The banking system in India should not only be hassle free but it should be able to meet the new challenges posed by the technology and any other external factors. For the past three decades, India's banking system has several outstanding achievements to its credit. The banks are the main participants of the financial system in India. The banking sector offers several facilities and opportunities to their customers. All the banks safeguard the money and valuables and provide loans, credit, and payments services, such as checking accounts, money orders, and cashier's cheques. The banks also offer investment and insurance products. As a variety of models for cooperation and integration among finance industries have emerged, some of the traditional distinctions between banks, insurance companies, and securities firms have diminished. In spite of these changes, banks continue to maintain and perform their primary role-accepting deposits and lending funds from these deposits. The efficient working of banking system leads to survival of any country. The banking system of India is featured by a large network of bank branches, serving many kinds of financial needs of the people.

* Shobhit University, Meerut, U.P., India

OBJECTIVE OF THE STUDY

The present study has been conducted to examine and evaluate all the aspects of the financial performance of State Bank of India on certain parameters through ratio analysis and to summarize the findings.

RESEARCH METHODOLOGY

Financial analysis is mainly done to compare the growth, profitability and financial soundness of the respective bank by diagnosing the information contained in the financial statements. It helps in better understanding of banks financial position, growth and performance by analyzing the financial statements with various tools and evaluating the relationship between various elements of financial statements.

Data collection

The study is based on secondary data that has been collected from annual report of SBI of various years, research papers, text books, news papers etc. The study covers the period of 5 years i.e. from year 2009-10 to 2012-14.

Data analysis

In order to analyses the financial performance of SBI Ratio Analysis has been used.

LIMITATIONS OF THE STUDY

1) This study is based on secondary data and as such its findings depends entirely on the accuracy of such data.
2) The study is limited to five years which is very short duration to analyse any organisation.
3) The study is confined to financial aspect of SBI only.
4) The study is largely based on ratio analysis; such analysis has its own limitations, which also applies to the present study.

FINANCIAL ANALYSIS OF SBI

Credit Deposit Ratio

Credit-Deposit Ratio is the proportion of loan-assets created by a bank from the deposits received. Credits are the loans and advances granted by the bank. It indicates how much of a bank's core funds are being used for lending, the main banking activity In other words it is the amount lent by the bank to a person or an organization which is recovered later on. Interest is charged from the borrower. Deposit is the amount accepted by bank from the savers and interest if paid to them. A higher ratio indicates more reliance on deposits for lending and vice-versa The regulator does not stipulate a minimum or maximum level for the ratio. But, a very low ratio indicates banks are not making full use of their resources. And if the ratio is above a certain level, it indicates a pressure on resources.

The Table 1 and graph shown in Fig. 1 reveal that Cash Deposit Ratio is increasing throughout the study except in 2013-14.It started from 78.58% in 2009-10 and reached to 86.93% in 2012-13. But in 2013-14 it slightly dropped down to 86.16%.This shows that bank has created more loan assets from its deposits.

Table 1. Cash Deposit Ratio

Year	Cash Deposit Ratio (%)
2009-10	78.58
2010-11	81.02
2011-12	83.12
2012-13	86.93

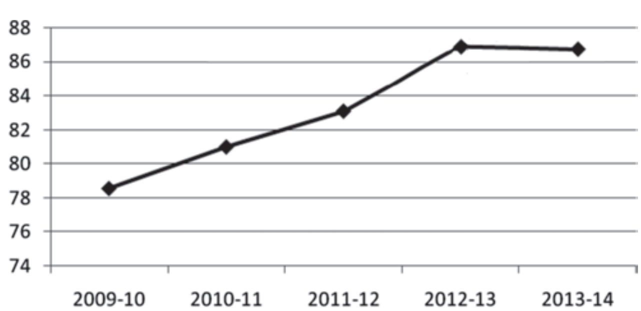


Fig. 1. Cash deposit ratio

Return on Equity

This ratio measures the profitability of the capital invested in the business by equity shareholders. As the business is conducted with a view to earn profit, return on equity capital measures the business success and managerial efficiency.

Table 2 shows that return on equity was 14.04% in 2009-10 but it comes down by 1.2% in 2010-11. Than it again showed an per increase and reached to 15.94% in 2012-13 but again in the very next year it dropped down to 10.49%.

Net Profit Ratio

The relationship of net profit to net sales is established by this ratio and is expressed as percentage. This ratio shows the balance of profit left to proprietors, after all expenses are met. Higher the ratio higher will be the profit left to shareholders. This ratio assists the management in controlling costs and in increasing the turnover.

Table 3 reveals that net profit ratio is continuously increasing throughout the study except in 2013-14. It started from 2009-10 and reached to10.39% in 2012-13. However it sharply sunk down to 7.03% in the very next year. It is clear from the following graph, how the net profit ratio shows ups and downs in various years.

Table 2. Return on Equity

Year	Return on equity (%)
2009-10	14.04
2010-11	12.84
2011-12	14.36
2012-13	15.94
2013-14	10.49

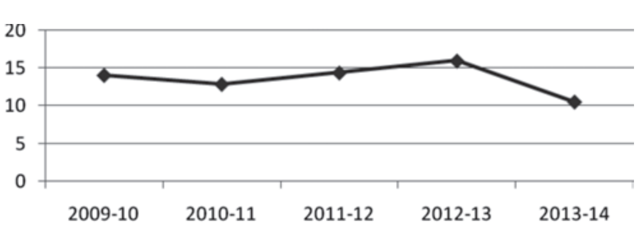


Fig. 2. Return on equity

Table 3. Net Profit Ratio

Year	Net Profit Ratio (%)
2009-10	6.30
2010-11	7.53
2011-12	9.68
2012-13	10.39
2013-14	7.03

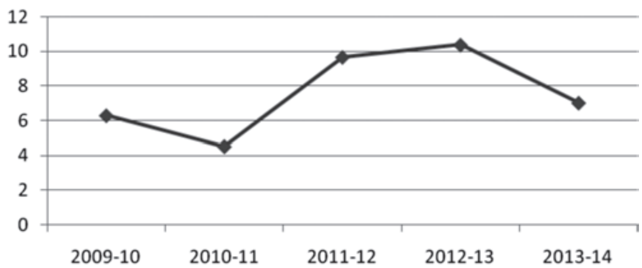


Fig. 3. Net profit ratio

Operating Ratio

Operating ratio matches cost of goods sold plus other operating expenses on one hand with net sales on the other. The ratio is closely related to the ratio of operating profit to net sales which can be obtained by subtracting the operating ratio from 100. The higher the operating ratio, the less favourable it is.

The Table 4 and the graph positioned above shows that operating ratio was 52.59 % in 2009-10. Than it showed improvement for two years and came down to 45.23% in 2011-12. But again it showed a pitiable performance reached to 52.67% in 2013-14.

Table 4. Operating Ratio

Year	Operating Ratio (%)
2009-10	52.59
2010-11	47.60
2011-12	45.23
2012-13	48.51
2013-14	52.67

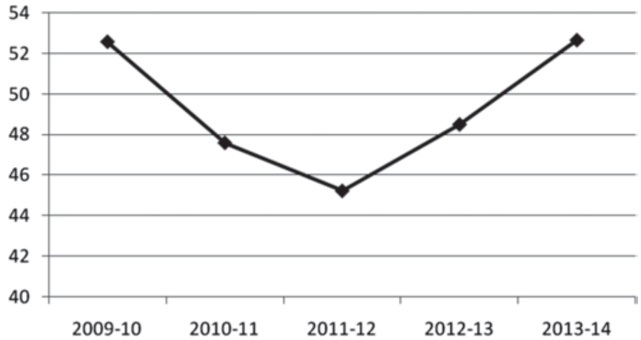


Fig. 4. Operating Ratio

CONCLUSION

From the above analysis it is concluded that Cash Deposit Ratio is satisfactory, Return on Equity was satisfactory till 2012-13 but disappointing in 2013-14. Similarly Net Profit ratio was good till 2012-13 but it showed pitiable performance in 2013-14.Operating ratio showed improvement till 2011-12 but started desecrating after that.

REFERENCE

Ranco Jelic, Richard Briston & Wolfgang Aussenegg, "The Financial Performance of Privatised Bank: Evidence From Three Transition Economies", *http://ssrn.com/abstract=273875 or doi:10.2139/ssrn.273875*, 2001.

Pradeep Kumar Singh, "Financial Appraisal of IDBI Bank Ltd Through Financial Indicators", *The Management Accountant*, 2003.

"A Study on the Financial Performance of the State Bank of India with Reference to Camel Model" *http://en.oboulo.com/a-study-on-the-financial-performance-of-the-state-bank-63966.html*, 2009.

Ramesh Chander and Jai Kishan Chandel, "Financial Viability of an Apex Cooperative Credit Institution—A Case Study of the HARCO Bank", *Asia-Pacific Business Review* Vol. VI, 2010.

Rajiv Kumar and Jasmindeep Kaur, "Financial Appraisal of Haryana State Cooperative Apex Bank", *Advance in Management*, Vol. 3, 2010.

D. Padma, V. Arulmathi, "Financial Perfor-mance of State Bank of India and ICICI Bank—A Comparative Study", *International Journal on Customer Relations*, Vol. 1, Issue 1, 2013.

Pooja Sharma and Hemlata, "Financial Analysis of ICICI Bank and SBI Bank: A comparative analysis" *International Journal of Research Aspects of Engineering and Management*, Vol. 1, Issue 1, 2014.

Multivariate Analysis for Indian Rupee Fluctuation Against US Dollar

Gurmeet Singh*

Abstract

This paper is an attempt to study and understand the dynamics of Indian Rupee fluctuations against US Dollar using yearly observations over the period of 12 years from 2001 to 2012. In this paper, evolution of exchange rate mechanism from fixed to hybrid exchange rate system in context of India along with the journey since independence has been explored. Further, an attempt has been made to identify the key variables that influence the Indian rupee fluctuations against US Dollar. Finally, Multivariate Regression Analysis is done to know the determinants of the rupee fluctuations against dollar.

Keywords: *Exchange Rate, Forex Reserve, Rupee Fluctuations, Multivariate Regression Analysis*

INTRODUCTION

Depreciation in rupee has become a big worry for the Indian Government because it has depreciated to an all time low with respect to the US dollar. On 28th August 2013, the Indian rupee had gone down to 68.825 against the dollar. Similarly rupee appreciation also causes concerns to imports of India. Exchange rates play a vital role in a country's level of trade, which is critical to almost every free market economy in the world.

The conversion rate fluctuates on timely basis based on various factors such as demand and supply of each currency, inflation rate in country, interest rate prevailing in the country etc. All economies that interact with inter-national economy can be broadly classified into five categories on the basis of exchange rate policy of the country.

Fixed Exchange Rate: These economies peg the value of their currency with some other prominent currency like US dollar. This system is simple and provides stability to the economy. This type of exchange rate regime is maintained by generally smaller economies like Nepal and Bhutan (pegged to Indian Rupee) or several African nations. Rational behind such regime is that in case of small economy, if the exchange rate is market determined the sudden influx or outflow of even relatively small amount of foreign capital will have large impact on exchange rate and cause instability to its economy. Notable exception is China which despite being large economy has its currency pegged to US dollar.

* United World School of Business, Uvarsad, Gandhinagar, Gujarat, India

Floating (or free) Exchange Rate: Bigger and developed economies like US, UK, Japan etc. generally let market determine their exchange rate. In such economy exchange rate is determined by demand and supply of the currency in international foreign exchange market.

Hybrid system: Most midsized economy like India practices a mix of both these regimes. It allows for the exchange rate to float in a range which it deems comfortable. Once the market determined rate tries to breach this range, central bank (government) intervenes in the currency market and controls the exchange rate.

Since 1950, India continuously faced trade deficits. In 1951, despite government attempts to obtain a positive trade balance, India experienced a severe balance of payments deficits. Inflation caused Indian prices to go sky high. When the exchange rate is fixed and a country experiences high inflation relative to other countries, that country's goods become more expensive and foreign goods become cheaper.

Factors Affecting Fluctuations

The currency value of an economy influences the growth rate of GDP in an economy. Several other factors that have a direct influence on the over or the undervaluation of a currency are as follows:

Basic Laws of Economics: As per the basic laws of economics if the demand for $ in India exceeds its supply then its worth will go up. If the demand for the Indian rupee is more (to settle international payments) than its supply in the foreign exchange market, its value will appreciate and vice-versa. It may be that importers are the major entities who are in need of the dollar for making their payments. Another possibility here could be that the Foreign Institutional Investors are withdrawing their investments in the country and taking them elsewhere.

Price of Crude Oil: India is a major importer of oil and the valuation of Indian money gets easily affected by the increase in the prices of the crude oil. It can further result in spreading inflation in an economy due to the over valuation of the Indian currency. The worth of crude oil has been a major nuisance for India since it has to bring in the majority of its requirement from outside the country. The demand for oil in India has been going up every year and this has led to the present situation.

Forex Reserve: India's foreign exchange reserves is made up of Foreign currency assets (US dollar, euro, pound sterling, Canadian dollar, Australian dollar and Japanese yen etc.), gold, special drawing rights (SDRs) of IMF and Reserve tranche position (RTP) in the International Monetary Fund (IMF). The level of forex reserve is expressed in US dollars. Hence India's forex reserve declines when US dollar appreciates against major international currencies and vice versa. RBI gains Foreign exchange reserves by buying foreign currency (via intervention in the foreign exchange market, Funding from the International Bank for Reconstruction and Development (IBRD), Asian Development Bank (ADB), International Development Association (IDA) etc., aid receipts and interest receipts.

Relative Inflation Rates: It is necessary to note that exchange rate is a relative price and hence the market weighs all the relevant factors in a relative term, (in relation to the counterpart countries). The underlying reasoning behind this conviction was that a relatively high rate of inflation reduces a country's competitiveness in international markets and weakens its ability to sell in foreign markets. This will weaken the expected demand for foreign currency (increase in supply of domestic currency and decrease in supply of foreign currency).

Interest Rates: An important factor for movements in exchange rates in recent years has been difference in interest rates; i.e. interest differential between major countries. In this respect the growing integration of the financial markets of major currencies, the revolution in telecommunication facilities, the growth of specialized asset managing agencies, the deregulation of financial markets by major countries, the emergence of foreign exchange trading etc. having accelerated the potential for exchange rates volatility.

Trade Balance: If a country is exporting more than its imports from other countries, then this would result in higher demand for that exchange, resulting appreciation of that currency against others. One of the main reasons behind the Indian government's inability to arrest the fall of the national currency is imbalance between export and import. A negative trade balance occurs when imports are more than the exports of the country and vice-versa. The trade balance is generally measured by the current account. In the fiscal year 2012-13, India's current account deficit (CAD) was measured at 4.8% of the GDP.

Foreign Institutional Investment: Recently Arcelor Mittal and Posco decided to pull out from their projects in India. Posco did not go ahead with a steel plant worth 30,000 crore that was supposed to be built in Karnataka and Arcelor Mittal withdrew from setting up a steel plant in Odisha that was supposed to cost around 52,000 crore. There were lot of delays in solving problems related to acquiring land for the project therefore in 2012-13 many Indian companies have spent more outside India compared to FIIs in India.

Capital flows and the stock market of India: It is important to note that in spite of suffering recession, an economy can grow if the capital inflow is constant or continuously rising. In India even if the GDP rate is less, the currency can still get overvalued due to excessive capital inflows made by the FII's in the Indian economy.

Global Currency Trends: Like many other currencies Indian rupee have also tied its knot with some of the big economies of the world including the names of UK, US, Japan and Canada. The depreciation or appreciation in the currency any of these, especially in the US dollar, influences the valuation of the Indian currency in one way or the other.

RBI Intervention: The valuation of the Indian currency highly depends on RBI that manages the balance of payments, slight modification in which can define the over or the under valuation of the Indian currency.

Political Factors: Several other factors that affect the currency stability are some political factors like change in the government set up, introduction of new export and import policies, tax rates and many more.

Research Methodology

Objective of the Study

There are several factors affecting the exchange rate like the inflation, interest rates, trade balance, FII, money supply (M3) in economy, Foreign Exchange Reserve and political factors etc. From these factors we have identified six independent variables and exchange rate (ER) as dependent variable.

- Forex Reserve (Rs. Billion) (FR)
- Foreign Institutional Investment (Rs. Billion) (FII)
- Money supply (Rs. Billion) (MS)
- Trade Balance (Rs. Billion) (TB)
- Inflation (%) (INF)
- Interest Rate (%) (INT)

Yearly data for the six Independent variables mentioned in previous section was considered for the period 2001-2012. Also data for the dependant variable Rupee Exchange Rate against Dollar (ER) was considered for the same period. The data was obtained from RBI database on Indian economy. Further the data for the study period was processed through excel by taking natural logarithm of the variable for converting the data in normal distribution at primary level and regression analysis is done. Contribution of each independent variable individually and their collective impact on the dependant variable was observed.

Findings & Analysis

Table 1 presents the summary of model application stating that there is 93.7% correlation between the dependent and independent variables. Table also reveals that 87.9% of dependent variable is explained by the six identified independent variables. Only 12.1% of currency rate is because of the other factors influencing the dependent

Table 1. Model Summary

Regression Statistics	
Multiple R	0.937759528
R Square	0.879392932
Adjusted R Square	0.73466445
Standard Error	1.561454837
Observations	12

variable. Thus, the model seems to be a good fit for the currency rate.

Table 2 depicts the analysis of variance of predicting variables where the F-Significance is 0.033 which is significant at 5% level of significance. In Table 3 the coefficients of the independent variables in Regression model. Thus, the predictor equation becomes as follows:

$$ER=35.29 + (-0.000086)\ FR + 0.000082\ FII + 0.000805\ MS + 0.0002640\ TB + (-0.839779)\ INF + 0.828713\ INT + et$$

Table 2. ANOVA

	df	SS	MS	F	Significance F
Regression	6	88.88716807	14.81452801	6.076156692	0.033248894
Residual	5	12.19070604	2.438141207		
Total	11	101.0778741			

Table 3. Coefficients

	Coefficients	Standard Error	t-Stat	P-value	Lower 95%	Upper 95%
Intercept	35.290111	9.6685	3.6500	0.0147	10.4363	60.1439
Forex Reserve (US Million $)	-0.000086	0.0000	-3.8278	0.0123	-0.0001	0.0000
FII Investment (US Million $)	0.000082	0.0001	1.3742	0.2278	-0.0001	0.0002
Money Supply (Billion Rs.)	0.000805	0.0006	1.2617	0.2627	-0.0008	0.0024
Trade Balance (Billion Rs.)	0.002640	0.0032	0.8342	0.4422	-0.0055	0.0108
Inflation	-0.839779	1.0792	-0.7781	0.4717	-3.6140	1.9344
Interest Rate	0.828713	0.5612	1.4767	0.1998	-0.6138	2.2713

CONCLUSION

Depreciation and appreciation in rupee is not a permanent phenomenon but it is due to various reasons. Here six factors have been identified to be specific to rupee fluctuation and are modeled with multivariate regression analysis. The result of analysis shows that these variables can explain the exchange rate dynamics to the extent of 87.9%. Since there are various internal as well as external reasons behind rupee appreciation and depreciation to a large extent, it takes time to bring back the situation to the normal state. The RBI and other Government agencies have to play their role to tackle this situation.

REFERENCES

P. Dua and R. Ranjan. "Modelling and Forecasting the Indian Re/US dollar Exchange Rate". *Centre for Development Economics, Working Paper No. 197*, 2011.

J. Dukich, K. Kim and H. Lin. "Modeling exchange rates using the GARCH Model". *Working Paper Series*, 2010.

A. Goyal. "Evolution of India's Exchange Rate Regime. Indira Gandhi Institute of Development Research", *WP 2010-024*, 2010.

S. Jakaria and S. Abdalla. "Modelling exchange rate volatility using GARCH Models: Empirical Evidence from Arab Countries". *International Journal of Economics and Finance*, 4(3), pp. 216-229, 2012.

A Study of Mobile Banking Services of Commercial Banks in Sattur

M. Selvakumar, V. Sathyalakshmi, K. Siva Murugan and K. Muthu Selvi*

Abstract

In recent years, with growth and development of information technology, all aspects of human life have been radically transformed. In recent years, mobile banking services along with internet banking services have fundamentally changed the ways and methods of doing daily activities by bank customers, and bank have also used it not only as a new way to increase customer satisfaction, but also as a model strategy to reduce costs and increase profitability. Mobile banking is a payment method that in an appropriate manner can greatly reduce the banking cost.

Keywords: *Customer Satisfaction, Mobile Banking Services, Commercial Banks*

INTRODUCTION

In India, banking is an important segment of tertiary sector. It acts as a back bone of our economic progress and prosperity. It plays an important role in mobilizing the nation's savings and in channelizing them into high investment priorities and better utilization of available resources. Hence, banking can better be des-cribed as the kingpin of the chariot of economic progress, banking is equated with money, is perhaps as old as the civilization itself. However, modern banking is something really different from more lending. It is far more sophisticated and complicated. In a developing economy the role of bank is more creating and purposeful than in the developed one.

Banking in India originated in the last decades of the 18th century. The oldest bank in existence in India is the state bank of India; a government owned bank that traces its origins back to June 1806 and that is the largest commercial bank in the country.

STATEMENT OF THE PROBLEM

The technology had a major impact in helping banks to service their customers with the introduction of the Internet banking. Internet Banking gives the customer's anytime access to their banks. Customers could check out their account details, get their bank statements, perform transactions like transferring money to other accounts and pay their bills sitting in the comfort of their homes and offices. However the biggest limitation of Internet banking is the requirement of a PC with an Internet connection. Mobile banking addresses the fundamental limitation of Internet Banking, as it reduces the customer requirement to just a mobile phone. Mobile usage has seen an explosive growth in most of the Asian economies

* Research Department of Commerce, Ayya Nadar Janaki Ammal College, Sivakasi, Tamil Nadu, India

like India, China and Korea. In fact Korea boasts about a 70% mobile penetration rate and with its tech-savvy populace has seen one of the most aggressive rollouts of mobile banking services.

Still, the main reason that Mobile Banking scores over Internet Banking is that it enables 'Anywhere Banking'. Customers now don't need access to a computer terminal to access their banks, they can now do so on the go—when they are waiting for their bus to work, when they are traveling or when they are waiting for their orders to come through in a restaurant.

The scale at which Mobile banking has the potential to grow can be gauged by looking at the pace users are getting mobile in these big Asian economies. According to the Cellular Operators' Association of India (COAI) the mobile subscriber base in India hit 40.6 million in the August 2004. In September 2004 it added about 1.85 million more. The explosion as most analysts say, is yet to come as India has about one of the biggest untapped markets. China, which already witnessed the mobile boom, is expected to have about 300 million mobile users by the end of 2004. South Korea is targeted to reach about 42 million mobile users by the end of 2005. All three of these countries have seen gradual roll-out of mobile banking services, the most aggressive being Korea which is now witnessing the roll-out of some of the most advanced services like using mobile phones to pay bills in shops and restaurants. Therefore this study concentrate mobile banking services of commercial banks.

OBJECTIVES OF THE STUDY

The objectives of the study are

- To study the evolution of mobile banking technology in Indian banking sector.
- To study the socio economic profile of the respondents.
- To analysis the mobile banking services of banks in sattur.
- The researcher has used sample study. A sample of 125 customers has been selected using judgment sampling method.
- The study covers a period of 6 months from October 2013 to March 2014.

TOOLS AND TECHNIQUES

The following tools and technique have been used to analyze and interpret the data.

- Percentage analysis
- Chi-square Test
- Linkert 5 point scale

RESULTS AND DISCUSSION

Analysis of Socio Economic Profile of the Respondents

The researcher has examined the socio economic profile of the respondents in the study area. Table 1 shows the data of 125 respondents.

KNOWLEDGE ABOUT BANK

The researcher has examined the respondent's knowledge about bank in the study area. The particulars are presented in Table 2.

KNOWLEDGE ABOUT MOBILE BANKING

The researcher has also examined the knowledge of respondents about mobile banking in the study area. The particulars are presented in Table 3.

OVER ALL OPINION ABOUT MOBILE BANKING SERVICES

In order to know the opinion of respondents about mobile banking services, the researchers collect the information for eight statements regard with the mobile banking services of banks.

Table 5 discloses that majority of the respondents strongly agree with all the factors influencing the satisfaction of respondents towards the mobile banking services.

IDENTIFICATION OF LEVEL OF SATISFACTION WITH MOBILE BANKING SERVICES OF COMMERCIAL BANKS

The scores are assigned in the order of 5 for 'Strong Agree', 4 for 'Agree', 3 for 'No opinion', 2 for 'Disagree' and one for 'Strong Disagree'. The score value for every sample respondents is obtained. The level of satisfaction has been classified into three categories, namely, low level,

Table 1. Primary data of 125 respondents

S. No.	Particulars	No. of Respondents	Percent to total
Category of Unemployment			
1.	Student	16	42.11
2.	Housewife	12	31.58
3.	Jobseeker	6	15.79
4.	Any other	4	10.53
	Total	38	100
Income Wise Classification			
1.	Below Rs.10,000	37	29.6
2.	Rs.10,001 to Rs.20,000	37	29.6
3.	Rs.20,001 to Rs.30,000	35	28
4.	Rs.30,001 to Rs.40,000	16	12.8
	Total	125	100

Source: Primary Data

Table 2. Knowledge About Bank

S. No.	Particulars	No. of Respondents	Percent to total
Bank Group Wise Classification of Respondents			
1.	Public sector bank	67	53.6
2.	Private sector bank	58	46.4
	Total	125	100
Period being the Customer of the Bank			
1.	Less than 5 years	53	42.4
2.	5 to 10 years	47	37.6
3.	10 to 15 years	14	11.2
4.	More than 15 years	11	8.8
	Total	125	100
Types of Bank Account of the Respondents			
1.	Savings account	62	49.6
2.	Current account	22	17.6
3.	Recurring Deposit A/c	23	18.4
4.	Fixed deposit account	18	14.4
5.	Any other	0	0
	Total	125	100
Visit to Bank per Week			
1.	Less than 2 times	66	52.8
2.	2 to 5 times	36	28.8
3.	5 to 8 times	15	12
4.	Above 8 times	8	6.4
	Total	125	100
Reasons for Selection of the Bank			
1.	Better service	51	40.8
2.	Proximity	23	18.4
3.	Helpful staff	31	24.8
4.	Convenient Business Hours	20	16
	Total	125	100

Source: Primary Data

medium level and high level for analytical purpose. While the score value of the respondent ≥(X+SD) and the score value of the respondent ≤(X–SD) have been classified as high level and low-level satisfaction respectively and the score values between (X+SD) and (X–SD) have been classified as medium level satisfaction, X and SD are the arithmetic mean and standard deviation which are calculated from the score values of 125 respondents. The arithmetic mean and standard deviation are 19.66 and 4.47 respectively.

(X+SD)=24.13: High
(X–SD)=15.19: Low
(X+SD)+(X–SD)=15.19 to 24.13: Medium

SOCIO-ECONOMIC VARIABLES AND LEVEL OF SATISFACTION TOWARDS THE MOBILE BANKING SERVICES

In order to test the relationship between socio-economic variables namely gender, age, marital status, occupation, monthly income, Type of Bank, type of Account, employment level, educational level of the customers and its influence on level of satisfaction towards the services of Banking. The following hypothesis is formulated.

There is no significant relationship between socio economic variables, such as Gender, Marital Status, Age, Educational Level, Employment Level, Monthly income, Type of Bank, Type of Account of the customer and their level of satisfaction towards the mobile banking services. Chi-square test is used to test the hypothesis. The Chi-square test is one of the simplest and most widely used non-parametric tests in statistical work. The chi-square test was first used by Karl Pearson in the year 1990. The quantity chi-square test describes the magnitude of the discrepancy between theory and observation. For computing Chi-square test, the following formula has been used.

$$\text{Chi-square} = \Sigma \frac{(O-E)\ 2}{E}$$

With (r-1) (c-1) degrees of freedom
Where,
O= Observed frequency
E= Expected frequency
c= Number of columns in a contingency table and
r= Number of rows in a contingency table

Table 3. Knowledge about Mobile Banking

S. No.	Particulars	No. of Respondents	Percent to total
Knowledge about Mobile Banking			
1.	Have	97	77.6
2.	Not Have	28	22.4
	Total	125	100
Involvement of Banks in Mobile Banking			
1.	Certainly	30	24
2.	Probably	32	25.6
3.	Never	26	20.8
4.	Always	37	29.6
	Total	125	100
Knowing Mobile Banking in Banks			
1.	Before one year	40	32
2.	1 to 2 years	45	36
3.	2 to 3 years	20	16
4.	Before 4 years	20	16
	Total	125	100
Sources to know about Mobile Banking			
1.	Media Advertising	23	18.4
2.	Friend/Relatives	55	44
3.	Bank Staff	30	24
4.	Co-workers	17	13.6
	Total	125	100
Use of Mobile Banking Services			
1.	Less than 1 year	49	39.2
2.	1 to 2 years	37	29.6
3.	2 to 3 years	22	17.6
4.	Above 3 years	17	13.6
	Total	125	100
Preferred Mobile Services			
1.	SMS News	19	15.2
2.	Account balance enquiry	18	14.4
3.	Cheque status enquiry	9	7.2
4.	Account statement enquires	19	15.2
5.	Mobile bank transfer	19	15.2
6.	Minimum balance alerts	8	6.4
7.	Bill payment alerts	13	10.4
8.	Credit/debit alerts	11	8.8
9.	Financial services like share trading	5	4
10.	Cheque book requests	4	3.2
	Total	125	100
Advantages of Mobile Banking			
1.	Anywhere, Anytime conducting of bank business	44	35.2
2.	Fast reaction to market developments (e.g. in case of turbulence in stock market)	40	32
3.	Overview over bank account(s) (e.g. SMS alerts for large transaction)	30	24
4.	Nothing	11	8.8
	Total	125	100
Drawback of Mobile Banking			
1.	Security concerns/Risks	39	31.2
2.	Too expensive	28	22.4
3.	Complicated/uncomfortable usage of mobile devices	34	27.2
4.	Nothing	24	19.2
	Total	125	100
Use of Mobile Phone for Bill Settlement			
1.	Used	89	71.2
2.	Not used	36	28.8
	Total	125	100
Security Problems With Mobile Banking Services			
1.	Exist	66	52.8
2.	Not Exist	59	47.2
	Total	125	100
Satisfaction of Respondents on Mobile Banking Services			
1.	Yes	109	87.2
2.	No	16	12.8
	Total	125	100
Benefits of Mobile Banking			
1.	Time saving	30	26.8
2.	Easy accessibility	31	27.7
3.	Error Free	21	18.8
4.	Convenience	30	26.8
	Total	112	100
Reasons for not Satisfaction in the Mobile Banking			
1.	Lack of service	6	26.1
2.	Lack of staff	9	39.1
3.	Lack of information	3	13.0
4.	Service chance is expensive	5	21.7
	Total	23	100

Table 4. Socio Economic Profile of the Respondents

S. No.	Particulars	No. of Respondents	Percent to total
Gender Wise Classification			
1.	Male	71	56.8
2.	Female	54	43.2
	Total	125	100
Marital Status			
1.	Married	75	60.0
2.	Unmarried	50	40.0
	Total	125	100
Age Wise Classification			
1.	Below 30	40	32
2.	30—40	21	16.8
3.	40– 50	44	35.2
4.	50– 60	15	12
5.	Above 60	5	4
	Total	125	100
Educational Qualification			
1.	Primary	20	16
2.	Secondary	29	23.2
3.	Under graduate	26	20.8
4.	Post graduate	40	32
5.	Diploma	7	5.6
6.	any other	3	2.4
	Total	125	100
Employment Status of Respondents			
1.	Yes	87	69.6
2.	No	38	30.4
	Total	125	100
Types of Employment of Respondent			
1.	Profession	11	12.64
2.	Business men	10	11.49
3.	Govt. employee	20	22.99
4.	Private employee	34	39.08
5.	Agriculture	12	13.79
6.	Pensioner	0	0
	Total	87	100

Source: Primary Data

Table 5. Overall Opinion about Mobile Banking Service

S. No.	Particulars	Strong Agree (%)	Agree (%)	No Opinion (%)	Disagree (%)	Strong Disagree (%)	Total Score (%)
1	Mobile banking would be easy to use	54(43.2)	38(30.4)	13(10.4)	4(3.2%)	16(12.8)	125(100)
2	Mobile banking would require less mental effort	18(14.4)	49(39.2)	37(29.6)	10(8)	11(8.8)	125(100)
3	Mobile banking is a less risky mode of banking to use	26(20.8)	35(28.0)	31(24.8)	25(20)	8(6.4)	125(100)
4	I am concerned about the security aspects of mobile phone banking	28(22.4)	35(28.0)	41(32.8)	15(12)	6(4.8)	125(100)
5	Information concerning my mobile banking transaction cannot be tempered with by others	32(25.6)	29(23.2)	40(32.0)	14(11.2)	10(8)	125(100)
6	Mobile banking is quicker to use than traditional forms of banking	36(28.8)	48(38.4)	25(20.0)	9(7.2)	7(5.6)	125(100)
7	Mobile banking would allow me to manage my finances more effectively	37(29.6)	48(38.4)	31(24.8)	9(7.2)	10(8)	125(100)
8	No charges for mobile banking	25(20.0)	37(29.6)	31(24.8)	18(14.4)	14(11.2)	125(100)

The calculated value of Chi-square is measured with the table value of Chi-square for given level of significance usually at 5% level. If the calculated value (C.V.) is less than the table value (T.V.), the null hypothesis is accepted and otherwise it is rejected. Table 6 presents the chi-square result.

CONCLUSION

In order to survive in the competitive world of modern banking, all the banks need to introduce mobile banking that greatly reduces the banking costs and it increasingly provides customer satisfaction through easy access to financial

Table 6. Level of Satisfaction with Mobile Banking Services of Commercial Banks

S. No.	Level of Satisfaction	No. of Respondents	Percent to total
1	High	15	12.0%
2	Medium	93	74.4%
3	Low	17	13.6%
	Total	125	100.0%

Source: primary data

Table 7. Chi-Square Result

Variable	Type	Person chi—square	Result
Gender	Level of Satisfaction	0.135	Not Significant
Marital Status	Level of Satisfaction	0.078	Not Significant
Age	Level of Satisfaction	0.297	Not Significant
Educational Level	Level of Satisfaction	0.717	Not Significant
Employment Level	Level of Satisfaction	0.935	Not Significant
Monthly Income	Level of Satisfaction	0.453	Not Significant
Type of Bank	Level of Satisfaction	0.534	Not Significant
Type of Account	Level of Satisfaction	0.030	Significant

transactions at any time and place with the lowest possible tool i.e. mobile banking is defined as doing bank transactions via mobile phone. If the mobile banking services will continue to grow reduce their operating costs. In addition, mobile banking can strengthen consumer retention and increase the consumer base for financial institutions by reaching unbanked rural populations. End consumers will benefit from a unified, mobile system that is convenient and seamlessly converts value in cards, cash, and retail points into each other and to create awareness program for lack of mobile banking knowledge person.

REFERENCES

Indrani Medhi, AishwaryaTatan and Kentaro Toyama, "Mobile-banking Adoption and Usage by Low Literate, Low-income Users in the Developing World", *Journal of Internet Commerce*, 2009.

C.R. Kothari, "Research Methodology—Methods and Techniques", *New Age Internal Publishers*, New Delhi, p. 196, 2010.

Z. Liao and M.T. Cheung, "Internet-based e-banking and Consumer Attitude: An Empirical Study", *International Journal of Information and Management*, Vol. 39, No. 4, pp. 283-295, 2002.

P.A. Pavlou, "Consumer Acceptance of Electronic Commerce: Integrating Trust and Risk with the Technology Acceptance Model", *International Journal of Electronic Commerce*, Vol. 7, No. 3, pp. 101-134, 2003.

Risk Management Practices: A Comparison of Public and Private Insurance Companies of Pakistan

Asad Irshad, Aneela Majeed and Sadaf Afreen*

Abstract

The intention of the research paper is to observe and degree to which Pakistan insurance companies use risk management practices and secondary purpose is to compare the risk management practices of public and private insurance companies in Pakistan. A tailored questionnaire on five aspects understanding risk and risk management, risk identification, risk assessment and analysis, risk monitoring and risk management practices, has been used containing 36 questions of Likert scale. A total of 240 questionnaires have been circulated to collect the data on public and private insurance companies of Pakistan.

Keywords: *Risk management practices, Understanding risk and risk management, Risk identification, Risk assessment and analysis, Risk monitoring, Credit risk analysis*

INTRODUCTION

Risk management is fundamental part of an organization. Without risk management an organization can never succeed in getting long term consistent benefit. In this modern world of dynamic environment where life is full of enthusiasm and risk with multiple shades and dimensions of the world changes day by day. Presently people merely not only taking the risk but want to catch the optimum utility by rejecting the opportunity cost and being more critical than the associates. In this regard, risk management is prevalent part of a business. Nowadays efficient risk management practices are need of the time. But organizations by using different risk management practices not only increasing the returns also create competitiveness in market. Risk management is critical for success or failure of any firm. Less efficient management practices make situation for businesses is worse. Especially for insurance company risk management is most important, where probability of risk is much higher than other businesses. The insurance industry in Pakistan having 57 general insurer, five life insurers, the state owned Pakistan Insurance Corporation (PIC) and National Insurance Corporation (NIC). At the time of independence of Pakistan 60 years ago, there were five indigenous insurance companies and 77 foreign companies which enjoyed a bulk of business, a situation which is being inverted at present.

* Army Public College of Management and Sciences, Rawalpindi, Pakistan

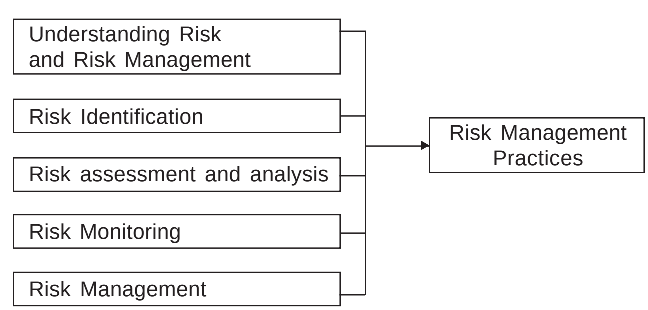
Risk management is including identification, assessment and prioritization of risks. Risk management Practices are performing a vital role in improving firm performance. Nazir, Daniel and Nawaz (2012) described two types of risk for any business one is systematic risk and other is unsystematic risk. Systematic risk is positively correlated to market and which can be minimizing by using different risk management practices. On the other hand unsystematic risk is associated with value of firm's assets. Unsystematic risk is not explained by general market movements. It is avoidable risk and this type risk can be minimizing by taking diversification strategies. Oldfield and Santomero (1997) explain three risk mitigation strategies eliminating or avoiding risk by simple business practices, transfer risk to other participant and acceptance of risk. For a proper risk management firm's goal should be clear. Schieg (2010) linked objectives of a firm with the risk management practices. If managers properly understand the goals, duties and contents of risk then they can easily manage risk. Through risk management managers easily overcome future possible unforeseen events and risks. Hermansson (2010) identifying three steps of a risk management procedure, One is equal inclusion of all affected, second is a reasonable discussion and third one is publicity in collective issues. Scott and Perry (2009) focusing on understanding the role of information systems in the re-organization of risk management practices. Because information is more critical during the policy making of risk management. Arora and Jain (2012) found that risk monitoring is used to ensure that risk management practices of firm align with objectives of the firm. Proper risk monitoring helps management to discover problem at early stage. Once risk is identifying at early stage future planning will be easily adopting according to situation. Pausenberger and Nassauer (2005) analyzed risk monitoring is last step of risk management process. But it is most important part then other parts of risk monitoring.

Insurance sector in Pakistan is facing losses due to high probability of events like terrorism. Keeping in view the situation this research is undertaken to analyze "Are Private Insurance Companies more observant than Public Insurance?

This study consists of major Pakistani Public and Private Insurance firms. The study includes the comparison of two big companies of Pakistan. State Life Insurance Corporation of Pakistan and Eastern Federal Union Insurance Company (EFU) is including in study and analysis. Because the both firms are big firms in Pakistan as well as other insurance companies. There are five independent variables used by previous authors as component effecting on risk management practices. Many insurance firms using old methods to manage risk. This study gives new techniques to manage the risks of such type of firm. This research can be applicable across the contextual boundaries of Pakistan.

In order to the check the difference of techniques adopted by the both Insurance Companies (Public and Private) the study is conduct in Pakistan in the area of managing risk to evaluate the difference. The growing market demand and attention given to the Public and commercial Insurance industry has escalated the research interest in this area as well the study has the following research objectives.

- To examine the degree to which the Pakistani Insurance Companies use risk management practices and techniques dealing with different types of risks.
- To compare risk management practices between Public and Private Insurance Companies of Pakistan.



Based on study findings efficient suggestions and recommendations to improve the weaker Insurance sector in Pakistan.

Theoretical Framework/Research Model:

RESEARCH METHODOLOGY

Data has been collected from the insurance sector of Pakistan. Target population of the study is public and private insurance companies of Pakistan. Only the listed insurance companies are consider for generalizing the facts of the study with respect to the risk management. The next step is to choose the sample from the targeted population. Data has been collected from the major cities of Pakistan where public and private system is flourished. A total of 240 questionnaires have been distributed among all the cities of Pakistan out of 20 questionnaires were return with blank responses and 10 questionnaires were excluded because the respondents showed lack of interest to fill.

The questionnaire used in the study was the same questionnaire that has been used in the study conducted in UAE banking sector by Al-Tamimi and Al-Mazrooei in (2007). It was mentioned in the in methodology that there is 45 questions has been asked from the responded on 5 likert scale. There are six different variables has been used in the study to generalize the finding.

RESULTS AND DISCUSSION

Reliability Analysis

Reliability analysis has been conducted to assess the chances of random error entered. Analysis will purely support the study how much variation in scores of six different variables. Cronbach's alpha has been used for the reliability analysis and suggests that the value of coefficient greater than 0.7 would be reliable data and can be used for further statistical analysis. The overall Cronbach's alpha of 6 variables is 0.915 and considered a very strong indication for the reliability of data.

Descriptive Analysis

Descriptive analysis will provide the summary of all the five variables with respect to the respondent such as mean, median, standard deviation and sum of the scores. The Table 2 clearly suggests the mean and median responses on the eight-research question under the variable of Understand risk and risk management. The responses of eight questions indicate the Pakistani insurance sector understand the risk and risk management. The median 4 clearly suggest that different insurance companies of Pakistan are ensuring that insurance companies are much better in understanding risk. Most of the respondents are agree that staff of Pakistani insurance sector is understand the risk in their organization. The insurance industry of the Pakistan will give the indication that risk management practices are efficiently managed in Pakistan. All the respondent are strongly agree that success of the insurance company is exclusively depend upon the understanding of

Table 1. Cronbach's alpha

Questions	Cronbach's alpha	No. of Questions
Understanding risk and risk management	0.695	8
Risk identification	0.567	6
Risk assessment and analysis	0.738	8
Risk monitoring	0.744	6
Risk management practices	0.778	10

Table 2. Descriptive Statistics

Variables	Mean	Median	Standard Deviation	Sum
Understanding risk and risk management	3.98	4.0	0.50	1000.93
Risk identification	3.73	3.83	0.50	936
Risk assessment and analysis	3.81	3.87	0.50	958.5
Risk monitoring	3.95	4.0	0.53	991.5
Risk management practices	3.91	4.0	0.53	983.38

the staff towards risk. Among all most of the respondent believe that understanding and managing the risk is most important for the insurance companies to increase the success by hitting maximum.

Risk Identification is important predicator of risk management. Risk identification comprises of six research questions on 5 point likert scale (1 SDA, 2 DA, 3 N, 4 A, 5 SA). The descriptive analysis clearly defines that the Pakistani insurance sector are well aware of identify the risk with the given objectives and aims of the insurance company. The mean of 3.73 suggest that the Pakistani insurance sector has aware about the potential risk which is affected the insurance companies. Some of the respondent believes that the insurance companies of Pakistan don't have any confusion to prioritize the insurance company which gives the identification that Pakistani insurance companies are efficient in identification the risk.

Eight Research Questions has been asked from the respondent under the aspect of Risk Assessment and analysis. The Table 2 shows the mean, median and standard deviation of respondent on risk assessment and analysis. It is suggest that most of the insurance companies are adopted the Quantitative techniques for accessing the potential risk face by the insurance industry of Pakistan.

The integral part of risk management is refers to the practice, which is adopted by the insurance company. It is not the case at all that most of the insurance companies may sophisticate method of understanding the risk, clearly identify the risk, proper procedure of assessment and analysis are still not clear that insurance companies are efficient in risk management practices. Ten research questions have been asked from the respondent on the aspect of risk management. In Table 2 combined mean of all the ten research questions is 3.93 and it seems that Pakistan financial institution is very much conducive for risk management practices.

Hypothesis 1: "There is a positive relationship between risk management practices and risk assessment and analysis, understanding risk, risk identification and risk monitoring" the OLS technique has been run to test the hypothesis. The first assumption to run the OLS model is to find multicollinerity between the explanatory variables. The explanatory variables more than .70 correlated each other suggest that the model is not god fitted because of positively correlated with each other. Table 3 suggests that there is no prospective multicollinerity between the descriptive variables that could affect the results. It is because the value of correlation is less than 0.70.

The next step is to evaluate the regression result and the value of R Square in Table 4 which is .522 supports the study of all the explanatory variables such as understanding risk and risk management, risk identification, risk assessment analysis, risk monitoring and credit risk analysis explains 52% variation in risk management practices. Global testing of hypothesis 1 that "there is positive relationship of RMP with URM, RI, RAA and RM" confirm it with high significance. The test statistic of global testing is F statistic with 5% level of significance in Table 5 shows the computed value from the F Test is 53.449 higher than the critical value and concluded that there is significant and liner relationship between the Risk management practices with all the explanatory variables.

The next step of the multiple regression analysis is to check significance of all the 5 explanatory variables such as URM, RI, RAA, RM, CRA with the Risk management practices (RMP) individually. The test statistics has been for individual testing is T. The Coefficients of all the 5 explanatory variables in the Table 4 credit risk analysis, risk monitoring and understanding risk and risk management are the most significant effect with risk management practices in public and private insurance companies.

