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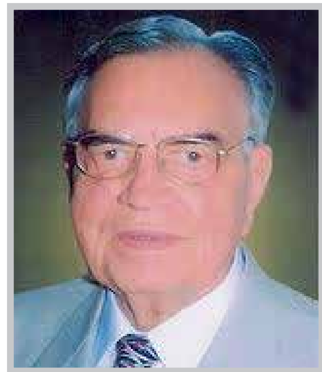

Shri. Balram Jhakar
Former Governor of Madhya Pradesh
Former Speaker of the Lok Sabha

FOREWORD

The existing phase is cast under a shadow of economic turmoil, experienced globally. This tumult scenario demands for change in perspective to harness innovation and creativity along with ethics playing major role to cope up with current state of darkness in business scenario. It has always been a tried and tested strategy, that to survive one need to foster creativity leading toward innovative management models based on ethical perspectives.

I appreciate the contribution of Asian Business School Research and Development Cell in the form of its 2nd issue of "ABS International Journal of Management" focusing on Innovation, Creativity and Ethics as an imperative to sustain one's identity in today's stiff world. "ABS International Journal of Management" is a blend of constructive research-based papers that aims at nurturing a novel attitude towards traditional business models- a sincere effort by various academicians and corporate from all across the globe putting together their ideology to creep in sustainable growth.

"ABS International Journal of Management" outlines constructive and immaculate efforts of associated connoisseur as a momentous collaborative approach to contour present situation and evade future business mayhem.

Shri. Balram Jhakar

MESSAGE FROM PRESIDENT DESK
ASIAN EDUCATION GROUP

Sweeping changes are afoot in the global economy. As the second decade of the 21st century unfolds and the world exits from the 2008–09 financial crisis, the growing clout of emerging markets is paving the way for a world economy with an increasingly multipolar character. Global growth will become distributed with no single country dominating the global economic scene. This provides an impetus to the BRICS countries wherein dynamic and adaptable managers will mark the new charter of growth.

We have always subscribed to the view that management concepts, approaches and techniques have to be continually evolved and that managerial decisions should be based both on systematic research, the gut feeling and value judgment. We are conscious of the fact that to be at the cutting edge of the business education and training, a B-School has to work in partnership not only with the business-houses but also with similar institutions across the world.

This second issue of ABS International Journal of Management successfully encompasses empirical, conceptual and research papers, case studies from academicians, professionals, consultants, practitioners and research scholars relevant to this paradigm change. I congratulate the team for this marvel.

Sandeep Marwah

Sunita Verma
Editor, ABS International Journal of Management

Rupali Misra Nigam
Editor, ABS International Journal of Management

PREFACE

It gives us emmense pleasure to give you the second issue of ABS International Journal of Management. ABS International Journal of Management is the initiative of ABS Research and Development Cell. Developing research capacity, sustaining it, bringing the benefits of research to society is the basis for research at Asian Business School. This journal is a rich blend of research studies on innovation, creativity and ethics.

Paradigm Shift in business scenario is characterized by a shift from a world of banal, incremental, and linear changes to that of radical and discontinuous change which seems to have global implications. The business environment prevailing internally and externally, continuously demand for inception of innovative and creative ideas in anticipation of change. Therefore, most of the organizations are stifling hard to gear up and encounter this new world of business that would increasingly demand non-linear strategies for sustaining organizational competence and mapping out the changes in economic and business scenario.

Unfortunately, most organizations, and their management, control and strategic planning systems are finding it really hard to survive in passing era that demands the art of distinguishing itself from the other competitor's. In absence of this art apart from growing, survival has become a major challenge to cope up with. As the traditional paradigms of concepts such as organizations, industry, and product / service definitions become increasingly blurred, one would call for new models of business that defy traditional boundaries of organization structure, industry structure and product / service definition. The only mantras to trouble shoot these changes and conquering art of distinguishing itself for survival and success is through "innovation and creativity".

Apart from innovation & creativity one more important aligned aspect that demand emergent consideration of all the stakeholders of society, directly or indirectly related to business scenario is "ethics". Ethical behavior thrives in, as an integral part of modern management based on principle of being rational and objective in nature.

ABS International Journal of Management will benefit both industry and academia alike in presenting latest trends in research to the world at large.

Contents

Intermediation Cost Efficiency: A Comparative Study of Private and Public Sector Banks in India

Pallavi Pandey[1]
Prof. (Dr.) Pankaj Atri[2]

Abstract

The banks are the back bone of the financial system of any economy. The changes in the banking sector that took place over the years with the entry of foreign players raised the bar for competition amongst the players. Private sector banks adopted a customer centric approach as a result Public sector banks that had never been customer centric and had to wake up to a new way of doing business where the consumer was king. This onslaught was followed up by changes in accounting policies and procedures which forced the commercial banks to provide unprecedented attention towards productivity and efficiency. In the light of the above changes particularly the latter, this paper makes a comparative assessment of the intermediation cost efficiency of banks.

The period of study is 2007-2008, 2009-2010, 2011-2012. The study concentrates on ten public sector banks and ten private sector banks. The paper makes use of the two nonparametric methods- Free Disposal Hull approach (FDH) and Data Envelopment Approach (DEA) for development of the cost frontier for efficiency measurement. In the FDH approach, we take segments of the cost frontier as benchmarks. In the DEA approach the study takes a linear version of the entire frontier as the benchmark.

Keywords Cost Efficiency, DEA, FDH, Commercial Banks, Allocative Efficiency

Introduction

Studies estimating the efficiency of financial institutions (FIs) such as banks have relied on accounting measures such as costs, outputs and profit due to unavailability of engineering information on the technology of FIs (Bergerand Humphrey, 1997).Although these studies are numerous and recent, most of them concern with developed nations such as USA, Sweden and Finland (Berg et al.,1993).2 However, a few studies analyse the efficiency of banks in developing countries. This paper is an attempt to contribute to this sparsely researched issue from the perspective of developing economies, particularly India. Indian banking is particularly interesting because of different and changing regulatory environment and the diversity of bank ownership: State bank of India (SBI) group, nationalized banks (NBs), privately owned domestic as well as foreign banks. The public sector banks (SBI and NBs) acquired a place of prominence in the financial intermediation process over the years. They made significant strides in expanding geographical coverage, mobilizing savings and providing funds for investments in agriculture/small-scale industry. Such a progress was achieved within a highly regulated environment with interest rates, credit allocation and entry being controlled by the Reserve Bank of India (RBI). However, during the late 1980s, most banks were plagued with poor profitability and under capitalization with a high proportion of non-performing assets and huge administrative expenditures. They lagged behind the international standards in introducing computers, communication technologies and product innovations and the quality of consumer service was unsatisfactory. Government of India set up the Narasimham committee to review the functioning of entire financial services industry in the country. Based on the recommendations of the committee (submitted in November 1991), the RBI initiated

[1] Research Scholar, Bundelkhand University Jhansi
[2] Head of the Department of Business administration, Bundelkhand University, Jhansi

major reform/liberalization measures that sought to improve bank efficiency through entry deregulation, branch delicensing and deregulation of interest rates and to allow the public sector banks to raise up their equity in the capital market. The reform also sought to improve banking profitability through gradual reduction of the cash reserve ratio, the statutory liquidity ratio and relaxation of several quantitative restrictions on the composition of selected portfolios. Since 1992–1993, the structure of the Indian banking system has undergone significant changes in terms of scope, opportunities and operational buoyancy. The commercial banks have been facing an increasing degree of competition in the intermediation process from term lending institutions, non-banking intermediaries (like mutualfunds and leasing companies), chit funds and the capital market. Besides, new banking services (ATM machines and Internet banking) have been emerging due to the advancement of computers and information technology. The performance of public banks has become more market driven with growing emphasis placed on profitability. In this context, it is essential to study whether the reform measures are really beneficial to the banking industry, thereby efficiency improvement.