In Table 4 confirms second hypothesis that "There is a difference between public and private

Table 3. Pearson Correlation

Name of Variables	URM	RI	RAA	RM	RMP
URM	1				
RI	0.536	1			
RAA	0.487	0.562	1		
RM	0.540	0.478	0.622	1	
RMP	0.509	0.444	0.547	0.622	1

Table 4. Regression coefficient Result:

Model	Unstandardized Coefficients		Standardized Coefficients	t-value	Sig.
	β	Std. Error	β		
(Constant)	0.337	0.230		1.4565	0.144
URM	0.141	0.061	0.132	2.298	0.022
RI	0.068	0.061	0.064	1.107	0.270
RAA	0.113	0.067	0.104	1.684	0.093
RM	0.309	0.062	0.306	4.970	0.000

F-Value=53.449, R2=0.522, R2-Adjusted=0.512

Table 5. One Way ANOVA of Public and Private Insurance Companies:

	F	Sum of Squares	DF	Mean Square	F	p-Value
URM	Between GroupsWithin Groups	0.88	1	0.288	1.125	0.29
		63.733	249	0.256		
	Total	64.021	250			
RI	Between GroupsWithin Groups	1.087	1	1.087	4.261	0.04
		63.511	249	0.255		
	Total	64.598	250			
RAA	Between GroupsWithin Groups	0.253	1	0.253	0.973	0.325
		64.749	249	0.26		
	Total	65.002	250			
RM	Between GroupsWithin Groups	0.247	1	0.249	0.87	0.352
		1.323	249	0.286		
	Total	71.572	250			
RMP	Between GroupsWithin Groups	0.008	1	0.008	0.029	0.866
		72.723	249	0.292		
	Total		250			

insurance companies in the understanding of risk and risk management". The result of p-value in Table 4 shows that p-value is 0.290 and indicates that there is no difference in understanding risk and risk management between the public and private insurance companies. The study is conducted to check any difference on the basis on public type and private type in the perspective of understanding risk and risk management. Based on the findings study do not reject null hypothesis and concluded that there is no difference in understanding risk and risk management. Staff of both public and private insurance companies is well equipped with the understanding of risk in Pakistan.

The findings enclosed in Table 4 shows p-value to take the decision for third hypothesis "There is a difference between public and private insurance companies in the Practice of risk identification". It is a technique followed by both of the insurance companies i.e. public and private. Based upon the finding in Table 5, p-value is 0.040 and concluded that risk identification is clearly differs from the public and private insurance companies. The methods of identification of risk between public and private insurance companies are different in Pakistan.

The fourth hypothesis of the study is "There is a difference between public and private insurance companies in practice of risk assessment and analysis". Once the risk is identified the next step is to assess the desired and risk and make the analysis of the risk. On the basis of the finding the p-value is 0.325 in the Table 4 suggest that the assessment method and analysis method are same on both types of insurance companies operating in Pakistan. The process of assessment is the same in both of the insurance companies such as public and private insurance companies.

Fifth hypothesis of study is "There is a difference between public and private insurance companies in practicing of risk monitoring and control". The technique of risk monitoring is solely followed by the risk management practices. It's a review system and access that the risk management techniques are efficiently worked. The statistical analysis shows the p-value 0.352 in Table 4 suggest that there is no difference between the method of risk monitoring followed by the public and private insurance companies of Pakistan. The method of risk monitoring is same in public and private insurance companies operating in Pakistan.

The finding of the p-value 0.866 shows the risk management practice has the same nature in both type of insurance companies.

CONCLUSION

The foremost results from the finding show that the significant variable of risk monitoring and under-standing risk management in the perspective of risk management practices in public and private insurance companies operating in Pakistan. The second aspect of the study is to evaluate the difference between public and private insurance companies. The major differences between the public and private insurance companies are techniques to identify the risk. It is the major reason behind the public insurance companies are less efficient in identify the risk and cannot take the competitive edge on Private insurance companies in Pakistan. Public insurance companies should align the identification of risk approach with the private insurance companies operating in Pakistan.

REFERENCES

S. Arora and R. Jain. Risk Monitoring and control system in Indian Commercial Banks: An Empirical Investigation. *ABAC Journal*, pp. 52-62, 2012.

A. Chusaini and R. Isma. Credit risk management in Indonesian Islamic Banking. *Afro Eurasian Studies*, Vol. 2, Issues 1&2, pp. 41-55, 2013.

S. Hakim and S. Neaime. Profitability and Risk Management in Banking: A Compara-tive Analysis of Egypt and Lebanon. *Money and Finance in the Middle East: Missed Oportunities or Future Prospects*, 6, pp. 117-131, 2005.

H. Hermansson. Towards a fair procedure for risk. *Journal of Risk Research*, pp. 512-513, 2010.

H. A. Hussain and J. Al-Ajmi. Risk management practices of foreign and local banks in Bahrain. *The Journal of Risk Finance*, 13(3), pp. 215-239, 2012.

Martin Schieg. Risk management in construction project management. *Journal of Business Economics and Management*, pp. 8-25, 2010.

E. Richard, M. Chijoriga, E. Kaijage, C. Peterson and H. Bohman. Credit risk manage-ment system of a commercial bank in Tanzania. *International Journal of Emerging Markets*, 3(3), pp. 323-332, 2008.

R. Rosman. Risk Management Practices and Risk Management Processes of Islamic Banks: A Proposed Framework. *International Review of Business Research Papers*, Vol. 5, pp. 242-254, 2009.

S. Scott and N. Perry. The enactment of risk categories: The role of information systems in organizing and re-organizing risk practices in the energy industry. *Information Systems Frontiers A Journal of Research and Innovation*, pp. 19-20, 2009.

Outreach and Financial Performance of Microfinance Institutions—A Comprehensive Review of Existing Literature

Kamlesh Gakhar and Meetu*

Abstract

Although the people around the world are somewhat familiar with the term microfinance which has drawn its core elements from the finance discipline, yet there a need to present the literature related to microfinance. The purpose of the present article is to introduce the finance academic community to the discipline of microfinance institutions' financial performance and outreach. We discuss the performance measurement of MFI's, performance evaluation models, approaches to microfinance institutions' performance, trade-off between outreach and financial performance and the key factors affecting performance and outreach.

Keywords: *Microfinance, Microfinance Institutions, Sustainability, Trade-off, Performance Measurement*

INTRODUCTION

Poverty is the major problem in most of the developing economies. In these economies, lack of access to credit is presumed to be the main cause of the failure of the poor to come out of poverty. Meeting the gap between demand and supply of credit in the formal financial institutions frontier has been challenging. Banks have been reluctant to provide financial services to the people in the rural areas because of high risks and high transaction costs. This lack of access can create persistent poverty traps and income inequality (Beck *et al.*, 2007 and World Bank, 2008).

Microfinance has therefore been considered as one of the most important tools for poverty reduction as its innovative loan contracts have made it possible to extend the small loans to the poor and to increase the loan repayment rate even upto 100%. (Armendariz de Aghion and Morduch, 2005). But these high repayment rates have not turned into profits. Many of the microfinance institutions are still dependent on subsidies for their survival and are unable to fulfill their ultimate promise of serving the poor in a profitable way. A debate regarding the profitability of microfinance institutions, being emerged in 1990s, still remains unsolved. Generally it is argued that for self-sufficiency, microfinance institutions should be able to cover their costs from the revenues they generate. As

* Institute of Management Studies and Research, Maharshi Dayanand University, Rohtak, Haryana, India

microfinance institutions become financially sound, they would be able to borrow more and more from the commercial market and reduce their dependency on donations and subsidies. This calls for a more commercial approach to microfinance practices. This opens the way for microfinance institutions to have access to a larger asset base to finance their operations and to serve an absolutely large number of poor people (Morduch, 2000; Bruck, 2006; Ghosh and Van Tassel, 2008). The other side of the debate fears that when microfinance institutions go for commercialisation, they will end up serving the wealthier clients and these wealthier clients would crowd out the poorest ones.

The debate on these two contradictory aspects of microfinance institutions' practices still remains unsettled, and there is a clear need for representative empirical studies that attempt to identify the patterns of profitability and outreach of microfinance institutions. It is not possible to conclude precisely on outreach and financial performance as mutually exclusive goals. It is difficult to presume that outreach is a constraint to sustainability and vice versa.

The purpose of this paper, therefore, is to introduce the various concepts related to the outreach and financial performance of microfinance institutions to the academic finance community and to provide an outline for future research. In order to present a coherent and succinct review of the broad literature related to microfinance institutions.

MEASUREMENT OF THE PERFORMANCE OF MICROFINANCE INSTITUTIONS

The important goal of microfinance is to improve the standard of living of the poor and bring them out of poverty. Performance measurement of a microfinance institution is about examining its progress and determining whether the goals of microfinance have been met.

On the basis of the CGAP guidelines, five core areas are needed to be taken into consideration when measuring the performance of microfinance institutions: (i) Outreach, (How many clients are being served?); (ii) Client poverty level (How poor are the clients?); (iii) Collection Performance (How effective is the microfinance institution in collecting its loan?); (IV) Financial sustainability (Is the microfinance institution profitable enough to maintain and expand its services without continued support from subsidized donor funds?); (v) Efficiency (How well does the microfinance institution control its administrative costs?) (CGAP, 2007). Rosenberg (2009) has used five parameters to gauge the performance of MFI. These are: outreach (breadth), outreach (depth), loan repayment, financial sustainability (profitability) and efficiency.

For evaluating the performance of micro-finance institutions, Meyer (2002) suggests that Micro-finance institutions must be evaluated on the basis of their objectives. He has mentioned "Critical Microfinance Triangle" consisting of: outreach to the poor, financial sustainability and welfare impact. However, there is a trade-off in meeting the objectives of reaching the poorest and achieving financial sustainability, and, at the same time, ensuring a positive impact on the borrowers. Some studies focused on both financial performance and outreach for measuring the performance of microfinance institutions. (Cull *et al.*, 2007; Kereta, 2007 and Park and Ren, 2001).

Measuring Outreach

Outreach means the number of poor served, including the number of women clients. How well does a microfinance institution reach the poorest and the variety of financial services, it makes available, also explains the outreach. Outreach is defined as the ability of an MFI to provide high quality financial services to a large number of clients (Martin and Frederic, 1999). Outreach is "a social benefit of microfinance" aiming at improving the well-being of the poor (Schreiner, 2002). Outreach has two components: depth and breadth. Depth of outreach is the value that society attached to the net gain of a given client (Schreiner 2002) or "the value the society attaches to the net gain from the use of the micro credit services by a given borrower," (Navajas *et al.* 2000). The loan size is usually taken as a proxy for the depth of outreach (Bhatt and Tang, 2001; Cull *et al.* 2007; Schreiner 2002; Lensink 2008). The assumption is that the smaller the loan size, the deeper the outreach, or the poorer the client; the smaller the amounts or shorter times, indicate better depth. Accordingly, it is believed that poorest clients are served if the majorities are female and the average loan size is smaller (Bhatt and Tang 2001). An alternative proxy to the depth of outreach of microfinance is the percentage of women borrowers. The SPTF (2009) report showed that women outreach is considered an important indicator in the various social performance measurement and assessment tools used. Breadth of outreach simply involves the number of poor people reached by an MFI and is measured as the total number of active borrowers. It can also be assessed in relation to the increase in branch network and staff hired over time. Hermes and *et al.* (2008) suggested average loan balance per borrower (ALB); percent loans below US$300; percent woman borrowers (WOMAN); Average savings balance per saver (US$) (ASB); percent clients below poverty Line; percent clients in bottom half of the population, as the outreach indicators.

Outreach is defined by Meyer as a multi-dimensional concept and suggested outreach measurement into different dimensions like the number of people now served that were previously denied access to formal financial services, number of women served, depth of poverty and the variety of financial services provided. Similarly, Navajas *et al.* indicated six aspects of measuring outreach: worth of users, depth, breadth, cost to users, length and scope. This measure is to identify the poor clients. Because, the poor are the one who fail to get access to have credit from formal financial institutions since they fail to prove that they can pay back their loan. Worth of outreach to users refers to "how much a borrower is willing to pay for a loan,"(Navajas *et al.* 2000). Similarly, "cost of a loan to a borrower, is referred as cost of outreach to user" (Navajas *et al.* 2000). These costs to the users might consists of prices like rate of interest and various charges that they have to make, which could be revenue to the lender, and the other loan related transaction costs like transport, expenses on documents, food, taxes, etc. (Navajas *et al.* 2000). Finally, "breadth of outreach is the number of users or the number of credit clients (Schreiner, 2002). Time frame in which a microfinance institution produces loans is known as length of outreach," and "Scope of outreach is the number of type of financial contracts offered by a microfinance Organisation," (Navajas *et al.* 2000). It is argued that length of a loan matter, because if the microfinance institutions support the poor only in the short run it will hamper their growth in the long run. If a microfinance institution's client knows that he/she will not receive additional loan in the future, it discourages them repay their existing loan (Navajas *et al.*, 2000). Meyer (2002), also, noted that the poor needed to have access to financial service on long-term basis rather than just a onetime financial support. Adongo and Stork (2005) focused on microfinance institutions in Namibia. Some other researchers also concentrated on outreach, for example, Navajas *et al.* (2000) in Bolivia, Tucker (2001) on microfinance institutions in 17 Latin American countries.

Measuring Financial Performance

Financial performance analysis is used as a general measure of a firm's overall financial health over a given period of time, and can be used to compare similar firms across the same industry or to compare industries or sectors in aggregation.

Financial sustainability stands for the degree that an institution is capable of generating sufficient revenue from offered services to meet full operating costs. According to Foster et al. (2003) and Meyer (2002), there are two levels of financial sustainability: Operational self-sustainability and financial self-sustainability. Operational self-sustainability is the sufficiency of an institution to cover its operational costs like salaries, supplies, loan losses, and other administrative costs from its operating income. And financial self-sustainability (which he referred as high standard measure) is its ability to cover the costs of funds and other forms of subsidies received when they are valued at market prices. As per the MIX Market definition[1], the term Financial Self Sustainability (FSS) is defined as having an operational sustainability level of 110% or more, while Operational Self Sustainability (OSS) is defined as having an operational self-sufficiency level of 100% or more. However, "measuring financial viability requires that MFIs maintain good financial accounts and follow recognized accounting principles and standards that provide full transparency for income, expenses, loan recovery, and potential losses" (Meyer, 2002).

The first level of financial sustainability is achieved when "the organisation earns sufficient income from its own earned revenue sources to cover all administrative or operational expenses but relies on wholly or partially subsidized capital base" (Forster *et al.* 2003). A commonly used indicator is the operational sufficiency index.

Operational self-sufficiency=Total operating income/total operating expenses (including administrative expenses, interest expenses, and loan loss provision

The second level of financial sustainability is achieved when the organisation not only earns sufficient income to cover all its operational expenses but is also covers the cost of inflation, its loan losses and the market cost of funds. In other words, at this level of sustainability, an organisation earns positive net income independently of donor support and can offer positive returns to its investors (Forster *et al.* 2003). A commonly used indicator, accounting for institutional scale, is the adjusted return on assets.

Adjusted return on assets (equities)=Net operating income (adjusted/net of taxes, inflation and subsidies)/ average total assets

Sarma and Borbora (2011) measured the sustainability of the MFIs by using the indicators like Financial Self Sustainability (FSS), Subsidy Dependence Ratio (SDR), Subsidy Dependence Index (SDI). Sustainability is also measured by Return on Assets (ROA) and Return on Equity. The Return on Assets (ROA) ratio indicates how well a MFI is using the institution's total assets to generate returns. Studies such as Olivares-Polanco (2004) and Cull *et al.* (2007) among other have used return on assets in measuring sustainability or profitability. There are various indicators to analyse the financial performance like provision expense ratio, portfolio at risk, operating expense ratio, write-off ratio, risk coverage ratio, cost per client, credit officer productivity, personnel productivity, funding expense ratio, cost of funds ratio and loan loss reserves (Cull *et al.*, 2007; Nieto *et al.*, 2004; Tucker, 2001). A study by Aggarwal and Sinha (2010) discussed different dimensions to analyse the financial performance of various microfinance institutions in which they concluded that the difference in MFIs performance is due to the adoption of different business models. Crombrugghe *et al.* (2007) suggested that a better targeting of the interest rate policy or increasing the number of borrowers per field officer especially in collective delivery models could lead to the performance improvement. Khandker *et al.* (1995) pointed out the loan repayment (measured by default rate) as another indicator for measuring financial sustainability of MFIs; because, low default rate would help to realize future lending. Operational cost and portfolio yield are the important variables to measure the financial performance (Christen, 2000). A workshop report (2006) on Micro insurance suggested different ratio to measure the financial performance of micro insurance practitioners. These are: net income ratio, incurred expense ratio, incurred claims ratio, renewal rate ratio, solvency ratio, promptness of claims settlements, claims rejection ratio, growth ratio, coverage ratio and liquidity ratio. Sarma and Borbara (2009) measured the sustainability by using the ratios like Subsidy Dependence Index (SDI) and Subsidy Dependence Ratio (SDR). Few of the experts are of the view that financial perfor-mance can be analysed from different angles like sustainability/profitability; assets/liability management; portfolio quality; efficiency/productivity (CGAP, 2003).

Welfare Impact

The measurement of the welfare impact of the services of microfinance institutions on the borrowers is essential in determining the success of microfinance programmes. A report given by World Bank (2001) view poverty as lack of money, lack of adequate food, shelter, education and health and the poor are vulnerable to ill health, economic dislocation and natural disaster. According to Meyer (2002) this perspective of poverty can be used to assess the impact of the MFIs on their beneficiaries. However, there is no clear evidence of the impact of microfinance in poverty reduction and women empowerment, as assumed by the PRONAFIM programmes (Gonzalez-Vega, 1998; Armendariz de Aghion and Morduch, 2005). Schreiner (1999) and Bhatt (1999) support the view that microfinance may not be an effective poverty alleviation tool in the US. Schreiner analyses US micro enterprise programmes and finds that some programmes can move some people from welfare to self-employment, but it only works one percent of the time. Meyer (2002) also noted the assessment of impact of the MFIs on their clients as a very difficult and controversial way of evaluating the institutions performance. Many researchers measuring the perfor-mance of microfinance focused on the welfare impact on the borrowers (business, household and individual).

Comparison with benchmarks

An attempt can be made to compare the performance of the MFIs with the industry benchmarks. Comparison with benchmarks can alert management and those who fund MFIs to how well or poorly an MFI is performing. By revealing weaknesses, benchmark measure can be used as a guide to focus resources and upgrade management practices. In a study done by Ejigu (2009), he analysed that the MFIs' are poor performers on depth of outreach, ratio of GGLP to assets and not using their debt capacity properly. In context to outreach, we found that institutions are good at breadth of outreach, in managing the cost management and charge low interest rates. Oikocredit partner operations compare favourably to other agencies with respect to operational sustainability (OSS), even while portfolio at risk and depth of outreach are still below the industry average standards (Ruben and Schers, 2007). Aggarwal and Sinha (2010) concluded that there exist a similarity between the firms performance in the areas like risk coverage, debt equity ratio, productivity, cost per borrower, operational self-sufficiency etc. Bassem (2008), through the use of non–parametric DEA, found that the eight MFIs are relatively efficient and have a notable level of average efficiency. Lindsay (2010) concluded that legal status of the MFI determines its effectiveness. Further, he found that nonprofit institutions are most effective in fulfilling the purpose, they intended to do. Tucker (2001) found that commercial banks and the non-regulated MFIs' performance exceeded the performance of regulated MFIs' in terms of growth in assets, growth in portfolio, and growth in equity. Mersland and Strom (2009) found in context of outreach that neither average loan has increased over the time nor there is a tendency towards more individual loans and higher proportions of lending to the rural customers.

Tucker and Miles argued that self-sufficient MFIs are strong performers on ROE and ROA. But when measured, at the aggregate level, they are unprofitable and far worst performer than their geographic commercial peers. In contrast to this, Lafourcade (2006) found that MFIs in Africa are dynamic and perform favorably compared with their counterparts in other global regions. Mersland and Strom (2007) recommended the change in board structure to improve the overall financial performance. He suggested the changes like: to split the roles of CEO and chairman, to have a woman CEO, and to grant the loans to individuals. In regard to outreach, he assessed that outreach increased with the higher group lending. Thus, it can be analysed that his opinion in context of financial performance and outreach are contrasting as one focused on individual and other on the group lending. MFIs in South Asia and Middle East & North Africa tend to be less efficient than the others (Nawaz, 2008). A study regarding the non-sustainability of Nepalese MFIs is done by Sharma (2008). Farrington (2000) suggested the measures like an increase in loan officer productivity and improving portfolio quality will help to increase the profitability by the reduction in total administrative and provisioning expenses. The CNCAS was not profitable for the last five years. Indeed it has been accumulating losses; therefore sustainability has not been achieved.

PERFORMANCE EVALUATION MODELS FOR MFIS

During the 1990s, there was an increasing interest on the part of financial institutions in microfinance. As a result, several performance evaluation indicators in the form of different models emerged in relation to different areas of management considered as the most important in evaluating an MFI's performance. Some evaluation models were accepted in general and have been currently adopted by institutions to monitor and evaluate the business performance. Each of these models focused on specific profiles of analysis. These models contribute to raising the level of informative transparency with regard to the process of credit management of MFIs.

The qualitative analysis focuses on the success of the strategy verifying the quality of management processes and the efficiency of the information system with the objective of guaranteeing the internal control functions. It focused on government and decision making, information and management tool, risk analysis and control, activities and loan portfolio, financing: equity and liability, efficiency and profitability as the performance indicators for MFIs.

INSTITUTIONALIST AND WELFARIST APPROACHES TO MICROFINANCE

There are two schools of thought-welfarists and institutionists for the measurement of performance of MFIs. Welfarists argue that MFIs can achieve sustainability without achieving financial sustainability (Brau and Woller, 2004). Welfarists tend to emphasize poverty alleviation, place relatively greater weight on depth of outreach relative to breadth of outreach and gauge institutional success according to social metrics. This is not to say that breadth of outreach and financial metrics don't matter. Welfarists feel that these issues are important, but they should not be achieved at the cost of depth of outreach (Brau and Woller, 2004). On the contrary, institutionists argue that unless we build sustainable MFIs that are capable of running independent of subsidies, the promise of MFIs, of eradicating world poverty will not be met. They argue that a sustainable MFI helps to expand outreach and reach more poor people. Rhyne (1998) considered the two goals of MFIs-financial performance and outreach to be win-win situation, stating that MFIs following the principles of good banking would also be those that alleviate the most poverty. Markowski (2002) as cited by Wrenn (2005) stated they have a dual mission: a social mission "to provide financial services to large numbers of low-income people to improve their welfare", and a commercial mission "to provide these financial services in a financially viable manner". It has observed that MFIs are not fulfilling their social mission to the extent needed to meet the demands of the poor for financial services. Simanowitz with Walter (2002), as cited by Wrenn (2005) argued that microfinance is a compromise between this social mission and commercial mission. With the greater emphasis on financial and institutional performance, opportunities for maximizing poverty impact and depth of outreach have been compromised. They call for a balancing of social and financial/commercial objectives because the current focus on financial objectives means targeting fewer of those who are in utmost need of the microfinance services. To do this they argued "it is now time to innovate and design services that not only, maintain high standards of financial performance, but also set new standards in poverty impact" (Wrenn, 2005).

The debate between institutionists and welfarists is referred as the "microfinance schism" (Morduch, 2000). General consensus holds that there exists a tradeoff between financial self-sufficiency and depth of outreach (Von Pischke, 1996). But there is much disagreement about the nature, extent, and implications of this trade off. Nonetheless, as suggested by the existing little evidence that those MFIs that have achieved true financial self-sufficiency have also tended to loan to the borrowers, who were either slightly above or slightly below the poverty line in their respective countries (Navajas *et al.*, 2000). These MFIs are able to capture economies of scale by extending larger loans to the marginally poor or non-poor. This limited evidence leads many to conclude that if financial self-sufficiency is desired, then the very poor will not be reached by MFI services. That is, the MFI would not be able to achieve enough depth to reach those who need credit most desperately.

TRADE-OFF BETWEEN SUSTAINABILITY AND OUTREACH?

Proponents of trade-off between sustainability and outreach

The developments and the resulting emphasis on sustainability and efficiency of MFIs may go at the cost of their outreach, because it is argued that the unit transaction costs for small loans to the poor are high as compared to unit costs of larger loans. Barry *et al.* argued that despite the success of microfinance institutions, only about 2% of world's roughly 500 million small entrepreneurs are estimated to have access to financial services. Also, the financial sustainability of microfinance institutions has come under suspicion. Thus, there may be a trade-off between efficiency and outreach, implying that the shifting focus towards increasing sustainability and efficiency reduces the scope for the more traditional aim of many MFIs, which is, lending to the poor. It is impossible for a microfinance institution to achieve financial sustainability and, at the same time, reach higher numbers of the poorest (Hartarska, 2005; Zeller & Meyer, 2002; Park & Ren, 2001). Hartarska (2005) also stressed that there is no "win-win" situation for microfinance institution between achieving outreach and financial sustainability. The microfinance institution either reaches only the poorest, charges low interest rates and is subsidized or reaches not-so-poor borrower, charges higher interest rates and achieves financial sustainability.

In policy circles there has been a hefty debate on this issue between the welfarists and the institutionalists. Related to the issue of trade-off between financial performance and outreach, we find surprisingly few rigorous testing of the issue. The most comprehensive study done by Ylinen (2010) on 487 MFIs suggested that increased profitability tends to worsen outreach. Further, he concluded that the institutional form and operation method, lending method, cost structure, operational environment determine this trade-off. His viewpoint is supported by Sarma and Borbara (2009), Nawaz (2008), Servin *et al.* (2011), Christen (2000), Hermes *et al.* (2008), Ejigu (2009) and Armendariz and Szafarz (2009). However, christen (2000) argued that there seems to be no compelling argument that represents this mission drift. Rather, larger loan sizes could simply be the function of different factors, such as choice of strategy, period of entry into the market, or natural evolution of the target group. Further Armendariz and Szafarz (2009) used a model to pin down the situation where profit maximising MFIs can deviate from their mission. They concluded that country specific factors like cost and weightage given by MFIs to the poor, affect their mission. Hermes *et al.* (2008) even found that that efficiency of MFIs is higher if they focus less on the poor and/or reduce the percentage of female borrowers. Cull *et al.* (2007) study argued that a trade-off emerges between profitability and serving the poorest when disaggregation by lending type is done. Along with it, they found that institutional design and orientation matters importantly in considering trade-offs in microfinance. In support of Cull's findings, Bassem (2012) recognized the existence of trade-off between financial performance and the depth of outreach (social performance). But, it does not mean that achieving the double bottom line, the ultimate promise of microfinance is impossible although it is difficult to achieve. Though Luzzi and Weber (2006) found that some trade off exists between outreach and sustainability but this is not the case for every year. Navajas *et al.* (2003) do not directly analyse the existence of the trade-off, but their study may have implications for outreach versus sustainability. They concluded that due to increased competition, MFIs changed their lending technologies and the borrowers on which they focus their activities. On the other hand, outcomes of a study done by Martinez-Gonzalez (2008) revealed that most MFI are more efficient in pursuing sustainability (performing loan portfolio size) rather than breadth of outreach (no of clients) or haven't met either goal successfully. Mersland and Strom (2009) showed that an increase in average profit and average cost tends to increase average loan size and the other drift measures. In the aggregate sample composing MFIs of seventy countries, they found that MFIs in every region are unprofitable and far worse performers than their geographic commercial peers. Self-sufficient MFIs are strong performers on ROA and ROE. The majority of MFIs, however, are very weak and in need of continued subsidies.

Disputants of the trade-off between sustainability and outreach

The poorest people can benefit from microfinance from both an economic and social well-being point-of-view, and this can be done without jeopardizing the financial sustainability of the MFI (Morduch and Haley, 2002). An efficient microfinance institution leads to the sound economic development by bringing financially disadvantaged people within the sphere of financial services. A study in this regard is done by Hermes. Hermes *et al.* (2009) where he found a positive relationship between MFI efficiency and domestic financial development. The key is finding the right combination of factors to meet credit and savings needs. In contrast to this study, the results of the studies done by Kereta (2007), Crombrugg (2007), Kailthya (2009) found no evidence of trade-off between outreach and financial sustainability, rather positive correlation between the two is found. Kailthya's results are comfirmed by Dacheva (2007) where he found no association between the commercialisation factors and loan sizes. According to Christen *et al.* (1995), Otero and Rhyne (1994) cited in Meyer (2002): outreach and financial sustainability are complimentary. This is because as the number of clients increases, MFIs enjoys economies of scale and hence reduce costs which help them to become financial sustainable. Crombrugghe (2007), also, analysed that better targeting of the interest rate policy and increasing the number of borrowers per field officer help the MFIs to improve their financial performance. Haq *et al.* (2010) found that the non-governmental MFIs particularly under production approach are most efficient in the fulfilment of dual objectives. To attain the dual objectives simultaneously, Conning (1999) suggested that MFIs must charge higher interest rate, have higher staff costs per dollar loaned and make less use of leverage. Bassem (2012) didn't find a justified mission drift. On the other hand, Kar (2010) in his study regarding the trade-off used a unique panel database containing 4-9 years observations from 253 MFIs in 69 countries. He found a positive significant association between self-sustainability and the height of outreach, suggesting some extent of vulnerability of mission drift over time for individual –based lenders. However, he concluded that mission-drift phenomenon works differently in different developing regions in the world. It can be concluded that MFIs can achieve their double objectives and fulfil their ultimate promise.

KEY FACTORS AFFECTING PERFORMANCE AND OUTREACH

The performance of all the microfinance players is not the same. There are a lot of factors which affect the performance of these players. Some MFIs are performing well on some parameters and others on other ones. There are different studies reporting different factors responsible for the performance difference of Microfinance players. Ejigu (2009) found that the use of debt financing and the age of the MFIs' (CGAP, 2009) make firms more efficient and productive. Ruben & Schers (2007) found the membership base, MFI loan size and political constituency as the general critical determinants for performance. Gutierrez-Nieto *et al.* (2007) found the country effects on efficiency and effects that depend on non-governmental organisation (NGO)/non-NGO status of the MFI. Qayyum and Ahmad (2006) study revealed size of the MFI as an important factor in determining both Technical Efficiency (TE) and Pure Technical Efficiency (PTE) levels. In contrast to this, Bassem (2008) found that the size of MFIs had negative effect on their efficiency. A research done by Ylinen (2010) in Uganda context concluded that the, non-governmental organisations (NGOs) and group lenders are the least often profitable relative to their other counterparts. Country specific factors like cost and weight age given by MFI to poor affect the mission of MFI, as assessed by the Armendariz and Szafarz (2009) in their study. Martinez-Gonzalez (2008) found average loan size, performing portfolio to assets ratio, scale of operations, ratio of payroll to expenses, age, board structure, for-profit status of MFI, % of FINAFIM funds as the determinants of difference in efficiency of microfinance institutions. Hassan and Sanchez (2009) in their study revealed that Technical efficiency is higher for formal MFI than non-formal MFI and also, efficiency depends upon the region of the concerned institution. As per the results of the work done by Kailthya (2009), operational efficiency, leverage (risk) and institutional structure affect the financial performance. The study conducted by Hermes *et al.* (2009) discussed the surprising results saying the type of the loans, an MFI provide, also affect its efficiency. Arsyad (2005) concluded that good performance and sustainability have been very much influenced by the institutional environment. Hoque (2011) held that equity financing and increased use of commercial debt lowers productivity for client-maximizing MFIs because of the lower conversion of savers to borrowers or the yield rate. Omri and Chkoundali (2011) found the average loan size and the number of outstanding loans per women as the important factors for the increase in commercial viability of the non-governmental organisations. Kinde (2012) in his study in context of Ethiopia followed a quantitative research approach using a balanced panel data set of 126 observations from 14 MFIs over the period 2002-2010. His study found that microfinance breadth of outreach, depth of outreach, dependency ratio and cost per borrower affect the financial sustainability of microfinance institutions in Ethiopia. However, the microfinance capital structure and staff productivity have insignificant impact on financial sustainability of MFIs in Ethiopia for the study periods. Coleman and Osei (2007) showed the critical role of governance in the performance of MFIs. They also stated that the independence of the board and a clear separation of the positions of a CEO and board chairperson have a positive correlation with both performance measures.

CONCLUSION

The purpose of this article has been to introduce the finance academic community to the discipline of microfinance institutions' financial performance and outreach. We have discussed the performance measurement of MFI's, performance evaluation models, approaches to microfinance institutions' performance, trade-off between outreach and financial performance and the key factors affecting performance and outreach. MFI's performance measurement includes measuring outreach, financial performance and assessing the welfare impact. Outreach has been defined as the ability of an MFI to provide high quality financial services to a large number of poor people. Financial performance is used as a measure to track the financial sustainability of an institution over a period of time. This sustainability can be both operational and financial. Finally, we discussed the trade-off between financial performance and outreach. We hope that this article will help to turn the attention of finance researchers to the dual aspect of microfinance institutions outreach and financial performance. Many of the models, tools and frameworks in the existing finance literature can be used to achieve the contradictory goals of microfinance performance and outreach.

REFERENCE

Ariadna Martinez-Gonzalez, "Technical Efficiency of Microfinance Institutions: Evidence from Mexico", The Ohio State University, 2008.

Tuuli Ylinen, Profitability and Outreach of microfinance: Mission drift theory and evidence from Uganda, Department of Economics, Helsinki School of Economics, 2010.

J. Adongo and C. Stork, "Factors influencing the financial sustainability of selected microfinance institutions in Namibia", The Namibian Economic Policy Research Unit, 2005.

S. Afrane, "Impact assessment of micro-finance Intervention in Ghana and South Africa", *Journal of Microfinance*, Vol. 4, No. 1, 2002.

K. Pankaj Aggarwal and S.K. Sinha, "Financial Performance of Microfinance Institutions of India-a cross-sectional study", *Delhi Business Review*, Vol. 11, No. 2, 2010.

B. Armendáriz and A. Szafarz, "Microfinance Mission Drift?", *CEB Working Paper*, Vol. 9, No. 15, 2009.

Armendáriz de Aghion, Beatriz and Jonathan Morduch. "The economics of microfinance", MIT Press, 2005.

Lincolin Arsyad, "An assessment of Microfinance Institution Performance: The importance of institutional environment", *Gadjah Mada International Journal of Business*, Vol. 7, No. 3, pp. 391-427, 2005.

Ben. Soltane Bassem, "Efficiency of Micro-finance Institutions in the Mediterranean: An Application of DEA", Mediterranean and Middle East Papers, *Transit Stud Rev*, Vol. 15, pp. 343–354, 2008.

Ben. Soltane Bassem, "Social and financial performance of microfinance institutions: Is there a trade-off?", *Research Paper, Journal of Economics and International Finance*, Vol. 4, No. 4, pp. 92–100, 2012.

Thorsten Beck, Asli Demirguc-Kunt and Maria Soledad Martinez Peria, "Reaching out: Access to and use of banking services across countries, *Journal of Financial Economics*, Vol. 85, No. 1, pp. 234-266, 2007.

N. Bhatt and S. Tang, "Making Microcredit Work in the United States: Social, Financial, and Administrative Dimensions." *Economic*

Development Quarterly, Vol. 15, No. 3, pp. 229-241, 2001.

C. James Brau and M. Woller Gary, "Micro-finance: A Comprehensive Review of the Existing Literature", *Journal of Entrepreneurial Finance and Business Ventures*, Vol. 9, No. 1, pp. 1-26, 2004.

Connie Bruck, "Millions for Millions", *The New Yorker*, 2006.

CGAP, "Microfinance Consensus Guide-lines", Retrieved on June 22, 2009, 2003.

CGAP, "Core performance indicators for microfinance", 2007.

CGAP, "Efficiency Drivers of MFIs: The Role of Age", Retrieved from: *http:/ssrn.com/abstract=1779025,* 2009.

Peck. Robert Christen, "Commercialisation and Mission Drift: The Transformation of Microfinance in Latin America", Final Draft 12/22/00, 2000.

R.P. Christen, "Bulletin Highlights", Micro-banking Bulletin, Vol. 4, pp. 41-46, 2000.

CMF Survey of MFIs, Retrieved from: *http://www.centre-for-microfinance.org/wp-content/uploads/2012/02/Updated_Final_Report_Map_of_Microfinance_Report_CMF_June27.pdf,* 25.04.2013; 9:30am, 2010.

Coleman, Kyereboah. Anthony and A. Osei Kofi, "Outreach and profitability of micro-finance institutions: the role of governance", 2007.

J. Copestake, S. Bhalotra and S. Johnson, "Assessing the impact of microcredit: A Zambian case study", *Journal of Development Studies*, Vol. 37, No. 4, pp. 81, 2001.

Alain de. Crombrugghe, Michel Tenikue and Julie Sureda, "Performance Analysis for a Sample of Microfinance Institutions in India". *Annals of Public and Cooperative Economics*, pp. 269–299, 2007.

R. Cull, A. Demirguc-Kunt and J. Morduch, "Financial performance and outreach: a global analysis of leading microbanks", *The Economic Journal*, Vol. 117, No. 517, 2007.

Petra Dacheva, "Commercialisation in Micro-finance—A Study of Profitability, Outreach and Success Factors within the Latin American Context", *MicroFinance Information Bulletin, Microfinance Exchange Information Bulletin*, No. 15, 2007.

T. Farrington, "Efficiency in microfinance institutes", *Microbanking Bulletin*, pp. 20–23, 2000.

S. Forster, S. Greene and J. Pytkowska, "The State of Microfinance in Central Europe and the New Independent States." *CGAP Regional Review*, 2003.

Suman Ghosh and Eric Van Tassel, "A Model of Mission Drift in Microfinance Institutions", Working Paper No. 08003, Department of Economics, Florida Atlantic University, 2008.

B. Gutierrez-Nieto, C. Serrano-Cinca and C. Mar-Molinero, "Microfinance institutions and efficiency", *Journal of Accounting and Finance*, 2007.

Haq, Mamiza and *et al.*, "Efficiency of Micro-finance Institutions: A Data Envelopment Analysis", *Asia-Pacific Financial Markets*, Vol. 17, pp. 63–97, 2010.

V. Hartarska, "Governance and performance of microfinance institutions in Central and Eastern Europe and the Newly Independent States", *World Development*, Vol. 33, pp. 1627-1643, 2005.

Valentina Hartarska and Denis Nadolnyak, "Do regulated microfinance institutions achieve better sustainability and outreach? Cross-country evidence", *Applied Economics*, Vol. 39, No. 10, pp. 1207-1222, 2007.

M. Kabir Hassan and Benito Sanchez, "Efficiency Analysis of Microfinance Institutions in Developing Countries", Working Paper, Networks Financial Institute at Indiana State University, 2009.

Hermes. Niels, Robert Lensink and Aljar Meesters, "Outreach and Efficiency of Micro-finance Institutions", Centre for International Banking, Insurance and Finance, UK, 2008.

Niels Hermes and *et al.*, "Financial Develop-ment and the Efficiency of Microfinance Institutions", Retrieved from: *http://ssrn.com/abstract=1396202*, 2009.

Hoque, Monzurul and Muhamamd Chishty, "Commercialisation and changes in capital structure in microfinance institutions: An innovation or wrong turn?", *Managerial Finance*, Vol. 37, No. 5, pp. 414-425, 2011.

Subham Kailthya, "Analysing the Trade-off between Outreach and Financial Performance for Indian Microfinance Institutions", *Extension Paper, Master Thesis, Madras School of Economics*, Chennai, 2009.

Kumar. Ashim Kar, "Sustainabilty and mission drift in microfinance: Empirical study on mutual exclusion of double bottom lines", Hanken school of Economics, 2010.

B. Befekadu Kereta, "Outreach and Financial Performance Analysis of Microfinance Institutions in Ethiopia", African Economic Conference United Nations Conference Center (UNCC), Addis Ababa, Ethiopia, 2007.

Asnakew. Bayeh Kinde, "Financial sustaina-bility of Microfinance Institutions (MFIS) in Ethiopia", *European Journal of Business and Management*, Vol. 4, No. 15, 2012.

Anne-Lucie Lafourcade and *et al.*, "Overview of the Outreach and Financial Performance of Microfinance Institutions in Africa". *Feature article, Microbanking Bulletin,* 2006.

R. Lensink, A. Meesters and N. Hermes, "Outreach and Efficiency of Microfinance Institutions: is there a trade-off?", Groningen, Finance Department, University of Groningen, 2008.

Jennifer Lindsay, "An Evaluation on the Effectiveness of Micro Finance Institutions", SPEA Honors Thesis, 2010.

Ferro. Giovanni Luzzi and Sylvain Weber, "Measuring the Performance of Microfinance Institutions", CRAG, 2006.

Roy Mersland and Oystein R. Strom, "Performance and corporate governance in microfinance institutions", *Journal of Banking and Finance*, Retrieved from: *http://ssrn.com/abstract=996283*, 2007.

Roy Mersland and Oystein R. Strom, "Microfinance mission drift?", Elsevier, 2009.

R. Mersland and R. Strom Oystein, "Performance and governance in microfinance institutions", *Journal of Banking & Finance*, Vol. 33, No. 4, pp. 662-669, 2009.

R.L. Meyer, "Track Record of Financial Institutions in Assisting the Poor in Asia", *ADB Institute Research paper*, No. 49, 2002.

Jonathan Morduch, and Barbara Haley, "Analysis of the Effects of Microfinance on Poverty Reduction", NYU Wagner Working Paper, No. 1014, 2002.

Jonathan Morduch, "The microfinance schism", *World Development* 28, pp. 617-629, 2000.

S. Navajas, M. Schreiner, R.L. Meyer, C. Gonzalez-Vega and J. Rodriguez-Meza, "Micro credit and the Poorest of the Poor: Theory and Evidence from Bolivia", *World Development*, Vol. 28, No. 2, pp 333-346, 2000.

S. Navajas, J. Conning and C. Gonzalez-Vega, "Lending technologies, competition and consolidation in the market for microfinance in Bolivia" *Journal of International Development*, pp. 747-770, 2003.

Ahmad Nawaz, "Efficiency and Productivity of Microfinance: Incorporating the Role of Subsidies", 3rd Draft, 2008.

Waleed Omri and Ridha Chkoundali, "The Convergence between Outreach and Financial performance in Mediterranean MFIs: A Panel Data Analysis", Mediterranean and Middle East papers, *Transit Study Rev,* Vol. 18, pp. 149–163, 2011.

M. Otero and E. Rhyne, "The New World of Micro enterprise Finance", *Hartford*, Kumarian Press, 1994.

A. Park and C. Ren, "Microfinance with Chinese characteristics", *World Development*, Vol. 29, No. 1, pp. 39-62, 2001.

Abdul Qayyum and Munir Ahmad, "Efficiency and Sustainability of micro Finance institutions in South Asia", MPRA Paper No. 11674, 2006.

Rosenberg Richard, "Measuring Results of Microfinance Institutions: Minimum Indicators That Donors and Investors Should Track", A Technical Guide, 2009.

Ruerd Ruben and Sophie Schers, "Micro-finance Portfolio Performance: An Explora-tive Analysis of Determinants of Outreach, Sustainability and Risk", Contributed Paper in a Conference on 'Microfinance: What Do We Know', Centre for International Banking, Insurance and Finance, University of Groningen, 2007.

Gopal Kumar Sarma and Saundarjya Borbora, "Is Microfinance outreach Sustainable? A case of Microfinance Institutions model in India", Second European Research conference on microfinance, University of Groningen, The Netherlands, 2009.

M. Schreiner, "Aspects of outreach: A frame-work for discussion of the social benefits of microfinance", *Journal of International Development*, Vol. 14, pp. 591-603, 2002.

Roselia Servin and *et al.*, "Ownership and Technical Efficiency of Microfinance Institutions: Empirical Evidence from Latin America", 2011.

Raj. Puspa Sharma, "Financial Sustainability of Selected MFIs of Nepal", *The Journal of Nepalese Business Studies*, Vol. 1, 2008.

Fadzlan Sufian, "The Efficiency of Non-Bank Financial Institutions: Empirical Evidence from Malaysia", *International Research Journal of Finance and Economics*, No. 6, *Euro Journals Publishing Inc*., 2006.

M. Tucker, "Financial performance of selected microfinance institutions", *Journal of Microfinance*, Vol. 3, No. 2, 2001.

World Bank, "Attacking poverty", World Development Report 2000/01, Washington D.C., 2001.

World Bank, "Finance for All? Policies and Pitfalls in Expanding Access", World Bank, 2008.

Eoin Wrenn, "Microfinance Literature Review", Retrieved from: *http://www.dochas.ie/Shared/Files/2/MicroFinance_literature_review. pdf*, 03/10/1012; 4:00 pm, 2005.

M. Zeller and R.L. Meyer, "The triangle of microfinance: Financial sustainability, outreach, and impact", Johns Hopkins University Press in collaboration with the International Food Policy Research Institute (IFPRI), Baltimore and London, 2002.

Innovation in Rural Region in India

Nomita Sharma*

ABSTRACT

Innovation is the key to growth in country's economy. But it is dependent on resources like money, technology and skilled labour. These resources are easily available in the urban area.This explains the frequent innovations happening in the urban area. But a rural region has many shortcomings likeun skilled labour, shortage of money and technology and less awareness about new technology.But inspite of all these shortcomings, there are many people as well as small enterprises in the rural regions which have come out with innovations. These innovations have transformed their lives and improved their standard of living. Most of the rural innovations remain unnoticed because they do not get support of promotion or their use is confined to limited rural regions. The paper explores innovations in the rural region in India.It further tries to analyse the cause or origin of the situations or environment that were instrumental in on-set of these innovations. Different innovations at rural region have been explored to understand the reasons underlying innovation. Secondary data was used to analyse rural innovations.

Keywords: *Frequent innovations, Rural region, Common people, Cost effective products*

INTRODUCTION

Innovation is the main engine in driving growth and productivity in any country. There is wide spread agreement that economic growth of any country depends largely on how that country innovates and reinvents itselfin the competitive environment. India is one of the fastest growing economies in the world with around 300 million people living below poverty line. These people have little access to even basic necessities like sanitation, food, water and other requirements of like education, accommodation electricity and transportation. Many scholars have pointed that innovation should focus on bottom part of the pyramid. Innovative solutions can help these people below poverty line transform their lives.This research paper presents few innovations done in the rural region in India.It also further analyses these rural innovations and churns out the variables that affect rural innovations.Over a small period of time, these rural innovations have even inspired people living in urban region to innovate and improve standard of living. Many rural innovation have come with an idea of designing and delivering products at affordable prices. There are many examples that show real innovation has indeed happened in absence of required

* Shaheed Sukhdev College of Business Studies, University of Delhi, Delhi, India

resources be it money, shortage of skilled labour or shortage of technology. There is Sankara Nethralaya, a charitable not-for-profit eye hospital that provides a world-class eye care to people with a single standard of care for people. The prosthetic limb, Jaipur foot, made of rubber, wood and tyre cord has influenced the market for prosthetics around the world. A Greenway Smart Stove designed by a start-up called Greenway Grameen Infra has been able to reducesmoke emissions by 80% and fuel consumption by 65% in rural Indian households. A firm called AyasShilpa makes suspension bridges for a tenth of the price of conventional ones to connect countless villages to the outside world which otherwise would use perilous rope bridges.

There is need to identify these rural innovations and promote them.A number of venture capital firms are investing in companies that cater to the country's rural and bottom of the pyramid populations. Global philanthropic foundations such as Gates Foundation, Omidyar Network and the Acumen Fund are keen to invest in innovations with a social impact in India. As the innovation juggernaut rolls on, India needs to put in place an even better inclusive innovation ecosystem which harnesses the dynamism of enterprise of our youth to address problems faced by the less fortunate. India is in a position to mount a strong initiative for affordable innovations by taking advantage of low costs and a large talent base. Engagement of multiple stakeholders and creating Public-Private-Partnerships for promoting people-centric research will require all the necessary support. Innovation in rural region can add contribute to social and economic value and lead to development of a community. Most of the innovation in rural region go unnoticed because they do not get support of promotion or their usage is limited to rural communities.

REVIEW OF LITERATURE

Innovation

An idea must be replicable to be called an innovation at an economical cost and must satisfy a specific need. Innovation uses information, imagination and initiative in making a new thing, object that can improve quality of life or provide health benefits to people or provide an easier way of doing a work. It may also mean reducing cost of product or giving more benefits to customers at same price. Innovation helps in creating new ways of making same products by using better alternative for example, an alternative raw material or reducing time and money in making a product. Innovation can be evolutionary or revolutionary. Evolu-tionary can be continuous or dynamicinnovation that are brought about by many incremental advances in technology or processes which revolutionary is discontinuous innovations, which is often disruptive and new.

A rural region is characterised by open land and few people, homes and buildings. It is rich with natural environment. The "rural sector" means any place which meets the following criteria,

- A population of less than 5,000,
- Density of population less than 400 per sq. km., and
- More than "25% of the male working population" is engaged in agricultural pursuits.

INNOVATION IN RURAL REGION

It has been observed that people staying in rural regions have come out with innovations that have improved their standard of life. These innovations are driven by their basic need or by solution of a problem faced by them. This is backed by their inability to meet their needs through existing options in society. In the presence of many constraints i.e. lack of education and severe cash crunch–many have successfully shown new ways of improving products or even made a new product. They have also come with ways of reducing cost and time of making a product and even helped in conserving environment. A washing-cum-exercise machine, hand operated water lifting device, portable smokeless stove, automatic food making machine, solar mosquito killer, shock proof converter, a floating toilet soap are few of the innovations originated in rural region. This research paper explores innovation at the rural level in India. Further, over a period of last few years, it has been observed that people in rural areas have moved to urban areas for better living and of hope of changing ones economic circumstances and better life. Agricultural technology has decreased the need for agricultural workers.

Improved transportation, tools, fertilizer, and genetically modified crops mean fewer farm-workers harvest more food. This decreased need for farm employment drives many farmworkers into cities in search of jobs. And those who could not move due to various reasons, they have found innovative ways to make their life simpler. The cost of living in urban areas is usually much higher than in rural areas. It costs more to rent a house, buy food, and use transpor-tation. For this reason, wages are usually higher in urban areas. The search for higher wages is another reason people migrate from rural areas. But there are many people who cannot migrate to urban region and stay in rural regions either out of preference or due to no option available to them.

NEED/IMPORTANCE OF THE STUDY

Innovation is the need of hour. Innovation helps in managing uncertain business environment. It further adds to country's economy also. It is stabilizes a small company status as profitable company. Pandit Jawahar Lal Nehru had said that real India lies in Rural India. Over a period of time, India has gone through many changes like economical, political, technical demographical, societal, structural and cultural. It becomes very importance to study change in rural region with respect to innovation.

Extensive literature review was done for two broad categories. First category of literature review focused on identification of rural region in India. Second category, focused on different type of innovations. Review of different variables like money, technology, knowledge, skilled labour that affect innovation is also undertaken. Ten different innovation are shortlisted for analysis of the study.Each innovation is then analyzed with respect to objectives of the research.

FINDINGS

Ten innovations in rural region are presented below:

- A Reaper Windrower machine was innovated to solve problem of harvesting crops on time. This problem was due to shortage of labourers and it resulted in reduction in yield and loss.To overcome this problem device was innovated. It has three different units namely, cutting unit, which consists of cutter bar, reel unit for pushing the standing crop towards the cutter bar and gathering unit to windrow the crop at centre of the machine thus making it easy to handle/transport to the threshing floor. It helped in reducing manpower requirement and the drudgery involved in the harvesting process. The machine has 7 ft width of operation and can cover 0.4 hectares per hour. Further, while operating this machine, fuel consumption of tractor is 2.5-3 litres per hour.
- A Hand operated water lifting pump was in response to a dearth of available pumps that could be afforded by small farmers. In this case, though options were available in the market but the farmers could not afford it. But this innovation went through many improvements before taking a final shape. Nearly five prototypes over a period of fifteen years were designed before finally perfecting design.The resulting water-lifting device was operated by the continuously rotating a handle. It is simple in design and has a high discharge at low cost compared to the motorized pumps and conventional hand pumps. The pump has discharge of 20,000 lph at 0.75 m head.
- Bullock operated sprayeris pulled by a pair of bullocks and gets the drive from the ground through a gear box and belt pulley system.When the operator shifts the lever to a higher gear, the frequency of strokes of the pump increases as a result of which more pressure develops in the container. The spray fluid, thus, atomizes into fine droplets with a wider swath. This sprayer considerably reduces time requirement as compared to manual spraying and also the drudgery and health hazards involved in manual spraying.It has 18 nozzles, spaced at a distance of 35 cm and can cover 3.5 acre/h.
- Lemon cutter was developed for cutting lime into small pieces in bulk quantity. It is an innovative technology that offers a great value proposition for the pickle manufac-turing companies. The pickle industry faces problems due to less automation especially for cutting of fruits. Another problem is shortage of labour during peak seasons,

Table 1. The result is summarized in the table.

Innovation	Place	Cause	Type of Innovation	Useful to	Usage/Benefit
Reaper Wind-rower machine	Madhya Pradesh	Shortage of Labourers/Loss of yield and loss	Product	Farmers	Reduction in Manpower, Less fuel consumption, Easy to handle and transport
Hand operated water lifting pump	Tamil Nadu	Dearth of affordable pumps	Product	Farmers	High discharge at low cost, helps in controlling pollution
Bullock operated sprayer	Madhya Pradesh and Gujrat	Manual spraying which is Time consuming and hazardous to health	Product	Farmers	Reduces time to spray the whole field and health hazards. It can covers wider area for spraying
Lemon Cutter	Tamil Nadu	Inefficient operations due to low degree of automisation, Short-supply of labour during peak seasons	Product	Pickle Industry	It is a novel machine in terms of its cost effectiveness, efficiency, drudgery reduction for women, safety consideraions and transmission system
Bicycle Weeder	Maharashtra	Requirement for effective and efficient way for removing weeds from land	Product	Farmers	It is easy operate, affordable and covers more area in one hour
Pepper thresher	Kerala	To control damage and increase output.	Product	Farmers	It can be operated both manually and automatically. It can produce more output in less time
Compost Aerator & Leaf Pruner	Rajasthan	To increase the fertility value and reduce decomposition time	Product	Farmers	It mixes the bio-wastes thoroughly, it can process more waste per hour, it is better in quality
Modified hand pump with tap and attachment for filling animal trough	Rajasthan, Delhi	Lack of surface water and falling water table, shortage of drinking later, difficulty in drinking and pumping water at the same time	Product	People using hand pump in villagers/ town/ cities	One can drink while pumping hand pump simultaneously and comfortably with the help of tap. Helps in saving extra water that is wasted while pumping
Milking machine	Karnataka	Shortage of skilled labour for milking cows and non-affordability of farmers to use milking machines	Product	Farmers/ Milk vendors/ diaries	An easy and cost effective way to milk cows
Shock proof converter	Manipur	Need for cost effective and safe electricity.	Product	Household individuals	It is an easy to install device that provides electricity to every connection in household

Floating soap	Kerala	Need to control slipping of soap into river/make medicinal soap with health benefits	Product	Individuals	It answers problem of slipping of soap into water while bathing. It also has medicinal values and health benefits
Bamboo lathe machine	Nagaland	Need to save time and save labour in making bamboo products	Product	Bamboo industry	The machine can make different products effectively and efficiently. It takes less time in making the products

which limits the capacity. It provides a novel mechanism for reducing cost and improving efficiency.It is also safe and less tedious work for women and for transmission.

- Bicycle weeder has been made with by fixing a rod with a blade at the end, to an assembly consisting of only the front wheel and the handle of a bicycle. This innovation is extremely efficient in removing weeds from hard land. It is very useful device for ploughing/inter culture operation in very small farm plots, gardens and kitchen gardens. One can cover 0.08 hectare in one hour.
- Pepper thresher is better than conventional threshers which can be operated both automatically and manually with higher output and minimum damage. About 100 kg pepper can be threshed in a one HP machine in ten minutes (60 kg in a HP version). It consumes 3/4 electric units per hour, has threshing efficiency 90% and the damage is about 2-3%.
- Compost Aerator & Leaf Pruner helps in improving quality of biowaste. Decomposed bio-waste has better fertility values. The time for decomposition can be decreased if the biomass is aerated, humidified and properly mixed. This innovation is a tractor (power take off driven machine, which can thoroughly mix the bio-wastes and add moisture as well thereby reducing the time of decomposition.The machine can cover a row of wastes disbursed by 100 trailers of size 11 ft×6.5 ft×2.5 ft (i.e total 400 ton) in one hour. Tractor consumes 3.5-4.0 liter diesel per hour. This provides a better value of compost. Total time for converting the biomass into manure while processed by this machine is 25-40 days, which is otherwise 3-4 months by the conventional methods.
- Modified hand pump with tap and attachment for filling animal trough was borne out due to lack of surface water sources and falling water table. This shortage made availability of clean drinking water a major problem in Rajasthan. This arrangement provides 20% of pumped water directly to the attached animal water trough. Through this way, the extra pumped water can be stored for animals. Another benefit that it provides is that at the same time, a person can drink directly while pumping water.
- Milking machine was answer to shortage of skilled labour for milking a small herd of cows. These farmers could not afford costly milking machines. It provides an easy and cost effective way to milk cows. It can produce 1.5-2 litre of milk per minute. The machine can be used to remove all the milk from the udder. The cow feels as if it is being suckled and does not experience any pain.
- Shock proof converter is an innovative device which converts all electrical lines into shock-free power lines. This is a very useful device for every household/commercial establish-ment. The device can be installed just after the energy meter so that each and every connec-tion in the building establishment gets connected to the device and becomes shock-free.
- Floating soap was innovated to control slipping of soap into water while bathing. Several experiments were conducted to make a soap that has a density of 0.878, TFM (Total Fatty Matter) as 73%, foaming stability

as 0.1 cm and foaming power as 0.2 cm. Another innovation was.

- Bamboo lathe machine helps in making bamboo products. First of all, outer covering of Bamboo has to be removed for developing smooth surface to make interior decoration items and utility articles like cups, pen stands, etc. This job is very time consuming and laborious. This innovation can do all the operations like removing the outer knots, smoothening the surface, internal/external carving and finishing. The machine has soft touch joystick controlled operating system, which facilitates precision in operation.The finished bamboo can be used to make bamboo pet bottles. This bottle has the potential to replace the plastics and tin bottles and cans. The bamboo pet bottles can be made with a capacity of 1 lit, lit, 200 ml etc.

RESULTS & DISCUSSION

The main cause or origin of these rural innovations is shortage of skilled labour, shortage of technology that can ease out the functioning of products. Moreover, the inability of farmers to afford available options in environment also forces them to innovate and devise a solution of their problems. Whether it is a machine that can milk cows in less time or bullock operated sprayer that can spray in wider farm area , all innovations are borne out of basic problem faced by farmers.And with option or help around, they have devised ways to handle problems in their simple and cost effective ways. All innovation considered in this section are product innovations. It is interesting to note that even though product innovations require more resources, still without many resources at their disposal, people in rural regions have been able to find solutions to their problems. These solutions are cost effective and within reach of common man.

The result of the research study supports the hypothesis that innovation at rural region is affected by shortage of knowledge, money and skilled labour.

CONCLUSIONS

Innovation at rural region needs to be supported and promoted. People living in the Rural region can be given training to promote innovative activities. Innovation at rural region is basically need based. The different innovations happening at rural region in India have been explored. Total ten innovations were shortlisted and analyzed. Different variables that affect innovative activities are shortage of skilled labour, shortage of technology and inability of the people to afford the available options in environment.This is due to less awareness level of people in rural region. Awareness about technology is also very less. All the innovations are product innovations.

REFERENCES

E. Vieira, E. Vazquez-Rozas and I. Neira, "The Innovation factor: An Economic Model of Productivity in European Regions", Vol. 8-1, Regional and Sector Economic Studies, 2008.

S. Hotho and K. Champion, Small businesses in the newcreative industries: Innovation asa people management challenge, *Management Decision*, Emerald Group Publishing Limited, Vol. 49 No. 1, pp. 29-54, 2011.

Report by Rural Areas, People and Innovative Development (RAPIDO), "Sectors where innovation enhance rural, 2008.

Tourism Services in Kashmir: Perspective of Foreign Tourists

Mushtaq Ahmad Bhat and Nabina Qadir*

Abstract

Due to the complexity and globalization of today's competitive business environments in tourism, quality has become one of the most important sources of competitive advantage. For tourism enterprises, it is no longer sufficient just to maintain a business now; it is also necessary to have systematic processes to manage quality and to gain and maintain competitive position. High quality tourism services attract large number of tourists and ensure tourist retention. Tourist retention provides higher profit contribution in terms of repeat visits. Besides, the need for delivering quality tourism services arise due to the fact that foreign exchange earnings in this industry has a high added value which contributes to the growth of the GDP of an economy. Therefore, in view of the growing importance of service quality for successful tourism promotion and development of the economy, present study is an attempt to measure the perceptions of foreign tourists in Kashmir. Based on data gathered, with the help of a self-developed and statistically tested research instrument, from three hundred sixteen (316) respondents, the study concludes that by and large foreign tourists are satisfied with tourism services but an improvement is needed in all dimensions to improve the overall quality of tourism services.

Keywords: *Tourism Service Quality, Tourist's Expectations and Perceptions, Dimensions of Tourism Services, Kashmir Valley*

INTRODUCTION

Tourism has become the fastest growing industry in the world for the past 50 years, and today it is the world's largest industry relating to employment, foreign exchange earnings and overall economic development of several countries. It is one of the most important civil industries of the world contributing about 10% to the world's GDP (Abhyankar and Dalvie). Tourism provides opportunity for poverty alleviation and holds the key for creation of rural wealth. It can provide impetus to other industries through backward and forward linkages and can generate huge revenue earnings for the nation.

Tourism sector holds immense potential for Indian economy. India, a developing and an emerging market economy, is experiencing a substantial growth in tourism sector. During the year 2011, the number of Foreign Tourist Arrivals (FTAs) in India reached the level of 6.29 million,

* Department of Business & Financial Studies, University of Kashmir, Srinagar, J&K, India

registering a growth of 8.9% over the FTAs of 5.78 million in 2010.

For the sustenance and promotion of tourism industry, it is necessary to enhance its service efficiency. In today's competitive business environment, tourism service providers must find ways to make their services stand out among their competitors. To achieve this, they must understand their customers' needs—and then set out to meet these needs. Among all customer demands, quality service has been increasingly recognized as a critical factor in the success of any business also suggested that customer service quality is a crucial source of distinctive competence and is often considered a key success factor in sustaining competitive advantage in service industries. Research has extensively revealed that service quality leads to customer loyalty and attraction of new customers, positive word-of-mouth, employees' satisfaction and commitment, enhanced corporate image, reduced costs and increased business performance. Higher levels of service quality produce higher levels of customer satisfaction, which in turn lead to higher levels of customer patronage (Amin and Isa, 2008). Thus, attention to delivery of a higher level of service quality is an important strategy by which service organizations can position themselves more effectively in the market place.

RESEARCH HYPOTHESIS

To study the gap between expectations and perceptions, SERVQUAL scale, which became the most popular instrument for measuring service quality. The instrument contained 22 items for assessing customer perceptions and expectations regarding the quality of service. Each item is consisted of two statements—one for expectation and the other for perception. A level of agreement or disagreement with a given item is rated on a Likert-type scale and the level of service quality is represented by the gap between perceived and expected service. The SERVQUAL instrument is based on five service quality dimensions, namely tangibles (physical facilities, equipment and personnel appearance), reliability (ability to perform the promised service dependably and accurately), responsive-ness (willingness to help customers and provide prompt service), assurance (knowledge and courtesy of employees and their ability to gain trust and confidence) and empathy (providing individualized attention to the customers). The instrument has been revised and extensively used in a variety of service settings such as banking, credit card services, telecommunication services, repair and maintenance (Alkhattab and Aldehyyat, 2011). But, despite its wide usage, it has been subjected to several criticisms on theoretical and operational aspects. However, in the tourism and hospitality industry, a number of studies have used SERVQUAL instrument and suggested its applicability (O'Neill *et al.*, 2000; Andaleeb and Conway, 2006; Gonzalez *et al.*, 2007; Namkung and Jang, 2008; Martinez and Martinez, 2008; Hurst *et al.*, 2009; Markovic and Raspor, 2010; Bhat, 2012; Bhat and Qadir, 2013b; etc.). The SERVQUAL model was of the utmost importance for defining the real meaning of customer satisfaction in the tourism industry. SERVQUAL was a simple tool for tourism managers to use in tackling the areas of weaknesses in their service delivery and is seen as the most appropriate model for measuring service quality in the hospitality industry.

SAMPLE PROFILE

The study has been carried out at Kashmir—an important tourist destination of India that has been a place of attraction for tourists since centuries. During the year of 2012, the valley has reported the visit of 19,29,765 tourists. By applying simple random sampling technique, a total of 316 foreign respondents has been chosen, who visited Kashmir Valley in the months of Jan to May 2013. All important demographic characteristics like; age, gender, education, income, occupation, length of stay, purpose of visit and number of visits were taken into consideration while seeking responses from the foreign tourists regarding their expectations and perceptions about the quality of tourism services in Kashmir. The profile of the respondents was deemed to be distributed fairly around all the possible categories.

As far as the gender of the respondents is concerned, it was distributed fairly with 64.2% males and 35.8% females. Significant number of respondents (29.7%) belonged to the age group of

31-40 years followed by 28.8% in the age group of 41-50 years. Lowest participation of respondents (14%) belonged to the age group of above 51 years followed by the age group of up to 30 years (27.5%). Respondents with graduation were largest in number (62%) followed by post graduates (26.3%) and the remaining (11.7%) were undergraduates. Respondents with monthly income of above Rs 61,000 were highest in number (28.2%) followed by the respondents having monthly income of Rs 21,000-40,000 (26.9%), whereas respondents having monthly income up to Rs 20,000 were lowest in number (19.9%) followed by respondents having monthly income of Rs 41000-60000 (25%). Majority of the participants belonged to service class (52.2%) followed by business (24.7%) and the remaining were professionals (23.1%). Respondents who stayed for 1-6 days in Kashmir were highest in number (44.6%) followed by those who stayed for 7-12 days (36.1%) and those who stayed for more than 19 days were the least (7.6%) followed by those who stayed for 13-18 days (11.7%). Most of the participants were leisure/holiday tourists (74.7%) followed by pilgrimage tourists (10.1%) whereas tourists visiting to friends/relatives were the least (3.2%) followed by tourists for business purpose (5.4%) and the remaining (6.6%) were sports tourists. Majority of the respondents were first time visitors (64.2%) followed by second time visitors (26.0%) while as least number of respondents were fourth time visitors (2.5%) followed by third time visitors (7.3%).

RESEARCH METHODOLOGY

In order to measure the foreign tourists' expectations and perceptions regarding the quality of tourism services in Kashmir, a modified SERVQUAL instrument proposed by Bhat and Qadir, (2013b) was used. Expectations and perceptions were measured by a self-administered questionnaire. The original items were slightly modified to suit the present research setting. The questionnaire for the study consisted of two parts: part first contained 32 items for measuring foreign tourists 'expectations and perceptions on a Likert-type scale ranging from 1='strongly disagree' to 10='strongly agree.' The second part was designed to capture respondents' demographic characteristics, which included age, gender, income, occupation, level of education, purpose of visit, length of stay and number of visits. All the statements in the questionnaire were worded positively as suggested by Parasuraman *et al.*, (1994) and arranged alphabetically to later identify the underlying expectation/perception dimensions by using factor analysis. The data received from the questionnaires were then put into the SPSS (Statistical Package for Social Sciences) 19.0 and analyzed using exploratory factor analysis and reliability tests.

Exploratory factor analysis was performed on the 32 expectation/perception attributes included in the questionnaire in order to determine the underlying dimensions of tourism services. R-mode Principal component analysis with Varimax rotation and Eigen value equal to or greater than 1 was used. The approach was to retain items with factor loadings of equal to or above 0.50 (Hair *et al.*, 1998), which meant for exclusion of 3 items (Q3, Q17 and Q24). The dropped questions were labeled as: comfortable recreational facilities; professional, polite and competent service personnel; and, provision of information about local events and entertainment respectively. Hence, factor analysis got completed in 8 iterations and 5 factors were emerged as dimensions of tourism services consisting of 29 items with 67.94% explained variance. Each of the 5 factors was labeled according to the items loaded onto it. Factor 1 was named as Tangibility; Factor 2 as Assurance; Factor 3 as Reliability; Factor 4 as Responsiveness; and, finally Factor 5 as Empathy. Highest variance was observed on Tangibility (17.37) followed by Assurance (16.33) and as such these two dimensions are considered as the most important determinants of tourism service quality.

Furthermore, a reliability analysis was performed to test the reliability of the scale and inner consistency of extracted factors. For this purpose, Cronbach's alpha coefficients were calculated. The coefficients of the extracted factors ranged from 0.761 to 0.839 that are well above the minimum value of 0.60, which is considered acceptable as an indication of scale reliability (Hair *et al.*, 2006). Thus, these values suggest good internal consistency of the factors. Moreover, Cronbach's alpha value for the overall expectation/perception scale is 0.949 and indicates its high reliability. The suitability of factor analysis

Table 1. Factor Analysis Results and Reliability Coefficients (n=316)

Item No.	Elements of tourism services	Factors				
		F1	F2	F3	F4	F5
V16	Well dressing and neat appearance of service personnel (e.g., tour and hotel escorts).	.772				
V20	Unspoiled nature and pollution free atmosphere.	.724				
V1	Aesthetic, clean and attractive destination.	.720				
V21	Safety and security to tourists.	.710				
V23	Hygienic and high quality food and beverages.	.710				
V28	Appealing accommodation facilities.	.686				
V12	Appropriate location of facilities and equipments.	.661				
V4	Modern and technologically relevant vehicles.	.557				
V11	Trustworthiness and honesty of the service personnel.		.872			
V6	Willingness of. the service personnel to help tourists and advise on how to use free time.		.835			
V18	Fluent and understandable communication skills of the service personnel.		797			
V22	The behaviour of other participants (local people and others) is not bothersome.		.737			
V2	Behaviour of service personnel instills tourists' confidence.		.577			
V5	Providing service/s at the promised time.			.854		
V7	Easy access to service personnel when needed.			.714		
V27	Insisting on error-free services.			.637		
V10	Performing services right the first time.			.576		
V9	Providing correct and accurate information to tourists.			.553		
V15	Uninterrupted telecommunication services.			.549		
V13	No sudden increase in tour cost.			.518		
V31	Cultivation of friendly relationship with tourists.				.816	
V30	Tour operators/tour guides act on participants' suggestions.				.679	
V29	Sincere and keen interest in solving the problems of tourists.				.658	
V32	Tourists being served quickly by the appropriate personnel.				.640	
V26	The service persons do not neglect tourists' services when they are busy.				.513	
V19	Individual attention to tourists.					.756
V25	Best tourist interest at heart.					.749
V8	Providing diversified service based on tourists' needs.					.651
V14	Proper health care to tourists.					.547
Eigen Values		10.279	3.278	3.212	2.673	2.301
Percentage of Total Variance		17.374	16.332	13.521	11.582	9.139
Cumulative Percentage of Variance		17.374	33.706	47.227	58.809	67.948
Cronbach's Alpha		.784	.794	.839	.784	.761
Number of Items per Factor		8	5	7	5	4

Table 2. KMO and Barlett's Test

Kaiser-Meyer-Olkin Measure of Samping Adequacy	0.927
Barlett's Test of Sphericity (Approx. Chi-Square)	4264.958*
Cronbach's Alpha	0.949

*At 1% Significance Level

was validated with the help of Bartlett's Test of Sphericity that revealed a Chi-square at 4264.958 ($p<0.000$ at 1% level) and confirmed that the correlation matrix was not an identity matrix. Kaiser-Meyer-Olkin measure of sampling adequacy was also performed that showed KMO=0.927 i.e., higher than the suggested value of 0.6 (Tabachnik and Fidell, 2001).

Results of the Study

In order to achieve the above stated objectives, expectations and perceptions were measured on a ten point Likert Type (strongly disagree/ strongly agree) scale. To determine the service quality gaps (service quality=perception-expectation), mean scores were computed separately for foreign tourists' perceptions and expectations. Independent sample t-test was also performed to test the hypothesis. The results are shown in Tables 3-7.

Overall Service Quality

In order to determine the foreign tourists' overall Expectation and Perception gap related to tourism services, mean scores averaged on all dimensions were calculated separately followed by independent t-test.

The results of such an analysis (Table 3) indicates significant difference ($p<0.05$ at 5%) in foreign tourists' expectations and perceptions in the overall and across all dimensions of tourism services. Moreover, the data reveals that Kashmir Valley is exceeding the expectations of tourists on overall quality of tourism services (0.44). The analysis clearly shows higher levels of tourism service quality as is reflected by the respective SERVQUAL scores on all dimensions of tourism services—Tangibility (0.32), Assurance (0.55), Reliability (0.42), Responsiveness (0.54), and Empathy (0.38) respectively.

Dimension-Wise Analysis

***Tangibility dimension*:** The data on Table 4 reveals that Kashmir Valley is marginally exceeding the expectations of foreign tourists on Tangibility (0.32) which suggests improvement in the physical aspect of tourism services. Its element-wise analysis brings to light that Valley is exceeding the expectations of foreign tourists relatively more on 'safety and security to tourists (0.84)' followed by 'aesthetic, clean and attractive destination (0.56)' while as it falls below the expectations of tourists on 'modern and technologically relevant vehicles (-0.04)'. Its' service quality score is relatively low on 'unspoiled nature and pollution free atmosphere (0.02)' followed by 'hygienic and high quality food and beverages (0.12)' and 'appealing accommodation facilities (0.30)'.

Assurance dimension

Relatively higher service quality score (0.54) on assurance (Table 5) indicates that the service personnel of Kashmir Valley are exceeding the expectations of tourists significantly ($p<0.05$) and are credible and courteous. Its' element-wise analysis shows highest SERVQUAL score on 'Trustworthiness and honesty of the service personnel (0.96)' followed by 'willingness of the service personnel to help tourists and advice on how to use free time (0.67)', whereas relatively low SERVQUAL score is reported on 'fluent and understandable communication skills of the service personnel (0.15) followed by 'friendly behaviour of other participants (0.27)'.

Reliability dimension

The data on Table 6 shows significant difference ($p<0.05$) in tourists expectations and perceptions on reliability. Positive mean difference (0.42) indicates that Kashmir Valley is exceeding the expectations of tourists on reliability dimension. Element-wise analysis of the said dimension reveals lowest service quality score on 'uninterrupted telecommunication services (-0.25)' followed by 'insisting on error free services (0.25)'. Although, relatively higher service quality score is observed on 'provision of correct and accurate information to tourists (0.76)' followed by 'no sudden increase in tour cost (0.63)' and 'providing service/s at the promised time (0.55)'.

Responsiveness dimension

Data on table 7 reveals service quality score of 0.54 on responsiveness dimension, which indicates that the service personnel of Kashmir Valley provide prompt services to tourists. Further, positive mean scores indicate that

Table 3. Expectation and Perception Scores Averaged on all Dimensions

Dimensions of Tourism Services	Group	Mean Scores	Standard Deviation	Service Quality	'p' Value*
Tangibility	Expectation	7.16	1.1	0.32	0.00
	Perception	7.48	0.9		
Assurance	Expectation	7.13	1.0	0.54	0.00
	Perception	7.67	0.9		
Reliability	Expectation	7.12	1.0	0.42	0.00
	Perception	7.54	0.9		
Responsiveness	Expectation	7.19	1.1	0.54	0.00
	Perception	7.73	0.9		
Empathy	Expectation	7.03	1.0	0.37	0.00
	Perception	7.40	1.0		
Overall Service Quality (Averaged on all dimensions)	Expectation	7.13	1.0	0.44	0.00
	Perception	7.57	0.8		

*Significant (p<0.05) at 5% level

Table 4: Expectation and Perception Scores on Tangibility

Elements of Tourism Services	Group	Mean Scores	Standard Deviation	Mean Difference	'p' Value*
Well dressing and neat appearance of service personnel (e.g., tour and hotel escorts)	Expectation	7.32	1.39	0.34	0.00
	Perception	7.66	1.44		
Unspoiled nature and pollution free atmosphere	Expectation	6.88	1.54	0.02	0.90
	Perception	6.90	1.66		
Aesthetic, clean and attractive destination	Expectation	7.12	1.60	0.56	0.00
	Perception	7.68	1.43		
Safety and security to tourists	Expectation	7.15	1.45	0.84	0.00
	Perception	7.99	1.42		
Hygienic and high quality food and beverages	Expectation	7.38	1.39	0.12	0.31
	Perception	7.50	1.50		
Appealing accommodation facilities	Expectation	7.18	1.34	0.30	0.00
	Perception	7.48	1.30		
Appropriate location of facilities and equipments.	Expectation	7.16	1.41	0.41	0.00
	Perception	7.57	1.40		
Modern and technologically relevant vehicles.	Expectation	7.07	1.44	-0.04	0.75
	Perception	7.03	1.39		
Overall Tangibility Scores (Averaged on all elements)	Expectation	7.16	1.10	0.32	0.00
	Perception	7.48	0.98		

*Significant (p<0.05) at 5% level

Kashmir Valley is significantly (p<0.05) exceeding the expectations of tourists on all elements of responsiveness. Specifically, higher service quality has been reported on 'cultivation of friendly relationship with tourists (0.81)' followed by 'sincere and keen interest in solving the problems of tourists (0.75)'. However, relatively low service quality score is observed on 'tour operators/tour guides act on participants' suggestions (0.22)' followed by 'tourists being served quickly by the appropriate personnel (0.45)'.

Table 5. Expectation and Perception Scores on Assurance

Elements of Tourism Services	Group	Mean Scores	Standard Deviation	Mean Difference	'p' Value*
Trustworthiness and honesty of the service personnel.	Expectation	7.30	1.28	0.96	0.00
	Perception	8.26	1.15		
Willingness of the service personnel to help tourists and advise on how to use free time.	Expectation	7.12	1.30	0.67	0.00
	Perception	7.80	1.21		
Fluent and understandable communication skills of the service personnel.	Expectation	7.29	1.21	0.15	0.12
	Perception	7.44	1.28		
The behaviour of other participants (local people and others) is not bothersome.	Expectation	6.68	1.56	0.27	0.02
	Perception	6.95	1.54		
Behaviour of service personnel instills tourists' confidence.	Expectation	7.27	1.49	0.66	0.00
	Perception	7.93	1.39		
Overall Assurance Scores (Averaged on all elements)	Expectation	7.13	1.08	0.54	0.00
	Perception	7.67	0.91		

*Significant (p<0.05) at 5% level

Table 6. Expectation and Perception Scores on Reliability

Elements of Tourism Services	Group	Mean Scores	Standard Deviation	Mean Difference	'p' Value*
Providing service/s at the promised time.	Expectation	7.27	1.44	0.55	0.00
	Perception	7.83	1.46		
Easy access to service personnel when needed.	Expectation	7.27	1.24	0.46	0.00
	Perception	7.24	1.24		
Insisting on error-free services.	Expectation	7.05	1.37	0.25	0.02
	Perception	7.30	1.42		
Performing services right the first time.	Expectation	7.14	1.28	0.55	0.00
	Perception	7.69	1.24		
Providing correct and accurate information to tourists.	Expectation	7.07	1.42	0.76	0.00
	Perception	7.83	1.31		
Uninterrupted telecommunication services.	Expectation	6.77	1.56	-0.25	0.04
	Perception	6.52	1.55		
No sudden increase in tour cost.	Expectation	7.24	1.43	0.63	0.00
	Perception	7.87	1.44		
Overall Reliability Scores (Averaged on all elements)	Expectation	7.12	1.08	0.42	0.00
	Perception	7.54	0.92		

*Significant (p<0.05) at 5% level

Empathy dimension

Service personnel of Kashmir Valley have tourists' best interest at heart which is reflected by positive service quality score on empathy (0.37). The data (Table 8) clearly shows that service personnel in Kashmir Valley are exceeding the expectations of tourists significantly ($p<0.05$). Element-wise analysis of the said dimension reveals low service quality score on 'proper health care to tourists (-0.04)'

Table 7. Expectation and Perception Scores on Responsiveness

Elements of Tourism Services	Group	Mean Scores	Standard Deviation	Mean Difference	'p' Value*
Cultivation of friendly relationship with tourists.	Expectation	7.28	1.43	0.81	0.00
	Perception	8.09	1.33		
Tour operators/tour guides act on participants' suggestions.	Expectation	6.88	1.52	0.22	0.08
	Perception	7.11	1.70		
Sincere and keen interest in solving the problems of tourists.	Expectation	7.20	1.40	0.75	0.00
	Perception	7.96	1.38		
Tourists being served quickly by the appropriate personnel.	Expectation	7.30	1.33	0.45	0.00
	Perception	7.75	1.32		
The service persons do not neglect tourists' services when they are busy.	Expectation	7.27	1.32	0.48	0.00
	Perception	7.75	1.36		
Overall Responsiveness Scores (Averaged on all elements)	Expectation	7.19	1.11	0.54	0.00
	Perception	7.73	0.99		

*Significant ($p<0.05$) at 5% level

Table 8. Expectation and Perception Scores on Empathy

Elements of Tourism Services	Group	Mean Scores	Standard Deviation	Mean Difference	'p' Value*
Individual attention to tourists.	Expectation	7.12	1.30	0.50	0.00
	Perception	7.63	1.26		
Best tourist interest at heart.	Expectation	7.16	1.21	0.59	0.00
	Perception	7.75	1.24		
Providing diversified service based on tourists' needs.	Expectation	7.20	1.36	0.45	0.00
	Perception	7.65	1.33		
Proper health care to tourists.	Expectation	6.64	1.52	-0.04	0.73
	Perception	6.60	1.53		
Overall Empathy Scores (Averaged on all elements)	Expectation	7.03	1.08	0.37	0.00
	Perception	7.40	1.02		

*Significant ($p<0.05$) at 5% level

followed by 'providing diversified service based on tourists' needs (0.45)' whereas higher service quality score is observed on 'best tourist interest at heart (0.59)' followed by 'individual attention to tourists (0.50)' respectively.

CONCLUSION

The overall empirical results supported the proposed hypothesis. The current study has employed modified SERVQUAL instrument for determining foreign tourists' expectation and perception gap scores in relation to tourism services and identified five factors—Tangibility, Assurance, Reliability, Responsiveness and Empathy with 29 statements . From the data, it has been observed that most of the sampled foreign tourists came to Kashmir Valley with higher expectations and left the destination with higher perceptions. While comparing the sampled foreign tourists' expectations and perceptions, it can be concluded that Kashmir Valley exceeded the expectations of the tourists significantly.

The overall expectation and perception gap (SERVQUAL) score of 0.44 clearly indicates higher levels of tourism service quality. The results have confirmed that out of five tourism service dimensions, assurance and responsiveness dimensions are the significant contributors of overall tourism service quality. Tourist expectations for the service are likely to rise when the service is not performed as promised. Therefore, in order to keep expectations from rising, tourism entrepreneurs must provide diversified services based on the individual needs of the tourists and must perform such services properly for the first time. They should monitor the quality of tourism services and evaluate the efficiency of the service personnel by performance appraisal techniques on a regular basis in order to avoid service failure and customer complaints.

REFERENCES

S.A. Alkhattab and J.S. Aldehayyat, "Perceptions of Service Quality in Jordanian Hotels", *International Journal of Business and Management*, Vol. 6, No. 7, pp. 226-233, 2011.

M. Amin and Z. Isa, "An Examination of the Relationship between Service Quality Perception and Customer Satisfaction", *International Journal of Islamic land Middle Eastern Finance and Management*, Vol. 1, No. 3. pp. 191-269, 2008.

S.S. Andaleeb and C. Conway, "Customer Satisfaction in the Restaurant Industry: An Examination of the Transaction-Specific Model", *Journal of Services Marketing*, Vol. 20, No. 1, pp. 3-9, 2006.

M.A. Bhat, "Service Quality in Tourism: A Dimension—Specific Assessment of SERVQUAL", Global Business Review, *Journal of International Management Institute*, New Delhi, Vol. 13, No. 2, pp. 327-337, 2012.

M.A. Bhat and N. Qadir, "An Empirical Assessment of Tourists' Expectations and Perceptions", Pezzottaite Journals, *International Journal of Applied Services Marketing Perspectives*, Vol. 2, No. 2, pp. 320-329, 2013b.

J.M. Carman, 'Consumer Perceptions of Service Quality: An Assessment of the SERVQUAL Dimensions', *Journal of Retailing*, Vol. 66, No.1, pp. 33-55, 1990.

W. Fache, "Methodologies for Innovation and Improvement of Services in Tourism", *Managing Service Quality*, Vol. 10, No. 6, pp. 356-366, 2000.

M.E. Gonzalez, L.R. Comesana, J.A.F. Brea, "Assessing Tourist Behavioral Intentions through Perceived Service Quality and Customer Satisfaction": *Journal of Business Research*, Vol. 60, pp. 153-160, 2007.

Govt. of India, "*Tourism—An Overview*", Annual Report by Ministry of Tourism, 2012.

A. Haghkak, M. Nosratpour, A. Ebrahimpour and A. Hamid, "The Impact of Service Quality on Tourism Industry", Proceedings of 2nd International Conference on Business and Economic Research (2nd ICBER 2011)", pp. 1834-1854, 2011.

J.F. Hair, R.E. Anderson, R.L. Tatham and W.C. Black, "Multivariate Data Analysis (5th Edition). Boston, MA: Pearson Education Inc., 1998.

J. Huh, M. Uysal and K. McCleary, "Cultural/ Heritage Destinations: Tourist Satisfaction and Market Segmentation", *Journal of Hospitality and Leisure Marketing*, Vol. 14, No. 3, pp. 81-99, 2006.

J.L. Hurst, L.S. Niehm and M.A. Littrell, "Retail Service Dynamics in a Rural Tourism Community: Implications for Customer Relationship Management", *Managing Service Quality*, Vol. 19, No. 5, pp. 511-540, 2009.

M. Khan, "ECOSERV: Eco Tourists' Quality Expectations", *Annals of Tourism Research*, Vol. 30, No.1, Pp. 109-124, 2003.

B.R. Lewis and V.W. Mitchell, "Defining and Measuring the Quality of Customer Service", *Marketing Intelligence and Planning*, Vol. 8, No. 6, pp. 11-17, 1990.

S. Markovic and S., Raspor, "Measuring Perceived Service Quality Using SERVQUAL: A Case Study of the Croatian Hotel Industry", *Journal of Management*, Vol. 5, No. 3, pp. 195-209, 2010.

C.L. Martinez and J.A. Martinez, "Develop-ing a Multidimensional and Hierarchical Service Quality Model for Travel Agency Industry", *Tourism Management*, Vol. 29, No. 4, pp. 706-720, 2008.

H. Nadiri and K. Hussain, "Perceptions of Service Quality in North Cyprus Hotels", *International Journal of Contemporary Hospitality Management*, Vol. 17, No. 6, pp. 469-480, 2005.

Y. Namkung and S. Jang, "Are Highly Satisfied Restaurant Customers Really Different?" *International Journal of Contem-porary Hospitality Management*, Vol. 20, No. 2, pp. 142-155, 2008.

A. Parasuraman, V.A. Zeithaml and L.L. Berry, "A Conceptual Model of Service Quality and its Implications for Future Research", *Journal of Marketing*, Vol. 49, pp. 41-50, 1985.

A. Parasuraman, V.A. Zeithaml and L.L. Berry, "Alternative Scales for Measuring Service Quality: A Comparison Assessment Based on Psychometric and Diagnostic Criteria". *Journal of Retailing*, Vol. 70, No. 3, pp. 201-230, 1994.

C. Ryan, "From the Psychometrics of SERVQUAL to Sex: Measurements of Tourist Satisfaction". Consumer Behaviour in Travel and Tourism, the Haworth Hospitality Press, New York, pp. 267-286, 1999.

B.G. Tabachnik and L.S. Fidel, "Using Multivariate Statistics", (4thEds) Allyn and Bacon, Needham Hights, MA, 2001.

Vazquez, "Expectations: A Comparison Standard in Measuring Service Quality: An Assessment of a Reassessment", *Journal of Marketing*, Vol. 58, No. 1, Pp. 132-139, 2001.

I. Yilmaz, "Measurement of Service Quality in the Hotel Industry Anatolia", *Inter-national Journal of Tourism and Hospitality Research*, Vol. 20, No. 2, pp. 375-386, 2009.

Y. Yoon and M. Uysal, "An Examination of the Effects of Motivation and Satisfaction on Destination Loyalty: A Structural Model", *Journal of Tourism Management*, Vol. 26, pp. 45-56, 2005.

V. Zabkar, M.M. Brencic and T. Dmitrovic, "Modeling Perceived Quality, Visitor Satis-faction and Behavioural Intentions at the Destination Level", *Journal of Tourism Management*, Vol. 31, pp. 537-546, 2010.

Job Satisfaction of Working Women in the Educational Institutes

Neha Rani*

ABSTRACT

Teachers are the most important group of professionals for our nation's future. Therefore, it is astonishing to know that even today many of the college teachers are dissatisfied with their jobs. Job satisfaction among college teachers is good not only for themselves but society as whole. Female Teacher job satisfaction should be taken into consideration and it should be the primary objective of an institution to be able to promote teaching and high quality education. . Employee satisfaction refers to the employee's sense of well-being within his or her work Environment. It is the result of a combination of extrinsic rewards, such as remuneration and Benefits, and intrinsic rewards, such as respect and appreciation.This research was mainly undertaken to investigate on the significance of factors such as working conditions, pay and promotion, job security, fairness, relationship with co-workers and supervisors in affecting the job satisfaction. This paper presents a comprehensive diagnosis of job satisfaction indices of pharmaceutical business, the factors causing the dissatisfaction and suggestions to improve them.

Keywords: *Job satisfaction, Female teacher, Working conditions, Job security*

INTRODUCTION

The importance of job satisfaction among the employees of organizations and institutions goes back to the second half of the 20th century, with the appearance of Maslow's theory (1956).

The factor like job design, work environment feedback, recognition, and decision making participation are the potential factor for satisfying teachers in educational institutes. Study found that there is a constructive association among promotion and job satisfaction. Academicians are more motivated and committed to perform a job and also more satisfied if promotion opportunities are available to them.

Job satisfaction is the extent to which one feels good about the job. It is in regard to one's feelings or state of mind regarding to the nature of their work. In other words, job satisfaction implies doing a job one enjoys, doing it well, enthusiasm and happiness with one's work. Job satisfaction differs from person to person and institution to institution and even in the context of male and female.

Therefore, job satisfaction is such phenomenon which comes not only from the job, but

* Shobhit University, Meerut, U.P., India

also from one's personal, social, academic, administrative and economical condition.

Theoretical framework and literature on the job satisfaction of female teachers Marie-Pierre *et al.* [1] when asked about women's position in society and women's position within the teaching profession, the notion that teaching represented a 'female-friendly' option was a prevalent theme; an initial attraction to the working hours and long holidays provided the impetus, yet this scenario quickly took on a mythical status.

Shamima Tasnim [2], in her study found that one of the main purposes of job is to get the payment or salary and it is very natural that a handsome salary will bring job satisfaction. In his study shows that job characteristics such as salary, promotional opportunity, task clarity and significance and skills utilization as well as organizational characteristics such as commitment and relationship with supervisors and coworkers, have significant effects on job satisfaction.

- Marie-Pierre *et al.*, Job satisfaction among America's Teachers: Effects of workplace conditions, Background Characteristics and Teacher Compensation, Higher Education European Social Fund, Secondary Heads Association, London Metropolitan University, July 1997.
- Shamima Tasnim, job satisfaction among female teachers: A study on primary schools, Department of Administration and Organization Theory, The University of Bergen, Norway 2006.

This has been found that 93% of the college teachers who were highly satisfied with their job expressed that they have cordial relationship with their colleagues. The study concluded that student achievement may be directly connected to teacher's job satisfaction.

After independence women's education, especially higher education, took off. Education started playing a great role in the emancipation of women from traditional dependencies. Women became more vocal, articulate and assertive. Our constitution granted equal rights to women and that included the Right to education. Jawaharlal Nehru said," You can tell the condition of a nation by looking at the status of its women."

Job satisfaction can be affected by age, sex, marital status, designation, academic qualification, professional qualification, training course, teaching experience etc.