The Objective of the Present Study

The aim of the present study is to make a comparative assessment of the public and private sector bank intermediation cost efficiency during the period of changes in banking regulations. The new banking regulation norms are being phased in and consequently the profit indicators corresponding to these years cannot be compared in a strict sense with those corresponding to the latter years. The years covered in this study are 2007-2008, 2009-2010, 2011-2012 .This study concentrates on 10 public and ten Indian private sector banks (details provided in the Appendix). These banks hold 81% of the entire banking sector assets (excluding the Regional Rural Banks). If the foreign banks are excluded, then the figure rises to 88%. The public sector banks covered by this study hold 80% of the public sector bank assets. The ten private sector banks hold 79% of the private banking sector assets. Hence it can be rightly concluded that the banks covered by this study are fairly representative of the Indian banking sector.

Review of Related Literature

An important contribution to the development of efficiency and productivity analysis has been done by Shephard's models of technology and his distance functions (Shephard 1953, 1970, 1974). In contrast to the traditional production function, direct input and output correspondences admit multiple outputs and multiple inputs. They are thus able to characterize all kinds of technologies without unwarranted output aggregation prior to analysis. The Shephard direct input distance function treats multiple outputs as given and contracts inputs vectors as much as possible consistent with technological feasibility of contracted input vector. Among its several useful properties, one of the most important is the fact that the reciprocal of the direct input distance function has been proposed by Debreu (1951) as a coefficient of resource utilization, and by Farrell(1957) as a measure of technical efficiency. This property has both a theoretical and a practical significance. It allows the direct input distance function to serve two important roles, simultaneously. It provides a complete characterization of the structure of multi-input, multi-output efficient production technology, and a reciprocal measure of the distance from each producer to that efficient technology.Linear programming theory is a milestone of efficiency analysis. The work of Dantzig (1963) is closely associated with linear programming since he contributed to the basic computational algorithm (the simplex method) used to solve this problem. Charnes and Cooper (1961) made considerable contributions to both theory and application in the development of linear programming,and popularize its application in DEA in the late 70s (see Charnes, Cooper and Rhodes, 1978). Forsund and Sarafoglou (2002) offer an interesting historical reconstruction of the literature developments subsequent to Farrell's seminal paper that lead to the introduction of the DEA methodology.The use of linear programming and activity analysis can be found in thework of Leontief (1941, 1953) who developed a special case of activity analysis which has come to be known as input-output analysis. Whereas Leontief's work was directed toward constructing a workable model of general equilibrium, efficiency and productivity analysis is more closely related to the microeconomic production programming models developed by Shephard (1953, 1970, 1974),Koopmans (1951, 1957) and Afriat (1972). In these models observed activities,such as the inputs and outputs of some production units, serve as coefficients of activity or intensity variables forming a series of linear inequalities, yielding a piecewise linear frontier technology.

The work of Koopmans and Shephard imposes convexity on the reference technology, therefore, the DEA estimator relies on the convexity assumption.The Free Disposal Hull (FDH) estimator, that maintains free disposability while relaxes convexity, was introduced by Deprins, Simar and Tulkens (1984).By enveloping data points with linear segments, the programming approach reveals the structure of frontier technology without imposing a specific functional form on either technology or deviations from it.Frontier technology provides a simple means of computing the distance to the frontier - as a maximum feasible radial contraction or expansion of an observed activity. This means of measuring the distance to the frontier yields an interpretation of performance or efficiency as maximal-minimal proportionate feasible changes in an activity given technology. This explanation is consistent with Debreu's (1951) coefficient of resource utilization and with Farrell's (1957) efficiency measures. However, neither Debreu nor Farrell formulated the efficiency measurement problem as a linear programming problem, even though Farrell and Fieldhouse (1962) envisaged the role of linear programming. The full development of linear programming techniques took place later.