Item Rating of Job Satisfaction Facets are as follows:

1. *Policies:* This implies that school that having a policy manual for teachers could increase job satisfaction among teachers.
2. *Supervision:* This implies that teachers in the Division of Cotabato City very satisfied with their schools principal in terms of trust and confidentiality. They are confident that their principals do their job at the best of their knowledge.
3. *Pay:* Data shows that among the facets pay have the lowest mean in all its items. This indicates that teacher respondents felt that their salaries cannot make it more at par with the present economic condition. Thus, salaries could make them more satisfied with their job.
4. *Opportunities for Promotion/Professional Growth:* finding implies that sufficient reading materials and journals for teachers to be used in teaching process could contribute for high job satisfaction.
5. *Working Conditions:* This indicates that teacher respondents find satisfaction with their job when stake holders more involve in school activities.
6. *Work Itself:* finding implies that teacher respondents very satisfied with their work. : Work with pride. This implies that working with pride is one way to satisfy the teachers with their job.
7. *Achievement:* Data shows that almost all items of achievement got the highest mean. This indicates that teachers find themselves satisfied with this facet.
8. *Responsibility:* This implies that when teachers have enough freedom and authority on their job, they feel more satisfied with their job.

STATEMENT OF THE PROBLEM

This study is to analyses the job satisfaction level of working women in educational institutes.

At present job satisfaction has been an important issue. People are interested to work in the organization as well as the services where they get more satisfaction. It is human behavior. But in reality how far such job satisfaction is ensured in different jobs. The researcher interest is to analyses job satisfaction from organizational perspective. Looking job satisfaction from women perspective will also be interesting to present. This study has tried to reveal the job satisfaction of working women in educational institutes.

OBJECTIVES OF THE STUDY

- Evaluate the level of employee satisfaction with compensation and promotion potential.
- Evaluate the effectiveness of communication within the organization.
- Determine the effectiveness of supervision, evaluation and appraisal of staff.
- Find out the perceived level of job satisfaction.
- Determine the extent of training and development among staff.
- Develop a composite measure of staff satisfaction and use it to determine the overallrating of the current level of staff satisfaction.
- Determine staff perception of the Work Environment in terms of safety and policies.
- Recommend measures to enhance staff satisfaction and productivity.

RESEARCH METHODOLOGY

This study has been done by using both the qualitative and quantitative approach of research.This study used a survey technique that follows a "One-shot" the quantitative method was used to collect data in the teacher's motivation to teach & the associated factors affecting their motivation to perform their job. Interview & questionnaire technique will be used to collect qualitative data.

The study is an empirical research & it use full variety of evidence-documents, artifacts &interviews to explain & test assumptions concerning causal relations among variables under investigation.

TOOLS FOR PRIMARY DATA COLLECTION

The primary data for the purpose of the study were information & responses from Teachers of Higher educational intuitions in Meerut. The

Table 1. Level of Satisfaction of Female Teachers in term of their qualification

Dimensions	Percentage
Satisfied	80
Average	18
Dissatisfied	2

Source: Primary Data

Table 2: COMPENSATION AND PROMOTION POTENTIAL SATISFACTION

Dimensions	Strongly Agree	Agree	Neutral	Disagree	Strongly Disagree	Total
Pay package is competitive compared to other organization in the same line of work	22%	55%	8%	15%	0%	100
I understand how my salary is determined by the organization	10%	44%	0%	26%	20%	100
I am satisfied with the benefits my organization extends to me	10%	60%	10%	12%	8%	100
Organization has a fair promotion policy	20%	24%	18%	14%	24%	100
Overall, I am satisfied with my salary package	7%	33%	10%	20%	30%	100

Source: Primary Data

Table 3. Satisfaction in Terms of Communication

Factors	Strongly Agree	Agree	Neutral	Disagree	Strongly Disagree	Total
The organization recognizes my input	24%	58%	6%	0%	12%	100
We receive feedback on issues raised by employees	10%	34%	18%	14%	24%	100
Essential flow of information from management to staff	25%	55%	10%	10%	0%	100
We hold regular staff meetings that are quite useful in my work	20%	60%	15%	5%	0%	100

Source: Primary Data

Table 4. Satisfcation in Terms Supervision, Evaluation

Dimensions	Strongly Agree	Agree	Neutral	Disagree	Strongly Disagree	Total
I am satisfied with the quality of supervision that I receive	50%	30%	10%	5%	5%	100
My supervisor treats me with respect	70%	20%	0%	8%	2%	100
My supervisor assigns me challenging & motivating work to me	10%	50%	30%	8%	2%	100
My supervisor gives me feedback on my job performance	20%	10%	30%	35%	5%	100
I have opportunities to provide input into decisions that affect my work	35%	20%	25%	16%	4%	100

Source: Primary Data

Table 5. Job satisfaction in Terms of Safety Management

Dimensions	Strongly Agree	Agree	Neutral	Disagree	Strongly Disagree	Total
I feel safe and comfortable in my work environment	15%	45%	18%	12%	10%	100
I am satisfied with the organization's culture	34%	56%	8%	2%	0%	100
My organization is committed to ensuring my health and well being	25%	35%	10%	24%	6%	100
I am able to balance my work and personal life	48%	16%	4%	12%	20%	100
I am satisfied with relationship I have with my co-workers	40%	55%	0%	5%	0%	100
I do not feel stressed at my work environment	8%	28%	0%	50%	14%	100

Source: Primary Data

Table 6. Satisfaction in Terms of Job

Dimensions	Strongly Agree	Agree	Neutral	Disagree	Strongly Disagree	Total
I know what is expected of me in my job	50%	10%	0%	10%	30%	100
I have opportunities for career growth within the organization	50%	10%	20%	10%	10%	100
My job is a good fit with my skills/qualifications	20%	30%	50%	0%	0%	100
Overall job satisfaction	45%	20%	25%	5%	5%	100

Source: Primary Data

Table 7. Satisfaction According of Work Environment

Dimensions	Percentage
Satisfied	90%
Average	10%
Dissatisfied	0%

Source: Primary Data

Table 8. Satisfaction in Terms of Training and Development

Dimensions	Strongly Agree	Agree	Neutral	Disagree	Strongly Disagree	Total
My organization is fair in selection of employees for training and Development opportunities	4%	48%	24%	8%	18%	100
My organization supports my work-related training and development	32%	30%	18%	0%	20%	100
Overall, I am satisfied with the opportunities for training and continual	14%	40%	14%	20%	12%	100
My organization is fair in selection of employees for training and Development opportunities	4%	48%	24%	8%	18%	100

Source: Primary Data

Table 9. Job Satisfaction in the Context of Freedon of Expression in Job

Dimensions	Percentage
Satisfied	95%
Average	05%
Dissatisfied	0%

Source: Primary Data

Table 10. Satisfaction Because of Interpersonal Relationship

Dimensions	Percentage
Satisfied	90%
Average	09%
Dissatisfied	01%

Source: Primary Data

required data was collected by addressing the appropriate class of respondent & requesting them to provide necessary information. In order to collect primary data, the researcher has approached following classes of respondents.

Questionnaire-based survey of Teachers

The teachers are respondents who provide information regarding their understanding, experiences, opinion and perception towards teaching practices (job satisfaction) adopted by Institutions. The questionnaire incorporated different scaling techniques as demanded by the study.

A well-structured and comprehensive questionnaire was prepared to collect data from these respondents. The questionnaire consisted of both open & closed ended questions.

SOURCES OF SECONDARY DATA COLLECTION

As with any research, the researcher was aware about the value of secondary data. The secondary data provided the researcher with information regarding the activities, scope & opinions of other researchers and experts in the initial stages. The data further guided the researcher in defining the variables of the study. The secondary data useful and necessary information supplementing the qualitative aspects of research finding.

For this purpose, secondary data was collected from all associated sources that include: Books, Research Journals, Magazines and Newspapers, Published materials & websites.

Table 11. Satisfaction with the Present of Salary Structure

Dimensions	Percentage
Satisfied	65%
Average	35%
Dissatisfied	0%

Source: Primary Data

Table 12. Satisfaction with the Present Promotion Policy

Dimensions	Percentage
Satisfied	75%
Average	25%
Dissatisfied	0%

Source: Primary Data

Table 13. Participation in Decision Making

Dimensions	Percentage
Satisfied	85%
Average	10%
Dissatisfied	05%

Source: Primary Data

SAMPLE SIZE DETERMINATION

Sample size taken here is 100. Data has been collected from 100 teachers in higher education in Meerut.

CONCLUSION

On the basis of the data collected to check the different factors related to the job satisfaction of female teachers who are imparting knowledge to the students in the higher education through interview & questionnaire result will been analyzed and interpreted as follows:

1. There is research on job satisfaction among the female teachers & they analyzed the ream job satisfaction from social psychological point. But this study can be termed as a unique one as this is only study ever found regarding female teachers job satisfaction. Job satisfaction is the fulfillment of one's expectation from job. It is a pleasurable or positive emotional state resulting from the appraisal of one's job experience. But expectation of people may not be homogeneous. It may differ from person to person, place to place, job to job, context to context, organization to organization. So' job satisfaction cannot be generalized. From organizational perspective, policy and administration of organization, culture of that organization, working environment, supervisory style affects the job satisfaction. Hierarchy is the part of the organization which is linked with job satisfaction or dissatisfaction. Findings of this study found that female teachers are dissatisfied with centralized administration.

2. Most of female teachers willingly enter into this profession. According to the female teachers view job satisfaction is not only linked with nature of job but also linked with working environment. To them having a good physical environment as well as getting a harmonious interpersonal relation among colleagues is job satisfaction. They also expressed that working under a democratic and participatory head teacher is job satisfaction. Most of teacher perceived job satisfaction as having a secured job and as well as getting status and prestige.

3. The result of this employee satisfaction survey and work environment provides feedback onemployees' opinion about an organization. In the whole the employees show high levelsof job satisfaction with overall satisfaction and work environment satisfaction working out to52.37% and 53.6% respectively

4. Most of the female teachers considered this job as noble profession. They sketch the job satisfaction as getting honor and social status. A large number of female teachers have pointed out that the job satisfaction is to get a permanent job.

5. The factors like working environment, interpersonal relation and supervision, can be reason of job dissatisfaction.

6. Female teachers are more focusing on satisfaction of teaching children.

7. The theory by Herzbrg used in this study. Herzbrg viewed as motivating factor for job satisfaction is achievement, recognition, challenging work environment, responsibility & development. Hygiene factors are environ-ment, administration, supervision, working condition, interpersonal relation security, status & salary. In this study the female teacher's job satisfaction or dissatisfaction is caused by both the factor of motivation. During the study the factors found as the causes of satisfaction or dissatisfaction are related either to the motivator factors or to the hygiene factors. But according to Herzbrg salary, interpersonal relation, working environment & supervision are only hygiene factors. But this study stated these as motivating factor also. Actually this theory developed in western countries.

8. Theory of job satisfaction covers almost all these factors which is linked with job satisfaction. Especially the policy of the administration, salary and leadership style impacts on job satisfaction. The factors affecting female teacher's job satisfaction is working environment, interpersonal relation & supervision.

9. A large number of female teachers come into this profession willingly.

10. Education is the backbone of a nation. If the instructor of that backbone is unhappy and dissatisfied with their job what should be the future of that nation. So, we need to be concerned about our teachers' condition. We have to take the best step to make them satisfied with their job. It will energize the teachers & their efforts will be in full swing to build up the nation.

11. It is hoped that the barrier to the female teacher's job satisfaction are found in this research can contribute to a great extent to improve the level of job satisfaction of female teachers.

12. This satisfaction will then be infused to the children and next to the nation.

REFERENCES

All India on higher Education, ministry of human resource Development of higher education planning, monitoring & statistics bureay, 2011

G.A. Arumugasamy. Study on Motivation & Job Satisfaction of Higher Secondary, *Indian J. Edu. Inf. Manage*, Vol. 1, No. 3, 2012.

C.R. Kothari, Research Methodology: Methods & Techniques, 2nd revised ed., New Delhi Newage International Edition, 2011.

Marie-Pierre *et al* Job Satisfaction Among America's Teachers: Effects of Workplace Conditions, Background Characteristics and Teacher Compensation, Higher Education European Social Fund, Secondary Heads Association, London Metropolitan University, 1997.

Ranjit Singh, Faculty of education and information sciences, Punjabi University Patiala, 2006.

Report of Department of Administration and Organization Theory, Job Satisfaction among Female Teachers: A Study on Primary Schools in Bangladesh, 2006.

Report of Meeting of OECD Education Ministers, Higher Education: Quality, Equity & Efficiency, 2006, Athens.

CSR for Students of Management Studies

Sanjoy Roy, Ashutosh Gaur and Bharat Kaushik*

Abstract

Business men are running there factories, trading and shops etc. without have a think of the impact of unethical practices on the society. Management Institutes are most affected by technological changes, but seem to be less sensitive to social accountability (Raghunandan T: Strategy A Pedagogy for Efficient, Accountable and socially Responsive Higher Education). Therefore, one should educate the concept of CSR to upcoming managers i.e. our students of Higher Studies. The Green Paper of the European Commission (July 2001) defines Corporate Social Responsibility (CSR) as ¯a concept whereby companies integrate social and environmental concerns in their business operations and in their interaction with their stakeholders on a voluntary basis. The purpose of this paper is to study the efficiency and effectiveness of Management Institutes in making students aware of Corporate Social responsibility.

Keywords: *CSR (Corporate social responsibility), Higher Education, Effectiveness*

INTRODUCTION

The first college level business school in the country was founded in 1913 in Mumbai and was soon followed by another in Delhi in 1920. These business colleges imparted basic skills about the principles of trade and commerce to clerks and supervisors from fields as diverse as banking, transport, and accounting. (Indian Management, Sept 2004). The first Business School in India was Indian Institute of Social Welfare and Business Management, Kolkata, which was established in 1953. The All India Institute of Management and Labour welfare and the department of management, Delhi University followed suit in 1968. A number of universities set up their MBA programme in 1960s. The IIMs were patterned on the recommendation of Dean Robbins of the University of California, which was invited by the planning commission.

The first IIM was set up in 1961 at Kolkata followed by IIMs at Ahmedabad in 1961, Bangalore in 1971 and Lucknow in 1974 and in the late 1990s at Indore and Calicut. The flagship management education programme, MBA, is widely popular as it offers quick gateway to the riches and to the top echelon of corporate world.

The early 90's saw the boom of founding new management schools, most of them in private sector. In the last three years alone 400 Business Schools came into existence. Few Business Schools have also established collaboration with some western Universities. India management

* Bharati Vidyapeeth Institute of Management and Research, Paschim Vihar, Delhi, India

institutions produce over 30,000 full-time MBAs and 10,000 part-time MBAs every year. Many business schools are also running MBA equivalent program such as distance Post Graduate Diploma in Management (PGDM), Masters in International business (MIB) etc.

CHARACTERISTICS OF MANAGEMENT INSTITUTION IN CONTEXT OF SOCIETY

Management education gives a holistic picture to the students about how to manage the four 'M's of any organization i.e. money, material, man and machine. Whether the knowledge about management principles is obtained through formal study programs at Universities or internally through on the job training or through external seminars or programs, it is of the utmost importance for any person in any job in life; even for the self-employed, entrepreneurs. However in context of Social work there is less emphasis.

Utility of Management Education: As a corollary, one can question the utility of Management Education in the Indian context. The utility of management education in India can be discerned by looking at two variables: (i) demand for management graduates and (ii) "demand for management services of faculty in terms of sponsored research, training and consultancy.

UNIVERSITY SHOULD INVOLVE IN CSR

Effective CSR aims at "achieving commercial success in ways that honor ethical values and respect people, communities and the natural environment". Consequently, the CSR performance of companies depends essentially on how important social and environmental CSR issues are perceived by companies themselves on the one hand, and by their stakeholders (such as investors, employees, consumers and Civil Society Organisations, etc.) on the other. If companies and stakeholders are unaware of how businesses can contribute to sustainable development by incorporating environmental protection, social responsibility and consumer interests into daily management routines, CSR will remain a phrase (European Commission, 2002). For this reason, raising awareness for CSR among both businesses and their stakeholders is a key task for governments as far as they assume that CSR is a promising complementary approach in achieving societal objectives (Public Policies on CSR awareness rising in the EU-25).

Baruch and Lemming (1996, p27) suggest that "the aims of MBA programs are to prepare

Table 1. KPMG-CSR survey has presented a range of motivating factors and drivers for CSR which are discussed in table 1 as below

Drivers	Priority in (%)
Economic Considerations	74
Ethical Consideration	53
Innovations and Learning	53
Employee Motivation	47
Risk Management or risk reduction	47
Access to capital or increased value shareholder	39
Reputation or brand	27
Market share improvement	21
Strengthened supplier relations	13
Cost saving	9
Improved relationship with governmental authorities	9
Others	11

Source: Data Taken From—KPMG International. KPMG Surveys Of Corporate Responsibility Reporting 2005 graduates for managerial roles, help them gain a better understanding of the industrial and business world and its needs, enrich their skills and provide them with competencies relevant to their careers". According to Trevino and Nelson (1999), business school students may need training in ethics and moral reasoning more than most other students. Research conducted by Best (1987) found that students in business schools ranked lower in moral reasoning than students in philosophy, medicine and dentistry. Crane (2004, p 149) cites a study of top business schools in the United States that found business school education has not only failed to improve the moral character of students.

The students have to be enlightened about the right and wrong ways of using all techniques and interventions. Business ethics have to be ingrained as the central notion in all subjects and theories taught in class, irrespective of the complications of semesters and teaching faculty.

Crane (2004) highlights that in recent years; the ethical content in business school subjects has also been diminishing to the minimum content required by ranking agencies such as the Association to Advance Collegiate Schools of Business and AMBA. He opines that some business ethics educators highlight the marginalization of business ethics in favor of other "hard" business topics such as finance, strategy and marketing, as one of the reasons for the deterioration of ethical conduct in business (Gioia, 2002).

Only a few universities across the world have woken up to this challenge and immense power that they wield. In 2001, Cardiff University won £3.1 million in research funds from the Economic and Social Research Council to develop a Research Centre for Business Relationships, Accountability, Sustainability and Society (BRASS).

By looking into the data above it seems that only 53% of the employees consider the ethical values as part of CSR. Which means almost half of the managers don't consider ethics as an important aspect of running a business.

Therefore, it is a dreadful need for including business ethics in course curricula and broadening the outlook of students about concepts like Corporate Social Responsibility to increase the capabilities of future professionals to make more responsible decisions.

Dunfee and Robertson (1988, pp. 847-59) support the inclusion of such subjects in business school programs and put forward several reasons why they should be featured:

1. To convince students that ethical issues are an important part of the key business functions of finance, marketing, and management.
2. To provide systematic coverage of a wide range of ethical issues to all students.
3. To imbue all MBA students with a perspective of what ethics mean in business practice.
4. To provide students with a set of analytical tools applicable to ethical problems in all aspects of their business education, as well as their future jobs.

Powers and Vogel (1980) argue that teaching business ethics is not solely about helping managers to resolve a specific moral dilemma, but also to develop competencies or capacities for, moral judgment in business contexts, the ability to integrate broader social issues with the managerial role and to implement, to develop competencies or capacities for, moral judgment in business contexts, the ability to integrate broader social issues with the managerial role and to implement.

WAY TO ACCOMPLISH CSR EFFICIENCY IN UNIVERSITIES

There should be integration of the industry and academics for better implementation of CSR activities. Students work as a team to create a program model to recommend for inclusion in the companie's corporate social responsibility portfolio. University's should focus on healthcare camps and touch the lives of people in poor condition and isolated communities.

CSR orientation visits of the students of the University to non-governmental organizations located in the rural and urban areas should be organized. These visits are useful in sensitizing students to the work and activities of the social and voluntary sector and they will get an opportunity to interact with professionals

With regard to the macro view of the environment such as that of a university the CSR principles are dependent on the following set of factors:

- CSR should begin with the poorest of the poor in the community at the ground level where there is a great need for professional and concerted interventions.
- Responsiveness and involvement of the community is extremely necessary.
- Accountability of the community members in maintaining and continuing the interventions initiated by the academic agency is equally essential.
- Industry partners play a vital role in achieving the community efforts.
- Collaborative partners help in mobilizing financial and other resources for the planned and organized CSR initiatives.
- Students and research associates in the university become the change initiators.
- CSR is an ongoing process requiring frequent and continuous monitoring of the community.
- It requires acceptability of change by the community and the university both.

The membership in this regard is unlimited and very broad in scope comprising of people who are directly or indirectly associated towards the welfare of community and environment. These members can be the management, teachers, industry partners, vendors, Liaisoning officers, government officials, visiting and distinctive personalities associated in the advisory boards and so on.

Corporate Social Responsibility (CSR) is also an approach that takes into account the social impact an organisation like University, has on the community both local and global. CSR is a fertile ground for innovation, creativity and challenges old ideas and working practices by allowing a voice for all stakeholders. Universities are a kind mirror, for seeing the reflections and gaining these experience from the special side of students (Hopkins 2004).

CONCLUSION

Universities are the most important areas of imparting education, still in light of modernization the basic objective of providing education must not suffer. Educational systems must not become commercial organizations stressing upon only growth in number of students and span of control. It should be the responsibility of the academicians as well to do contribute a bit towards the welfare of the society by making the world a little healthier.

REFERNCES

T. Raghunadhan, A Pedagogy for Efficient, Accountable and Socially Responsive Higher Education, *National Institute of Technology, Cailcut, NIT Campus (PO),* Vol. 1, No. 1, pp. 36-48, 2009.

W. Stubbs & C. Cocklin, "Teaching sustain-ability to business students; shifting mindsets" International Journal of Sustainability in Higher Education, vol. 9, issue no. 3, pp. 206-221, 2008.

G. Berger & A. Konrad. Public policies on CSR awareness raising in the EU-25. *CSR-Politiken in Europa*, Vol. 15, No. 3, pp. 1-13, 2009.

E. Brown & J. Clokel. Corporate Social Responsibility in. ACME: *An International E-Journal for Critical Geographies*, Vol. 8, No. 3, pp. 474-483, 2009.

P. Khanna & G. Gupta. Status of Corporate Social Responsibility: In Indian Context. *APJRBM*, Vol. 2, No. 1, pp. 178-187, 2011.

D. Matten & C. Moon. "Corporate Social Responsibility Education in Europe" *Journal of Business Ethics*, Vol. 54, pp 323–337, 2004.

W. Stubbs & C. Cocklin. "Teaching sustain-ability to business students; shifting mind-sets", *International Journal of Sustainability in Higher Education*, Vol. 9, No. 3, pp. 206-221, 2008.

Stress Management with Special Reference to Public Sector Bank Employees in Delhi NCR Region

Anshu Choudhary*

Abstract

This paper gives the conceptual frame wok of stress management. Researcher has conducted a study on 60 numbers of respondents and found about 97% of the respondents believed that they face high level of stress, which may be due to both professional and personal reasons. This study also found that the respondent were overburdened with work load in their work place and work life imbalance is one of the major attribute which contribute to stress for an employee.

Keywords: *Stress management, Work life imbalance, Over burdened with work load*

INTRODUCTION

Hans Selye was one of the founding fathers of stress research. His view in 1956 was that "stress is not necessarily something bad—it all depends on how you take it. The stress of exhilarating, creative successful work is beneficial, while that of failure, humiliation or infection is detrimental." Selye believed that the biochemical effects of stress would be experienced irrespective of whether the situation was positive or negative.

The most commonly accepted definition of stress (mainly attributed to Richard S Lazarus) is that stress is a condition or feeling experienced when a person perceives that "demands exceed the personal and social resources the individual is able to mobilize." In short, it's what we feel when we think we've lost control of events.

Stress is inevitable in our society. Researchers on stress make it clear that, to enter in to the complex area of stress, especially in to the area of occupational stress, is very difficult. Stress is an unavoidable consequence of modern living. In light of the above, the present study attempt to throw light on the various problems of occupational stress among banking professionals specifically the Nationalised bank employees.

REVIEW OF LITERATURE

- According to Douglas [1980], stress is defined as any action or situation that places special physical or psychological demand upon a person.
- Cobb (1975) has the opinion that, "The responsibility load creates severe stress among workers and managers."

* Shobhit University, Meerut, U.P., India

- If the individual manager cannot cope with the increased responsibilities it may lead to several physical and psychological disorders among them.
- Brook (1973) reported that qualitative changes in the job create adjust mental problem among employees. The interpersonal relationships within the department and between the departments create qualitative difficulties within the organization to a great extent.

RESEARCH OBJECTIVES & SCOPE

Primary Objective

The primary aim for the study is to analysis the job stress among the public sector bank employees in DELHI and NCR.

Secondary Objective

To examine what is the effect of stress on work factors (e.g., morale, job satisfaction, task effort, organizational commitment, etc) when people are under high stress.

SCOPE OF THE STUDY

United States National Institute of Occupational Safety and Health has defined workplace stress as "The harmful physical and emotional responses that occur when the requirements of the job do not match the capabilities, resources, or needs of the worker. Job stress can lead to poor health and even injury." Workers who are stressed are also more likely to be unhealthy, poorly motivated, less productive and less safe at work. Their organizations are less likely to be successful in a competitive market. Stress can be brought about by pressures at home and at work. Employers cannot usually protect workers from stress arising outside of work, but they can protect them from stress that arises through work. Stress at work can be a real problem to the organization as well as for its workers. Good management and good work organization are the best ways of stress prevention.

OBJECTIVE OF THE STUDY

- To analyze the origin and growth level of banking sector in Delhi and NCR region.
- To analyze the level of job stress among bank employees in Delhi and NCR region.
- To analyze the contribution of over load, authority, conflict and Lack of Support from colleagues to the job stress among bank employees in Delhi and NCR.
- To analyze the importance of interventional strategies at organizational level to manage stress among bank employees.
- To evaluate the progress, goals and success of stress management programme organized by the banks.
- To give suitable suggestions to the banking sector to develop stress less working condition among the bank employees did not responded.

METHODOLOGY OF THE STUDY

Population

The population selected for this particular study is employees from public sector units in DELHI AND NCR. Public sector comprise of Syndicate Bank of India, Punjab national Bank and the State Bank of India.

Research Design

The study is explorative as well as descriptive in nature.

Sample Design

The particulars of sample design,

1. *Type of Universe:* Delhi and NCR
2. *Sampling Unit:* Public Sector Employees
3. *Source List:* Finite
4. *Size of Sample:* 60
5. *Parameter of Interest:* In estimating the number of persons being stressed in their jobs.

Tool of Data Collection

A pilot testing was conducted initially by administering the questionnaire on around 60 numbers of respondents. The information was collected from the bank employees at executive levels. Interviews were conducted with the employees for gathering information on their perception about their organization and the problems which they face both directly and indirectly in the discharge of their respon-sibilities.

Sources of Data

The study consists of both primary and secondary data. The primary data was collected by direct interview through questionnaire. The secondary data was collected from research publications, standard journal and periodicals including the government organizations and from respective records about the job related occurrence.

Research Instrument-Questionnaire Method

The instrument has been administered at the workplaces of groups. Data will be collected from the employees. Data will be collected using a structured questionnaire, which will be distributed in the workplace to employees and in Delhi and Ncr region.

Analysis of Data

The data will be analyzed to determine any differences between the stress levels of employees and their impact on reducing stress.

From the table 1, it is indicated that majority of the respondents working in public sector banks were stressed, whereas only few respondents felt that they were not stressed.

From Table 2, it is inferred that major causes of stress among the bank employees are excess of work load [21%] and lack of cooperation among the impatient customer [17%].Hence it was found that employees felt that they were facing severe work pressure, as they were expected to handle multiple roles and responsibilities. Time stress is created by a real or imaginary deadlines; encounter stress is created by contact with other people [both pleasant and unpleasant], and in this study, the employees suffer from stress because of lack of support from the management and colleagues.

The above table depicts the various attributes related to stress; work life imbalance is one of the major attribute which contribute to stress for an employee. This can be regarded as a factor building up stress because a lot of employees complained that they were unable to balance both the personal and professional fronts successfully. Extra work pressures and demands from work environment at times led to neglect of personal front.

Table 1. Percentage of respondents who felt that they were stressed.

Category	% of Respondants
Stressed	97
Not Stressed	03

Table 2. Causes Of Stress

Causes of Stress	% of Respondants
Work Overload	21
Lack of Acceptability	07
Time Management	08
Lack of Support	06
Feeling of Inequality	08
Job Difficulty	14
Inadequacy of Role Authority	03
Impatient Customer	19
Stress due to Technological Problem	17

From the above table, it is interpreted that Meditation form an integral part of the science of Yoga, has a direct, positive impact on the mind giving it the strength and power to resist stress. Moreover, around 18 percent of the respondents expected that they required recognition as acknowledging people's value is especially important in times of stress. Based on the analysis; the initiatives taken by the banks to reduce stress are by providing good ambience, continuous training, proper communication and conducting effective stress management programmes.

FINDINGS OF THE STUDY

About 97 % of the respondents belived that they face high level of stress, which may be due to both professional and personal reasons

The respondent were overburdened with work load in their work place

Work life imbalance is one of the major attribute which contribute to stress for an employee.

The researcher identified few initiatives for effectively handling stress. Meditation was found to be the integral part of life to reduce stress.

Table 3. Various Attributes of Stress

Various Attributes of Stress	% of Respondents
Communication Gap	14
Lack Of Skills	05
Work Life Imbalance	46
Work Environment	14
Unmatched Expectations	08
Economic Status	07
Resources Inadequacy	06

Table 4. Initiatives for handling the Stress Levels of the Bank Employees.

Initiatives of Stress	% of Respondents
Good Ambience	16
Recognition	18
Continous Training	13
Effective Communication	15
Programme on Stress Management	15
Meditation	23

IMPLICATION OF STRESS

1. Physical problems and health problems like heart diseases, ulcers, arthritis, increased frequency of drinking and smoking, cardiovascular, gastrointestinal, endocrine and other stress related disorders.
2. Psychological and behavioural problems: psychological problems like change of moods, inferiority complex, widespread resentment, reduced aspirations and self esteem, reduced motivation and job skills,
3. Organizational: job dissatisfaction, behavioral problems, production turn over, increased absenteeism, increased accidents, lower productivity,

SUGGESTION AND RECOMMENDATIONS

1. Organize Stress Management Programs for employees.
2. Take adequate steps to redesign jobs, which are taxing to employees' abilities and capacities.
3. Adequate role clarification to be made whenever necessary to eliminate role ambiguity.
4. Introduce more job oriented training programs, which improve employees skill and their confidence to work effectively.
5. Encourage open channel of communication to deal work related stress.
6. Undertake stress audit at all levels in the organization to identify stress area improving conditions of job and alleviating job stress.
7. Introduce 'Pranayam' (Brain Stilling and control of Vital Force) as a holistic managerial strategy to deal with Occupational strategy.

CONCLUSION

The paper includes an analysis of data collected presented it in tabular form along with interpretations. The information collected were also analysed to arrive at proper conclusion.

REFERENCES

H. Selye. "Stress without Distress." Harper and Row Publications, U.S.A., 1974.

M.E. Douglas & D.N. Douglas. *Manage your time, manage your work, manage yourself*. New York: Amacom (a division of American Management Associations), 1980.

Express news service, 2011.

Steve Mc Connell."Brooks law repealed" Ieee software Vol. 16, pp. 6-8, 1999.

Media Report, Press Releases, *RBI Documents*, 2013.

http://www.mindtools.com/pages/article/newTCS_82.htm

S. Cobb, J.R.P. French, R. Van Harrison and S.R. Pinneau. Job demands and worker health. Cincinnati, OH: *National Institute for Occupational Safety and Health*, Publication No. 75-168, 1975.

A. Brook. Mental Stress at Work. *The Practitioner*, Vol. 210, p. 500, 1973.

Risk Perception of Investors In Repeated Gambles—An Empirical Study

Prabha Rajagopalan[1] and S. Gurusamy[2]

Abstract

Risk perception relates to the extent to which one is aware of the risk. Risk attitude determines whether it is judged to be positive (as an opportunity to gain) or negative (a threat of losing). The researcher explores the relationship between risk aversion and personality traits and to examine the risk-perception of retail investors in repeated gambles. Various statistical tools such as Simple percentage analysis, Factor analysis by principal component method has been applied to reduce the number of psychological biases and personality traits into ten meaningful factors and seven meaningful factors respectively. Correlation analysis matrix has been derived to determine the relationship between risk aversion, psychological bias and personality traits. One way Analysis of variances is undertaken between seven personality traits and ten psychological biases. Results indicates that Among the ten psychological biases identified in the study, Illusion of control and socio conformity bias are the foremost biases which are influenced by the eight proposed independent variables viz., Gender, Age, Marital status, Occupation, Income, Time spent for analysis, Number of trades performed per month, Percentage of shares held for speculation, Investment experience and annual rate of return on equity.

Keywords: *Illusion of control, Risk aversion, Personality traits, Risk taking, Risk propensity, Correlation analysis matrix*

INTRODUCTION

Risk is defined as the probability of decision outcomes in the context of expected utility theories which has been applied in financial decision making. Risk taking is domain specific. Weber, Blais and betz assert that at an individual level, risk taking in one domain (e.g. the financial domain) has little or no relationship with risk taking in another domain (e.g. the social domain). Risk taking is mediated by risk perception, risk attitude and risk propensity. Risk perception relates to the extent to which one is aware of the risk. Risk attitude determines whether it is judged to be positive (as an opportunity to gain) or negative (a threat of losing). Risk propensity refers to the extent to which one intends to take or avoid the risk. Risk propensity relates to habitual or routine ways of handling risky situations. These routine patterns

1 Department of Corporate Secreataryship, DG Vaishnav College, Chennai, India
2 Department of Commerce, University of Madras, Chennai, India

persist over time. Risk taking is also moderated by the person and situational factors.

Individual who has been risk averse in the past are likely to continue to make cautious decisions whereas investors who have been risk seeking in the past are likely to continue to make risky and adventurous decision. Yet a pattern of risk taking will not persist when it is proven unsuccessful. Positive outcomes will allow decision makers to remain stable whereas negative outcomes will induce them to change their strategies. Most of the individuals take risk in order to reap some psychological or material benefit but not for the sake of risk itself.

Risk Aversion and Personality Traits

To measure the link between personality factors and risk aversion the revised scales of Big five personality dimensions has been adapted in the current study. For measuring the risk aversion of retail investors in Chennai City, three items have been used with Five Point Likert's type response (viz. Strongly disagree, disagree, neutral, agree, strongly agree). These items were reworded to make them situation specific to assess investor behaviour and personality type.

RISK PERCEPTION

Risk perception is an indispensable component of financial decision making and other risk taking behaviour. It encompasses an assessment of the degree of situational uncertainty, controllability of that uncertainty and the confidence in these estimates. It is basically a cognitive assessment but influenced by affects such as fear, regret and optimism and susceptible to many biases such as over confidence, self attribution bias and illusion of control, In addition, risk taking is multidimensional phenomenon involving personality correlates, self regulating processes and the most cognitive aspects of decision making. It can be viewed as focussed towards 'fear of failure' as well as 'fear of losses'. In this study, the sample respondents perceive that they are risk averse in financial decisions.

To measure the link between personality factors and risk aversion, the revised scales of Big Five personality dimensions has been adapted in the current study. Risk aversion is investigated through three items with likert's five point response (type). These items have been reworded to make them and personality type of the respondents.

Research Methodology

The methodology of the study is based on primary data collected through well framed and structured questionnaire to elicit the perception of retail investors in the share market. Simple random sampling has been used to collect responses from the retail investors. The study has been conducted in a two stage format with preliminary pre-testing followed by the main study.

Profile of Retail Investors

Retail investors are individual investors who invest in small quantities. The term investor is generic term that encompasses all market participants. A trader could be seen as a special type of investor who has a very short investment horizon. Traders have a belief in the possibility of earning excess returns from short term security price movements. This is a typical characteristic of day traders and majority of them base their trades on technical analysis. Whereas, investors are usually market participants who have long investment horizon and who self manage portfolios or seek the assistance of independent financial advisors or portfolio managers. However, investors are seen as traders who trade in order to move their wealth from the present to the future.

According to Securities and Exchange board of India (SEBI), retail individual investor means an investor who applies or bids for securities of/ for a value of not more than ₹1,00,000. Retail investors are individual investors who buy and sell stocks on their own account. In India, participation of retail investors in capital market is comparatively low. Retail investors find the stock market activities too complex and difficult to comprehend. A cross-country comparison reveals that Indian investors despite being one of the highest savers in the world do not evince interest in stock market investments (*www.articles.economictimes.indiatimes.com* 26-07-2012).

Study area and period

The study has been conducted among the retail investors of different broking and sub broking firms having several branches in Chennai City. The pilot study was conducted during the period from 1st May, 2011 to 15th June, 2011 while the main study was conducted during the period from 15th July, 2011 to 30th November, 2011.

Selection of Respondents

A heterogeneous sample was adopted to cover a wide variety of demographic group. The prime respondents are the retail investors of share broking firms and sub-broking firms. Since they have numerous branches in Chennai city, care was taken to ensure the selection of retail investors of share market in a fairly proportionate manner.

Questionnaire was also administered to the retail investor participants in the meetings conducted by the Madras Stock Exchange, Bombay Stock exchange, National Stock exchange and Securities exchange board of India. Further, questionnaire was circulated and collected during the regular meetings conducted by the Tamil Nadu Investors Association. The student traders of B-School Institute for Financial Management and Research, Nungambakkam also responded to the primary survey questionnaire.

Sample Size

The retail investor participation in Chennai city is about 1.4 percentage of its population [CDSL Update]. The total sample size of the study is cross verified for representation of the population parameters. Therefore, the researcher profoundly concludes that the sample size of 606 is adequate to conduct the research.

Data Collection

Data for this study was primarily collected through a survey in the form of a questionnaire as well as through research based published data concerning retail investor participation. Primary data refers to data, which is collected for specific purpose and which is required in order to complement secondary data. Secondary data refers to the existing collected and summarized material of the research papers and publications. This data originates from sources such as databases, literature, journals and the internet.

Primary Data

The primary data was collected from the retail clients of share broking firms in person by the researcher through survey method. For a few respondents who were busy during trading hours and those who experienced difficulty in language, responses were collected orally by the researcher in a one-to-one interview manner. A mail survey instrument was also chosen as the method of collecting the self-reported data. Despite potential problems with non-response, mail questionnaires are commonly held as the most efficient means of collecting empirical data. The researcher developed a web page that contained the survey questionnaire and allowed respondents to mail their response to an email account specifically created for this purpose.

Based on the pilot study results, 1200 questionnaires were distributed for the main survey to the respondents in Chennai City. The number of questionnaire collected after sustained follow up was 859. Out of the 859 responses only 606 were complete and suitable for statistical analysis. Out of the total 1200, 341 questionnaires were not returned and 253 were eliminated for inconsistent replies and incomplete answers. Therefore, the exact sample size for this study is 606.

Pilot Study

The pilot study was conducted by distributing 150 questionnaires to retail investors of various broking firms in Chennai city but only 100 responses were suitable to be taken up for testing the internal consistency and reliability of the constructs. Cronbach alpha test was used to determine the degree of consistency among the multiple measurements of each factor. It measures the inter-item reliability of a scale generated from a number of items.

Ideally, the reliability coefficient above 0.5 is considered acceptable as a good indicator of construct reliability, above 0.6 is treated satisfactory, but alpha above 0.7 is considered sufficient (George and Mallery, 2001). These alpha values are statistically significant to ensure a smooth normal distribution and to justify the sample statistics for the representation of population parameters. Further, during the pilot study, the respondents expressed difficult to comprehend certain questions and give responses. Such issues were redressed to make the questionnaire fully refined for the main study.

Data Analysis

The primary data collected through the questionnaire is analysed using the SPSS-V 15 (Statistical Package for Social Sciences) computer packages. The statistical tools used for data analysis based on the data enumerated from the questionnaire are as follows.

- Simple percentage analysis is used to describe the sample unit considered for the research.
- Factor analysis by principal component method has been applied to reduce the number of psychological biases and personality traits into ten meaningful factors and seven meaningful factors respectively
- Correlation analysis matrix has been derived to determine the relationship between risk aversion, psychological bias and personality traits
- One way Analysis of variances is undertaken between seven personality traits and ten psychological biases

FACTOR ANALYSIS OF PERSONALITY TRAITS OF RETAIL INVESTORS

The factor analysis of the psychological biases and personality traits is conducted by means of exploratory factor analysis. Factor analysis is used to summarize a set of variables into a smaller set of factors by means of the inter correlation between variables (Pallant). Within the broad spectrum of factor analysis, this study made use of principal axis factor analysis which rotates the data such that maximum variabilities are projected onto the axes (Pallant; Tabachnick and Fidell, 2001). In deter-mining the number of factors to be extracted, the Kaiser eigenvalues greater than one criterion is considered (Pallant, 2007).

As a first step towards an exploratory factor analysis, a principal component analysis was conducted in order to determine the underlying dimensions of psychological biases and personality traits of retail investors of share market in Chennai City. Seven principal components were constructed out of the personality traits using the Kaiser's varimax rotation technique which explains 54.926 % of the total variance which shown in Table 1.

Therefore, the researcher appropriately moved third variable to the fifth component factor to give value addition and variances for the fifth factor and deleted the eleventh variable. The seven components resulting from factor analysis of personality traits are described as follows:

The variables in Table 2 relate to individuals who are assertive, energetic, stimulated and excited with people around. They possess positive emotions and are venturesome to accomplish their ambitions (Watson and Clark, 1997). Conversely, individuals scoring low on the above traits are reserved and independent. They perform things at even pace and prefer to remain in their own company. They correspond to the personality trait extroversion in the big five personality inventory. Hence, factor I is labeled as gregariousness.

Table 1. Rotated component matrix for personality traits

Components	Eigen value	% of variance explained	Cumulative variance
I	3.376	13.503	13.503
II	2.895	11.581	25.084
III	1.603	6.411	31.495
IV	1.473	5.894	37.389
V	1.268	5.071	42.460
VI	1.075	4.299	46.759
VII	1.023	4.093	50.852
VIII	1.019	4.074	54.926

Source: Computed data

Table 2. Factor I Gregariousness

Variables	Factor loading
I really enjoy talking to people	.804
I am cheerful and high spirited	.804
I am very active	.715
I avoid social gathering	.411

Source: Computed data

The variables in Table 3 relate to individuals who are prone to anxiety; feel unsure and worried about their investments and trading decisions. Such individuals respond emotionally to market events and become easily tensed leading to erratic decisions. Due to their subjective feeling and insecurity, they experience negative emotions and thus enter and exit trade on whims of emotions. Additionally, unstable emotions make them less dependable. They correspond to the personality factor high neuroticism of the big five personality inventory. Hence, factor II is described as Self-consciousness.

The variables in Table 4 indicate that the sample respondents perceive them as risk-averse and risk-avoiders. It shows that investors neither prefer nor have willingness to bear risk to achieve desired outcome in the stock market. They are found to be risk averters as they want to avoid risk and choose the safer option in making the decision. Majority of the investors take risk in order to reap some psychological or material benefit not for the sake of risk itself. This is supported by Olsen in his studies, in which most people consider themselves to be risk-avoiders rather than risk-takers. Similar results were reported by Audrey Lim Li Chin in his study where investors tend to be cautious in exercising choice towards investment while judging risk-return relationship. It is expected that their tendency to be risk-averse has exacerbated due to the major losses they had experienced before. Therefore, factor III is labeled as Risk-aversion.

Table 3. Factor II Self- consciousness

Variables	Factor loading
I am often tensed	.737
When I fail, I consider giving up	.715
Sometimes I am not dependable	.601

Source: Computed data

Table 4. Factor III Risk aversion

Variables	Factor loading
I do not prefer to take risk	.805
I avoid risk totally	.687
I choose low risk-steady return over high risk high returns	.583

Source: Computed data

The variables Table 5 deal with individuals who are thoroughly organized, achievement-striving, efficient and adhere to moral precepts. They are self-disciplined and persevering. Conversely, individuals who are low on these variables tend to be hedonistic, distractible in their efforts, careless towards responsibilities and disorganized (Haslam, 2007). They correspond to the personality trait conscientiousness in the big five personality inventory (Costa & McCrae). Hence, factor IV is named as Diligence.

The variables in Table 6 represent individuals who are emotionally stable. They have good emotional control during stressful conditions of trading and are less prone to irrational ideas. They are generally calm and collective under pressure (Hans Eysenck), remain even-tempered and composed (Taylor and de Bruin). They are predisposed to adopt practical approach towards market and not capitulated to temptations and desires (McCrae and Costa). They correspond to the personality factor low neuroticism of the big five personality inventory (Costa & McCrae). Hence, factor V is labeled as Pragmatism.

The variables in Table 7 represent individuals who possess inquiring intellect, vivid imagination resulting in creative ideas. They have broad interest domains and appreciate aesthetics (Trapnell). Alternately, individuals low on these traits is conventional and conservative. They have

Table 5. Factor IV Diligence

Variables	Factor loading
I approach my task meticulously	.732
I perform each aspect of a job in the best manner	.684
I apologise on failure to do my work	.638

Source: Computed data

Table 6. Factor V Pragmatism

Variables	Factor loading
I analyse market action to respond aptly	.653
I do not trade by gut feeling	.626
I take market setbacks as cost	.588
I feel worthless in trading	.437

Source: Computed data

narrow interest and remain comfortable with familiar experience and are unwilling to explore new experience (Taylor and de Bruin). They relate to the personality trait openness to experience in the big five personality inventory (Costa & McCrae). Hence, factor VI is labeled as Aesthetic.

The variables in Table 8 stated measure individuals who are empathetic, helpful and considerate (Taylor and de Bruin).They are concerned with individual's interpersonal orientation. (Pervin and John). Conversely, individuals who are low on them are indifferent, hostile (Haslam, Pervin and John), manipulative and self centered (Taylor and de Bruin). They correspond to the personality trait agreeableness in the big five personality inventory (Costa & McCrae). Hence, factor VII is named as Altruism.

FACTOR ANALYSIS FOR PSYCHOLOGICAL BIAS

The variables covered in the survey capture ten psychological biases exhibited by the retail investors in Chennai city. Table 9 shows the ten principal components which are constructed out of psychological biases using the varimax rotation technique that explain 54.481 % of the total variance. The variables in Table 10 relate to the investor who is motivated to promote positive self views rather than negative self views of themselves (Taylor and Brown). He strives systematically to promote the perception that others think well of him (Shrauger). It stems from over confidence (Martin Glaser and Martin Weber) of the investors which is manifested in the form of illusion of knowledge (H.K Baker and J.R. Nofsinger,), illusion of control (Presson and Benassi), better than average effect.

Retail investors in Chennai City overestimate the accuracy of their own judgment towards stock market which is amplified because others seek information from them regarding investment. Further they are overly confident about their stock picking skill and claim to be self disciplined to fix stop loss limits while trading. It is evident that familiarity towards trading, access to information increases their confidence and induces them to enhance their self image. Therefore, factor I is labeled as Self-enhancement bias.

Table 7. Factor VI Aesthetic

Variables	Factor loading
I often try new and strange food	.667
I am inquisitive	.612
I seek thrill	.535

Source: Computed data

Table 8. Factor VII Altruism

Variables	Factor loading
I often argue	.644
People think that I am cold and calculative	.628
I am thoughtful and considerate	.434

Source: Computed data

Table 9. Rotated component matrix for psychological biases

Components	Eigen value	% of variance explained	Cumulative variance
I	4.351	13.597	13.597
II	2.326	7.270	20.867
III	2.077	6.490	27.356
IV	1.450	4.531	31.887
V	1.353	4.229	36.116
VI	1.293	4.039	40.156
VII	1.259	3.934	44.090
VIII	1.147	3.585	47.676
IX	1.128	3.526	51.202
X	1.050	3.280	54.481

Source: Computed data

Table 10. Factor I Self enhancement bias

Variables	Factor loading
I have the ability to cut losses	.752
I am more knowledgeable than average investor	.679
Often, I am able to pick winning stocks	.661
I am familiar with trading process	.553
I have access to vast amount of information	.543
Others seek information on stock from me	.517

Source: Computed data

The variables in Table 11 indicate that the sample respondents in Chennai prefer to be exposed to information that is supportive of their current beliefs rather than to non supportive information which presumably could arouse dissonance. The investors are prone to inconsistent thoughts and action leading to disharmony which has to be balanced. Further they are anchored to their preconceived ideas and they ignore any information which is incompatible with their preconceived notion. They interpret new information as confirmation to their prior held beliefs. It reveals that these investors are prone to intrapersonal conflict between their objective self and subjective self. While objective self encourages rational thoughts and decisions subjective self induces instinctive and myopic action to protect self image. They try to change their original thought or accept the new thought or rationalize their action to resolve the conflict.

Investors face and handle two consistent realities in the market. On the one hand markets cannot be controlled or predicted and on the other virtually any trader or investor has to try to predict market movements. In such a situation to reduce the dissonance investors pay attention to the evidence that confirms favorable propositions and discount evidence against such propositions. Generally investors agonize over whether they have exercised right choice in trading and investment decisions. Often being plagued with regrets and second thought after tough choice, they automatically seek information that vindicate their decision and allays nagging doubts to reduce dissonance. Therefore, a good way to reduce such dissonance is to seek exclusively positive information on the decision and avoid negative information about it. Thus, factor II is named as Cognitive dissonance.

Table 11. Factor II Cognitive dissonance

Variables	Factor loading
I ignore information contradicting my belief	.694
I look for information supporting my belief	.692
I brush aside negative information about stock	.663

Source: Computed data

The variables in Table 12 reflect the investor's tendency to choose familiar stocks rather than unfamiliar ones. It indicates that the sample respondents have distaste for ambiguity as uncertainty accompanies risk. Individuals are averse to ambiguity, as they cause irrational choices (Ellsberg), emotional tendency such as fear towards risky choices. Individual investors are likely to express ambiguity aversion because of obvious absence of identifiable parameters of the decision problem which often associated with higher risk and possibly lead to hostile manipulation. Further, retail investors prefer gamble that give them a sense of understanding or competence. Hence factor III is described as Ambiguity aversion.

The variables in Table 13 imply that sample respondents exhibit unrealistic perception of their control in trading and investment decisions. This bias basically emerges in investors due to their over confidence. So they underestimate the size of the risk they are undertaking and assume large risks (Terrance Odean). These investors own responsibility for the outcome both for profits and losses. It is evident few investors do not conform to the group behaviour yet, over-confident in their ability and skills to outperform the market. The traders and investors's familiarity with the trading process, the competition they face, the choice they

Table 12. Factor III Ambiguity aversion

Variables	Factor loading
I prefer familiar stock to the unfamiliar	.753
I prefer certain over uncertain	.746

Source: Computed data

Table 13. Factor IV Illusion of control

Variables	Factor loading
I own responsibility for my decisions	.752
Following the crowd is not always correct	.512
I have experienced both positive and negative outcomes	.466
Good results are due to my investment skills	.416

Source: Computed data

could exercise, the information they possess and their personal involvement causes illusion of control. They behave as if the stock market situation is determined by their skill and they could exert control over price movements.

Further sample respondents have a preference for control so they adopt online trading terminal to trade than someone else doing it for them or they watch live updates and order transactions to the broker through phone. These investors substantially overestimate their degree of control though it is chance determined event and caught under the illusion that they were instrumental if the outcome turns out successfully. Hence factor IV is named as Illusion of control.

The variables in Table 14 capture the retail investor's tendency to extrapolate the recent trends in stock prices while forming expectations about future stock returns. They expect stock prices to continue the recent trend, predicting higher returns following price rallies and lower returns after price decline (Vissing-Jorgensen). It indicates that certain investors in Chennai are trend chasers thereby reflecting their over optimism towards past winners and pessimism about past losers. They strongly believe that by extrapolating historical price pattern they can suggest future movements of the corresponding shares (Sheen and Kendall). The need to spend resources on tracking price trends, volume and numerous other gauges of demand for equities is emphasized because it is the investor's sentiment which moves prices rather than economic fundamentals. Further, investors think that good companies represent good investment and expect the good companies to continue their superior perfor-mance in the future (Shefrin and Statman; Solt and Statman). Therefore, factor V is labeled as Extrapolation bias.

Table 14. Factor V Extrapolation bias

Variables	Factor loading
Past performance of stocks indicate future price trend	.798
Good companies sustain high growth levels achieved in the past	.723
Good companies do not always make good investment	.604

Source: Computed data

The variables in Table 15 measure investors tendency to attribute internal factors viz. their own ability, effort and skill for successful out-comes, conversely ascribe external uncontrollable factors such as market events and circumstances for unfavourable outcomes. Although, investors perceive that all information about financial market is readily available, the preponderance lies in the direction of self serving biases. They contend that they have adequate training, experience and skills to interpret information in an unbiased manner. They tend to give them-selves too much credit when trades go their way as it promotes ego enhancement but rationalize situations that lose money since it is ego threatening. They are likely to become over confi-dent after a string of winning trades, raise their trading frequency or size and place themselves at risk, jeopardising their performance. It shows that investors do not own losses and gain with equal fervor. So, factor VI is labeled as Performance attribution bias.

The variables Table 16 imply that the sample respondents are more willing to bet on their own judgment because they are skillful and know-ledgeable in trading and investment field. It is likely that educational background and other demographic characteristics make some investors feel more competent than others in understanding an array of financial instruments, information and opportunities available in the stock market. The competency effect posits that individuals' willingness to act on their own judgment is affected by their subjective competence, which induces them, to turndown alternate methods. Further they claim that critical analysis is not necessary for efficient investment decisions. Thus, factor VII is named as Competency bias.

Table 15. Factor VI Performance attribution bias

Variables	Factor loading
All information on financial market is readily available	.669
My investment losses are due to unpredictable factors	.540
I have the training, experience and skills required to interpret information	.442

Source: Computed data

The variables in Table 17 measure the perceived potentiality of investors towards information collection, segregation and com-pilation in terms of its utility towards trading decisions. The respondents perceive although more information leads to better decision, the time frame is too short to consider all information. They possess positive illusion that more information increases their knowledge but the fact is that they lack the necessary training, experience and skill to interpret the information. Moreover, the time and cognitive resources often are limited to analyse the data optimally (David Hirshleifer).

Investors lay more emphasis on the quantum of information rather than the factors such as relevance, reliability, speed, anticipated market surprise, and expected market impact which is rated foremost in judging the efficacy of information (Oberlechner and Hocking). In addition retail investors are unaware of the latent effect that increased amount of information leads to illusion of control and overconfidence (Nofsinger; Peterson and Pitz). Therefore, factor VIII is labeled as Information Overload bias.

The variables in Table 18 indicate that the sample respondents are motivated to conform to social norms in their trading and investment decisions. They use evidence of other's behaviour to decide most effective course of action when the situation is novel, ambiguous and uncertain. They seem to follow other's leads to avoid loss or to grab profitable opportunities as this 'social proof' saves time and cognitive effort (Cialdini). Investors in Chennai associate with social groups because they view group members as trust worthy source of information. It helps them to resolve conflict between one's own senses and perception of others i.e. to seek social approval. Socio-conformity decreases search costs and helps to circumvent their lack of expertise in trading decisions (Margarida Abreu and Victor Mendis). Groups consensus provide simple heuristics to act effectively (Tversky and Kahneman), in situations which evoke ambiguity and uncertainty, for goal attainment and vicarious reinforcement from others provide reward power. Hence, factor IX is named as Socio-Conformity bias

The variables Table 19 relate to the perception of investors to erroneously believe in mean reversion of prices i.e. they believe today's losers will outperform today's winner likewise today's winners would be losers of tomorrow. So they sell winners and buy losers. As far as valuation is concerned they exercise their choices in terms of potential gains or losses relative to the purchase price. So they are risk averse in the domain of gain and risk seeking in the domain of loss. These investors stick to previous unsuccessful actions because they feel the need to justify or rationalize their decisions. They are reluctant to admit that the prior decisions were incorrect (Zuchel). They sell winning stocks to realize gains, implying that they have made a good initial decision. Further,

Table 16. Factor VII Competency bias

Variables	Factor loading
Critical analysis is not required for investment decisions	.699
I do not consider alternative methods	.635

Source: Computed data

Table 17. Factor VIII Information Overload bias

Variables	Factor loading
More the information better the forecast	.718
Time constraints prevent considering all information	.526

Source: Computed data

Table 18. Factor IX Socio conformity bias

Variables	Factor loading
I discuss about stocks often with my friends	.648
I act on others' behavior to grab profit opportunities	.535
I follow the herd to avoid loss	.461

Source: Computed data

Table 19. Factor X Disposition effect

Variables	Factor loading
I tend to sell stocks that go up in value	.637
Often I hold stocks that have lost value	.502

Source: Computed data

realizing profits early allows them to maintain self-esteem while realizing losses causes them to admit an implicit erroneous investment decision. Thus they hold on to losers (Martin Vlcek). Hence, factor X is named as Disposition Effect.

RISK PERCEPTION OF INVESTORS IN REPEATED GAMBLES

The Frequency distribution for measuring the behavior of investors during prior gain or prior loss in a gambling situation with two options was givento the respondents. The investor preference towards their options in the sample unit is presented in the following table.

The findings of the repeated gamble are consistent with the prospects theory. Table 20 indicates that 51% of the sample respondents with an initial gain opt for the first choice while 49% are contented with initial gain and do not prefer further gain or loss. The gain contributes to house money and thus investors are more likely to assume high level of risk (Kim and Nofsinger, 2008). The initial win is denoted as house money which prompts them to seek risk in winning situation. This implies that they are risk seeking in winning situations.

Table 21 shows that 46% of the sample respondents who begin with an initial loss exercise the first option of gamble whereas 54% of them prefer no further gain or loss. This evidence is referred as snake bite effect and is consistent with studies done by Audrey Lim Li Chin (2012). After experiencing a loss, investors are less willing to take risks. (Odean, Strahilevitz and Barber).

Table 22 reveals that 40% of the sample respondents who begin with an initial loss exercise the first choice of gamble while 60% of them opt for the second choice with a sure gain. Even if the gamble offers them a chance to break even, it does not stimulate retail investors of Chennai to seek risk. They continue to exhibit risk-averse characteristics. This finding is contrary to the result of Thaler and Johnson who examined MBA students with real money gamble and found that 60% of their respondents opted for the chance to gamble so as to break even rather than the sure gain of ₹10, which only 40% resorted to opt.

RISK AVERSION

The correlation analysis result between personality trait identified and risk aversion is presented in the table below.

From Table 23, it can be observed that self conscious personalities of the sample respondents exhibit strong correlation of r=0.247 towards risk aversion. This personality is predisposed to experience negative emotion anxiety and depression. They attend to and weigh negative outcomes; over estimate the probability of losses relative to probability of gains. Further, focus on prevention of losses rather than striving to promote gains and are characterised for propensity to avoid risk, hence take few or smaller financial risk.

Table 20. Percentage analysis of investor behaviour during gamble I

Option	Freq	%
You have just won Rs. 30. Now choose between		
A 50% chance to gain Rs. 9 and a 50% chance to lose Rs. 9 or	308	51
No further gain or loss	298	49
Total	606	100

Table 21. Percentage analysis of investor behaviour during gamble II

Option	Freq	%
You have just lost Rs.30. Now choose between		
A 50% chance to gain Rs. 9 and a 50% chance to lose Rs. 9 or	281	46
No further gain or loss	325	54
Total	606	100

Source: Computed data

Table 22. Percentage analysis of investor behaviour during gamble III

Option	Freq	%
You have just lost Rs. 30. Now choose between		
A 33% chance to gain Rs. 30 and a 67% chance to gain nothing or	242	40
Sure gain of Rs. 10	364	60
Total	606	100

Source: Computed data

Diligent respondents are prone to risk aversion with a strong correlation of r=0.127 since they are unwilling to venture failure even in low stakes situation (McGhee *et al.*, 2012). They have a strong desire to be correct in their trading and financial decisions. This is also consistent with the finding of Nicholson *et al.*, who reported that high diligent investors are typically associated with risk aversion.

Gregarious personalities are not correlated to risk aversion (r=-0.007) which indicates that they are neither risk averse nor risk seekers. Morse argued that there was no relationship between self reported risk level and overall risk level (i.e., between sensation seeking and actual levels of risk taking). Moreover, using participation in sports as a proxy for sensation seeking did not have significant effect on risk preferences.

Aesthetic and gregarious investors are high sensation seekers who possess intense stimulation and need for arousal. Thus, they take more and larger risk. Findings in this study is inconsistent with personality literature since the questionnaire was circulated post global crisis when economic recession set into the economies worldwide and in India too. Therefore, respondents who benefitted from the favourable returns in periods of economic upswing ran into problems and confronted unsustainable losses due to the recessionary trend. Perhaps the personalities viz., pragmatic, aesthetic, altruistic were unsuccessful in their stock market dealings which caused a change in strategy from routine risk taking to risk averse tendency. Thus, these personalities exhibit strong correlation towards risk aversion.

INVESTORS RISK PERCEPTION DURING REPEATED GAMBLES AND ITS INFLUENCE ON PERSONALITY TRAITS AND PSYCHOLOGICAL BIASES

The influence of risk perceptionof investors during repeated gambles on personality traits and psychological biases is more appropriate to study and to derive microscopic information about psychological changes and behavioural changes in the personality of the retail investors. This context is analysed through one way ANOVA for seven personality traits and ten psychological biases found out by the researcher.

From Tables 24 & 25, it is found that the sample respondents differ in risk perception towards repeated gambles depending on the personality traits and the psychological biases they are susceptible. In the first gamble, the

Table 23. Correlation between personality traits and risk aversion

Personality trait	Self conscious	Pragmatic	Diligent	Aesthetic	Altruistic	Gregarious
Risk aversion(r value)	0.247**	0.134**	0.127**	0.116**	0.156**	-0.007

Source: Computed data

Table 24. Influence of personality traits on risk perception during gamble I

Personality trait	Source	Sum of squares	df	Mean square	F	Sig. level
Self consciousness	Between groups	3.925	1	3.925	5.197	.023
	Within groups	456.092	604	.755		
	Total	460.017	605			
Aesthetic	Between groups	7.014	1	7.014	15.308	.000
	Withingroups	276.738	604	.458		
	Total	283.752	605			
Risk aversion	Between groups	3.066	1	3.066	3.939	.048
	Within groups	470.041	604	.788		
	Total	473.107	605			

Source: Computed data

differences are significant for self consciousness (F=5.197, p=.023) Aesthetic (F=15.308, p=.000), risk aversion (F=3.939,p=.048) and those respondents who subject them to information overload bias (F=7.961, p=.005). The difference in their risk perception and its influence on personality traits and psychological bias is estimated through mean comparison. It can be observed that out of total sample unit 606, 308 (51%) of the investors who exercise the first option of chance situation are moderately self conscious (mean=3.1364), moderately aesthetic (mean=3.1623), less risk averse (mean=2.9729), are prone to moderate information overload bias (mean=3.6607). Contrarily 298 (49%) of the investors who are happy with the initial outcome profit and thus do not prefer further gain or loss are less self conscious (mean=2.9754), less aesthetic (mean= 2.9471), moderately risk averse (mean=3.1152) and prone to moderate information overload bias (mean=3.4681).

From Tables 26 & 27, it is found that in the second gamble, the difference in risk perception is significant for sample respondents who exhibit self consciousness (F=7.904, p=.005), cognitive dissonance (F=4.782, p=.029), competency bias (F=5.582,p=.018), information overload bias (F=6.073,p=.014), Socio conformity bias (F=8.306,p=.004) and disposition effect (F=6.464,p=.011). The difference in their risk perception and its influence on personality traits and psychological bias is estimated through mean comparison. Further, it can be observed that out of total sample unit 606 investors, 281 (46%) of them who exercise the first option of chance situation are moderately self conscious (mean=3.1637) and are prone to moderate cognitive dissonance (mean=3.2147), moderate information overload bias (mean=3.6566), low socio conformity bias (mean=2.9929) and moderate disposition effect (mean=3.4093). Alternatively, 325 (54%) of the investors who exercise the second option of no further gain or loss are less self conscious (mean=2.9651) and exhibit moderate cognitive dissonance (mean= 3.0646), moderate information overload bias (mean= 3.4877), low socio conformity bias (mean= 2.7677) and moderate disposition effect (mean= 3.2262).

From Tables 28 & 29, it is observed that in the third gamble, the difference in risk perception during repeated gambles is significant for respondents who display self consciousness (F=23.611, p=.000), self enhance-ment bias (F=5.245, p=.022), cognitive dissonance (F=4.770, p=.029), ambiguity aversion (F=7.867, p=.005) and competency bias (F=6.034, p=.014). The difference in their risk perception and its influence on personality traits and psychological bias is estimated through mean comparison. Further, it is found that out of total sample unit 606 investors, 242 (40%) of them who exercise the first choice of chance situation are moderately self conscious (mean=3.2645) and exhibit moderate self

Table 25. Influence of Psychological bias on risk perception during gamble I

Psychological bias	Source	Sum of squares	df	Mean square	F	Sig. level
Information overload bias	Between groups	5.678	1	5.618	7.961	.005
	Within groups	426.242	604	.706		
	Total	431.860	605			

Source: Computed data

Table 26. Influence of personality traits on risk perception during gamble II

Personality trait	Source	Sum of squares	df	Mean square	F	Sig. level
Selfconsciousness	Between groups	5.942	1	5.942	7.904	.005
	Within groups	454.075	604	.752		
	Total	460.017	605			

Source: Computed data

Table 27. Influence of Psychological bias on risk perception during gamble II

Psychological bias	Source	Sum of squares	df	Mean square	F	Sig. level
Cognitive dissonance	Between groups	3.395	1	3.395	4.782	.029
	Within groups	428.800	604	.710		
	Total	432.195	605			
Competency bias	Between groups	4.986	1	4.986	5.582	.018
	Within groups	539.529	604	.893		
	Total	544.515	605			
Information overload bias	Between groups	4.299	1	4.299	6.073	.014
	Within groups	427.561	604	.708		
	Total	431.860	605			
Socio-conformity bias	Between	7.642	1	7.642	8.306	.004
	Within groups	555.697	604	.920		
	Total	563.339	605			
Disposition effect	Between groups	5.052	1	5.052	6.464	.011
	Within groups	472.064	604	.782		
	Total	477.116	605			

Source: Computed data

Table 28. Influence of personality traits on risk perception during gamble III

Personality trait	Source	Sum of squares	df	Mean square	F	Sig. level
Self consciousness	Between groups	17.306	1	17.306	23.611	.000
	Within groups	442.711	604	.733		
	Total	460.017	605			

Source: Computed data

Table 29. Influence of Psychological bias on risk perception gamble III

Psychological bias	Source	Sum of squares	df	Mean square	F	Sig. level
Self enhancement bias	Between groups	2.406	1	2.406	5.245	.022
	Within groups	277.113	604	.459		
	Total	279.519	605			
Cognitive dissonance	Between groups	3.387	1	3.387	4.770	.029
	Within groups	428.809	604	.710		
	Total	432.195	605			
Ambiguity aversion	Between groups	7.027	1	7.027	7.867	.005
	Within groups	539.532	604	.893		
	Total	546.559	605			
Competency bias	Between groups	5.386	1	5.386	6.034	.014
	Within groups	539.129	604	.893		
	Total	544.515	605			

Source: Computed data

enhancement bias (mean=3.5000), moderate cognitive dissonance (mean=3.2259), moderate ambiguity aversion (mean=3.4669) and moderate competency bias (mean=3.0661). Conversely, 364 (60%) of the investors who exercise the second option of sure gain are less conscious (mean= 2.9194) and exhibit moderate self enhancement bias (mean=3.3713), moderate cognitive dissonance (mean=3.0733), moderate ambiguity aversion (mean=3.6868) but low competency bias (mean=2.8736).

CONCLUSION

Among the ten psychological biases identified in the study, Illusion of control and socio conformity bias are the foremost biases which are influenced by the eight proposed independent variables viz., Gender, Age, Marital status, Occupation, Income, Time spent for analysis, Number of trades performed per month, Percentage of shares held for speculation, Investment experience and annual rate of return on equity. Self enhancement bias is influenced by occupation, income, time spent for analysis, number of trades performed per month, investment experience and annual rate of return. Performance attribution bias is influenced by income, time spent for analysis, number of trades performed per month, investment experience and annual rate of return on equity.

REFERENCES

Arvid O.I. Hoffmann, Hersh Shefrin, Joost M.E. Pennings. Behavioral Portfolio Analysis of Individual Investors *http://papers.ssrn.com/sol3/papers.cfm?abstract_id=1629786*, 2010.

Audrey Lim Li Chin, "Psychological Biases and Investor Behaviour: Survey Evidence from Malaysian Stock Market", *International Journal on Social Science, Economics and Art*, Vol. 2, No. 2, pp. 74-80, 2012.

Coval, Joshua D. and Tyler Shumway: Do behavioral biases affect prices?, *Journal of Finance*, Vol. 60, pp. 1–34, 2005.

Da Costa N, Mineto C and Da Silva S. Disposition effect and gender. *Appl. Econ. Lett*., Vol. 15, No. 6, pp. 411-416, 2008.

Daniel Nettle and Bethany Liddle, "Agreeableness is Related to Social-cognitive, but Not Social-perceptual, Theory of Mind", *European Journal of Personality Eur. J. Pers*. Vol. 22, pp. 323–335, 2008.

Goetzmann, William N. and Alok Kumar, "Equity Portfolio Diversification",*NBER Working Paper 8686*, 2001.

Goetzmann, William N. and Alok Kumar, "Why Do Individual Investors Hold Under-Diversified Portfolios?", *Society for Economic Dynamics Meeting Papers*, No. 77, 2005.

Hoffmann, A.O.I., W. Jager and E.J.H.V. Eije. Social simulation of stock markets: Taking it to the next level. *Journal of Artificial Societies and Social Simulation*, Vol. 10, No. 2, 2007.

Kim, K.A. and Nofsinger J.R. "Behavioral finance in Asia." *Pacific-Basin Finance Journal*, Vol. 16, pp. 1-7, 2008.

Menkhoff L., Schmidt U. and Brozynski T. The impact of experience on risk taking, overconfidence, and herding of fund Complementary survey evidence. *Eur. Econ. Rev.*, Vol. 50, pp. 1753-1766, 2006.

O'Keefe, D.J. Persuasion: Theory and research (2nd ed.). Thousand Oaks, CA: Sage, 2002.

Roberts, B.W., Jackson, J.J., Fayard, J.V., Edmonds, G.W. and Meints, J. Conscien-tiousness. In M.R. Leary and R.H. Hoyle (eds.), New York: Guilford Press, *Handbook of Individual Differences in Social Behavior*, pp. 369–381, 2009.

Solt, M. and M. Statman. "Good Companies, Bad Stocks." *Journal of Portfolio Management*, pp. 39-44, 1989.

Stango, Victor and Jonathan Zinman, "Fuzzy Math and Red Ink: When the Opportunity Cost of Consumption is Not What It Seems," *Working Paper*, Dartmouth College, 2007.

Zoghalami, Faten and Hamadi Matoussi, A Survey of Tunisian Investors, *International Research Journal of Finance and Economics*, Issue 31, pp. 66-81, 2009.

Entrepreneurial Orientation and Locus of Control: An Empirical Study of Youths

Amar Kumar Mishra*

Abstract

This paper investigated the influence of gender and locus of control on entrepreneurial orientation. The participants in this study were three hundred fifty students in the age group of 18-25 studying management courses in Uttarakhand. 60 percent were males and 40 percent were females. Dimensions of Entrepreneurial Orientation were analyzed using principal component analysis and three hypotheses were tested using various statistical techniques including independent't' test, and spearman's correlation. The findings showed that a significant difference existed between internal locus of control and entrepreneurial orientation; and there was no significant difference in the entrepreneurial orientation based on gender differences. On the basis of the findings, potential entrepreneurs are advised to take cognizance of their personality since it can go a long way to determine the success or failure of an enterprise.

Keywords: *Entrepreneurship, Entrepreneurial orientation, Locus of control*

INTRODUCTION

There is a saying "there are two certainties in life: death & taxes". In the context of management, it can easily be said that there is another certainty and that is change. From the formula fifties, sensitive sixties, strategic seventies, excellence eighties and nanosecond nineties, it will not be an exagge-ration to say it is entrepreneurship twenty-first century. The dearth in employment has rendered many educated youths unemployed or at least underemployed. Nonetheless, MBA students are increasingly turning to entrepreneurship and the scenario is universal. There is an increased rate of MBA students across developed and developing countries considering the issue of self-employment; whether it is a choice or a necessity for a preparation of new venture (Pietrobelli, Rabellotti, & Aquilina, 2004). A recent Graduate Management Admissions Council survey found that 11 per cent of MBA alumni (who graduated between 1959 and 2013) now run their own businesses. Such an increasing trend is even more evident for developing countries than for developed countries. Business schools are tailoring MBA programmes to ensure they engender the specific skills necessary to start one's own company. While knowledge undoubtedly enhances entrepreneurial skills; the success of a business is due to many factors, and the greatest determinant of a business's success is the entrepreneur him/herself.

* IMS Unison University, Dehradun, Uttarakhand, India

People who start up and run businesses need to know their own strengths and weaknesses because "entrepreneurship involves the ability to build a 'founding team' with complementary skills and talents" (Timmons, 1994). Banks and venture capitalists, as well as consultants, who assist entrepreneurs, stress the importance of the entrepreneur's personality for the success of a business. A deeper understanding of the personality of the entrepreneur is needed for a sound judgment of whether the entrepreneur will carry through the business plan successfully. While many researchers have conducted studies exploring entrepreneurship with various personality traits; little has been done to explore entrepreneurial orientation from the point of view of personality dimensions. More specifically there is dearth of studies in India exploring the impact of personality dimensions on various dimensions of entrepreneurial orientations.

LITERATURE REVIEW

Entrepreneurial orientation has emerged as a foremost construct within the entrepreneurship literature over the last few decades (Drennan, Kennedy, & Renfrow, 2005). Much research has been conducted into the characteristics of successful entrepreneurs and the researchers have identified following characteristics for successful entrepreneurs.

Brandstätter, 1997; Zhao and Seibert, 2006, Rauch and Frese, 2007, Caliendo, Fossen, Kritikos, 2011 examined the relationship between personality traits and entrepreneurship and found that personality characteristics are most important determinants of entrepreneurship.

Ahmed (1985) in a study found that significant relationships exist among risk-taking propensity, locus of control and entrepreneurship.

Rauch and Frese (2000) took individual as the unit of analysis and found that the personality and environmental factors have maximum level of impact on entrepreneurship.

Fairlie and Holleran (2011) investigated effects of entrepreneurship training on individuals and found differential impact based on their personality characteristic.

While many researchers conducted studies exploring entrepreneurship with various personality traits (achievement need, power need, Big 5 traits etc.); little has been done to explore entrepreneurial orientation from the point of view of personality dimensions.

McClelland (1961) noted that entrepreneurs show responsibility for their actions and are innovative, suggesting relationship between control orientation and entrepreneurship on the one hand and creativity on the other.

Perry (1990) found that Internal locus of control has been one of the psychological traits most often posited as predictive of entrepreneurship; Shapero (1975) found that entrepreneurs tended to have an internal focus. Boone, Debrabander and Van Witteloostujin's (1996) found internal locus of control to be associated with performance. Their findings corroborated prior study findings of (Begley and Boyd 1987; Bonnett and Furnham 1991, Nwachukwu 1995) that internal locus of control is an important entrepreneurial psychological trait.

Wolleat (1980) studied the relationship between locus of control, sex and achievement and found that males are more achievement oriented, energetic, and enterprising than females; while Nelson (1991) studied the relationship on females and found that female entrepreneurs have a significantly more internal locus of control than do females in the general population while Bonnet and Furnham (1991) used a three dimensional (Internal, External and Chance) economic locus of control scale developed by Banks (1989) and found a significant difference between the locus of control of a group of student entrepreneurs and a control group.

Levin and Leginsky (1990) used Levenson's (1974) IPC scale and found that entrepreneurial social workers tended to exhibit a greater internal locus of control.

Rupke used both Rotter's I-E scale and Levenson's IPC scale and found entrepreneurs to display significantly higher levels of internal locus of control than the non-entrepreneurs with both measures.

Somewhere every study confirmed Lefcourt and Phares (1976) study that suggested that internal individuals are prone to entrepreneur success than externals as internal persons appear to take more initiative and are responsible in performance situation. They seek and utilize information more efficiently and seem to be more in touch with external realities. They further concluded that externals are less likely to persist at a task since they do not feel that exertion of energy is likely to lead to meaningful results. They have the belief that external determinants, such as fate, luck and powerful others are at work in any situation requiring a need for attainment of goals.

OBJECTIVES

Based on the review of literature; following objectives have been set forth for the proposed study:

- To identify and measure the various dimensions of Entrepreneurial Orientation (EO) among youths.
- To study the relationship of various dimensions of EO with locus of control.
- To study the impact of gender on various dimensions of Entrepreneurial Orientation.

METHOD

Prfesent study employed the use of survey design. The independent variables are gender and personality (locus of control) and the dependent variable is perceived entrepreneurial orientation.

The participants in this study were three hundred fifty youths studying management across various colleges and universities in the state of Uttarakhand, India. 60% were males and 40% were females aged between 18 and 26.

RESEARCH INSTRUMENT

The scale for the study was divided into three sections. Section A measures the demographics; section B is a 23-item scale which measures entrepreneurial orientation with reliability coefficient of 0.79 on a ten point Likert type scoring format ranging from 1 to 10; section C is 24-item Rotter's scale which measures locus of control with reliability coefficient of 0.65. Both scales were thus found to be reliable on the parameter of Nunally.

Table 1. Gender-Wise

Gender	Respondents	%
Female	140	40
Male	210	60

STATISTICAL ANALYSES

The various dimensions of EO were identified through Principal Component Analysis of factor analysis; Hypotheses 2 and 3 were analyzed with independent t-test; hypothesis 1 was analyzed with Spearman's correlation.

DEMOGRAFIC RESULT

As the value of test statistic chi-square is 3753.298, p<.05; the null hypothesis of identity matrix is rejected implying variables in question are correlated. Further KMO > 0.5 implies that sample size is adequate.

Kaiser's rule of retaining factors with eigenvalues larger than 1.00 has been used in this analysis. The eigen values for the first two four components with eigen values of 7.28, 1.739, 1.317 and 1.227 were retained. Thus most of the variance (50.317%) of these variables was accounted for by these four dimensional factor solutions.

In the Principal Components Output, the Rotated Component Matrix gives the correlation of each variable with each factor. From the contribution of the variables (also called a "loading") we can name these factors (i) achievement needs, (ii) urge for innovation, (iii) control on self and (iv) self esteem.

Table 2. KMO and Bartlett's Test

Kaiser-Meyer-Olkin Measure of Sampling Adequacy.		.618
Bartlett's Test of Sphericity	Approx. Chi-Square	3753.298
	df	780
	Sig.	.000

GENDER & ENTREPRENEURIAL ORIENTATION

"An independent-samples t-test was conducted to compare Entrepreneurial Orientation score for male and female respondents. There was no significant difference in the scores for male (M=166.75, SD=14.36) and female (M=163.48, SD=14.68); t (348)=2.264, p=0.291.

Further the independent-samples t-test was conducted to compare every dimension of Entrepreneurial Orientation score for male and female respondents. There was no significant difference in the scores on any dimension for male and female as given in Table 1.

The results accordingly suggest that gender really does not have a significant effect on achievement motive, innovative urges, self-esteem, and personal control and over all Entrepreneurial Orientation. Both male and female youths stand equal opportunity and equal potential for becoming entrepreneur. The descriptive statistics, however suggest that so far as innovativeness is concerned, female have more variance than their male counterparts. This indicates that the majority of female need to be more innovative."

GENDER & LOCUS OF CONTROL

"An independent-samples t-test was conducted to compare LOC score for male and female respondents. There was no significant difference in the scores for male (M=, SD=) and female (M=, SD=); t (348)=–1.154, p=0. 064.

The result thus suggests that gender does not have any significant impact on youth's Locus of

VARIANCE EXPLAINED

Table 3.

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	7.28	31.652	31.652	7.29	31.696	31.696	3.73	16.219	16.219
2	1.73	7.561	39.213	1.73	7.561	39.256	3.34	14.523	30.742
3	1.31	5.726	44.939	1.31	5.726	44.981	2.55	11.099	41.842
4	1.22	5.335	50.274	1.22	5.335	50.317	1.94	8.475	50.317
5	0.98	4.296	54.570						
6	0.89	3.891	58.461						
7	0.80	3.500	61.961						
8	0.78	3.404	65.365						
9	0.75	3.265	68.630						
10	0.71	3.117	71.748						
11	0.68	2.974	74.722						
12	0.67	2.913	77.635						
13	0.61	2.661	80.296						
14	0.57	2.513	82.809						
15	0.54	2.387	85.196						
16	0.52	2.274	87.470						
17	0.50	2.209	89.678						
18	0.45	1.983	91.661						
19	0.42	1.843	93.504						
20	0.40	1.774	95.278						
21	0.37	1.648	96.926						
22	0.36	1.583	98.509						
23	0.34	1.493	100.002						

Communalities

	INITIAL	EXTRACTION
V1	1	0.435
V2	1	0.414
V3	1	0.53
V4	1	0.469
V5	1	0.343
V6	1	0.654
V7	1	0.545
V8	1	0.739
V9	1	0.484
V10	1	0.335
V11	1	0.69
V12	1	0.513
V13	1	0.536
V14	1	0.488
V15	1	0.378
V16	1	0.487
V17	1	0.683
V18	1	0.597
V19	1	0.343
V20	1	0.484
V21	1	0.55
V22	1	0.464
V23	1	0.412

Table 4. Component Matrix

	Component			
	1	2	3	4
VAR18	0.701			
VAR07	0.685			
VAR16	0.679			
VAR13	0.573			
VAR12	0.669			
VAR21	0.658			
VAR14	0.656			
VAR11	0.652			–0.4
VAR17	0.643			
VAR04	0.634			
VAR03	–0.529			
VAR15	0.583			
VAR01	0.585			
VAR05	0.556			
VAR08	0.549	0.401		–0.417
VAR10	0.437			
VAR20	0.436		–0.404	
VAR19	–0.427			
VAR09		0.627		
VAR02		0.548		
VAR22		0.465		
VAR06	562		0.571	0.507
VAR23				

Rotated Component Matrix

VAR18	0.8			
VAR07	0.684			
VAR16	0.647			
VAR13	0.638			
VAR12	0.579			
VAR21	0.55			
VAR14	0.459			
VAR11		0.677		
VAR17		0.661		
VAR04		–0.567		
VAR03		0.523		
VAR15		0.516		
VAR01		0.514		
VAR05		0.496		
VAR08		0.429		
VAR10			0.833	
VAR20			0.747	
VAR19			0.747	
VAR09				0.548
VAR02				0.545
VAR22				0.586
VAR06				0.543
VAR23				0.427

Table 5. Group Statistics

	Gender	N	Mean	Std. Deviation	Std. Error Mean
ACH	M	210	57.10	6.585	1.472
	F	140	54.14	5.379	1.174
INN	M	210	50.85	5.537	1.238
	F	140	49.05	8.084	1.764
SE	M	210	22.95	3.927	0.878
	F	140	20.10	3.254	0.710
PC	M	210	35.85	6.268	1.402
	F	140	33.19	4.434	0.968
EO	M	210	166.75	14.360	3.211
	F	140	163.48	14.682	3.204

Control personality dimension.

LOCUS OF CONTROL AND ENTREPRENEURIAL ORIENTATION

"Spearman's correlation coefficient was also computed to assess the relationship between LOC and various dimensions of entrepreneurship. There was a negative correlation between the two variables, ñ=–0.349, n=350, p=0.006. LOC were inversely correlated with EO score and the degree was significant i.e. overall, there was a significant negative correlation between LOC and EO score."

Further the rho-score was calculated between LOC and each dimension of Entrepreneurial orientation and all coefficients were found to be negative. While there is not much significant relationship between locus of control and self-esteem, nevertheless it is significant with achievement motive, urge for innovation and personal control.

Table 6. Independent Samples Test

	Levene's Test for Equality of Variances		t-test for Equality of Means						
	F	Sig.	t	df	Sig. (2-tailed)	Mean Difference	Std. Error Difference	95% Confidence Interval of the Difference	
								Lower	Upper
ACH	0.446	.508	1.578	348	.123	2.957	1.874	–0.832	6.747
INN	1.970	.168	0.829	348	.412	1.802	2.175	–2.596	6.201
SE	1.268	.267	2.540	348	.152	2.855	1.124	0.581	5.128
PC	1.869	.179	1.575	348	.123	2.660	1.689	–0.757	6.076
EO	0.008	.929	2.264	348	.291	10.274	4.538	1.094	19.454

Table 7.

		N	Mean	S.D.
Male	Internal	131	7.83	2.91
	External	79	12.9	1.22
	Total	240	9.73	3.45
Female	Internal	92	9.48	1.36
	External	48	13.5	1.65
	Total	140	10.85	2.41

Table 8. Independent Samples Test

	Levene's Test for Equality of Variances		t-test for Equality of Means						
	F	Sig.	t	df	Sig. (2-tailed)	Mean Difference	Std. Error Difference	95% Confidence Interval of the Difference	
								Lower	Upper
loc Equal variances assumed	3.669	.058	-1.87	238	.064	-1.154	.616	-2.377	.069

Table 9.

	LOC	EO	ACH	INN	SE
EO	–0.349				
ACH	–0.357	0.862			
INN	–0.255	842	0.525		
SE	–0.061	728	0.453	0.632	
PC	–0.414	0.785	0.577	0.659	0.437

Thus it can be inferred that as one's locus become more externally oriented; the achievement motive, innovative urge and control on self tend to decline.

CONCLUSION

The study shows that a significant difference exist between internal and external locus of control and entrepreneurial orientation and confirms the results of earlier studies that entrepreneurs are more likely to be characterized by locus of control internality than non entrepreneurs (Inegbenebor, 2007). It also shows growing emergence of women entrepreneurs in the society. Entrepreneurship in Northern India had for long a bastion of male. The result that male and female did not differ in entrepreneurial orientation confirms the preponderance of females' aspirations in self-employment activities especially in the growing informal sector of the Indian economy and herald of a new era where women entrepreneur having wings of fire will lead to more equality, equity and empowerment in the society.

Thus it can be concluded that the greatest determinant of a business's success is the entrepreneur herself. People who have the willingness to start up and run businesses should ponder in germane way about their strengths and weaknesses not only on one or two dimensions but on all dimensions to emerge successful.

REFERENCES

Ahmed, S.U., "Risk-taking, locus of control and entrepreneurship''. Personality and Individual differences, 6, 781-782, 1985.

T.M. Begley and D.P. Boyd, "Psychological characteristics associated with performance in entrepreneurial firms and smaller businesses", *Journal of Business Venturing*, 2, 79-93, 1987.

C. Bonnet and A. Furnham. Who wants to be an entrepreneur? A study of adolescents interested in a Young Enterprise scheme. *Journal of Economic Psychology*, 12, 465-478, 1991.

R.H. Brockhaus, The psychology of the entrepreneur. In C.A. Kent, D.L. Sexton and K.H. Vesper (Eds.), *Encyclopedia of Entrepreneurship*, Englewood Cliffs, NJ: Prentice Hall, 39-56, 1982.

M. Caliendo, F. Fossen and A.S. Kritikos, Personality Characteristics and the Decision to Become and Stay Self-Employed, *IZA Discussion Paper No. 5566*, 2011.

P. Drucker, "Innovation and entrepreneur-ship" New York NY: Harger and Row, Publishers, 1987.

R.W. Fairlie, A. Robb. Gender Differences in Business Performance: Evidence from the Characteristics of Business Owners Survey. *Small Business Economics* 33(4), 375-395, 2009.

W.B. Gartner, A conceptual framework for describing the phenomenon of new venture creation. *Academy of Management Review*, 10, 696-706, 1985.

R.D. Hisrich, and M.P. Peters, Entrepre-neurship. Boston: McGraw-Hill, , 2002.

J.A. Hornaday and J. Aboud, "Characteristics of successful entrepreneurs." *Personnel Psychology*, 24: 141-153, 1971.

A.U. Inegbenebor, Pharmacists as Entrepre-neurs or Employees: The Role of Locus of Control. *Tropical Journal of Pharmaceutical Research*, 6(3): 747-754, 2007.

G. Nelson, Locus of control for successful female small business proprietors. *The Mid-Atlantic Journal of Business*, 27, 213-224, 1991.

O.C. Nwachuckwu. CEO locus of control, strategic planning, differentiation, and small business performance: A test of path analytic model. *Journal of Applied Business Research*, 11: 9-14, 1995.

R.H. Rupke, Entrepreneurial potential and assessments. *Personality and Social Psychology Bulletin*, 6, 57-62, 1980.

A. Shapero, The displaced, uncomfortable entrepreneur. *Psychology Today*, 83-88, 1975.

K.G. Shaver & L.R. Scott, Person, process, choice: The psychology of new venture creation. *Entrepreneurship Theory and Practice*, 23-45, 1991.

P.L. Wolleat, "Sex Differences in High School Student causal attributions and performance in Mathematics". *Journal of Mathematics Education*, 11, 356-366, 1980.

H. Zhao and S.E. Seibert, The Big-Five Personality Dimensions and Entrepreneurial Status: A Meta-Analysis Review, *Journal of Applied Psychology,* 91, 259-271, 2006.

Examining Factors of Customer Experience and their Mediating Role in Retail Banking Sector: An Empirical Study

Meenakshi Chandok and N.L. Gupta*

Abstract

This study was conducted within the evolving retail banking industry and investigated customer experience as a possible strategic differentiator in this industry. The paper identifies the critical success factors of Customer Experience which have been identified from the literature survey and through expert's opinion and to find their priorities for success in banking organizations. This, in turn, would help in the enhancement of the relationship between the retail banks and their customers, and thus aid the decision makers of the banks to identify the major factors that determine the satisfaction of their customers. Data from 400 survey respondents(100 each from four banks two public and two private sector banks) were collected from bank branches of Garhwal region of Uttarakhand. The findings suggest that the managers in banking organizations must ameliorate these critical factors according to their weights, in order to attain favourable Customer Experience, sustainable Customer Satisfaction and Customer delight.

Keywords: *Retail banking, customer experience, customer satisfaction, customer motivation, public sector banks, private sector banks, etc.*

INTRODUCTION

The banking industry, as is the case with other financial services industries, is facing a rapidly changing market, new technologies, economic uncertainties, fierce competition, and more demanding customers; and the changing environment has presented an unprecedented set of challenges. In India too, the cross border flows and entry of new players and products have forced banks to adjust the product-mix and undertake rapid changes in their processes and operations to remain competitive. Over the years, Indian banks have expanded to cover large geographic and functional area to meet the developmental needs of their customers. They have been managing a world of information about customers—their profiles, location, etc. They have a close relationship with their customers and a good knowledge of their needs, requirements and cash positions. What our banks, especially those in the public sector, lack is the marketing attitude. What is needed is the effort on their part to improve their service image and exploit their large customer

* Uttaranchal University, Dehradun, Uttarakhand, India

information base effectively to communicate product and/or service availability.

The banking organizations have to rigorously work on the 'touch points' of the customers (Berry and Carbonc. 2007). These 'touch points' are, the experiences of the customers which arc generated when any type of interaction occurs between the customer and the organization (Gentile *et al.,* 2007: Ravizza, 1977). According to Shaw (2005), "The customer experience is a combination of everything you do. or fail to do for that matter, that underpins any interaction with a customer or potential customer".

RETAIL BANKING AND CUSTOMER EXPERIENCE

The first and the foremost challenge for retail banking business is customer retention, to increase the profitability and market share, banks have to pay proper attention in retain their customers. In case of consumer < comprising credit cards and personal loans, the risk weight has increased from 100 percent to 125 percent. Third challenge which arises in front of retail banks is their high dependency on Information Technology (IT) departments

As mentioned above, the first and the foremost challenge the Indian retail banking sector is facing is, the retention of the customer. According to Gerpott *el al.,* (2001). "the phenomenon of customer retention encompasses a degree of fuzziness' since it represents a theoretical construct which cannot be observed directly". It is linked with customer satisfaction and customer loyalty (Homburg and Bruhn. 1998). where customer loyalty is determined by customer satisfaction and acts as a determinant of customer retention (Gerpott *ei al.,* 2001). Though each of these three constructs i.e. customer satisfaction, customer loyalty and customer retention is affected by variety of other factors, but in the existing body of literature customer experience has shown a significant effect on customer satisfaction and loyalty as depicted in Table 2. According to Meyer and Schwager. (2007), customer satisfaction is the resultant of the good minus the bad experiences the customer avails from any organization.