Boles (1966), Bressler (1966), Seitz (1966) and Sitorius (1966) developed the piecewise linear case, and Timmer (1971) extended the piecewise log-linear case. Afriat (1972) developed a series of consistency 'tests' on production data by assuming an increasing number of more restrictive regularity hypotheses on production technology. In so doing he expanded his previous work on utility functions (Afriat 1967) based on the revealed preference analysis (Samuelson, 1948). These 'tests' of consistency, as well as similar 'tests' of hypotheses proposed by Hanoch and Rothschild (1972), are all based on linear programming formulations. Diewert and Parkan (1983) suggested that this battery of tools could be used as a screening device to construct frontiers and measure efficiency of data relative to the constructed frontiers. Varian (1984, 1985, 1990) and Banker and Maindiratta (1988) extended the Diewert and Parkan approach. In particular,Varian seeks to reduce the "all-or-nothing" nature of the tests - either data pass a test or they do not - by developing a framework for allowing small failures to be attributed to measurement in the data rather than to failure of the hypothesis under investigation. All these studies use nonparametric linear programming models to explore the consistency of a dataset, or a subset of a dataset, with a structural (e.g.constant return to scale) or parametric (e.g. Cobb-Douglas) or behavioral (e.g.cost minimization) hypothesis. These tools, originally proposed as screeningdevices to check for data accuracy, provide also guidance in the selection of parametric functional forms as well as procedures useful to construct frontiers and measure efficiency. The problem of nonparametric exploration of regularity conditions and behavioral objectives has been treated also by Chavas and Cox (1988, 1990), Ray (1991), and Ray and Bhadra (1993). Some works have indirectly influenced the development of the efficiency and productivity analysis. Hicks (1935, p.8) states his "easy life" hypothesis as follows: "people in monopolistic positions [...] are likely to exploit their advantage much more by not bothering to get very near the position of maximum profit, than by straining themselves to get very close to it. The best of all monopoly profits is a quite life". The suggestion of Hicks, i.e. the fact that the absence of competitive pressure might allow producers the freedom to not fully optimize conventional objectives, and, by implication, that the presence of competitive pressure might force producers to do so, has been adopted by many authors (see e.g. Alchian and Kessel, 1962, and Williamson, 1964).Another field of work, related to efficiency literature, is the property rights field of research, which asserts that public production is inherently less efficient than private production. This argument, due originally to Alchian (1965), states that concentration and transferability of private ownership shares create an incentive for private owners to monitor managerial performance, and that this incentive is diminished for public owners, who are dispersed and whose ownership is not transferable. Consequently, public managers have wider freedomto pursue their owns at the expense of conventional goals. Thus Niskanen (1971) argued that public managers are budget maximizers, de Alessi (1974) argued that public managers exhibit a bias toward capital-intensive budgets,and Lindsay (1976) argued that public managers exhibit a bias toward "visible"inputs. However, ownership forms are more varied than just private or public. Hansmann (1988), in facts, identifies investor-owned firms, customerowned firms, worker-owned firms, as well as firms without owners (nonprofit enterprisers). Each of them deals in a different way with problems associated with hierarchy, coordination, incomplete contracts and monitoring and agency costs. This leads to the expectation that different ownership forms will generate differences in performance.As a more micro level is concerned, Simon (1955, 1957) analyzed the performance of producers in the presence of bounded rationality and satisfying behavior. Later Leibenstein (1966, 1975, 1976, 1978, 1987) argued that production is bound to be inefficient as a result of motivation, information, monitoring,and agency problems within the firm. This type of inefficiency, the so called "X-inefficiency" has been criticized by Stigler (1976) and de Alessi (1983) among others since it reflects an incompletely specified model rather than a failure to optimize.The problem of model specification - including a complete list of inputs and outputs, and perhaps conditioning variables as well, a list of constraints,technological, and other (e.g. regulatory) is a difficult issue to face. Among others, Banker, Chang and Cooper (1996) analyse the effects of misspecified variables in DEA. Simar and Wilson (2001) propose a statistical procedure to test for the relevance of inputs/outputs in DEA models.