OBJECTIVES OF THE STUDY AND RESEARCH METHODOLOGY

Banking system is the backbone of economy. The working of customer's mind is a mystery which is difficult to solve and understanding customer experience is a challenging task. It is seen that customer experience with the product or services leads to his satisfaction or dissatisfaction. With this in mind, Present Research work has been taken up with the objectives to identify the attributes of customer experience & customer satisfaction of retail banking services and analyze the impact of customer experiences on customer satisfaction derived from retail bank services. It was hypothesized that there is no significant relationship between Customer Experience and Customer satisfaction.

To achieve the above state objectives, both Exploratory and Descriptive type of research has been carried out. Two banks of public sector and two from private sector namely, SBI, PNB, HDFC and ICICI were chosen for the proposed study. A well designed questionnaire was administered amongst the customers of these banks located in Garhwal region of Uttarakhand. Of all the four banks under sample and data obtained was processed and analyzed with the help of analytical & statistical tools, besides, the secondary information was collected from most reliable sources which include—Economics survey, RBI Bulletin, IBA Bulletin, *www.rbi.org.in.*

To measure the customer experience and their satisfaction, primary data of 400 respondents (100 from each bank) from conveniently selected respondents of these four banks located in garhwal region has been taken.

DISCUSSION

Among others, the questionnaire included a segment on customers' profile. This was done because an assortment of demographic and other factors were likely to influence the degree of customer experience on the products and services offered by the bank. Information on demographic features is also useful in formulating the bank's marketing strategy. The demographic profile of the respondents is presented in Table 1.

Table. 1. Demographic profile of the respondents

Description		Frequency (400)	Percent (100)
Gender	Male	256	64
	Female	144	36
Marital status	Married	235	58.75
	Unmarried	165	41.25
Age wise classification	Less than 20	16	4
	21-35	170	43
	36-50	131	33
	51-65	46	12
	Above 65	37	9
Educational Qualification	High school & below	3	1
	Diploma	23	6
	Bachelor Degree	119	30
	Master Degree	202	51
	Professional Degree	53	13
Income	Less than 10,000	27	6.8
	10,001-30,000	103	25.8
	30,001-50,000	134	33.5
	50,001 & above	90	22.5
	None	46	11.5

Demographic characteristics of the respondents presented in the above ttable indicates that in the sample 64% were males and 36% females , 59% were married and 41% were unmarried. Furthermore, sample is the representation of qualified respondents as out of the total respondents only 1% are high school and below, 6% are only diploma holders, 30% are graduates and max that is 51% out of total respondents are post graduates and 13% have a professional degree as well which implies that there is high literacy level among the respondents. With regard to employment status 6.8% have a monthly income less than 10,000, 25.8% have income between 10,000-30,000, majority that is 33.5% earn monthly between 30,000-50,000 , 22.5% of them have income above 50,000 while 11.5% 0f the respondents do not earn (may be students or retired persons).

Referring to the Table 2, Factor 1 having variance 32.8295% represents the elements of the convenient services provided by the bank and is therefore labeled as 'CONVENIENCE'. These elements are the convenient location of banks, convenient operating hours, ATMs at convenient locations, the clear statements sent and proper information provided by banks. Factor 2 with a variance of 5.24475% has all the statements related to the physical appearance of bank as perceived by the customers and therefore has been termed as 'SERVISCAPE', an abbreviated term for bank personality. The elements were the cleanliness, exterior appearance ,physical layout , ambient conditions, and advertisement visuals, its clear cut objective is to attract its customers and build a brand (image) of the bank. The statements that load into factor 3, having variance 4.60481% all were concerned with the attitude and behavior of the bank employees and thus was abbreviated as 'EMPLOYEE WILLINGNESS'. The elements were the friendliness of employees, error free services provided, employees prompt services, willingness to solve problems, empathy and helpullness. Factor 4 having variance 4.30061% consisted of the online functions provided by banks and has been named as 'ONLINE FUNCTIONAL ELEMENTS'. The elements factored were, the ease of login/logout, quick downloading of pages, functioning of web pages and updated websites. Factor 5 having variance equal to 3.96543% was a summation of the elements that are related to attitude of customers with other customers present in the bank and was termed 'PRESENCE OF OTHER

CUSTOMERS. The elements were irritation on presence of other customers, a feeling of social surrounding, number of customers in building reputation, recommendations made by other customers. Factor 6 with a variance of 3.82595% consisted hedonic elements of website and was termed as "ONLINE HEDONIC ELEMENTS" comprising design of website, information architecture of website and understandable language of website. Factor 7 having variance 3.48885% was related to customized retail services and so abbreviated as "CUSTOMISATION". The elements were range of services to meet specific requirements, capability to alter services as customer needs and financial help by bank at time of emergencies. Factor 8 with a variance of 3.00713% was related to the core retail services provided and hence labeled as "CORESERVICE" consisting capability of banks to handle complaints, transactions proper and confidential, employees personal attention, all types of services provided by banks. Factor 9 having variance 2.74589% consisted of elements of value added services provided by retail banks, added valuable services, useful innovative services provided. Factor 10 with a variance equal to 2.58499% was related to timely and speedy attention hence labeled as "SPEED" contained elements waiting period in ques, prompt response to queries , promises made on time. Factor 11 variance equal to 2.58499% was related to promotional efforts made by bank so termed as "PROMOTION" having elements effective promotion of products/services, attractive promotional schemes, competitive prices .Factor 12 with a variance 2.26664% comprised of elements related to security of online services and termed as "ONLINE AESTHETICS". The elements being web pages do not freeze information, feeling of security while transacting online and willingly use of self banking services.

Table 2. Results of the Factor Analysis

Results of Factor Analysis of 50 items of Customer Experience and its 12 Dimensions

Factors and items	Eigen Value	Factor loadings	% of Variance	Cumulative %
Conveniance	16.4148		32.8295	32.8295
The location of the bank is at convenient place		0.682		
The operating hours of bank are convenient & sufficient		0.573		
The atm of bank is at convenient locations		0.546		
The statements and letters sent by bank are clear		0.461		
The bank provides you proper information		0.438		
Serviscape	2.62237		12.2447	45.0742
The cleanliness of bank is excellent		0.592		
The exterieror apperance of bank is visiually appealing		0.629		
The physical layout of equipments and furnishing are comfortable		0.512		
The ambient conditions as temp,ventilation, noise and adour of bank are good		0.602		
The singns, symbols, advertisments, board, pamplets and other artifacts are properly placed		0.625		
Employee Willingness	2.30241		8.60481	53.67901
The employeesof bank are social and friendly		0.625		
The employeesof bank are capable enough to deliver you error free services		0.595		
The employeesof bank delivers prompt services		0.483		
The employeesof bank are willing to solve problem of customers		0.611		
The employeesof bank always help out customers		0.542		

Factors and items	Eigen Value	Factor loadings	% of Variance	Cumulative %
Online functional Elements	2.15031		5.30061	58.97962
You can easily login/logout of bank website		0.557		
The links are problem free, accurate and pages download quickly		0.576		
The functioning of webpages is proper		0.546		
The website of bank posseses up to date and error free information		0.466		
Presence of Other Customers	1.98271		4.96543	63.94505
The presence of other customers in the bank irritates you		0.569		
The presence of other customers in the bank gives you social surrounding		0.621		
The number of customers affects the reputation of bank in your mind		0.602		
The recommendation made by other customers affects you		0.498		
Online Hedonic Elements	1.91298		3.82595	67.7712
The presentation quality of bank website is high		0.521		
The design elements of bank website are innovative		0.634		
The information architecture of banks website is clear		0.657		
The language of banks website is easily understandable		0.642		
Customisation	1.74443		3.48885	71.25985
The bank offfers a range of credit facilities that meets your specific requirements		0.651		
The bank is capable to alter its products/services to meet your needs		0.625		
The bank helps you at the time of financial emergencies	0.63			
Core service	1.50356		3.00713	74.26698
The bank is capable to handle complaints		0.658		
The transactions of account are proper and confidential		0.585		
The employess of bank gives you personlised attention		0.578		
The bank provides all types of services		0.636		
Value addition	1.37294		2.74589	77.01287
The bank offers some type of gift as incentives		0.528		
The additional services provided by the bank are valuable for you		0.514		
Your bank provides useful innovative services		0.656		
Speed	1.2925		2.58499	79.59786
You do’nt have to stand in ques for long time		0.553		
Bank gives prompt responses for your querries		0.645		
Bank delivers its promises on time		0.689		
Promotion	1.21797		2.43593	82.03379
The bank promotes its products/services effectively		0.652		
The promotions of the bank are attractive		0.573		
The bank offers its prouduct/services at competitive prices		0.548		
Online aesthetics	1.13332		2.26664	84.30043
The web pages of the bank donot freeze any information given by you		0.623		
The feel secure while transacting through banks website		0.566		
You try to avail self banking services offered by bank willingly		0.536		

CONCLUSION

The findings of the research provide the practical inferences of the identified customer experience factors, which may be supportive in formulating the strategies essential for the growth of Indian banking sector. In the long run, these strategies could help the banking organizations to attain competitive advantage through customer loyalty, customer retention and positive word of mouth. It is anticipated that the present research work would be very fruitful for the academicians, practitioners, decision makers, managers and future researchers of this arena.

REFERENCES

Alda´s-Manzano, J., Lassala-Navarre, C., Ruiz-Mafe, C. and Sanz-Blas, S., "The role of consumer innovativeness and perceived risk in online banking usage", *International Journal of Bank Marketing,* Vol. 27 No. 1, pp. 53-75, 2009.

Al-Eisa, A.S. and Alhemoud, A.M., "Using a multiple-attribute approach for measuring customer satisfaction with retail banking services in Kuwait", *International Journal of Bank Marketing*, Vol. 27, No. 4, pp. 294-314, 2009.

Berry, L.L., Carbone, L.P. and Haeckel, S.H., "Managing the Total Customer Experience", *MIT Sloan Management Review*, Vol. 43, No. 3, pp. 85-89, 2002.

Brakus, J.J., Schmitt, B.H. and Zarantonello, L., "Brand Experience: What Is It? How Is It Measured? Does It Affect Loyalty?" *Journal of Marketing*, Vol. 73, pp. 52-68, 2009.

Brauer, H., "Financial Services Customer Loyalty", *Finance Week*, Vol. 49, 2005.

Bridges, E. and Florsheim, R., "Hedonic and utilitarian shopping goals: The online experience", *Journal of Business Research*, Vol. 61, pp. 309–314, 2008.

Gentile, C., Spiller, N. and, Noci, G., "How to Sustain the Customer Experience: An Overview of Experience Components that Co-create Value With the Customer", *European Management Journal*, Vol. 25, No. 5, pp. 395–410, 2007.

Hsieh *et al.*, "How to diminish the investment systematic risk?", African, 2008.

Khan & Mahapatra, "Service quality evaluation in internet banking: an empirical study in India", *International Journal of Indian Culture and Business Management,* Vol. 2, No. 1, 2009.

Meyer, C. and Schwager, A., "Understanding customer experience", *Harvard Business Review*, Vol. 85, No. 2, pp. 116-126, 2007.

Nagasawa, S., "Customer experience management: Influencing on human Kansei to management of technology", *The TQM Journal*, Vol. 20, No. 4, pp. 312-323, 2008.

Shaw, C. & Ivens, J. Building Great Customer Experiences. New York: Macmillan, 2005.

Srivastava & Thakur, "Performance Appraisal in Public Sector Banks, A Case of the State Bank of India", *Mangalmay Journal of Management & Technology*, Vol. 1, No. 1, 2006.

Verhoef, P.C., Lemon, K.N., Parasuraman, A., Roggeveen, A., Tsiros, M., Schlesinger, L.A., "Customer Experience Creation: Determinants, Dynamics and Management Strategies", *Journal of Retailing*, Vol. 85, No. 1 pp. 31-41, 2009.

Walter, U., Edvardsson, B. and Ostrom, A., "Drivers of customers' service experiences: a study in the restaurant industry", *Managing Service Quality*, Vol. 20, No. 3, pp. 236-258, 2010.

Indian Government Financial Reporting Standards (IGFRS): A Case Study of Selected Municipal Corporations from Various States of India

Archana Singh[1] **and G. Soral**[2]

Abstract

The CAG of India has constituted the GASAB (Government Accounting Standards Advisory Board) will be issued as 'Indian Government Financial Reporting Standards (IGFRS)'. Five IGFRSs have been given by the board on following topics like: IGFRS1 Framework for Financial Reporting under accrual basis accounting, IGFRS2 Property, Plant & Equipment, IGFRS3 Revenue for Exchange Transactions, IGFRS4 Inventories and IGFRS5 Provisions, Contingent Liabilities and Contingent Assets. When comparison has been done between given IGFRSs with relevant IFRSs, it is found that IGFRSs are mostly based on the IFRSs. However very few IGFRSs have come out as compare to the available IFRSs. This paper has also covered the success case study of seven states Municipal Corporations those are using accrual based accounting system, ex: Tamil Nadu, Maharashtra, Gujarat, Andhra Pradesh, Delhi, Kolkata and Karnataka. Among all seven states Tamil Nadu's accounting reform is one of the best example of the reforms underway in India's urban sector. Municipal Corporation of Delhi (MCD) is using tally software and Bangalore Mahanagar Palika is using fund based accounting system. It is suggested that accrual based accounting has so many benefits in comparison to cash basis accounting so government sector must follow this.

INTRODUCTION

Gone are the days when the function of accounting was limited to record keeping. In today's environment accounting, apart from being a statutory requirement is also expected to provide the government and other users of government's financial statements with relevant, reliable and timely information that will assist them in the decision-making process.

Presence of an efficient and transparent financial reporting system has become extremely important for the governments specially in view of increasing awareness for use of public funds by governments.

EVOLUTION OF GOVERNMENT ACCOUNTING REFORMS

Significant changes in public sector accounting and financial reporting systems around the world and their increasing convergence to an

1 Aishwarya College of Education Sansthan, University Road, Udaipur, Rajasthan, India
2 Accountancy and Statistics Department, UCCMS, MLSU, Udaipur, Rajasthan, India

accrual basis for accounting over the last two decades. Countries across the world started moving towards the IFRS. Alongside the need for globally applicable government accounting standards has taken centre stage.

CASH-BASIS ACCOUNTING SYSTEM VS ACCRUAL-BASIS

Accounting System with Reference to Government

Due to ease of compilation of information, cash-basis of accounting was used by governments across the world. Some benefits of cash-basis of accounting are:

(i) Government budgets and appropriations are cash based. Monitoring of receipts and spending are easier.
(ii) Cash based financial reports are budget compliant.
(iii) Principles underlying the cash basis are easy to understand and easy to explain.
(iv) Operating costs are lower.
(v) No need to exercise any judgment in determining the amount of cash flows for the period.

LIMITATIONS OF CASH-BASIS ACCOUNTING SYSTEM

There are so many limitations of cash-basis accounting system. Some are given below:

(i) Information on assets and liabilities is not available.
(ii) Impact of consumption of stock of net assets held by government is not known.
(iii) Cash accounting focuses solely on the cash flows of the current period.
(iv) There is no system of reporting of contingent liabilities which may have significant impact on future revenues.
(v) Matching of costs and benefits is not possible.

MAJOR BENEFITS OF ADOPTION OF ACCRUAL-BASED ACCOUNTING SYSTEM ARE SUMMARISED AS UNDER

(i) The quality of government financial reporting can be improved manifold.
(ii) Comparable financial information is available.
(iii) Harmonization of financial reporting within the government entities.
(iv) Performance evaluations become easier.
(v) Efficient and standardize financial reporting system into better decision-making.
(vi) Reliability of financial information increases.
(vii) Information on assets and liabilities are readily available.
(viii) Matching costs are recorded against the revenues.

CONVERGENCE OF ACCOUNTING STANDARDS

In India Central and State governments are currently using cash-basis of accounting but there are plans to introduce accrual-based accounting system in Central and State government soon. Four State governments including Tamil Nadu, Maharashtra, U.P. and Karnataka are using accrual-based accounting system.

The Honorable Supreme Court of India, in 2001, opined that the urban local bodies should adopt immediate measures to convert their accounts from cash to accrual basis. The accounts of MCD are being maintained on accrual-based accounting since 2003.

PHASED-PROGRAM OF INTRODUCTION OF ACCRUAL-BASED ACCOUNTING SYSTEM

Conversion of cash accounting system in all tiers of government in one-go is gigantic task. Therefore this task requires phase-wise completion. In the first phase, an action plan should be prepared for introduction of accrual-based accounting system in the public sector entities and local bodies, the work can then be started at the level of provinces/states and finally the accrual-based accouning be introduced at the Federal/Central government.

EXPERIENCES OF INDIA WITH IPSAS

Countries across the world started moving towards the IFRS. Alongside the need for globally applicable government accounting standards has taken centre stage. The CAG of India has constituted the GASAB(Government Accounting Standards Advisory Board) will be issued as 'Indian Government Financial Reporting Standards (IGFRS)' and on notification by Government of India will be applicable to Centre as well as State governments in the preparation of accounts under accrual basis accounting.

The board has decided to develop standards on accrual basis on the following topics:

(i) IGFRS 1: Framework for financial reporting under accrual basis accounting.

(ii) IGFRS 2: Property, Plant and Equipment.

(iii) IGFRS 3: Revenue from exchange transactions.

(iv) IGFRS 4: Inventories

(v) IGFRS 5: Provisions, Contingent liabilities and Contingent assets.

GASAB has two fold mission improvements in the existing cash basis accounting system, and facilitating an eventual migration to accrual basis accounting. GASAB develops accounting standards under cash basis known as Indian Government Accounting Standards (IGAS) for the existing accounting system and standards for accrual basis under the nomenclature of Indian Government Financial Reporting Standards (IGFRS).

(i) IGFRS 1

IGFRS 1 on presentation of Financial statements sets overall requirements for the presentation of financial statements, guidelines for their structure and minimum requirements for their contents prepared under accrual basis accounting to be followed in government sectors.

Objective: The objective of this standard is to prescribe the manner in which general purpose financial statements should be presented to ensure comparability both the entity's financial statements of previous periods and with the financial statements of other entities.

Scope: This standard shall be applied to all general purpose financial statements prepared and presented under the accrual basis of accounting in accordance with IGFRSs. The standard should applied to all reporting entities in preparing the financial statements of the government.

General purpose financial statements are those intended to meet the needs of users. Users of general purpose general purpose financial statements include various stakeholders, government and their agencies and the public. These statements include those that are presented separately or within another public document such as an annual report.

This standard should apply to all reporting entities in preparing the financial statements of the government.

Consistency of Presentation: The presentation and classification of items in the financial statements shall be retained one period to the next unless:

(a) It is apparent, following a significant change in the nature of the entity's operations or a review of its financial statements, that another presentation or classification would be more appropriate having regard to the criteria for the selection and application of accounting policies in IGFRS6; or

(b) An IGFRS requires a change in presentation. An entity changes the presentation of its financial statements only if the changed presentation provides information that is reliable and is more relevant to users of the financial statements and the revised structure is likely to continue, so that comparability is not impaired.

Reporting Period: Financial statements shall be presented at least annually. When an entity's reporting date changes and the annual financial statements are presented for a period longer or shorter than one year, an entity shall disclose, in addition to the period covered by the financial statements:

(a) The reason for using a longer or shorter period; and

(b) The fact that comparative accounts for certain statements such as the statement of financial performance, statement of changes in net assets/equity, cash flow statement and related are not entirely comparable.

Presentation of true and fair view and compliance with IGFRSs:

(a) True and fair presentation of financial statements require the faithful representation of the effects of transactions, other events and conditions in accordance with the definitions and recognition criteria for assets, liabilities, revenue, and expenses set out in IGFRSs.

(b) In virtually all circumstances, a presentation of true and fair view is achieved by compliance with applicable IGFRSs.

(c) The financial statements shall be identified clearly, and distinguished. From other information in the same published document.

(d) IGFRSs apply only to financial statements , and not to other information presented in an annual report ar other documents.

(ii) IGFRS 2

The IGFRS 2 is an adaptation of International Public Sector

Accounting Standards (IPSAS) 17 dealing with Property, Plant and Equipment aligned to Indian requirements.

Objective: The objective of the standard is to prescribe the accounting treatment for property, plant and Equipment so that users of financial statements can obtain information regarding an entity's investment in its property, plant and equipment and any changes in such investments.

The existing cash basis accounting in government recognizes PPE in terms of capital expenditure in the final accounts. Assets are classified based not on their nature but on the basis of major heads. There is no concept of depreciation.

Scope: An entity which prepares and presents financial statements under the accrual basis of accounting should apply this standard in accounting for PPE, except when a different accounting treatment has been adopted in accordance with another IGFRS . This standard does not apply to Government Business Enterprises (GBE) i.e., Public sector enterprises like Indian Oil Corporation, BHEL etc.

Measurement at recognition:

(a) An item of PPE which qualifies for recognition as an asset should initially be measured at its cost.

(b) Where an asset is acquired through a non-exchange transaction, its cost shall be measured at its fair value as at the date of acquisition.

(c) Where determination of cost or fair value of such an asset is difficult due to first time recognition under migration to accrual accounting, at a nominal value of Rs. 1.

After recognition as an asset, an item of PPE shall be carried at its cost less any accumulated depreciation and any accumulated impairment losses.

(iii) IGFRS 3

Revenue is one of the key constituents of the financial performance of an entity. The government receives revenue from exchange (rendering of goods & services) and non exchange (taxes, transfers and fines) transactions. The IGFRS 3 on" Revenue from government transaction" was initiated in July 2008. The Exposure Draft(ED) was circulated for invitation to comments from stakeholders with approval of GASAB in November 2008. The ED used the term approval of GASAB in 'approximately comparable value'.

Objective: The primary issue in accounting for revenue is determining when to recognize revenue. Revenue is recognized only when it is probable that future economic benefits or service potential will flow to the government entity and these benefits can be measured reliably.

According to this standard revenue should be accounted for only when it is earned and it has become reasonably certain that the revenue will be realized.

This standard is applicable to government entities like Union states and Territories with legislature and also their sub-entities where these entities are treated as reporting entities for the purpose of financial statements.

Scope: A government entity which prepares and presents financial statements under accrual basis accounting should apply this standard in accounting for revenue arising from the following exchange transactions and events:

(a) The rendering of services

(b) The sale of goods

(c) The use by others of entity assets yielding interest royalties, dividends and fees.

Measurement of Revenue: The amount of revenue arising on a transaction is usually determined by the agreement between the government entity and the purchaser or user of the goods, services or assets. It is measured at the value of the consideration received or receivable taking into account the amount of any trade discount and volume rebates allowed by the government entity.

(iv) IGFRS 4

The purpose of this standard is to prescribe the accounting treatment for inventories. A primary issue in accounting for inventories is the amount of cost to be recognized as an asset and carried forward until the related revenues are recognized. This standard provides guidance on the determination of cost and its subsequent recognition as an expense.

Objective: The existing cash basis accounting system in government recognizes inventories in terms of expenditure either charged off to a capital head or revenue head. The finance accounts of government do not depict the stock at the end of the year as a distinct line item.

This standard aims at using accrual principles of accounting for inventories, both at the stage of charging as expense and depicting the closing stock in the financial statements at the end of the reporting period.

Scope: An entity that prepares and presents financial statements under the accrual basis of accounting shall apply this standard in accounting for all inventories except:

(a) Work in progress arising under contracts, including directly related services contracts;

(b) Financial instruments;

(c) Biological assets (living animals or plants) related to agricultural activity and agricultural produce at the point of harvest; and

(d) Work in Progress of services to be provided for no or nominal consideration directly in return from the recipients.

Inventories in the government may include: consumable stores, ammunition , maintenance materials, share parts for plant and equipment other than those dealt with in the standard on property; plant and equipment, stocks of unissued currency, postal service supply held for sale (for example stamps) ; land/property held for sale.

Measurement of Inventories: Inventories shall be measured at the lower of cost and current replacement cost where they are held for:

(a) Distribution at no charge or for a nominal charge; or

(b) Consumption in the production process of goods to be distributed at no charge or for a nominal charge.

(c) Consumption of single use inventory.

(v) IGFRS 5

The purpose of the IGFRS on contingent liabilities (other than guarantees) and contingent assets is to provide for disclosure requirements of contingent liabilities (other than guarantees) and contingent assets of governments in the financial statements. Disclosure of contingent liability is relevant from the point of view of knowing what risk of future liability the government carries. Disclosure of contingent assets is relevant in knowing what possible assets may accrue to the government.

Objective: The objective of the IGFRS on the subject is to lay down the principles for disclosure requirements of contingent liabilities (other than guarantees) and contingent assets for both the Union and State Governments including union territories with legislatures, in their respective financial statements in order to ensure uniform and appropriate disclosure of such liabilities and assets. It also ensures consistency with international best practices leading to transparency and improved quality of disclosure in the financial reports of governments for the benefit of various stakeholders.

An important objective of the IGFRS is to ensure that governments portray the risks associated with contingent liabilities and contingent assets in a transparent manner.

Scope: The IGFRS shall apply to both the Union and State Governments including Union territories and legislatures in preparation of their financial reports. The standard also excludes treatment of off budget borrowings, for which a separate statement may be developed, when found necessary.

IFRS: At present 27 IAS and 13 IFRS are exist there. Comparison between IGFRS V/S IFRS: There is a comparison between IFRS and IGFRS are given below:

a) IGFRS 1 V/S IAS 1: Framework for financial reporting under accrual basis accounting:
IGFRS talks about Budget realization but IAS not. Like this regarding framework for financial reporting, IGFRS and IAS both are similar except some points like disclosures, IAS focuses on dividends, capital disclosures etc.

b) IGFRS 2 V/S IAS 16: Property, Plant and Equipment:
Regarding Property, Plant and Equipment both standards are almost the same.
Except regarding some points like, IGFRS talks about the heritage assets . In case of heritage assets and those entities, recently adopted accrual accounting ,nominal value of Rs.1 may be taken for financial statements purposes.
And IAS throws light on revaluation method but IGFRS is silent about this.

c) IGFRS 3 V/S IAS 18: Revenue from Exchange Transactions:
There are no major differences in both standards regarding revenue except some points have been covered by IGFRS and some by IAS. Like: IGFRS mentions that revenue includes only the gross inflows of economic benefits or service potential received or receivable by the government entity on its own account. Amounts collected as agent of the government or another government entity or on behalf of third parties , are excluded from revenue.
And IAS describes about significant risk, that if the entity retains significant risk of ownership, the transaction is not a sale and revenue is not recognized.

d) IGFRS 4 V/S IAS 2: : Inventories
There is a minor difference between both two standards on regarding some points like, IGFRS mentions that for a service provider, the point when inventories are recognized as expenses normally occurs when services are rendered, or upon billing for chargeable services.
Like this IAS has given techniques for measurement of the cost of inventories, such as the standard cost method or the retail method, may be used for convenience but IGFRS is silent about that.

e) IGFRS 5 V/S IAS 37: Provisions, Contingent liabilities and Contingent assets.
Regarding Provisions, Contingent liabilities and Contingent assets IGFRS and IAS both are similar except some points like IGFRS describes types of contingent liabilities like explicit, implicit, funded ,unfunded, quantifiable and unquantifiable liabilities but IAS not. On the other hand IAS focuses on restructuring but IGFRS not.

On the basis of above comparison, this is evident that the IGFRSs are mostly based on the IFRSs. However very few IGFRSs have come out as compare to the available IFRSs. This indicates that standardization of Accounting Standards by the Indian government is still in its infancy stage. Only a few points of accounting relevance have been picked up for standardization and such selection of points does not have any apparent justification. It is therefore suggested that a comprehensive set of Accounting Standards covering most of the relevant aspects should be adopted and implementation for the same should be initiated.

CASE STUDY

In early 1990s, three states Gujarat, Karnataka and Rajasthan made attempt to introduce double entry system they failed to get success. The Municipal reforms exercise in various cities of India is a model which can be replicated by any other municipal corporation of the country contemplating such reforms. This paper has covered the success case study for the following:

(i) The Tamil Nadu Case Example

(ii) The Maharashtra Case Example

(iii) The Gujarat Case Example

(iv) The Andhra Pradesh Case Example

(v) The New Delhi Case Example

(vi) The Kolkata Case Example

(vii) The Karnataka Case Example

(i) The Tamil Nadu Case Example

In January, 1999, the state of Tamil Nadu approved a measure to begin with pilot testing of double entry accrual based accounting system in two municipal corporations and 10 municipalities. With the pilot project successfully in progress, the state inaugurated this new system in its remaining three municipal corporations and 92 municipalities on April 1, 2000. Tamil Nadu is the first state in India to initiate such extensive accounting reforms on a state wide scale. The State Government began the process by appointing a committee chaired by a retired joint director of the Local Fund Audit in January 1998. The committee submitted its first draft of an accounting system manual for all Urban Local Bodies (ULBs) in the state in June 1998. The first part of the accounting manual for ULBs in Tamil Nadu deals with accounting procedures, the second part provides the chart of accounts, and the third part presents the new forms and formats to be used in the new accounting system. Every procedure, account and form was specifically designed for the state's ULBs.

Tamil Nadu's accounting reforms is one of the best example of the reforms underway in India's urban sector. The state contracted with a firm to develop accounting software for the ULBs that will be introduced after it has been tested with cities using the new system manually. Tamil Nadu introducing accounting and other reforms is exemplary. It has proved that if there is administrative and political will, and appropriate methodology is adopted, it is quite possible to bring about municipal reforms not only in one or a handful of municipal bodies, but in all the municipal bodies of the state.

Following factors were responsible for the success of Tamil Nadu experiment:

a. Strong felt need for municipal accounting reform;

b. Unstinted political and administrative support;

c. State-wide unified accounting system approach;

d. Training and opinion building exercises;

e. Involvement of experienced local government officers;

f. Engaging local consultants; and

g. Committed and motivated participation by municipal bodies.

(ii) The Maharashtra Case Example

The Government of Maharashtra (GoM) initiated municipal accounting reforms during 2001 and developed the accrual based municipal accounting manuals for the ULBs. The Director of Municipal Administration (DMA), Government of Maharashtra is responsible for supervising the 230 municipal councils in the state.

(a) ***Thane Municipal Corporations:*** TMC had taken the decision to adopt accrual based accounting system from the financial year 2004-05. Preparatory work was done by TMC pertaining computerization of data base program salary, property taxes, Public Works Department (PWD) data and a program for tracking of assets and work in progress.

Results Achieved: Some of the achievements of the accounting reforms are as follows:

(a) Using of data forms-collating, analyzing the same, identifying gaps to take actions.

(b) Policy decision based on manuals, standards etc.

(c) Comparing available data with agreed policy implementation.

(d) Evolving unique-custom built solutions like use of Tally software to minimize time and cost.

(e) Depreciation methodology and impact.

(f) Drafting of accounting policy disclosure and framing of accounts.

(g) It ensures transparency and accountability.

(iii) The Gujarat Case Example

As in the case with the rest of the country, the municipalities in Gujarat followed cash based, single entry accounting system. There was an unwieldy heterogeneity in every aspect account code, chart of accounts, classifications, formats etc. Further, there was no software, thus resulting in lack of uniformity. The state had not updated municipal account codes for past thirty to forty years. Moreover, accounts were pending and not audited over the years. The financial reporting system was inadequate ever for the internal users.

While many states were still attempting 'Pilot' Projects, Gujarat courageously decided to go all out for all the municipalities in the state. Since the year 2000, City Managers' Association Gujarat (CMAG), a registered Trust and Society established in 1997 by the office bearers of various ULBs of Gujarat has been conducting workshops and seminars in order to spread awareness about the double entry accrual based and computerized accounting system with hands-on learning.The project initially started with focus of implementation in 141 municipal bodies. In 2005, CMAG launched the Gujarat Municipal Accounting Reform Project (GMARP). Due to restructuring of municipal bodies during 2006-07 and 2007-08, thirteen municipalities were merged with Municipal Corporations of larger cities while thirty new municipal bodies got added. Thus the GMARP program has been expanded to total 159 municipalities of Gujarat state.

Some states municipal corporations are using accrual based accounting system.

(iv) The Andhra Pradesh Case Example

As a measure of finance and accounting reform, Municipal Corporation of Hyderabad (MCH) has introduced accrual based accounting system from the financial year 2002-03 using an e-application. The MCH has engaged a Chartered Accountant Firm to design and implement the software. With the assistance of the consultants, MCH has developed accounts manual including chart of accounts and system software. It has revised chart of accounts from the year 2006-07 when it moved to Oracle Financials ERP. It is sophisticated software application program for computerizing double entry accounting system.

(v) The New Delhi Case Example

In May 1994, the NDMC (New Delhi Municipal Corporation) Act 1994, replaced the Punjab Municipal Act, 1911, and the committee was renamed as "New Delhi Municipal Council". The NDMC has shifted over to accrual based double entry system of accounting. It has made significant headway in developing a proper chart of accounts, collection of details of fixed assets and liabilities and determination of opening balance as on April 1, 2004. NDMC had signed agreements with a non-profit organization set up by Infosys, e-Government Foundation Bangalore, for computerization of its financial accounts. This project was meant to implement the e-Government financial, a double entry fund based financial accounting system in the council and provide an efficient and transparent service to public. Currently they are using Tally Software.

(vi) The Kolkata Case Example

Kolkata Municipal Corporation (KMC) is the largest ULB in West Bengal. KMC is practicing double entry based accounting since 1978. However, the accounting was partially accrual and steps are being taking to make the accounting fully accrual. KMC had been preparing its annual accounts since 1972 and the current Act makes it mandatory to prepare monthly accounts adopts it by the Mayor-in-Council. The annual accounts are prepared and to be adopted by the Corporation. In fact the Act specifies a fund based accounting system. However, it is pertinent to mention that during the period 1990-91 to 2002-03 nobody took up the effort to prepare the accounts. No annual accounts for KMC were prepared for 12 years during this pried, as was required under the Act. What is more alarming is that even though there was a clear non compliance of KMC Act, which was brought to the attention of the various authorities, no corrective action was taken till very recently before external consultants were appointed to update the accounts. Then KMC

Table 1.

Accounting Aspect	Maharashtra	Tamil Nadu	Hyderabad	Delhi	Kolkata	Karnataka
Method of Accounting	Double entry accrual based accounting system	Double entry accrual based accounting system	Double entry modified accrual based accounting system	Double entry accrual based accounting system	Double entry cash based accounting. The accrual accounting adjustments are separately added to the cash based accounting at the year end	Double entry accrual based accounting system
Computeri-sation Level	Currently manual. Supported by an accounting manual containing all the details. To be computerised	Computerised accounting. Supported by an accounting manual and also a user manual	Computerised accounting. Supported by an accounting manual	Computerised accounting (Tally)	Computerised accounting. No accounting manual in place yet	Web-enabled customized software under implementation will run in parallel
Frequency of Financial Statements	Annual and quarterly	Annual	Financial Statements- Annual, Comparison with budget and review- Annual	Annual	Financial Statements- Annual, Comparison and annual review with budget/ previous period is carried out monthly	Required to prepare half yearly accounts
Annual Financial Statements	Overall income and expenditure account, and balance sheet prepared	Separate income and expenditure account, and balance sheet are prepared for different types of fund consolidated financial statements not prepared	Income and expenditure account, and balance sheet are prepared. Apart from these,fund wise financial statements are prepared	Statement of revenue expenditures, and fund balances; and balance sheet are prepared for the different funds	Income and expenditure account, receipt and payment account and balance sheet are prepared	Consolidated and fund wise income & expenditure statement, receipt 7 payment account, balance sheet, notes to accounts

was ready to prepare the 2005-06 accounts within the prescribed time. The financial statements of KMC for the year 2003-04 have been audited by the office of the C&AG Local Bodies Audit and have been certified to be "True and Fair".

(vii) The Karnataka Case example

Bangalore Mahanagara Palika (BMP) is the largest of the six city corporations in Karnataka. Bangalore became the first city in India to shift to Fund Based Accounting System in 2002 .The initiative was taken up by the Bangalore Agenda Task Force (BATF), which provided funding support to implementation of fund based accounting system in BMP. Consultants were identified and brought in by BATF to respectively facilitate design and implementation of fund based accounting system in corporation. Some of the key steps undertaken during this exercise included, (a) preparation of a detailed budget exercise and creating focus on financial accounting and creation of financial information flow aspects; (b) collection of information of BMP assets and distributing the same to various departments for verification and updating; (c) physical verification of all assets listed; (d) collection of information on all works in the pipeline; (e) computerization of all data available at BMP.

Conversion of accounting system to Fund Based Accounting System has also played a major role in ensuring public oversight. Half yearly balance sheets are now published in all national newspapers and given to the proof for quarterly assessment.

Table 1 shows a implementation status-comparison across various states:

CONCLUSION

The role of the government is being continuously modified. Over the last twenty years, there have been sustained calls for government to move towards accrual based accounting and to adopt private sector style financial statements. In nut shell it could be said that accrual based accounting has so many benefits in comparison to cash basis accounting so government sector must follow this.

REFERENCES

Government Accounting-Accrual is the Way to Go, *www.thehindubusinessline.com*.

IGFRSs, *www.caparivaar.com*.

IGFRS 1,2,3,4,5 , *www.gasab.gov.in*.

IAS 1- Presentation of Financial Statements-IAS Plus, *www.iasplus.com*.

IAS 2 Inventories-IFRS, *www.ifrs.org*.

IAS 16 Property Plant and Equipment, *www.accaglobal.com*.

IFRS at a Glance IAS 18: Revenue, *www.bdointernational.com*.

IAS 37 Provisions, Contingent Liabilities and Contingent Assets, *www.ifrs.org*.

Municipal Accounting System, *www.ccs.in*.

Public Financial Management and Accountability, *www.ipeglobal.com*.

Impact of Future Contract on Agricultural Commodity Prices: An Indian Perspective

Sandeep Sehrawat*

Abstract

The future market can reduce volatility in the spot prices of the commodities and provide effective hedging of the price risk. The turnover of the commodity futures market has grown in a short span of time. The futures market can become an effective instrument of risk management and price discovery for the benefit of the producers, investors, consumers and companies. The competent authorities have over-looked the mechanism of checks and balances which can redistribute income from the small players to the big speculative financial market entities. The present study seeks to assess the role and significance of the Indian commodity futures market in the context of its efficient functioning. It is noted that instead of restricting the commodity futures market, it can be used successfully to strengthen the commodity market structure in India to achieve the broader target.

Keywords: *Hedging, Speculation, Arbitrage, Contango, Forward Contract*

INTRODUCTION

Agricultural commodities are vital for any developing country because they provide food, create income-generating opportunities and export earnings to the people involved in agricultural activities. Like other sectors, the agricultural commodity sector also experienced tremendous surge towards a more sophisticated structure during the last decade. The Government intervention has entered into the marketing of major agricultural products, which includes the Minimum Support Price (MSP) for specific commodities, regulation of various activities of marketing, such as transportation, storage, credit supply and international trading. However, the Government intervention has significantly declined after the initiation of liberalisation and economic reforms starts in 1991.

Several market-based instruments, involved in the commodity price risk, focus on the introduction of derivatives on several commodities. In other words, it is widely proposed to set-up an efficient derivative market for commodities to strengthen the agricultural commodities market. If the derivatives market functions properly, one of the important policy goals regarding the price volatility of agricultural commodities can be addressed. The basic need, to trade in commodity derivatives in general and commodity futures in particular, arises essentially to get the necessary

* Dept. of Commerce, Satyawadi College (Evening), Delhi, India

support from any variation in the commodity prices. This is commonly referred to as hedging. Hedging has been defined as the required amount of counter position (buy or sell) in the futures contract against the corresponding position (sell or buy) of the related underlying commodity. This counter position helps to off-set the loss expected in the near future arising out of the adverse price movement of the underlying commodity.

Thus, it is important to develop futures and other forms of derivative trading in commodities which are vulnerable to large and erratic price fluctuations.

Turnover of Commodity Futures Market

The commodity futures market facilitates the price discovery process and provides a platform for the price-risk management in commodities. The turnover in commodity futures market from 2010-11 to 2012-13 is given in table-1. As shown in the table, the year 2012-13 witnessed a decline in the total value of trade compared to the corresponding period of the preceding year.

The present study seeks to ascertain the relationship between spot and futures prices of the Indian agricultural commodities traded in the national level commodity exchanges and to examine the influence of futures contract on the spot prices.

Relevant Concepts in Commodity Futures Contract

A 'futures contract' is an agreement to buy or sell a certain quantity of an underlying asset, at a certain time in the future, at a predetermined price. It is a standardised financial contract traded in a recognised commodity exchange. The price at which the contract is traded in the futures market is called the futures price. The futures contract has onemonth, twomonth or threemonth expiry cycles and usually expires on the last Thursday of the respective month.

There are three types of the participants in the futures market:(1) Speculators, who bet on the future movement of the price of an asset, (2) Hedgers, who try to eliminate the risks involved in the price fluctuations of an asset by entering into the futures contract, and (3) Arbitrageurs, who try to take advantage of the discrepancy between the prices in different markets.

While hedgers participate in the market to off-set the risk, speculators make it possible for hedgers to do so by assuming the risk. Arbitrageurs ensure that the futures and the cash markets move in the same direction. The risks of physical commodity losses due to fire, theft, accidents, etc., are covered by insurance. However, the risk of value deprecation resulting from adverse price variations is not insured by

Table 1. Turnover in Commodity Futures Market (Volume of trading in lakh tonnes, value in Rs. crores)

Commodity	2010-11		2011-12		2012-13 (Up to 30-11-12)	
	Volume	Value	Volume	Value	Volume	Value
Agricultural commodities	4168	1456390	4942	2196150	3113	1536268
	(32.6)	(12.2)	(35.24)	(12.12)	(30.77)	(13.21)
Bullion	7.38	5493892	10.27	10181957	5.02	5363816
	(0.05)	(46.0)	(0.07)	(56.17)	(0.05)	(46.13)
Metals	1410	2687673	1388	2896721	1046	2157139
	(11.0)	(22.5)	(9.9)	(15.98)	(10.33)	(18.55)
Energy	7220	2310959	7686	2851270	5954	2569619
	(56.4)	(19.3)	(54.8)	(15.73)	(58.85)	(22.1)
Others		29.04		6.45		1.28
Total	12806	11948942	14026	18126104	10119	11626842

Source: Economic Survey (2012-13), Ministry of Finance (Government of India)
Note: Figures in brackets are the percentage to the total volume and value of trade of the respective group.

insurance. Although hedging is the practice of off-setting the price risk in any cash market position by taking an equal but opposite position in the futures market. However, the hedger avoids buying the physical commodity to prevent the blocking of funds and does not want to incur large holding costs. For instance, a wheat miller enters into a contract to sell flour to a bread manufacturer four months from now. The price is agreed upon today though the flour would be delivered after four months. A rise in the price of wheat during the course of the next four months would result in loss to the miller. To safeguard against the risk of increasing prices of wheat, the miller buys wheat futures contracts that call for the delivery of wheat in four months time. After the expiry of four months, as feared by the miller, the price of wheat has risen. The miller then purchases the wheat in the spot market at a higher price. However, since he has hedged in the futures market, he can now sell his contract in the futures market, at a gain, since there is an increase in the futures price as well. Hedging, thus, offsets loss from the purchase of wheat at a higher cost through the sale of the futures contract, thereby ensuring the profit on the sale of the flour.

An important part of understanding futures and cash price dynamics is being able to explain and anticipate basis movement. The basis is normally calculated as cash price minus the futures price. A positive basis indicates a futures discount ('backwardation') and a negative basis means a futures premium ('contango'). When the spot price is higher than a particular futures contract, it is said to be trading at backwardation. It is usual for a contract maturing in the peak season to be in backwardation during the lean period. Contango means a situation where futures contract price is higher than the spot price. It arises normally when the contract matures during the same crop season. In a well-integrated market, contango is equal to the cost of carry (interest rate on investment, loss on account of the loss of weight or deterioration in quality).

Evolution of Commodity Futures Market

Futures trading in commodities had its genesis in Japan in the 17th century where silk and rice was underlying commodities for a futures contact. The Dojima Rice Exchange in Osaka, Japan, is said to be the world's first organised futures exchange, where trading started in 1710.

In the USA, the Chicago Board of Trade (CBOT) was established by 83 merchants to facilitate trade in forward contracts on April 3, 1848. It was only in 1865 that standardised futures contracts were introduced. The Chicago Produce Exchange was established in 1874 and the Chicago Butter and Egg Board in 1898. In 1919, it was re-organised to enable futures trading and it was named as Chicago Mercantile Exchange (CME).

India had experienced its first futures market for cotton in Mumbai in 1875.Subsequently, futures trading started for oilseeds (Mumbai, 1900), jute (Calcutta, 1912), wheat (Hapur, 1913) and bullion (Mumbai, 1920). After a few years of trading, the markets underwent rapid growth between the two World Wars. As a result, before the outbreak of the Second World War, a large number of commodity exchanges, trading futures contract in several commodities, such as cotton, jute, oilseeds, groundnut, wheat, rice, sugar, silver and gold, flourished at various locations across the country. However, the futures trading in some commodities during the World War II was prohibited by the Defense of India Act, 1943.

After India's Independence, on the recommendations of the Forward Market Commission (FMC), futures trading were initiated on various commodities in the latter half of 1950s. However, this growing status of commodity futures market in India could not last for long. In the wake of recurring agricultural shortages, rising prices, and a growing apprehension that speculating activities on commodities through futures trading may fuel inflation in Indian economy, then, the Central Government banned the futures trading in most of the commodities. Even if the Dantwala Committee (1966) recognised the benefits of commodity trading even at the time of commodity scarcity, the recommendations were ignored by the authorities. This banning process continued till the 1970s, it was followed by the setting up of the Khusro Committee in the year 1980; the recommendations of this committee supported the revival of futures trading in most of the major commodities, including potatoes and onions.

However, the ban on all other commodities still continued with the misconception that speculative futures trading destabilises the prices of commodities. During the new era of liberalisation in the 1990s, the Government appointed another committee in 1993, under the chairmanship of Prof. Kamal Nayan Kabra to have another look on the necessity of commodity futures in the Indian economy. The Kabra Committee (1994) recommended the re-introduction of futures trading in a wide number of commodities and the up-gradation of existing commodity exchanges to facilitate futures trading at the international level. The Government of India accepted and implemented the majority of recommendations of the Kabra Committee. This eagerness to stimulate commodity futures trading in India not only led to recognising and strengthening of various regional commodity exchanges, but also to build up national-level, muti-commodity exchanges.