Methodology

Free Disposal Hull (FDH)

The FDH estimator, proposed by Deprins, Simar and Tulkens (1984), is general version of the DEA estimator as it relies only on the free disposability assumption for Ψ, and hence does not restrict itself to convex technologies.This seems an attractive property of FDH since it is frequently difficult to find a good theoretical or empirical justification for postulating convex production sets in efficiency analysis. At this purpose, Farrell (1959) indicates indivisibility of inputs and outputs and economies of scale and specialization as possible violations of convexity. It is important to note also that if the true production set is convex then the DEA and FDH are both consistent estimators; however,as pointed later in this section, FDH shows a lower rate of convergence (due to the less assumptions it requires) with respect to DEA. On the contrary, if thetrue production set is not convex, than DEA is not a consistent estimator of the production set, while FDH is consistent.The FDH estimator measures the efficiency for a given point (x0, y0) relative to the boundary of the Free Disposal Hull of the sample X = {(Xi, Yi), i =1, ..., n}.

Data Envelopment Approach

Data Envelopment Analysis is a nonparametric mathematical programming technique used for assessingevaluating and comparing the relative performances of economic units with minimal prior assumption on input-output relation. The DEA method is a generalization of Farrell's single input single output technical efficiency measure to the multiple output- multiple input case. The methodology was originally developed by Charnes, Cooper and Rhodes (1978) and was later further extended by Banker, Charnes and Cooper (1984).The DEA approach forms the efficiency frontier out of piecewise linear stretches thereby forming a convex production possibility set. In DEA frontier, efficient observations are those for which no other decision-making unit or linear combination of units has as much or more of every output (given inputs) or as little or less of every input (given outputs). The DEA approach is now described in brief. Let us consider a productive unit producing a scalar output Y from bundles of m inputs x=(x1, x2, …, xm) Let (xj, yj) be the observed input-out bundle of firm j (j=1, 2, …,n). The technology is defined by the production possibility set.Ps = {(x,y): y can be produced from x

The underlying assumptions are as follows:

(i) All observed input-output combinations are feasible. Thus

(xj, yj) Ps (j=1,2,…,n)
(ii) The production possibility set Ps is convex. Hence, if (x1, y1) Ps and (x2, y2) Ps then {xx1+ (1-x) x2, xy1 + (1-x) y2} Ps i.e., weighted averages of feasible input-output combinations are also feasible.
(iii) Inputs are freely disposable. Hence, if (x0 , y0) Ps and x1 = x0 then (x1, y0) Ps
(iv) Output is freely disposable. Hence if (x0, y0) Ps and y1 = y0 then (x0, y1) Ps
Concept of Efficiency: The production possibility set can be represented by two alternatives but equivalent ways in terms of the input and output set. For any output bundle y0, the input requirement set is V(y0) = { x: (x, y0) Ps
Similarly for any input bundle x0, the producible output set is P (x0) = { y :(x0 , y) Ps }There are accordingly three alternative ways of computing efficiency: The revenue maximization approach, the output maximization approach and the cost minimization approach.In the output maximization approach, the firm seeks to maximize output given the input bundle.As per the Banker, Charnes, Cooper (1984) orientation (under the assumption of variable returns to scale), the problem is,
Max f, s.t. f Y0 = Y, Xo = X, j=1 j = 0, Efficiency = Y0 / Ps (x0) = Actual Output/Best Practice Output Similarly in the revenue maximization approach, one compares the actual revenue with the best practice revenue.
In the cost minimizing approach, the objective of the firm is to select the input bundle that minimizes the cost of producing Y0 . The problem, then, is: Min C= W' X, s.t. X0 = X, Y0 = Y, j=1, j = 0
(Where W = input price vector) Efficiency = W'V(y0)/W'(X0) = Best Practice Cost/Actual Cost Decomposition of Efficiency: The overall efficiency can be decomposed into two components —technical efficiency and allocative efficiency.

Technical Efficiency It refers to the ability of a productive unit/system to reduce all the variable inputs to produce same level of output or to expand all the variable outputs for the given inputs.Formally technical efficiency can be computed (if one uses the cost minimizing approach) from the following minimization exercise: Min μ , s.t. μ X0 = X, Y0 = Y The scalar (variable) μ is the (proportional) reduction applied to all the inputs of the evaluated productive unit to improve efficiency.
Allocative Efficiency It refers to the ability of the productive system to select the right input/ output vector in the light of the prevailing input and output prices. Allocative efficiency is computed indirectly by applying the equality AE=Total Efficiency/Technical Efficiency In the last few years, quite a number of studies were conducted on bank efficiency in the Indian context. Bhattacharyya, Lovell and Sahay (1997) measured the technical efficiency of 70 commercial banks operating in India for the period 1986-91 using data envelopment analysis and took advances, investment and deposits as outputs while interest expense and operating expense were taken as the inputs. They found that the public sector banks had much higher efficiency compared to the private and foreign banks.
Das (1997) estimated the technical, allocative and scale efficiency of scheduled commercial banks for various pre-reform and reform years: 1970, 1978, 1984, 1990 and 1996 making use of data envelopment analysis. The study considered the net interest margin and interest income of banks as the two outputs .The inputs used in the calculation of various efficiency measurement are: Labor and loanable funds (deposits plus borrowings). In his study, Das computed the efficiency measures in respect of the public sector commercial banks. The results indicate that the State Bank Group, in general, improved in overall efficiency during the 26 year period. However, nationalized banks registered a gradual decline in overall efficiency during the period and this is more pronounced after 1990.The study showed that higher productivity leads to a decrease in credit risk and has a positive influence on bank capitalization. In general, the study supported the hypothesis thatproductivity, capital and risk taking tend to be jointly determined, reinforcing and compensating each other. Rammohan and Ray (2004) compared performances of public and private sector banks using a revenue maximization efficiency approach for the period 1992-2000. They argued that during the period, Indian banks did not have much freedom in trimming costs, especially the cost of labor. Under the circumstances, revenue maximization best describes the objective that banks have been focusing during the period.

The results relating to revenue maximization efficiency, technical efficiency and allocative efficiency reveal the following:

(a) Public sector banks are significantly better placed than private sector banks on revenue maximization efficiency but there is no difference between public sector banks and foreign banks.

(b) Public sector banks are significantly better than private banks in respect of technical efficiency but not in respect of allocative efficiency. Sinha (2005) and Sinha (2005) estimated the efficiency of Indian commercial banks using the Data Envelopment and FDH approaches respectively. They have taken net interest margin, non-interest income and loan as the output indicators. The results were for 1996-97 and 2000-01 respectively. The results suggest an improvement in performance if net interest margin or non-interest income are taken as the output indicators but a decline in performance if loan is taken as the output indicator.Das, Nag and Ray (2005) examined the output oriented technical efficiency, cost efficiency, revenue maximizing efficiency and profit efficiency of Indian banks. The results show that the Indian banks are still not much differentiated in terms of input or output oriented technical efficiency or cost efficiency. However, they differ sharply in respect of revenue and profit efficiencies.

Estimation of Cost Efficiency of Indian Commercial Banks Using FDH and DEA Specification of Output and Inputs

For the purpose of efficiency measurement, three output indicators have been used: Net interest margin, Non-interest income and Loan. Coming to the side of inputs, one can consider the following four: Labor, equity capital, branch and borrowed capital. In respect of the first two, the concept of free disposability is not applicable. The public sector banks are still overmanned in comparison to the private sector commercial banks and therefore, the inclusion of labor as an input injects an inherent bias working against the public sector banks. On the other hand, the public sector banks are undercapitalised as they cannot freely approach the capital market for raising Tier I capital. In terms of Tier I capital, they seem to over perform. Under the circumstances, bank branches and borrowed capital (including bank deposits) are taken as the inputs. While bank branches are also not very easily disposable, the R.B.I. has, of late, given considerable relaxation to the commercial banks in the matter of opening and closure of branches.The production relation, used in this paper, therefore, is Output (NIM,NII,L) =f (Branches, Borrowed capital)

Where NIM = Net Interest Margin, NII = Non-interest Income and L = Loan

Cost minimization DEA requires specification of input price. Operating cost per branch is taken as the price of branch whereas interest expended in terms of borrowed capital is taken as the price of capital.