Regulation of Commodity Futures Market

The Forward Contracts (Regulation) Act, 1952 (FCRA) was passed to regulate this market with FMC which was set up in 1953 in Mumbai as the regulator. Commodity derivatives were banned in the late 1960s, but were revived again in the 1980s. After the successful equity market reforms in the 1991, the Government of India tried to replicate similar reforms for the commodity derivatives market and in 1999 suggested that the MSP as a price-hedging instrument could be used for the derivatives market. National-level multi-commodity exchanges were set up on conditions of being backed by internationally prevailing best practices of trading, clearing and settlement. The national commodity exchanges follow electronic, transparent trading and clearing with innovation, similar to the equity market.

According to Nair (2004), the major obstruction in the development of commodity futures market in India is the fragmented physical or spot market with government laws and various taxes that disturb the free movement of commodities.

The Ministry of Consumer Affairs made attempts in the past to amend the FCRA, 1952. The Forward Contracts (Regulation) Amendment Bill, 1998, lapsed because it was not passed by the Lok Sabha. After the liberalisation of commodity futures market at the beginning of 2003, the need for a comprehensive amendment to the Act came up with the establishment of three national online exchanges and a host of complex trading systems and practices which showed that the existing regulatory capacity was insufficient to cater to the need of exponentially growing market. The Ministry of Consumer Affairs came up with the Forward Contracts (Regulation) Amendment Bill, 2006, but this failed again to sail through before the dissolution of the Lok Sabha. This was replaced by the Forward Contracts (Regulation) Amendment Bill, 2010, which is now pending with the Parliament.

The bill proposes to empower the commission and transforms it to a powerful independent regulator. This is critical to commodity futures market in general and the farm sector in particular for many reasons. It is risky for a country with a dominant farm sector to liberalise internal trade in commodities without a powerful regulator in place. Inadequately developed spot markets and spurious price discovery in excessively speculative futures markets (commodities in which open positions are excessively larger than their actual production figures are considered to be speculative) can distort the market prices of commodities and jeopardise investments in agriculture. A major obstacle to growth of agriculture is inadequate formal institutional credit, particularly to the rural farm sector. Lending institutions in India do not consider commodities as a standard asset class because of the lack of back-end infrastructure and well-regulated liquid market.

More importantly, the proposed opening up of multi-brand retail can attract foreign direct investment (FDI) to build infrastructure in the commodities supply chain, especially in storage and collateral management, only if there is an effective regulator that ensures integrity and investor confidence in the marketplace.

An active regulator is very useful in the formative stage of markets, particularly to ensure they have the best practices and procedures for trading, margining, clearing, market monitoring and surveillance, risk control, settlement, and delivery. If the contracts are well formulated, and the delivery modalities provide an effective line of defense against manipulation, the regulator has to only act as an off-site watchdog. (Sahadevan 2002)

Benefits of Commodity Futures Contract

The commodity futures markets have been developed because of its potential contribution to price stability, Poverty reduction and economic development and some of them are given below in the form of benefits.

Benefits to Investors: All participants in the commodity markets ecosystem across the value chain of different commodities are exposed to price risk. These participants buy and sell commodities and the time lag between subsequent transactions result in exposure to price risk. Commodity derivatives markets enable these participants to avoid price risk by utilizing hedging techniques.

Benefit to Producers: The commodity trade is useful to the producer because he can get an idea of the price likely to prevail on a future date and therefore can decide between various competing commodities, the best that suits him. Farmers, for instance, can get assured prices, thereby enabling them to decide on the crop that they want to grow. Since there is transparency in prices, the farmer can decide when and where to sell, so as to maximise his profit.

Benefit to Consumers: The commodity trade benefits the consumer because he gets an idea of the price at which the commodity would be available at a future point of time. He can do proper financial planning and also cover his purchases by making futures contract.

Benefit to Companies: Corporate entities can benefit by hedging their risks if they are using some of the commodities as their raw materials. They can hedge the risk even if the commodity traded does not meet their requirements of exact quality or technical specifications.

Commodity Exchanges in India

As on September 1, 2013, there are five on-line national exchanges and 16 regional exchanges that are permitted to offer futures in 113 commodities, including agriculture, metals, energy and plastics. Though the FMC has notified 113 commodities under Section 15 of the FCRA, 1952, exchanges have not offered futures in all of them. For example, the Multi Commodity Exchange (MCX), which had 82 per cent of the total value of trade during 2010-11, trades only in 52 commodities. (Annual Report 2011-12, FMC)

However, there are three major National Level Exchanges in India. Due to a large number of commodities traded in these exchanges and the importance they are gaining lately, these three exchanges are explained below.

National Multi Commodity Exchange of India Ltd. (NMCE) was promoted by commodity relevant public institutions namely Central Warehousing Corporation (CWC), National Agricultural Cooperative Marketing Federation of India (NAFED), Gujarat Agro-Industries Corporation Limited (GAICL), Gujarat State Agricultural Marketing Board (GSAMB), National Institute of Agricultural Marketing (NIAM), and Neptune Overseas Limited (NOL). Punjab National Bank (PNB) took equity of the Exchange to establish the financial linkage. NMCE, the first state-of-the-art demutualised multi-commodity exchange, commenced futures trading in 24 commodities on November 26, 2002 on a national scale.

National Commodity and Derivatives Exchange Limited (NCDEX) is a professionally managed on-line multi-commodity exchange promoted by ICICI Bank Limited, Life Insurance Corporation of India (LIC), National Bank for Agriculture and Rural Development (NABARD) and National Stock Exchange of India Limited (NSE). NCDEX is a nation-level, technology-driven, de-mutualised online commodity exchange with an independent Board of Directors and professional management. It commenced operations on December 15, 2003.

MCX is an independent and de-mutualised multi-commodity exchange, promoted by major financial institutions like Financial Technologies Ltd., State Bank of India and its associates, NABARD, NSE, Corporation Bank, Union Bank of India, Canara Bank, Bank of India, Bank of Baroda, HDFC Bank and SBI Life Insurance Co. Ltd. MCX is India's largest independent and de-mutualised multi-commodity exchange. It was inaugurated on November 10, 2003 and has permanent recognition from the Government of India for facilitating online trading, clearing and settlement operations for commodities futures market across the country.

Policies supporting Commodity Futures Contract

In October, 2012, the Financial-Sector Legislative Reforms Commission, headed by Justice B. N. Srikrishna, recommended that a super regulator should be created to merge Securities and Exchange Board of India (SEBI), Insurance Regulatory and Development Authority (IRDA), Pension Fund Regulatory and Development Authority (PFRDA), FMC in itself. The finance ministry already accepted the recommendations and it is now working out a plan on how to implement it.

The commission also recommended bringing the FMC under the finance ministry and the regulator for commodities futures trading struggles to contain the payments crisis at the National Spot Exchange Limited (NSEL). The finance ministry is of the view that if the commodities regulator, which is currently under the consumer affairs ministry, is brought under its ambit then it can be merged with the SEBI.

CONCLUSION

The futures markets in commodities, which are nearly eight-years old, are here to stay and should be allowed to grow with the regulatory measures. Contrary to the thinking in certain areas, futures prices should be used as a signaling device for the government policy. The regulators ought to ensure that there is no scope for manipulation of markets and the prices behave in a well-manner. Higher spot-prices, caused by economic fundamentals and the price volatility, has come down in the post-futures trading era. A large number of commodities user, especially the farmers who would be benefitted from such markets. In fact, markets should be allowed to grow rather than restrained. Markets world over seek to provide efficient solutions, which is also the requirement in India.

REFERENCES

Ghoshray, Atanu, "An Examination of the Relationship between U.S. and Canadian Durum Wheat Prices", *Canadian Journal of Agricultural Economics*, Vol. 55, No. 1, pp. 49-62, 2007.

Gilbert, Christopher L., "How to Understand High Food Prices", *Journal of Agricultural Economics*, Vol. 61, No. 2, pp. 398-425, 2010.

Government of India, Report of the Expert Committee to Study the Impact of Futures Trading on Agricultural Commodity Prices (Chairman: Abhijit Sen), New Delhi, 2008.

Richa Kumar, "Mandi Traders and the 'Dabba': Online Commodity Futures Markets in India", Economic and Political Weekly, Vol. 45, No. 31, pp. 63-70, 2010.

Tulsi Lingareddy, "Expert Committee on Commodity Futures: Agreements and Disagreements", Economic and Political Weekly, Vol. 43, No. 34, pp. 35-42, 2008.

Nath, Golaka C and Tulsi Lingareddy, "Impact of Futures Trading on Commodity Prices", *Economic and Political Weekly*, Vol. 43, No. 3, pp. 18-23, 2008.

K.G. Sahadevan, "Sagging Agricultural Commodity Exchanges-Growth Constraints and Revival Policy Options", *Economic and Political Weekly*, Vol. 37, No. 30, pp. 3153-3160, 2002.

P. Srinivasan, K. Srinivasan and Malabika Deo, "Impact of Derivatives and Asymmetric Effect on Indian Stock Market", Asia-Pacific *Journal of Management Research and Innovation*, Vol. 5, No. 3, pp. 11-18, 2009.

The Relationship of Strategic Brand Management and Corporate Social Responsibility on Brand Loyalty

Aliya Bushra and Anam Rizwan*

Abstract

Corporate Social Responsibility (CSR) is an emerging phenomenon in the developing countries and has gained a lot of attention in the developed countries. The companies with a strong brand loyal background have used the concept in order to achieve the positions they are currently enjoying. This study focused on Corporate Social Responsibility to formulate a relationship with brand loyalty of the consumers. The study was conducted in Pakistan which comprised of a sample size of 307 respondents. Structural Equal Modeling was done. As explication by the model showing the direct relationships, it was analyzed that CSR, company customer identification and customer satisfaction had a positively significant impact on brand loyalty. Whereas, trust also impact brand loyalty via company customer identification.

Keywords: *Corporate social responsibility, strategic brand management, company customer identification, structural equation modeling*

INTRODUCTION

Corporate social responsibility is an emerging concept in the developing countries. Most of the companies now hire experts and consultants to widen the company's horizon in making Corporate a Socially Responsible (CSR). One of the primary reasons is due to the idea of satisfying the consumer which influences the brand loyalty. Therefore, a CSR orientation is an approach and a strategy for companies in the emergent sectors to curtail the negative effects of their activities on natural and environmental, cultural and social surroundings. Nowadays, consumers have gained awareness and are vulnerable to diverse problems. They are dealing with crisis in values, natural disasters, climatic changes and massive differences among regions but most of all, the financial and economic crisis in developed countries. These are issues of the developing countries so the companies need to play a constructive role in the social order by initiating CSR into firms' strategy to achieve brand loyalty of the consumers and a sustainable competitive advantage.

One of the most valuable assets that companies own is the intangible possession of brands. In this context, brand loyalty is at the

* Lahore School of Economics, Lahore, Pakistan

heart of the marketing activities of firms. With intensified fragmentation, sophistication and competition of markets traditional manufacturers of brands are forced to be more concerned with the development and maintenance of long-term relationship with their consumers and therefore seeking to adopt relationship marketing.

Different operational definitions and frameworks are adopted for investigating the process of building brand-to-consumer relationships. The immense existing literature has focused on the factors which impact brand loyalty and has developed and conceptual measure for dimensionality, patterns, and intensity. But appropriate strategic actions in forming a company's Corporate Social Responsibility image along with all the other components of brand management lack in Pakistani companies.

METHODOLOGY

The sample size was of 307 respondents from universities who were on campus and also through online medium. Males and Females varying from 18 to 26 years have been included in this study and have the education status of undergraduate to MBA graduates. SPS Software and AMOS Graphics were used to compute the variables for SEM.

CONCLUSION

The study aims to investigate the impact of brand management components along with corporate social responsibility on consumer brand loyalty. Even though the study supports the existing literature to a large extent, there were also some significant relations discovered by the end of the study. Corporate social responsibility and company customer identification has a direct positive significance with brand loyalty. Nevertheless, other investigative variables were found which had insignificant impact on the dependent variable. These results provide an imperative step in the advancement of brand loyalty management from both practical and theoretical perspectives.

The findings of this research have important insinuations for the companies interested in building strong and long term relationship with its customers. This research suggests that consumers tend to reward and support those companies who are socially responsible and actively participate in making the world a better place. These consumers are loyal towards these brands and by strategically following the relationship brand management and its components the company will enhance and sustain a corporate identity for their target audience.

REFERENCES

Chan, E.S.W. Implementing environmental management systems in small and medium-sized hotels: obstacles. *Journal of Hospitality & Tourism Research,* Vol. 35 (1), pp. 3–23, 2011.

Hong, I.B. and Cho, H. The impact of consumer trust on attitudinal loyalty and purchase intentions in B2C e-marketplaces: Intermediary trust vs. seller trust. *International Journal of Information Management*, Vol. 31 (5), pp. 469–479, 2011.

Martínez, P. and Rodríguez del Bosque, I. CSR and customer loyalty: The roles of trust, customer identification with the company and satisfaction. *International Journal of Hospitality Management*, Vol. 35, pp. 89-99, 2013.

Shah, R. and Goldstein, S.M.. Use of structural equation modeling in operations management research: Looking back and forward. *Journal of Operations Management*, Vol. 24 (2), pp. 148-169, 2006.

Tsai, S.P. Fostering international brand loyalty through committed and attached relationships. *International Business Review*, Vol. 20 (5), pp. 521-534, 2011.

Investigating the Impact of Corporate Governance on Earning Management in the Presence of Firm Size: Evidence from Pakistan

Abrar Ahmad, Muhammad Tahir Anjum and Muhammad Azeem*

Abstract

This study investigates the relationship between earning management and corporate governance in presence of firm size having sample size of 50 listed companies of manufacturing sector in stock market with time horizon of 2009 to 2013. Corporate governance has been enumerated by the board size, audit committee independence and ownership concentration taking multi-dimensional aspect of it. Here cash flow statement approach using the Modified Jones Model has been exercised to measure the discretionary accruals. Ordinary Least Square (OLS) expressed the negative relationship of quality of corporate governance with earning management and positive relationship with firm size. Relationship of firm size and earning management is negative. So, small sized firms are more involved in earning management and reason for this relationship is to absorb fluctuations maintaining the financial position.

Keywords: *Corporate Governance, Earnings Management, Firm Size*

INTRODUCTION

It is imperious to have a solid understanding of earnings before plunging into comprehensive discussion of earnings management. In simple words, earnings are the life blood of a company and everyone wants to boost its blood. The management of the different companies uses the earning management to boost its blood. The earning management can be controlled and monitored through the effective corporate governance implementation. So, the corporate governance has the abundant impact on the earning management. Earning management and corporate governance is gaining importance all over the world. Managers may violate the timing and matching principles that result not only misstatements of earning but also create in the agency problems with the passage of time. The wealth of the companies grossly suffers due to this type of manipulation and robs the innocent stakeholders. Total assets have direct relation with corporate governance as all resources are generated by sources. Debts and equity are important sources. Higher the debt to equity ratio shows financial weakness and risk of the company. It also shows percentage of capital employed that is financed by debt and long-term liabilities. Mangers through the earning management can affect these ratios and dress the

* University of Sargodha, Gujranwala Campus, Pakistan

windows of their businesses to attract the investors. Share prices are, in fact, the present value of future cash flows; future cash flows are the dividends which of course are dependent on the earnings of the company. Share prices of the companies with higher projected earnings are higher as compared to the share prices of the companies with lower projected earnings. The concept of earnings management is very important because it plays very vital role in determining the stock's prices. The cost of engaging in earnings management will be higher for large-sized firms than small-sized firms. Therefore, their concern about reputations may prevent large-sized firms from manipulating earnings. Finally, large-sized firms may be less likely to manage earnings relative to smaller counterparts because they are followed by more financial analysts (Kim, Liu & Rhee, 2003). In contrast, large sized firms are more likely to manage earnings than small-sized firms. First, as Barton and Simko (2002) indicate, large sized firms face more pressures to meet or beat the analysts' expectations. LA & DJ (2000) compile empirical evidence that large-sized firms do not report accurate earnings after studying their earnings growth for at least 14 quarters. Rangan (1998) also notes that the firms in his study manipulating current accruals to overstate earnings in the year before seasoned equity offerings are older and larger. Second, large-sized firms have greater bargaining power with auditors. The larger the firm size, the more bargaining power they have in negotiations with auditors. Mark, John, & Robin, (2002) document that auditors are more likely to waive earnings management attempts by large clients. Third, large-sized firms have more room to manoeuvre given wide range of accounting treatments available. In all, the incentives and abilities to manage earnings may vary among firms of different sizes. These competing views and evidence raise a question on the relation of earnings management to firm size. Are large and medium-sized firms more likely to manage earnings than small-sized firms after controlling for various firm attributes that may affect earnings management practices? This question must be resolved empirically. In today's business world the size of the firms, corporate governance and earnings management have become important. It is assumed that there is a strong and critical relationship between the size of the firms, corporate governance and earnings management. The aim of this research is to quantify the aspects that are used by firms to manipulate their earnings and also the characteristics of such firms in terms of their size and corporate governance. In emerging economies like that of developing countries it is observed that there is a deviation in trends of earnings. So to help academicians and investors in predicting earnings management policy, this research reveals the effect of corporate governance on earning management. A comprehensive study of the topic led us to investigate what impact does the size (taken as logarithm of total assets) of a firm have on earnings management and how the corporate governance influences earnings management. Moreover, which of these two factors influence the earnings management the most and how the Earning Management is affected by the Corporate Governance? Most of the research is to quantify the impact of the capital structure on earning management but in this research significance of corporate governance has been measured on earning management in the presence of firm size. The basic objective is to check the impact of the firm size and Corporate Governance on the earning management.

Data and Methodology

The sample consists of 50 listed companies of the KSE 100 index. The time horizon for the sample data is from 2008 to 2012 out of which we exclude the following companies:

- Financial companies and the utilities (because the capital structure and the profits of these companies are different)

Measurement of Quality of Corporate Governance (QCG)

The proxies used in this paper for measuring the quality of corporate governance are Board Structure, Ownership Structure and Audit Committee Independence as these are in line with the Klapper & Love (2002). So, the Quality of Corporate Governance (QCG) has been measured by the use of following equation:

QCG = f (BS, OS, ACI)
BS= Board Structure
OS=Ownership Structure
ACI=Audit Committee Independence

The criteria used for estimating the corporate governance index

In this research paper we used the binary number codes "1" for yes or existence of the specified variable in the organization that adds one point to the corporate governance index. In the other hand "0" is used for no or non-existence. The data for nine variables is collected. Total score for corporate governance index is on the scale 0 to 9. The organization showing the higher score indicates the healthier quality of corporate governance Sawicki (2005). The following table shows the detail of estimation for the different variables:

Measurement of Firm Size (FS)

Total assets are taken as the proxy for measuring the firm size as Rahmani & Akbari (2013) has uesd this as a proxy for measuring the firm size.

Measurement of Earning Management (EM)

Modified Jones Model is opted in this paper for calculating the discretionary Accruals which signify the magnitude of the Earning Management. In this paper the Modified Jones cross-sectional model is opted for calculating the accruals because in literature most of the studies used and accepted this model to calculate the accruals as the proxy for the earning management practices.

There are two different approaches to calculate the Accruals

- Balance sheet approach
- Cash flow statement approach

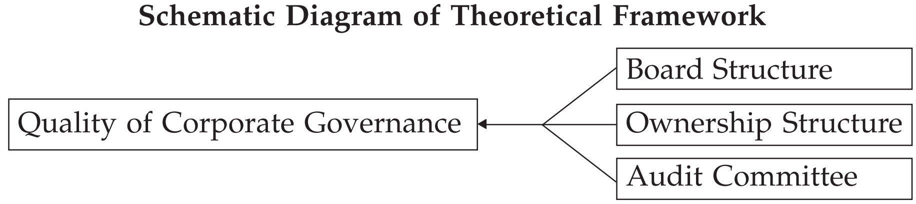
Balance sheet approach

According to this approach the accruals can be estimated with the help of the following equation:

$$TA_t = \triangle CA_t - \triangle Cash_t - \triangle CL_t + \triangle DCL_t - DEP_t$$

Variables	Estimation and Prediction
Board Structure	One-third independence of the board, as measured by the number of independent directors divided by total number of directors.
	Chairman and CEO separation.
	Largest director's shareholding (as measured using direct interest and deemed interest divided by total issued shares) below 5% of issued capital.
Audit Committee	Existence of an Audit Committee.
	Disclosure of frequency of Audit Committee meeting.
	Expertise of Audit Committee.
	Engagement of Big Six auditors.
Ownership Structure	Existence of a Remuneration Committee.
	Existence of a Nomination Committee

Schematic Diagram of Theoretical Framework



Where:

TA_t = total accruals in year t
$\triangle CA_t$= change in current assets in year t
$\triangle Cash_t$= the change in cash and cash equivalents in year t
$\triangle CL_t$= the change in current liabilities in year t
$\triangle DCL_t$= the change in debt included in the current liabilities in year t
DEP_t= depreciation and amortization expense in year t

Cash flow statement approach

According to this approach the accruals can also be estimated with the help of the following equation:

$$TA_t = N.I_t - CFO_t$$

Where:

TA_t= Total accruals in year t
$N.I_t$= Net income in year t
CFO_t= Cash flow from operating activities in year t

Measurement of Discretionary Accruals (DA)

Different methods have been opted by the different researchers for calculating the discretionary accruals but in our paper the Modified Cross Sectional Jones Model is opted because it is the latest and modified model for estimating the discretionary accruals. According to Modified Cross Sectional Jones Model [1995] the discretionary accruals are estimated by deducting non-discretionary accruals from total accruals so, these non-discretionary accruals are estimated by using the following equation:

$$NDA_t= \alpha 1(\frac{1}{A_t-1})+\alpha 2(\frac{\triangle REV_t-\triangle REC_t}{A_t-1})+\alpha 3(\frac{PPE_t}{A_t-1})+\varepsilon$$

Where:

NDA_t= Non-discretionary accruals in year t
A_{t-1}= Total assets at the end of year t-1
$\triangle REV_t$= Revenues in year t less revenue in year t-1
$\triangle REC_t$= Net receivables in year t less net receivable in year t-1
PPE_t= Gross property plant and equipment at the end of year t

All of the variables have been scaled by lagged total assets.
$\alpha 1$, $\alpha 2$, $\alpha 3$ are firm specific parameters
ε is the residual, which represents the firm specific discretionary portion of total accruals.

$\alpha 1$	$\alpha 2$	$\alpha 3$
0.53	0.09	0.18

These above values of the co-efficient $\alpha 1$, $\alpha 2$ & $\alpha 3$ are used in the above equation to calculate the non-discretionary accruals. These coefficients are found out by regressing the receivables, revenues and the property, plant & equipment on the total accruals. As the discretionary accruals are equal to the difference of the total accruals and the non-discretionary accruals so, the discretionary accruals can be calculated by the following equation:-

$$DA_t=TA_t-NDA_t$$

Where:

DA_t= Discretionary accruals in year t
TA_t= Total accruals in year t
NDA_t= Non-discretionary accruals in year t

To test the hypothesis following multiple regression equation has been estimated

$$DA=\beta_0+\beta_1(FS)+\beta_2(CGI)+\mu$$

In this above model the discretionary accruals (DA) is the dependent variable and the firm size (FS) & the corporate governance index (CGI) are the independent variables. The correlation tests have been performed in this analysis before the application of the ordinary least square (OLS) for checking out the relationship between the variables. The final outputs of these tests are shown in the following tables.

RESULTS

The results acquired in the form of correlation matrix are as follows:

	CGI	DA	Size
CGI	1	–0.32	0.276
DA	–0.32	1	–0.199
Size	0.276	–0.199	1

Here is the description of each variable's correlation with other variables. Distinctly correlation between discretionary accruals and quality of corporate governance is negative which shows that there is inverse relation between them and it justifies too. As the corporate governance boosts, this means that employees to secure the interest of stakeholders of firm are mounting, so there should also be more security to interest of stakeholders. If we focus on the magnitude of relation then we'll come to know that strength is not puny. As far as correlation between discretionary accruals and size is concerned, there is negative relation too. It means that small sized firms are more engaged in earning management while large sized firms are less concerned. Keeping in mind the relation it is quite unproblematic to understand that big firms are less connected with earning management as there is additional capacity to absorb the fluctuations because the large size of firms. But in case of small sized firms there may not be as much competence as that of large sized firms so there needs a more earning management comparatively.

By applying the OLS model we found the following results of co-efficient and significance of each co- efficient. In the model expressed above, all figures are significant except one the corporate governance quality whose co efficient shows that it is insignificant and its role is not as vital as the size of the firm has. Positive co-efficient confirms the relation of DA and CGI as discussed above while firm size is showing negative significant relation with discretionary accruals. These results are in consensus of the correlation matrix results suggesting the same output.

Model 1	Standardized Co-efficient	Sig. of Co-efficient
Constant		.012
CGI	–.025	.703
Size	–.206	.002

Discussing overall, the model is significant so the contribution made by the independent variables to dependent variables is satisfactory. But in Pakistan the rules and regulations are not as implemented as these should be. Corporate governance code is not followed strictly due to which company corporate governance role is not coming out significantly.

Model 1	R^2	Adj R^2	F Statistics	Sig. of F Statistics
	.040	.032	5.179	.006

Earning management may be of two types; positive as well as negative but which type of earning management is needed depends upon the situation. If company needs inflating the income then positive earning management is required and vice versa. Here in this case the firms, under study, are following the approach of positive one. Small sized firms observe more fluctuations in earning so those firms are more needed for the improvement of earning to show the better financial position of firms.

CONCLUSION

The aim of this research is to quantify the aspects that are used by firms to manipulate their earnings and also the characteristics of such firms in terms of their size and corporate governance. The sample consists of the 50 listed companies of KSE 100 index. The time horizon for this study is from 2008 to 2012. Summarizing the whole discussion, the Earning Management is more exaggerated by the size of firms rather by their quality of corporate governance. By taking into account the details of co-efficient and correlation matrix and model significance, the crux is; model is significant. Among the model major contribution is of size of firms on earning management but in negative direction while minor or insignificant impact is of corporate governance on earning management, reason may be the weak implementation of corporate governance practices in Pakistan. In emerging economies it is observed that there is deviation in trends of earnings. So to help academicians and investors in predicting earnings management policy, this research reveals the effect of corporate governance on Earning Management. Due to short period of time we choose the sample of 50 listed companies and the time horizon for the sample data of 5 years. We also skipped the organizations for which the proper data was not available and the utilities & financial sector. We sued the cash flow statement approach to estimate the discretionary accruals because the required data for balance sheet approach not available. So, the further research can be done by increasing the sample size and the time horizon as well or by adding the some other variables in the model.

REFERENCES

Aik Leng, A.C. The Impact of Corporate Governance Practices on Firms' Financial Performance. *ASEAN Economic Bulletin*, Vol. 308-318 (03), pp. 308-318, 2004.

Bartov, E., Gul, F.A. and Tsui, J.S. Discre-tionary-Accruals Models and Audit Qualifi-cations. *Financial Economics and Accounting*, pp. 1-41, 2000.

Collins and Hriber. Errors in Estimating Accruals: Implications for Empirical Research. *Social Science Research Network*, pp. 1-39, 1999.

DeFond, M. and C, P. Smoothing Income in Anticipation of Future Earnings. *Journal of Accounting and Economics*, Vol. 23, pp. 115-139, 1997.

Denis, Diane and McConnell, J. International Corporate Governance. *Journal of Financial and Quantitative Analysis*, 2005.

Ibrahim, M.U. and Abdullah, S.R. *The Impact of Corporate Governance Disclosure on Earnings Quality in the Nigerian Banking Sector* (Vol. 1), 2004.

Islam, M.A., Ali, R. and Ahmad, A. Is Modified Jones Model Effective in Detecting Earnings Management?Evidence from A Developing Economy (Vol. 3). *International Journal of Economics and Finance*, 2011.

Kim, Y., Liu, C. and Rhee, S.G. The Effect of Firm Size on Earnings Management. *University of Hawaii*, pp. 1-31, 2003.

Klapper, L.F. and Love, I. Corporate Gover-nance, Investor Protection and Performance in Emerging Markets. *World Bank Policy Research Working Paper No. 2818*, pp. 1-40, 2002.

LA, M. and DJ, S. Earnings momentum and earnings management. *Accounting Academics*, Vol. 14 (2), pp. 235-250, 2000.

Mark, W.N., John, A.E. and Robin, L.T. Evidence from auditors about manager's and auditor's earnings management Decisions. *Accounting Review*, Vol. 77, pp. 175-202, 2002.

Rahmani, S. and Akbari, M.A. Impact of Firm Size and Capital Structure. *World of Sciences Journal*, Vol. 1 (17), pp. 59-71, 2013.

Rangan, S. Earnings management and the performance of seasoned equity offerings. *Journal of Financial Economic,* Vol. 50, pp. 101-122, 1998.

Sawicki, J. Corporate Governance and Dividend Policy in Southeast Asia Pre- and Post-Crisis. *Nanyang Business School*, pp. 1-34, 2005.

Shah, S.A., Butt, S.A. and Hasan, A. Corpo-rate Governance and Earnings Management an Empirical Evidence Form Pakistani Listed Companies. *European Journal of Scientific Research*, Vol. 26 (4), pp. 624-638, 2009.

Xie, B., W.N, D., and P.J, D. *Earning Manage-ment and Corporate Governance: The Role of the Board and the Audit Committee* (Vol. 9). *Journal of Corporate Finance*, 2003.

Z. Elias, R. Determinants of Earnings Management Ethics among Accountants. *Journal of Business Ethics*, Vol. 40 (1), pp. 33-45, 2002.

Investors Preference Towards Different Industries Before Making Merger-Based Investments

P. Praveen Kumar and R. Kasilingam*

Abstract

Merger refers to legal combination of two or more companies from related or unrelated industry. This study analyses investors' preference towards different industries before making merger-based investments. This study also tries to measure the influence of profile of investors on their preference towards different industries. Finally, this study measures the association between investors' preference towards industry and selection of companies. This present literature is descriptive in nature, based on primary data. Data has been obtained from 513 equity investors in Puducherry and Chennai. Pilot study has been conducted by administering an interview schedule to 59 respondents. This study finds that investors prefer to invest in finance related companies. Gender and age of the investors are exercising maximum influence on investors' preference towards industry selection. This study also finds that there is a significant association between investors' preference of industry and selection of companies for making merger-based investments.

Keywords: *Investors, Merger based investments.*

INTRODUCTION

Indian corporates started involving themselves in corporate restructuring at a rapid pace. However, objectives of resorting to corporate restructuring may differ from company to company. Corporates might resort to financial restructuring, market restructuring, technology restructuring or organizational restructuring. Financial restructuring refers to adjusting the capital base by raising finance from the market for investing in new projects while market restructuring refers to executing adjustments in market segments. Technology restructuring denotes variations in technology due to adoption of new and innovative technologies while organizational restructuring signifies enhancement in competencies of personnel in business enterprises.

RESEARCH METHODOLOGY

Data have been collected from 513 equity investors by administering a well-structured interview schedule. Pilot study has also been conducted by administering an interview schedule to 59 respondents.

* Department of Management Studies, Pondicherry University, PondicherryIndi

Investment on Merger Announcement

Investors have been required to indicate their preference to industries while deciding about making merger-based investments in a Likert's five-point scale and their responses have been displayed in Table 1.

It can be inferred from Table 1 that investors are highly interested in investing in shares of companies in the banking, insurance and other financial intermediaries industries (mean of 4.03), followed by infrastructure (3.27), automobiles (3.25), consumer durables (3.1), other industries (3.1), electrical and electronics (2.97) and information technology (2.88). Investors show least interest to invest in information technology companies striking merger deals.

Segmentation of Investors

The investors' investment decision is immensely influenced by profile of company and the industry to which the company belongs. However, this decision may vary among the investors and those having similar opinion may be grouped under distinct groups using K-means cluster analysis and the results of such analysis has been displayed in Table 2.

Table 1. Mean Analysis and Rank Scores

Preferred Industry	Mean	Rank
Banking, Insurance and other financial intermediaries	4.03	1
Infrastructure	3.27	2
Consumer durables	3.1	4
Information Technology	2.88	7
Electrical and electronics	2.97	6
Automobiles	3.25	3
Others	3.1	4

Table 2 displays mean scores, size of each group and results of ANOVA. Cases refer to the number of investors constituting each of the group. The first cluster has been labelled as "Influence of finance company" because the mean in respect of banking, insurance and other financial intermediaries industries for this cluster is in the region of five mark. This cluster consists of 197 investors who are interested in investing on shares of finance companies. The second cluster has been designated as "Influence of consumer durables company" as the mean in respect of consumer durables industry for this cluster has touched the four mark. This cluster engulfs 114 investors who are interested in investing on shares of consumer durables companies. The third cluster has been branded as "Influence of all sectors" as the mean in respect of majority of industries for this cluster has exceeded the three mark. This group encompasses 202 investors who display interest in investing on shares of companies of any industry.

The F value in respect of banking, insurance and other financial intermediaries is the highest (704.412), followed by automobiles (116.302), information technology (114.721), consumer durables (113.916), others (54.655), electrical and electronics (31.882) and infrastructure (0.764). Hence, banking, insurance and other financial intermediaries industries contributes more to the segmentation process. However, all these F values are significant at one per cent, suggesting

Table 2. Final Cluster Centers and ANOVA

	Final Cluster Centers			ANOVA	
	1	2	3	F	Sig.
Banking, Insurance and other financial intermediaries	5	2	5	704.412	0.000
Infrastructure	3	3	3	0.764	0.466
Consumer durables	2	4	4	113.916	0.000
Information Technology	2	2	4	114.721	0.000
Electrical and electronics	2	3	3	31.882	0.000
Automobiles	2	3	4	116.302	0.000
Others	3	3	4	54.655	0.000
Cases	197	114	202		

that all the items related to different industries contribute to the segmentation of investors based on their preference to the industry in deciding about merger-based investments.

Reliability of Segmentation

Cluster Analysis has classified the investors into three categories of influence of finance company, influence of consumer durables company and influence of all sectors. Discriminant analysis has been conducted to check the reliability of segmentation process. The factors of banking, insurance and other financial intermediaries, infrastructure, consumer durables, information technology, electrical and electronics, automobiles and others are considered as independent variables while cluster membership scores of investors' preference towards industry has been taken as grouping variable.

Table 3 displays the value of Eigen, canonical correlation, wilks' lambda and chi-square. Function one has the highest Eigen value of 3.237 implying the maximum spread of group means in this function. The Eigen value in respect of function two is 1.718. A canonical correlation value of the first function is 0.874 while that of the second function is 0.795. This confirms the existence of relationship between investors' preference towards industry while deciding about merger-based investment and the two functions. Wilks' lambda value of the first function is 0.087 while that of the second function is 0.368 which suggests the prevalence of significant distance between the two functions. The values are significant at one per cent level, confirming good consistency of the segmentation process.

Table 4 displays the standardized beta scores which convey the characteristics of population. Two functions generated are:

Z1=0.923* Banking, Insurance and other financial intermediaries

Table 4. Structure Matrix

	Function	
	1	2
Banking, Insurance and other financial intermediaries	0.923*	0.048
Automobiles	–0.043	0.512*
Information Technology	0.151	0.468*
Consumer durables	–0.189	0.439*
Others	0.017	0.352*
Electrical and electronics	–0.041	0.264*
Infrastructure	–0.005	–0.041*

Z2=0.512* Automobiles +0.468* Information Technology +0.439* Consumer durables +0.352* Others + 0.264* Electrical and electronics –0.041* Infrastructure

Figure 1 shows group centroids in respect of the three clusters all of which are located at

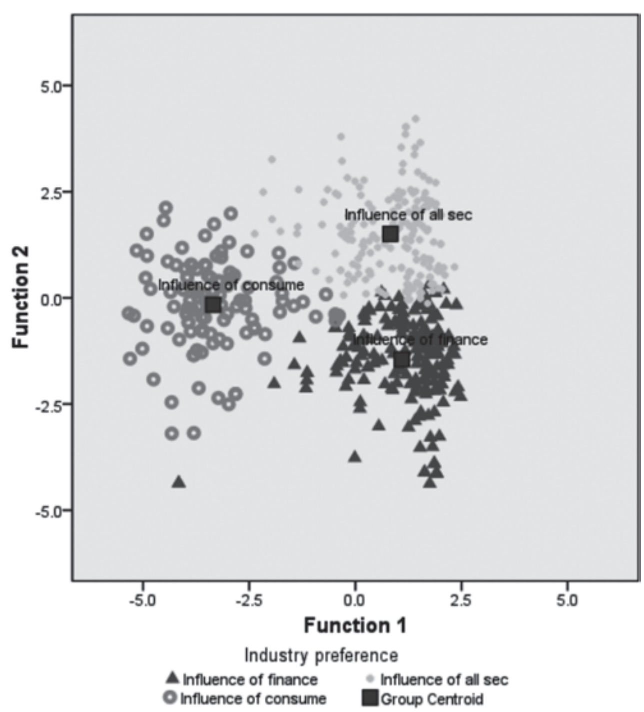


Fig. 1. Group Centroids

Table 3. Eigen Value and Wilks' Lambda

Function	Eigen value	Canonical Correlation	Wilks' Lambda	Chi-square	Sig.
1	3.237	0.874	0.087	1238.894	0.000
2	1.718	0.795	0.368	506.886	0.000

distinct locations. This confirms that the investors have been arranged properly.

Table 5 highlights that 95.6 per cent of investors have been correctly grouped under "influence of consumer durables company" while 95.4 per cent of the investors have been properly classified under "influence of finance company" and 95 per cent of the investors have been properly classified under the "influence of all sectors". Hence, it can be concluded that segmentation of investors into three clusters have been executed with good degree of precision.

Relationship between Profile of Investors and Preferred Industry

The relationship between profile of investors and their preference towards industry while deciding about making merger-based investment has been analyzed using chi-square analysis and ANOVA. Table 6 portrays the results of chi-square analysis.

It can be inferred from Table 6 that six out of the ten profile variables have significance value of less than 0.05 suggesting the presence of significant association between majority of profile variables of investors and their preference towards selecting industry for making merger-based investments.

The results of correspondence analysis have been compiled in Table 7. It can be inferred from the table that investors aged 30-50 years and those with income of Rs. 15,001-30,000 are interested in purchasing shares of finance companies. Investors with income of Rs. 30,001-45,000 and those having more than five family members are interested to invest in shares of consumer durables companies. Finally, investors with income of less than Rs. 15,000, those having one dependent and those with savings of 21-25 per cent are interested to invest in all types of companies. The above discussion highlight that income of investors has the highest association with their preference towards the industry while deciding about making merger-based investment. However, four variables lack significant association and these variables are tested using ANOVA and Table 8 displays the ANOVA results.

Table 8 depicts that the profile variables of educational qualification, occupation and

Table 6. Association between Personal Profile and Preferred Industry

	Preferred Industry	
	Value	Sig.
Gender	9.801	0.007
Age	15.281	0.018
Educational qualification	11.904	0.156
Occupation	12.141	0.595
Monthly income	16.797	0.032
Family members	19.533	0.012
Dependents	33.170	0.000
Income earning members	6.738	0.346
Family members in share market	7.487	0.278
Savings	16.121	0.041

Table 5. Extent of Correct Classification

	Preferred Industry	Predicted Group Membership			Total
		Influence of finance company	Influence of consumer durables company	Influence of all sector	
Count	Influence of finance company	188	5	4	197
	Influence of consumer durables company	4	109	1	114
	Influence of all sector	5	5	192	202
%	Influence of finance company	95.4	2.5	2.0	100.0
	Influence of consumer durables company	3.5	95.6	0.9	100.0
	Influence of all sectors	2.5	2.5	95.0	100.0

number of income earning members have significance value of less than 0.05. Education qualifications of investors influences their decision to invest on shares of banking, insurance and other financial intermediaries companies while occupation influences their decision to invest on shares of consumer durables companies and number of income earning members influences their decision to invest in shares of automobiles and banking, insurance and other financial intermediaries companies.

Table 9 displays that investors with low educational qualification and having more than three income earning members are not investing in shares of finance company.

Table 10 reveals that investors with more than three income earning members are investing in shares of automobile companies.

Table 7. Association between Personal Profile and Preferred Industry

	Influence of finance company	Influence of consumer durables company	Influence of all sectors
Age	30-50 years	—	—
Monthly Income	₹15,001-30,000	₹30,001-45,000	Less than ₹15,000
Family Members	—	>5	—
Dependents	—	—	1
Savings	—	—	21-25%

Table 8. Relationship between Personal Profile and Preferred Industry

	1F (Sig.)	2F (Sig.)	3F (Sig.)	4F (Sig.)	5F (Sig.)	6F (Sig.)	7F (Sig.)
Educational qualification	3.563	0.667	0.488	0.381	0.95	2.282	0.572
	(0.007)	(0.615)	(0.745)	(0.822)	(0.435)	(0.06)	(0.683)
Occupation	1.087	0.717	2.41	0.969	0.475	1.836	0.974
	(0.37)	(0.658)	(0.02)	(0.453)	(0.853)	(0.078)	(0.449)
Income earning members	3.149	0.172	0.574	0.631	0.826	3.18	0.989
	(0.025)	(0.915)	(0.632)	(0.595)	(0.48)	(0.024)	(0.398)
Family members in share market	1.012	0.915	1.767	0.301	1.162	1.467	0.525
	(0.387)	(0.433)	(0.153)	(0.824)	(0.324)	(0.223)	(0.666)

Where, 1- Banking, Insurance and Other Financial Intermediaries; 2- Infrastructure; 3- Consumer Durables; 4- Information Technology; 5- Electrical and Electronics; 6- Automobiles; 7- Others

Table 9. Post Hoc Analysis

Educational Qualification	Banking, Insurance and Other Financial Intermediaries		Income Earning Members	Banking, Insurance and Other Financial Intermediaries	
	1	2		1	2
8th STD or less	2.25	—	>3	3.09	—
SSLC	—	3.85	3	—	3.82
HSC	—	3.87	2	—	4.03
Graduate	—	4.01	1	—	4.14
Professional	—	4.26	—	—	—

Table 11 displays that two investment-related factors have significance value of less than 0.05. Hence, there is weak association between investment-related factors and investors' preference towards industry while deciding about merger-based investments.

Figure 2 portrays that investors with medium financial maturity are investing in shares of consumer durables companies while investors with high financial maturity prefer investing in finance companies. Investors with low financial maturity and those having less than five years' experience in share market prefer to invest in shares of all types of industries. Hence, it can be said that level of financial maturity among investors is highly associated with their preference towards industry while deciding about merger-based investments.

Table 10. Post Hoc Analysis

Income Earning Members	Automobiles	
	1	2
3	2.92	—
1	3.19	—
2	3.36	3.36
>3	—	3.91

Table 11. Association between Investment-Related Factors and Preferred Industry

	Industry Preference	
	Value	Sig.
Investment avenues	14.839	0.005
Period of investments	13.450	0.036
Equity investment avenues	9.860	0.275
Money in equity	15.201	0.055

Table 12 reveals that significance values in respect of equity investment avenues and money in equity are greater than 0.05, suggesting that there is no relationship between investors investment-related factors and their preference towards industry while deciding about merger-based investments.

Influence of Profile of Investors on Preferred Industry

Results of chi-square test and ANOVA serve testimony to the presence of significant relationship between investors' preference towards industry while deciding about making merger-based investments and 11 profile variables of gender, age, educational qualification, occupation, monthly income, number of family members, number of dependents, number of income earning members, savings, investment avenues

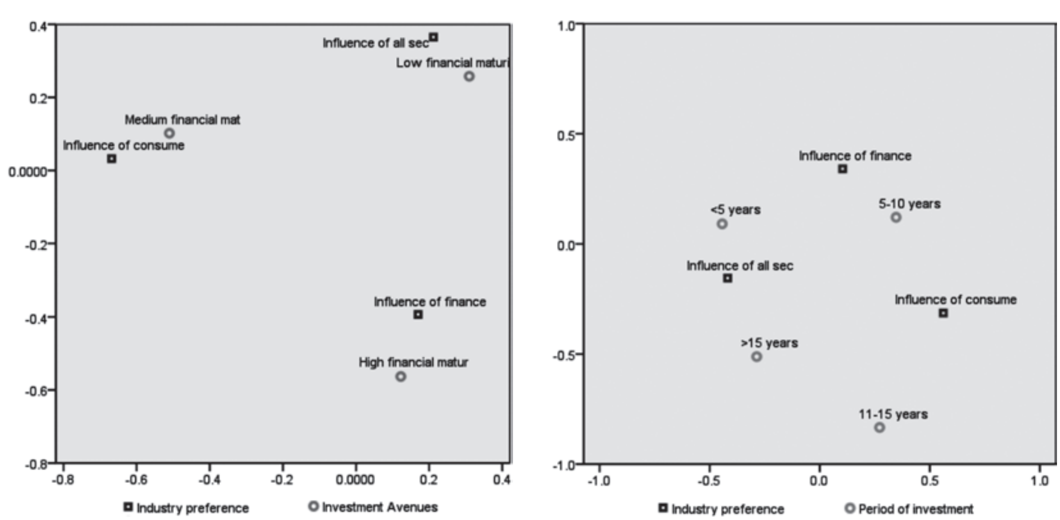


Fig. 2(a): Investment Avenues & Preferred Industry

Fig. 2(b): Period of Investment & Preferred Industry

Fig. 2. Association between Investment-Related Factors and Preferred Industry

and period of investments. Canonical correlation is utilized to arrive at the most influencing profile variable. Canonical correlation measures relationship between two sets. Cluster score has been taken as set one and the 11 profile-related variables have been considered as set two. Table 13 portrays the results of canonical correlation.

Table 13 shows canonical correlation value of 25 per cent which is significant at one per cent level. Hence, significant relationship prevails between the two sets. To add up, gender and age are the most influencing variables as the significance value in respect of these two variables is less than 0.05. Furthermore, a personal profile variable alone influences investors' preference of industry while making merger-based investment decisions.

Table 12. Relationship between Investment-Related Factors and Preferred Industry

	1F (Sig.)	2F (Sig.)	3F (Sig.)	4F (Sig.)	5F (Sig.)	6F (Sig.)	7F (Sig.)
Equity investment avenues	1.215 (0.304)	0.773 (0.543)	0.936 (0.443)	2.086 (0.081)	0.526 (0.716)	0.14 (0.967)	1.159 (0.328)
Money in equity	0.875 (0.479)	0.44 (0.78)	0.48 (0.751)	1.933 (0.104)	1.096 (0.358)	0.488 (0.745)	0.644 (0.631)

Where, 1- Banking, Insurance and Other Financial Intermediaries; 2- Infrastructure; 3- Consumer Durables; 4- Information Technology; 5- Electrical and Electronics; 6- Automobiles; 7- Others

Table 13. Canonical Correlation

	Coef.	Std. Err.	t	P>ltl	[95% Conf.	Interval]
u1						
indus	–1.132857	.1973158	–5.74	0.000	–1.520505	–.7452087
v1						
gen	–1.616224	.7898051	–2.05	0.041	–3.167882	–.0645665
age	.82564	.3336993	2.47	0.014	.1700516	1.481228
eduq	–.3017265	.2388987	–1.26	0.207	–.7710688	.1676158
occu	–.0869675	.1112407	–0.78	0.435	–.3055119	.1315769
monin	.2778182	.2587248	1.07	0.283	–.2304747	.7861111
fm	.2251316	.2063236	1.09	0.276	–.1802135	.6304767
dep	.0980012	.1851792	0.53	0.597	–.2658033	.4618056
incmem	–.0563397	.2884331	–0.20	0.845	–.6229977	.5103183
sav	.0244737	.1392204	0.18	0.861	–.2490399	.2979873
inav	.3454367	.2316502	1.49	0.137	–.1096651	.8005385
per	–.3550599	.2376956	–1.49	0.136	–.8220386	.1119188

(Standard errors estimated conditionally)

Canonical correlations: 0.2462 Tests of significance of all canonical correlations

	Statistic	df1	df2	F	Prob>F
Wilks' lambda	.9394020	11	501	2.9380	0.0009 e
Pillai's trace	.0605978	11	501	2.9380	0.0009 e
Lawley-Hotelling trace	.0645068	11	501	2.9380	0.0009 e
Roy's largest root	.0645068	11	501	2.9380	0.0009 e

Association between Investors Preference towards Industry and Selection of Companies

The association between industry preferred by investors and their preference towards selection of companies for making merger-based investments has been measured using chi-square test. Cluster membership scores pertaining to the two constructs have been used for the purpose of chi-square test and the results have been displayed in Table 14.

It can be inferred from Table 14 that there is a significant association between investors' preference of industry and selection of companies for making merger-based investments. The nature of this association is displayed in Figure 3.

Figure 3 displays investors who prefer finance industry purchase shares of acquirer companies which strike merger deal with big domestic target company. Investors who prefer to invest in all sectors purchase all types of company shares while investors who prefer to invest in consumer durables sector are not following any specific criteria during making such investments.

Table 14. Association between Investors' Preference towards Industry and Selection of Companies

	Preferred Industry	
	Value	Sig.
Selection of companies	25.800	0.000

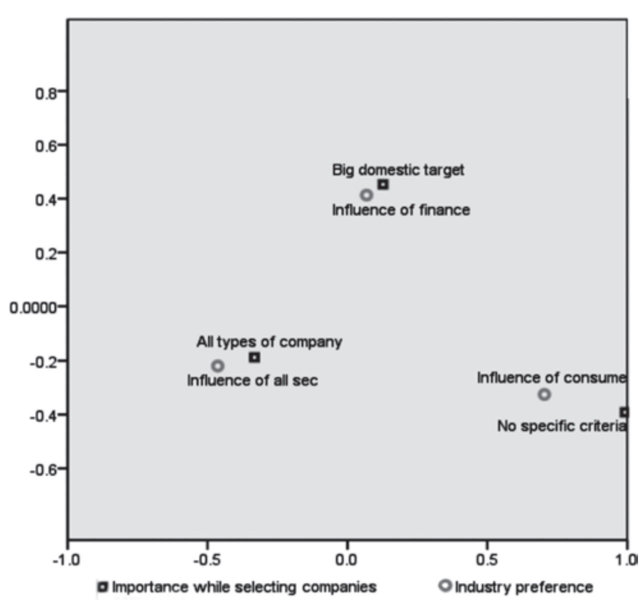


Fig. 3. Association between Investors'

CONCLUSION

Investors prefer to invest in finance related companies while they are reluctant to invest in shares of information technology companies. Investors who prefer finance related industries purchase the shares of acquirer which strike merger deal with big domestic target company while investors who prefer to invest in all sectors purchase all types of company shares. Investors who prefer to invest in consumer durables sector are not following any specific criteria.

REFERENCES

Hyun, H.J. and Kim, H.H. The Determinants of Cross-border M&As: The Role of Institutions and Financial Development in the Gravity Model. *World Economy*, Vol. 33(2), pp. 292–310, 2010.

Ismail, A. and Davidson, I. Further analysis of mergers and shareholder wealth effects in European banking. *Applied Financial Economics*, Vol. 15(1), pp. 13–30, 2005.

Kirchhoff, M. and Schiereck, D. Determinants of M&A Success in the Pharmaceutical and Biotechnological Industry. *The IUP Journal of Business Strategy*, Vol. 8(1), pp. 25-50, 2005.

Palia, D. The Managerial, Regulatory, and Financial Determinants of Bank Merger Premiums. *The Journal of Industrial Economics*, Vol. XLI(1), pp. 91-102, 1993.

Shukla, A. and Gekara, M.G. Effects of Multinational Mergers and Acquisitions on Shareholders' Wealth and Corporate Performance. *The IUP Journal of Accounting Research & Audit Practices*, Vol. 9(1&2), pp. 44-62, 2010.

Singh, F. and Mogla, M. Profitability Analysis of Acquiring Companies. *The IUP Journal of Applied Finance*, Vol. 16(5), pp. 72-83, 2010.

Vu, D.A., Shi, Y. and Hanby, T. Strategic frame-work for brand integration in horizontal mergers and acquisitions. *Journal of Technology Management in China*, Vol. 4(1), pp. 26–52, 2009.

Relationship of Mindfulness and Transformational Leadership with Affective Commitment: Mediating Role of LMX

Saliha Gul Abbasi and Arshad Zaheer*

Abstract

This study analyzes the impact of mindfulness of administrators and managers in government sector on employee affective commitment through leader-member exchange relationship. To enable this proportionate stratified random sampling method was used to collect data using structured questionnaire. Sample size was 309 supervisor-subordinate dyads of government employees. Data was analyzed using techniques like multiple linear regressions through SPSS. It was found that independent variables explained significant variation in mediating variable Leader Member Exchange (LMX) and dependent variable affective commitment. Indirect effects of LMX were non-significant in case of transformational leadership, mindfulness and affective commitment. Study suggests that if transformational leaders are mindful then a quality relationship is cultivated with subordinates which in turn will result in retaining more committed employees.

Keywords: *Mindfulness, Transformational Leadership, LMX, Affective commitment.*

INTRODUCTION

Rapid change in the globalized world is bringing organizations to face many challenges as pace of change is making it ever difficult to concentrate, scattering the attention of people in this era where knowledge sharing, learning and effective leadership require people in organizations to be ever smart and dynamic.

A plethora of research explored the impact of different leadership styles on employees establishing a number of relationships. The link of transformational leadership has been looked with positive employee outcomes but little is known if there are some other characteristics that may affect the behaviours. A comprehensive review of literature from psychology, sociology and behavioural sciences led Ray, Baker and Plowman (2011) to conclude that an individual's mindfulness can bring positive behavioural changes among its followers. It has been observed that mindfulness from leader's perspective and how the relationship between leader and his/her followers affect the link between mindful leaders and employee-affective organization commitment and burnout.

* Faculty of Business Administration, Air University, Islamabad, Pakistan

It has been theorized as moment-to-moment, non-judgmental and non-reactive awareness. Thus, mindfulness is prompt and thoughtful response base on background clues.

Transformational leadership has been associated with a number of positive outcomes but it has never been examined along with mindfulness to see if mindfulness develop better behavioural outcome for employees.

Mindful leadership is an area of study at Harvard (Ozaralli, 2003). As forecasted by World Health Organization, mental health problems will take away the greatest share of health resources by 2030. People undergoing anxiety and depression can get the greatest benefit from mindfulness training programs. Results of some studies may help us to conclude that less emotionally exhausted employees are also more committed at the same time.

The phenomenon of mindfulness is being introduced as a new area in behavioural sciences. Little is known about the mindful behaviour of leaders specifically how it affects the employee's attitudes of commitment and burnout among others. This is a theoretical oversight in the knowledge base of leadership. So, the first purpose of this study is to examine the extent of impact of mindful leader behaviour on employee organization commitment and burnout. In addition, the quality of relationship between leader and his/her followers affects the employee behaviours in distinguishing ways. Drawing upon Leader Member Exchange (LMX) theory, this study examines the intervening effect of LMX on the relationship between leader mindfulness and followers' organization commitment and burnout.

Theoretical Foundations of the Model

Mindfulness, meditation and insight have been found to be positively associated with problem-solving ability. It is related with highly ethical behaviour. Mindfulness promotes self-awareness that further helps to minimize immoral behaviour. Studies reveal that in case of people being aware of them; self-regulated behaviour fosters leadership development. Thus, mindful leaders will try to develop high quality working relationship with followers and their subordinates will be more respectful and loyal towards them.

A transformational leader enhances subordinate satisfaction. Qualities of LMX relationship helps followers enjoy the freedom at workplace. As a result, they are given better job assignments and more support, get more opportunities to work with their leader and experience more trust in the leadership.

Strong leaders identify with their organization the more their followers identify with the organization. Turnover intentions and affective commitment have a strong negative association with transformational leadership.

Integrating the research on mindfulness, LMX, and affective commitment, it is contended that leader plays instrumental role in socialization process, mentoring, motivating and supporting their followers. LMX has an intervening role operating as a mechanism between mindfulness and employee outcomes of burnout and affective commitment.

Significant and positive associations have been found between LMX and employee attitudinal outcomes such as affective commitment. Low level of affective commitment is found among contingent employees as compared to permanent employees.

Organizations are identified with their leaders. When employees are attached to leaders, it naturally explains that they are committed to the organization. It has also been obseved that human resources and transformational leadership are positively associated with each other.

Commitment is independent of personal motivation and interests. It implies extreme professional loyalty and depth of identification. Being concerned with development and growth of followers makes transformational leadership distinct from others. Thus, it can be contended that LMX mediates the relationship between mindfulness and employee affective commitment, as well as the relationship between transformational leadership and employee affective commitment.

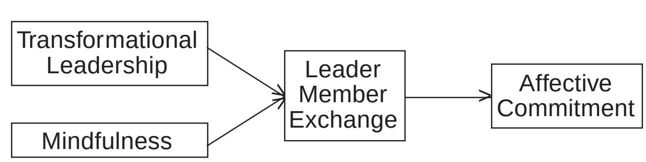


Fig 1. Theoretical Framework of the Study

METHODOLOGY

Scales used to measure the relationships proposed in this study are as follows:

All items were measured on a five-point Likert type scale from 1 'Strongly Disagree' to 5 'Strongly Agree'.

Methods

The study was conducted in natural work settings with minimal researcher interference and is a one-shot study. Unit of analysis was a manager-subordinate dyad. Target population included government employees working on administrative and managerial positions.

Government employees are selected as target population because administrators face the challenge of designing conscious methods to organize. It involves creating a culture that encourages deep thinking based on concrete information. Thus, managers and administrators have such a nature of job that requires them to be more vigilant and more aware of what is going around them as compared to other employees who carry out routine tasks performed on auto-pilot approach. This study utilized proportionate stratified random sampling as there are identifiable sub groups of population. Size of usable survey was 309 supervisor-subordinate dyads.

RESULTS

Demographic characteristics highlight that 88.85% of respondents are male, 64% of managers and 48% subordinates are in age bracket of 36-45 years with 5-10 years of job experience and 54% are masters degree holders among managers and subordinates respectively.

Independent sample t-test was conducted for gender and one way ANOVA was conducted for other demographic variables to identify the control variables. Control variables for LMX were age and gender of managers and gender of subordinates. Control variables for affective commitment were gender of managers, subordinates and qualification of subordinates.

CONCLUSION

The results of this study support the hypothesis. This study shows that transformational leadership and mindfulness have a significant and positive relationship with LMX. A statistically significant and negative impact of transformational leadership and mindfulness on affective commitment of employees is found.

Mindfulness and transformational leadership of manager develops the quality relationship between a manager and his/her followers. This relationship increases affective commitment among followers. The results of this study indicate that model proposed has been fully confirmed in the case of TL through LMX. Thus LMX mediated fully the relationship between TL and dependent variable affective commitment. Similarly, in case of mindfulness, relationship of mindfulness with AC was fully mediated.

Results indicate that mindfulness of managers leads to development of quality LMX relationship between manager and subordinates. This further develops the feeling of affective commitment among employees. Direct effect of mindfulness and transformational leadership becomes insignificant in presence of quality LMX.

Variance explained by LMX in affective commitment is 8%. It can be concluded that high quality of LMX relationship develops employee affective commitment. Mindfulness and transformational leadership style is significantly and positively related to LMX in government sector. Dulebohn (2011) also suggest this in case of transformational leadership. Vogus and Sutchcliffe (2012) and Ray et al. (2011) have similar experiences in case of mindfulness. TL and mindfulness explained 11.1% and 10.8% of variation in LMX respectively. Therefore, it can be concluded that both transformational leadership and mindfulness of a leader play a role in developing a quality relationship with their subordinates. Almost similar variation in LMX by the two predictors indicates that being aware of the surroundings is as much important for a leader and manager as following an acceptable leadership style.

REFERENCES

Avolio, B.J., Zhu, W., Koh, W. and Bhatia, P. "Transformational leadership and organizational commitment: Mediating role of psychological empowerment and moderating role of structural distance", *Journal of Organizational Behavior,* Vol. 25, No. 8, pp. 951-968, 2004.

Briscoe, J.P. and Finkelstein, L.M., "The new career and organizational commitment: Do boundary less and protean attitudes make a difference?", *Career Development International,* Vol. 14, No. 3, pp. 242-260, 2009.

Dulebohn, J.H., Bommer, W.H., Liden, R.C., Brouer R.L. and Ferris, G.R., "A Meta-Analysis of antecedents and consequences of leader-member exchange: Integrating the past with an eye toward the future", *Journal of Manage-ment,* Vol. 38, No 2, pp. 1715-1759, 2012.

Erdogan, B., "Leader-member exchange differentiation fairness: Evidence for a new construct", Retrieved from *ProQuest Dissertations and Theses Database*, 2002.

Erkutlu, H., "The impact of transformational leadership on organizational and leadership effectiveness: The Turkish case", *Journal of Management Development,* Vol. 27, No. 7, pp. 708–726, 2008.

Judge, T.A. and Piccolo, R.F., "Transformational and transactional leadership: A meta-analytic test of their relative validity", *Journal of Applied Psychology,* Vol. 89, pp. 755-68, 2004.

Jun R., Zhihui H., Jing L., Gao Xia W., Xiaoping Y., Zhi G.D., Yi Bin W. and Fei L., "Meditation promotes insightful problem-solving by keeping people in a mindful and alert conscious state", *Science China Life Sciences,* Vol. 54, No. 10, pp. 961-965, 2011.

Levinthal, D. and Rerup, C., "Crossing an apparent chasm: Bridging mindful and less-mindful perspectives on organizational learning", *Organization Science,* Vol. 17, No. 4, pp. 502-513, 2006.

Özaralli, N., "Effects of transformational leadership on empowerment and team effectiveness", Leadership *& Organization Development Journal,* Vol. 24, No. 6, pp. 335-344, 2003.

Ruedy, N.E. and Schweitzer, M.E., "In the moment: The effect of mindfulness on ethical decision making", *Journal of Business Ethics*, Vol. 95, pp. 73-87, 2010.

Shapiro, S.L., Brown, K.W. and Biegel, G.M., "Teaching self-care to caregivers: Effects of mindfulness-based stress reduction on the mental health of therapists in training", *Training and Education in Professional Psychology,* Vol. 1, No. 2, pp.105–115, 2007.

An Empirical Study on Financial Inclusion and Exclusion with Respect to Banking Services in Selected Villages of Anand District in Gujarat, India

Suchi K. Patel*

ABSTRACT

Inclusive growth is possible only through proper mechanism. Financial inclusion is an innovative concept which makes alternative techniques to promote the banking habit among rural people who are often illiterate. Such households have low income and often lack access to bank and have to spend time and money to avail banking services, be it opening an account or availing a loan facility. In this paper we analyze the income-related inequalities, differences in the use of banking services by male and female, lack of awareness about banking services among rural people, reasons for not availing banking services, and by which source these people (who are financially excluded in selected villages of Anand) meet their sudden financial need.

Key words: *Financial Inclusion, Financial Exclusion, Banking Services*

INTRODUCTION

Financial inclusion or inclusive financing is the delivery of financial services at affordable costs to sections of disadvantaged and low-income segments of society, in contrast to financial exclusion where these services are not available or affordable. An estimated 3 billion working adults globally have no access to the types of formal financial services delivered by regulated financial institutions. In Sub-Saharan Africa only 24% of adults have a bank account even though Africa's formal financial sector has grown in recent years. It is argued that as banking services are for the nature of public good, the availability of banking and payment services to the entire population without discrimination is the prime objective of financial inclusion public policy.

The term "financial inclusion" has gained importance since the early 2000s, a result of findings about financial exclusion and its direct correlation to poverty. The United Nations defines the goals of financial inclusion as follows:

- Access at a reasonable cost for all households to a full range of financial services, including savings or deposit services, payment and transfer services, credit and insurance;

* Anand Institute of Management, Anand, India

- Sound and safe institutions governed by clear regulation and keeping up professional standards;
- Financial and institutional sustainability, to ensure continuity and certainty of investment; and
- Competition to ensure choice and affordability for clients

Financial exclusion can be defined as the unavailability of banking services to people with low or no income. It is believed to be one factor preventing poor people to live in poverty. Simple financial tools such as a credit card and a bank account for pay have become prerequisites for many activities of daily living. Lack of access to these tools and services and lack of use of these represent a serious obstacle to economic and social integration of a person.

Generally speaking, people with low income, less education, part of an ethnic minority or with migrant background and either very old or very young are more likely to be financially excluded than others. Women are also twice as likely to find themselves completely excluded from financial services than men. By household type, people who are completely financially excluded are more likely to be found within households with no wage earner.

RESULT

The result indicates that 43% respondents fell into the age group of 26-35, proportion of male and female respondents being the same, 50% respondents held education as HSC and below, 33% respondents have less than Rs. 50000 and 33% respondents have Rs. 50000-150000 annual income.

The study shows that out of 5 selected villages, four villages have bank facility in which 59% respondents are availing banking services and 41% of respondents are financially excluded from banking services. From the financially included respondents 66.10% of the respondents use banking services from their local area bank branch. Due to the lack of education they are not that much aware regarding the banking system and are finding the banking services as a very time consuming process. Through quantitative analysis the study poses that during uncertain circum-stances the major sources financially excluded people. For meeting their financial needs they take help from their friends and relatives apart from that they take help from moneylenders and sometimes they might mortgage their capital assets for the said reason.

CONCLUSION

From this study researcher found that the people are aware about the basic banking services like deposit, loans, fixed deposit, ATM service. The people who are included are availed of the banking service for saving their surplus fund and for getting benefit of debit card services. The reasons for not availing are that due to the lack of education they are not that much aware regarding the banking system and are finding the banking services as a very time consuming process with high opening and maintenance charges. People meet their sudden financial needs with the help of friends or relatives, money-lenders, and by mortgaging their assets. Male-headed households are more included in financial services than female-headed households.

Relationship Among Employee Empowerment, Job Satisfaction and Organisational Commitment: An Empirical Study

Kranti Walia and Akanksha Arora*

Abstract

This study investigates the empowerment concept, job satisfaction and organizational commitment in the IT industry. Empowerment heightens employees' sense of personal control and motivates them to engage in work which in turn results in positive managerial and organizational outcomes. Job satisfaction and organizational commitment have both shown to be important outcomes of psychological empowerment. The primary objective of this study is to gain an understanding of the relationship of employee empowerment with job satisfaction and organizational commitment amongst employees in multi-national organizations.

Key words: *Empowerment, Job Satisfaction, Organizational Commitment*

INTRODUCTION

GLobalization has put pressure on companies to fundamentally rethink and redesign their existing organizational processes, to increase production, speed and quality, while cutting costs and eliminating layers. Organizations are finding the need to change the way they are doing their business. These may include the development of global market places, rapid innovation in work technologies, shifting work force and customer demographics, and increasing demand for quality and flexibility in products and service. In reaction to the global challenge, numerous big organizations delayered, devolved decision-making, promoted multi-skilling, encouraged teamwork, and introduced a range of initiatives in order to empower employees.

Employee empowerment, job satisfaction and organizational commitment are important concepts to consider when dealing with the changes in the world of work. Employee empowerment refers to the feeling of empowerment among employees. Empowerment heightens employees' sense of personal control and motivates them to engage in work which in turn results in positive managerial and organizational outcomes. Lots of studies mentioned that job satisfaction and organizational commitment have been found as the important outcomes of employee empowerment. Employee empowerment has received wide recognition as an important subject in management circles mainly because it is seen as one of the fundamental elements of managerial and organizational effectiveness that increases when power and

* NIT Kurukshetra

control are shared in an organization. The empowerment of employees is essential to the constant change and learning that characterize today's global business environment. Lashley (1999) states that employee empowerment has been hailed as a management technique which can be applied universally across all organizations as a means of dealing with the needs of modern global business. Empowerment leads to the potential benefits such as increased commitment, better decisions, improved quality, more innovation, and increased job satisfaction. The benefits of employee empowerment can be seen in both the organization and the individual. Some of the benefits of empowerment prog-rammes for the individual include confidence about their ability to perform their work well, perceived control in terms of a sense of competence and self-determination, a clear understanding of their role in an organization, lower absenteeism and increased turnover, a sense of ownership, taking responsibility, higher levels of motivation, commitment, performance and job satisfaction. There are various approaches to empowerment, namely, an act (structural approach), a psychological state of mind (motivational approach) or an energizing aspect through leadership (leadership approach). The present study, however, will focus on empowerment from the psychological pers-pective. It presents an empirical research on employee empowerment in IT industry and explores the impact of empowerment on job satisfaction and organizational commitment. It also establishes a relationship between job satisfaction and organizational commitment.

EMPOWERMENT

According to Lashley (1999), empowerment is a process that provides employees with autonomy through sharing of correct information and the provision of control circumstances that effect job performance of the organization, by rewarding employees for contributions made and with the power to make influential decisions being vested in employees. Psychological empowerment has, in particular, been defined as an individual's experience of intrinsic motivation that is based on cognitions about him or herself in relation to his or her work role. Vogt and Murrell (1990) define empowerment as a positive use of power to create more power, which has a positive energizing effect on the organization.

According to Zimmerman (1995), psychological empowerment as a construct integrates perceptions of personal control, a proactive approach to life and a critical understanding of the socio-political environment.

JOB SATISFACTION

A majority of authors defined job satisfaction in terms of feelings, attitudes and beliefs. Johns (1992) opined that job satisfaction is a collection of attitudes that workers have about their jobs. According to Landy and Conte (2007), job satisfaction is a positive emotional state resulting from the appraisal of one's job. According to Robbins (2003), the individuals who have high job satisfaction will exhibit positive attitudes towards their jobs whilst, at the same time, as individuals with low satisfaction will display negative attitudes toward their jobs. Udechukwu (2009) stated that it is the extent to which individuals like (are satisfied with) or dislike (are dissatisfied) with their jobs. Salami (2001) views job satisfaction as a personal feeling of contentment which an employee has and exhibits towards his or her work situation.

ORGANIZATIONAL COMMITMENT

Miller and Lee (2001) postulate that organizational commitment is characterized by an employee's acceptance of organizational goals and their willingness to exert effort on behalf of the organization. According to Levy (2003), organizational commitment can be defined as the strength of an individual's identification with, and involvement in the organization. Researchers usually describe organizational commitment as an employee's psychological attachment to the organization. Allen and Meyer (1990) define organizational commitment as the psychological link between the employee and the organization that makes it less likely for an employee to want to leave voluntarily. They also define organizational commitment as "the employee's feeling of obligation to stay with the organization". Becker, Randal and Riegel (1995) define organizational commitment in three dimensions, namely:

Miller and Lee (2001) postulate that organizational commitment is characterized by an employee's acceptance of organizational goals and their willingness to exert effort on behalf of the organization. According to Levy (2003), organizational commitment can be defined as the strength of an individual's identification with, and involvement in the organization. Researchers usually describe organizational commitment as an employee's psychological attachment to the organization. Allen and Meyer (1990) define organizational commitment as the psychological link between the employee and the organization that makes it less likely for an employee to want to leave voluntarily. They also define organizational commitment as "the employee's feeling of obligation to stay with the organization." Becker, Randal and Riegel (1995) define organizational commitment in three dimensions, namely:

- A strong desire to remain a member of the particular organization
- A willingness to exert high levels of efforts on behalf of the organization
- A belief in and acceptability of the values and goals of the organization

LITERATURE REVIEW

Numerous researchers have reported a positive relationship between job satisfaction and organizational commitment. **Popoola** investigated organizational commitment, job satisfaction and turnover intentions amongst records management personnel in Nigeria. The researcher expected no significant relationship between job satisfaction and organizational commitment. The null hypothesis was however rejected. The finding suggests that the higher the job satisfaction of records management employees, the more likely they would be organizationally committed and vice-versa. **Hartline and Ferrell (1996)** conducted a study of 279 hotel units, the findings revealed that empowerment, under the correct conditions, increased job satisfaction and service quality. The researchers posit that it is logical that providing customer-contact employees with the discretion in serving customers would result in many positive influences on their responses and the service encounter. So, a hypothesis is framed to test the relationship between empowerment, satisfaction and commitment.

- **Hypothesis 1**: There is a significant relationship between empowerment, job satisfaction and organizational commitment.
- **Hypothesis 2**: Employees who feel empowered are likely to exhibit job satisfaction.

There have been mixed views for the relationship between gender and empowerment, job satisfaction and commitment. According to **Dimitriades and Kufidu (2004)**, the relationship between gender and empowerment has been identified as an area with diverse findings. However, **Kotze (2007)** on the other hand, posits that "the relationship between gender and empowerment has been an under-researched topic." **Gurses and Demiray (2009)** studied as sample of n = 134 employees of a TV Production Centre to assess organizational commitment and found a significant relationship between gender and organizational commitment. The researchers explain the significant relations as a result of females being hesitant to consider new job opportunities due to family responsibilities like, children and marriage. **Mathieu and Zajac (1990)** used a meta-analysis and found that women tend to be more committed than men however; the magnitude of the effect was small. An explanation for this finding was that women have to overcome more barriers than men to membership of organizations. **Patah (2009)** investigated the influence of employee empowerment on overall job satisfaction amongst n=210 front office receptionists in Kuala Lumpur's-star hotels. They hypothesized that employees' overall job satisfaction differ significantly based on their demographic and work profile information. The findings indicated that there were no significant difference between males and females.

Koberg (1999) studied the consequences of employee empowerment amongst 612 employees in a hospital setting and found that employees with greater organizational tenure are more likely to experience feelings of empowerment. Similarly, **Ozaralli (2003)** found that employees who have a longer organizational tenure with their employer feel more empowered than those with shorter organizational tenure and suggested that this increase in empowerment related to tenure was due to an increase in experience. **Busch and Bush's (1978)** view is that in the instances where gender differences and job satisfaction have been noted, these differences were probably more related to the employee's role in the specific job rather than his or her gender. In a meta-analysis by **Mathieu and Zajac (1990)** the findings showed that age and organizational tenure are positively related to organizational commitment. Several other studies have confirmed that the length of service is positively associated to the level of internalization of organizational values which results in greater commitment from the individual. **Schneider (1987)** supports a positive relationship between tenure and job satisfaction suggesting that employees who fit in an organization are more likely to be satisfied and have longer organizational tenure. **Cano and Miller (1992),** on the other hand, found no association between years of experience and overall job satisfaction amongst agricultural education teachers. Hence, two more hypothesis have been framed to find out a relationship all the three constructs with tenure and age as important demographic characterstics.

- **Hypothesis 3**: There is a significant difference in empowerment based on biographical characteristics (namely, tenure and gender).
- **Hypothesis 4**: There is a significant difference between job satisfaction and organizational commitment on biographical characteristics (namely, tenure and gender).

OBJECTIVES OF THE STUDY

This study tries to find out the level of empowerment and its relation with job satisfaction and organizational commitment. For this purpose the following objectives have been framed.

- To determine employees' level of employee empowerment, job satisfaction and organizational commitment in multinational organizations of IT industry.
- To determine the relationship between employee empowerment, job satisfaction and organizational commitment.
- To determine the differences in empowerment, organizational commitment and job satisfaction and biographical characteristics (namely gender, and tenure).

RESEARCH METHODOLOGY

Research Design

Explorator-cum-descriptive research design was used for the present study. The primary data was collected through the use of online survey and questionnaire techniques.

- **Primary Data:** the data was collected by conducting online survey.
- **Population:** The survey was conducted on the employees of MNCs in IT industry at Bangalore.
- **Sample:** Two hundred employees were given questionnaire out of which 172 responded thus N=172. The population targeted for this study included permanent employees, employed in all departments of various multinational companies in IT industry at Bangalore.

DESIGN OF QUESTIONNAIRE

The questionnaire was designed based on literature review, the aim of study and the hypothesis. The questionnaire contained four sections. Every section had some questions or statements and the respondents were asked to rate the statements, on a 7-point Likert scale, the degree of agreeing or disagreeing. Each statement attempts to extract the employees' feelings towards organizational policies, goals and values, their willingness go the extra mile, and whether they are proud to be associated with the organization. These four sections have been adopted and therefore framed accordingly.

1. A self-developed section of the questionnaire was used to acquire demographic information from the sample. Participants were requested to provide information with regard to their gender, age, job grade and years of service in the organization.
2. The Measuring Empowerment Questionnaire (8 items) developed by Hayes (1994) was used to measure the psychological empower-ment of the respondents. The Cronbach alpha reliability coefficient for the empowerment is .811.
3. The Job Description Index was developed by Hackman and Oldham (1975) and it consists

of 15 items. The JDI was designed to measure five facets of job satisfaction, namely, satisfaction with work itself, satisfaction with pay, satisfaction with opportunities for promotion, satisfaction with supervision, and satisfaction with co-workers. The Cronbach alpha reliability coefficient for the JDI is .886.

4. The Organizational Commitment Questionnaire (OCQ) was developed by Allen and Mayer (1991) and used to elicit data on organizational commitment. It consists of 8 items and its cronbach alpha coefficient is 0.899.

PROFILE OF THE RESPONDENTS

Table 1. Profile of respondent (N=172)

Characteristics	N	Percentage
Gender		
Male	100	58
Female	72	42
Tenure		
Less than an year	37	22
1-2 years	52	30
3-5 years	54	31
5-10 years	18	11
More than 10 years	11	6

Data Analysis and Interpretation

Respondents were required to rate each statement using the 7-point scale. A rating of 7 indicates that the respondent agrees fully with the statement; and 1 indicates that the respondent disagrees fully with the statement. The responses gathered during the study have been used as the data for the study. Correlation was applied on the data for exploring the level of association amongst the "Empowerment, Organizational Commitment and Job Satisfaction."

The result indicated that there is a significant and direct positive relationship between job satisfaction and empowerment ($r = 0.479$, $p<0.01$). There is also a statistically significant positive relationship between empowerment and organizational commitment ($r = 0.531$, $p<0.01$). The strongest positive relationship is, however, between job satisfaction and organizational commitment ($r = 0.556$, $p<0.01$). The results provide evidence that the greater the job satisfaction, the higher is an employee's organizational commitment. Moreover, employees who feel empowered were likely to experience higher levels of job satisfaction and organizational commitment. **Hence, hypotheses 1 and 2 are accepted.**

Table 3 depicts gender differences in empowerment, job satisfaction and organizational commitment. The results indicate that there were no statistically significant differences in empowerment based on gender ($t = -.422$, $p>0.05$). There are also no statistically significant differences in organizational commitment ($t = 1.792$, $p>0.05$) and job satisfaction ($t=1.155$, $p>0.05$) based on respondents' gender. **Thus hypothesis 3 and 4 are rejected with respect to gender.**

Table 4 provides the results for the ANOVA depicting differences in empowerment, job satisfaction and organizational commitment based

Table 2. Correlation between empowerment, job satisfaction and organizational commitment

		Empowerment	Organizational Commitment	Job Satisfaction
Empowerment	Pearson Correlation	1	.531	.479
	Sig. (2-tailed)		.000	.000
Organizational Commitment	Pearson Correlation	.531	1	.556
	Sig. (2-tailed)	.000		.000
Job Satisfaction	Pearson Correlation	.479	.556	1
	Sig. (2-tailed)	.000	.000	

Correlation at significant level p<0.01 for 2-tailed

Table 3. Independent Samples t-test to determine **gender** differences in job satisfaction, empowerment and organizational commitment

		Levene's Test for Equality of Variances		t-test for Equality of Means	Significance
		F	Sig.	T	
Empowerment	Equal variances assumed	1.684	.196	–.422	No
	Equal variances not assumed			–.499	
Job Satisfaction	Equal variances assumed	.004	.953	1.155	No
	Equal variances not assumed			1.143	
Organizational Commitment	Equal variances assumed	.400	.528	1.792	No
	Equal variances not assumed			1.802	

Table 4. ANOVA illustrating differences in empowerment, job satisfaction and organizational commitment based on tenure

	F	Significance
Empowerment	14.728	Significant
Job Satisfaction	6.313	Significant
Organizational Commitment	7.202	Significant

on the biographical variable of tenure in organization. There were statistically significant differences in psychological empowerment based on the number of years in the organization ($F = 14.728$, $p<0.05$). There were also statistically significant differences in organizational commitment based on tenure in organization ($F = 7.202$, $p<0.05$). There were statistically significant differences in job satisfaction based on tenure in organization ($F = 6.313$, $p<0.05$) of the employees of various IT companies. **Thus hypothesis 3 and 4 are accepted with respect to tenure.** The results derived from this study indicate a significant statistical difference in empowerment based on the number of years in the organization. It is also evident that there is significant difference between job satisfaction and organizational commitment on tenure of the employees of various MNCs of IT industry at Bangalore.

CONCLUSION

The aim of this research was primarily to determine the relationship between empowerment, job satisfaction and organizational commitment amongst employees in IT industry at Bangalore. In this study several determinants which are responsible for the empowerment, job satisfaction and organizational commitment are reviewed and hence used as effective variables for the study. The results from this study indicate a significant relationship between empowerment, job satisfaction and organizational commitment in the employees of a multinational organization.

The following empirical findings emerged from the examination of the stated hypotheses:

- There is a significant relationship between empowerment, job satisfaction and organizational commitment.
- There is a significant difference in empowerment based on biographical characteristics, namely, tenure.
- However no differences were observed for male and female respondents.

This study concludes that empowering employees is a critical component of an organization to survive in the new, highly competitive global economy. Empowering of employees in a service industry like IT influences them to accept greater responsibility and exercise more control over the way they perform their jobs. If we perform an effective empowerment the employees are expected to deliver higher quality of service being highly satisfied and committed to their organization. The principles of this management tool i.e., empowerment are implemented in theory, but more difficult to implement in practice. Both management and employees share the responsibility for making it work. To develop a culture of empowerment there should be involvement of employees in defining the fundamental values, mission, and goals of organizations. The involvement of employees helps them to know how their work contributes to the success of the organization. Furthermore, results indicate that employees at the multinational organization are relatively satisfied with the nature of the work that they perform, with the supervision that they receive, as well as with their co-workers. Moreover, satisfaction involves the work environment, and commitment involves emotional commitment to the "family" of the organization. Giving your staff a sense of belonging to the organization (by shared values or rituals) would make them feel emotionally attached and "part of the family" which could be possible through empowerment. Managers can increase organizational commitment through communicating that they value employees' contribution and that they care about employees' well-being.

Based on the findings of the current research recommendations are put forth for future research. Future research should use a larger sample with equal representation of tenure and gender. Duplication of the current research could be performed to identify similarities and differences with the present findings. Future research could incorporate a qualitative approach in addition to a quantitative focus. A qualitative approach (for example, interviews) might provide a better understanding of whether employees are empowered.

LIMITATIONS

Firstly, the ability to generalize of the findings is restricted because a convenience sample was used for the study. Secondly, the findings cannot be generalized to other industries as it was conducted in IT industry. Also, the study was conducted in the Bangalore context, hence, it cannot be generalized to its national and international counterpart. Thirdly, all information generated for the study was on the basis of participants' self-reports. Therefore, an element of bias may have affected the results. Also, some respondents might have completed the instrument to get it done, whereas others might have shown more interest.

REFERENCES

N.J. Allen and J.P. Meyer. "The measurement and antecedents of affective continuance and normative commitment to the organizations". *Journal of Occupational Psychology*, 1990, 63, pp. 1-18.

T.E. Becker, D.M. Randal and C.D. Riegel. The multidimensional view of commitment and theory of reasoned action: A comparative evaluation. *Journal of Management*, 1995, 21(4), pp. 617–638.

P. Busch and R.F. Bush. Women contrasted to men in the industrial sales force: Job satis-faction, values, role clarity, performance and propensity to leave. *Journal of Marketing Research*, 1978, 15 (3), pp. 438–448.

J. Cano and G. Miller. A gender analysis of job satisfaction, job satisfier factors, and job dissatisfier factors of agricultural education teachers. *Journal of Agricultural Education*, 1992, 33(3), pp. 40-46.

Z.A. Dimitriades and S. Kufidu. Individual, Job, Organizational and Contextual Correlates of Employment Empowerment: Some Greek Evidence. *Electronic Journal of Business Ethics and organization Studies*, 2004, 9(2), pp. 36-43.

N. Gurses and E. Demiray. Organizational commitment of employees of TV Production centres (Educational Television ETV) for open education faculty, Anadolu University. *The Turkish Online Journal of Educational Technology*, 2009, 8(1), pp. 39-52.

M. Hartline and O.C. Ferrell, "The manage-ment of customer-contact service employees: an empirical investigation." *Journal of Marketing*, 1996, 60 (4), pp. 52-71.

G. Johns. Organizational behaviour. Understanding life at work (3rd ed.). New York. Harper Collins, 1992.

C.S. Koberg, R. Boss, S. Wayne, C. Jason and E.A. Goodman. Antecedents and outcomes of empowerment. *Journal of Social Psychology*, 1999, 139(3), pp. 389-414.

E. Kotze, E. Khashane, O. Mthembu. Psychological empowerment in the military: The role of gender and race. *Journal of Public Administration*, 2007, 42(8), pp. 798-814.

F. Landy & J.M. Conte. Work in the 21st Century: An introduction to Industrial Psychology (2nd ed). USA: Blackwell Publishing, 2007.

C. Lashley, "Employee empowerment in service: a framework for analysis" Personnel Review, 1999, 28(3), pp. 169-191.

P. Levy. Industrial/Organizational Psychology: Understanding the Workplace. Houghton Mifflin, New York, NY, 2003, pp. 378-405.

J.E. Mathieu and D.M. Zajac. A review and meta-analysis of the antecedents, correlates and consequences of organizational commit-ment. *Psychological Bulletin*, 1990, 108(2), pp. 171-194.

D. Miller and J. Lee. 'The people make the process: commitment to employees, decision-making and performance." *Journal of Management*, 2001, 27, pp. 163-189.

N. Ozaralli. Effects of transformational leadership on empowerment and team effec-tiveness. *Leadership and Organization Develop-ment Journal*, 2003, 24(5/6), pp. 335-345.

M.O.R.A. Patah, S.M. Radzi, R. Abdullah, A. Adzmy, R.A. Zain and N. Derani. The Influence of Psychological Empowerment on Overall Job Satisfaction of Front Office Receptionists. *International Journal of Business Management*, 2009, 4(11), pp. 167-176.

S.O. Popoola (n.d). Organizational Commit-ment, job satisfaction and turnover intentions among records management personnel in Ondo State Civil Service. Nigeria.

S.P. Robbins, A. Odendaal and G. Roodt. Organizational Behaviour (9th ed.). Cape Town: Prentice-Hall International, 2003.

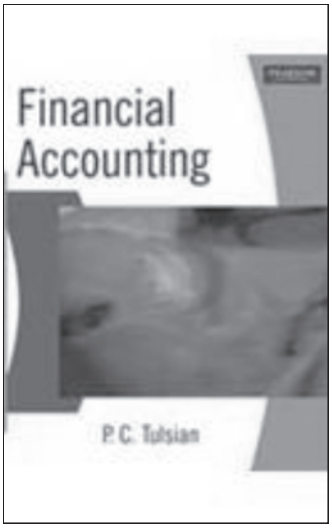
S.O. Salami. Prediction of Job Satisfaction from career salience, age, sex, status and experience among Nigerian nurses. *Journal of Advanced Studies and Educational Management*, 2001, 1(1), pp. 85-95.

B. Schneider. The people make the place. *Personnel Psychology*, 1987, 40(3): pp. 437-453.

J.F. Vogt and K.L. Murell. Empowerment in Organizations. University Associates, Inc., San Diego, CA, 1990.

I.I. Udechukwu. Correctional Officer Turn-over: Maslow's Needs Hierarchy and Herzberg's Motivation Theory. *Public Personnel Management*, 2009, 38(2), pp. 69-82.

Z.A. Zimmerman. Psychological empower-ment: Issues and illustrations. *American Journal of Community Psychology*, 1995, 23, pp. 581-599.



Financial Accounting
P.C. Tulsian
Pearson Education
ISBN: 9788177582284

The book entitled Financial Accounting Written in an easy-to-understand manner, this book adopts a fresh and novel approach to the study of accounting keeping in view the requirements of the students.

The first part of the book having the topics like Introduction to Accounting, Generally Accepted Accounting Principles, Accounting Standards, Accounting Policies, Accounting Equations.These topics help to understand the basics of accounting.

The second part the book includes Journalizing, Posting and Balancing, Subsidiary Books I: Cash Book, Subsidiary Books II: Other Books, Financial Statements,and Financial Statements of Not-for-Profit Organization.

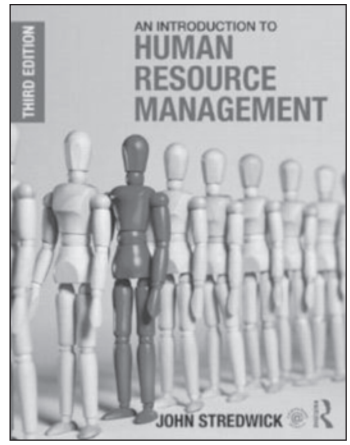
The third part covers Depreciation, Provisions and Reserves, Valuation of Inventory. Accounting for Partnership: Dissolution of a Firm.

The fourth part includes Partnership: Insolvency, Piecemeal Distribution, Sale of a Firm, and Amalgamation of Firms, Accounts from Incomplete Records, Accounting for Hire Purchase, Accounting for Branches,and Use of Computers in Accounting.

This book is a complete guide of basis of accounting with the number of examples that develops the knowledge of students and gives them the practical knowledge of accounting with the help of practical questions which are given for the practices in the end of each topic or chapter.

This book can be the most suitable text book for the students of Financial Accounting.

Neha Rani
Shobhit University
Meerut



An Introduction to Human Resource Management
John Stredwick
Routledge, 2014
Third Edition
ISBN 978-0-415-622264

The Book entitled "An Introduction to Human Resource Management" has been designed and developed focusing on the latest research information and a fundamental knowledge about the theory and practice of Human Resource Management. Emerging trends and issues that have significant implications on Human Resource Management are highlighted throughout the material. This book helps to strengthen the students in understanding today's important Human Resource issues and equip them with the skills to overcome current practical Human Resource Management challenges when supplemented with latest edition. Book reinforces topics most critical to today's HR Manager as it helps the student's experience better to meet the challenges of Human Resource Management today. This new edition has been fully revised and updated to include : - the proliferation of technologies in recruitment and Human Resource Management, the change of emphasis from recruitment/selection to talent management and recent legal developments. The book remains accessible to the students new to the subject area while combining with clear explanation illuminating case studies. The book provides the main theoretical base for subject area with a large number of practical examples and cases to assist the learning process. The edition has been influenced by a number of recent developments.

The text book has been organized into 12 chapters:

Chapter 1 introduces with the main roles and responsibilities of staff working in Human Resource Management field summarizing with the development of HR roles through number of models and theories of human resource.

Chapter 2 and 3 examines recruitment and selection defining vacancies, auditing, interviewing, selecting and appointing with terms and conditions, to ensure appropriate practices in terms of equal opportunities.

Chapter 4 is concerned with changing environment of employer relation by building relationship with employers in collective and individual basis.

Chapter 5 and 6 includes performance appraisal management and reward and subsequently relating this to a fair system of pay that needs the needs of both organization and employees.

Chapter 7 and 8 comprises of units of employee flexibility and of learning and development through initial induction, specialist skill training, supervisory and mgmt. training.

Chapter 9 and 10 are equal opportunities and health & safety.

Chapter 11 examines the content and operation of human resource in an international setting.

And last Chapter 12 draws a no. of stands together to look at the way organization operates human resource strategy and planning system in practice.

The Book contains case studies which are based on real life cases from published sources and from author's experience. In addition, at the end of the chapter, a website logo indicating further resources available on companion website is mentioned. The book attempts to incorporate the latest developments in the field. It helps the students in understanding the overall context of human resource through variety of examples and through coverage with latest developments. This book ideally fulfills the requirements of M.B.A./M.Com./PGDM and other relevant PG degrees/diploma for Human Resource Management. Many examples have been presented to show Human Resource Management practices adopted by leading Indian companies. Personnel managers whose organizations are graduating from traditional personnel management practices to modern Human Resource Management practices will find this book completely worthwhile.

Neha Yajurvedi
Shobhit University, Meerut

Shobhit University

Shobhit Institute of Engineering & Technology, Meerut

A University declared by GoI u/s 3 of UGC Act 1956

Printed and Published by Kunwar Shekhar Vijendra, Chancellor, Shobhit University, Meerut and Vice-Chairman, NICE Society, for and on behalf of NICE Society, University Tower, Institutional Area, Mayur Vihar II, New Delhi-110091. Phones: 011-4320-5500–19 at Indraprastha Press (CBT), New Delhi-110002, 011-23319960, 23316970–74