(a) The Methodology of FDH Cost Efficiency Evaluation

The methodology of FDH cost efficiency evaluation used in this paper is as follows:

i) The banks under observation are classified into several cost classes. The banks falling within acost class are compared in terms of Net Interest Margin, Non-interest Income and Loan.

ii) A bank is said to be cost inefficient if it is dominated by more than one banks. Domination implies

a) These banks have total costs lower than its own

b) These banks have output indicators (Net Interest Margin, Non-interest Income or Loan) greater than or equal to its own.

Mathematically speaking,

For all bi Ck , bi <1 if there exists bj Ck , such that, cbj < cbi and obj = obi Where Ck is the cot class to which bi and bj belong. cbi and cbj are operating costs of bank i and bank j respectively. obi and obj are outputs of bank i and bank j.

(iii) A bank is called cost-efficient if it is un-dominated.

(iv) If a bank is cost inefficient and dominated by more than one other banks, the dominating one with the lowest cost is called most dominating.

(v) If a bank is cost inefficient, its degree of cost efficiency =Cost of most dominating bank/Cost of the inefficient bank. By construction, this ratio is less than 1 and greater than 0. For efficient banks , this is conventionally set equal to1.

(b) The DEA Methodology

In this paper, we make use of cost minimization DEA. We have tried to measure three types of efficiencies:

i) Overall Cost Efficiency: A productive unit exhibits overall cost efficiency if it is able to minimize total cost on the isoquant. For practical purposes, the cost-efficiency level is computed from the following

minimization exercise:
Minimize p. x = c
subject to : y = wY
x = , wX, w R+ , w j=1, w j = 0
Where Y and X refer to the output and input matrices taking into consideration all the banks under observation. y and x are the output and input vectors for specific banks. w refers to the weights. The overall cost efficiency level of a productive unit is given by the Cost Efficiency index = c*/c where c* and c represent the optimal and actual cost respectively. ii) Technical Efficiency: The overall cost-efficiency can be decomposed into technical efficiency and allocative efficiency. Technical efficiency refers to the ability of a productive unit to reduce all variable inputs to produce some level of output and to expand all the variable outputs for given inputs. For practical purposes, the technical efficiency is computed from the following minimization exercise:
minimize m
Subject to y = wY, mx = wX, w R*
iii) Allocative Efficiency: It reflects the ability of the productive system to select the right input-output vector in the light of the prevailing input and output prices. For practical purposes, allocative efficiency can be computed indirectly: AE = CE/TE

Choice of Outputs and Inputs
For the purpose of efficiency measurement, three output indicators have been used: Net interest margin, Non-interest income and Loan.The first output indicator i.e., the net interest margin is a good indicator of credit risk management abilities of a commercial bank since a bank with a high net NPA ratio is likely to have a low net interest margin. Bank branches and borrowed capital are taken as the inputs. Branch is a proxy for labor, fixed capital and location. The production relation, therefore, is
Output (NIM,NII,L) =f (Branches, Borrowed capital)
Where NIM = Net Interest Margin, NII= Non-interest Income, L = Loan

Data Source

The study relied on the Statistical Tables Relating to Banks in India for the bankwise data published by the Reserve Bank of India on an annual basis. For the remaining, the principal data source has been the Trend and Progress of Banking in India also published by the Reserve Bank of India annually.

FDH Cost Efficiency Results (2007-2008), Interest Margin

Cost class (Rs Cr)	Bank	Total cost (Rs Cr)	Net Interest Margin (Rs Cr)	Most dominating bank	Cost efficiency
0-399	Development Credit bank	239	186	-	1.00
400-799	Yes bank	341	336	-------	1.00
	Indusind bank	402	341	----------	1.00
	Jammu and Kashmir bank	403	811	---------	1.00
	Fedral bank	469	868	----------	1.00
	ING Vysya bank	609	498	Fedral Bank	0.11
	Dena bank	650	893	---------	1.00
800-1199	Kotak Mahindra bank	1019	463	------------	1.00
	Oriental bank of commerce	1080	617	----------	1.00
	Allahabad Bank	1158	1781	-----------	1.00
1200-1599	Indian bank	1400	893	--------	1.00
1600-1999	Central bank	1746	2223	---------	1.00
2000-2399	Axis bank	2155	2585	---------	1.00
2400-2799	Bank of India	2644	4229	----------	1.00
	Canara bank	2791	3537	Bank of India	0.94
2800-3199	Bank of baroda	2934	3912	------------	1.00
3500-3899	Punjab national bank	3525	6035	-------	1.00
	HDFC Bank	3745	5228	Punjab national bank	0.94
800-8399	ICICI Bank	8154	7304	----------	1.00
12400-12799	SBI Bank	12609	10021	------	1.00

Source authors own calculation
Data source: RBI Statistical table relating to banks in India, 2007-08

FDH Cost Efficiency Results (2007-2008),Output-Non Interest Income					
Cost class (Rs Cr)	Bank	Total cost (Rs Cr)	Non interest Income	Most dominating bank	Cost efficiency
0-399	Development Credit bank	239	162	--------	1.00
400-799	Yes bank	341	354	------	1.00
	Indusind bank	402	258	Yes bank	0.84
	Jammu and Kashmir bank	403	245	Yes bank	0.84
	Fedral bank	469	395	-----------	1.00
	ING Vysya bank	609	418	--------	1.00
	Dena bank	650	443	------------	1.00
800-1199	Kotak Mahindra bank	1019	463	------------	1.00
	Oriental bank of commerce	1080	617	--------------	1.00
	Allahabad Bank	1158	856	--------------	1.00
1200-1599	Indian bank	1400	443	------------	1.00
1600-1999	Central bank	1746	791	-------------	1.00
2000-2399	Axis bank	2155	1795	--------	1.00
2400-2799	Bank of India	2644	2117	------------	1.00
	Canara bank	2791	2213	-------------	1.00
2800-3199	Bank of baroda	2934	2051	------------	1.00
3500-3899	Punjab national bank	3525	1997	-------------	1.00
	HDFC Bank	3745	2283	------------	1.00
800-8399	ICICI Bank	8154	8810	-------------	1.00
12400-12799	SBI Bank	12609	8694	------------	1.00
Source authors own calculation Data source: RBI Statistical table relating to banks in India, 2007-08					

FDH Cost Efficiency Results (2007-2008),Output Loan

Cost class (Rs Cr)	Bank	Total cost (Rs Cr)	Loan	Most dominating bank	Cost efficiency
0-399	Development Credit bank	239	4068	------------	1.00
400-799	Yes bank	341	9430	------------	1.00
	Indusind bank	402	12343	------------	1.00
	Jammu and Kashmir bank	403	18882	------------	1.00
	Fedral bank	469	18904	------------	1.00
	ING Vysya bank	609	14649	Fedral bank	0.77
	Dena bank	650	23023	------------	1.00
800-1199	Kotak Mahindra bank	1019	15523	------------	1.00
	Oriental bank of commerce	1080	54565	------------	1.00
	Allahabad Bank	1158	49720	Oriental bank of commerce	0.93
1200-1599	Indian bank	1400	39838	------------	1.00
1600-1999	Central bank	1746	72338	------------	1.00
2000-2399	Axis bank	2155	59661	------------	1.00
2400-2799	Bank of India	2644	113476	------------	1.00
	Canara bank	2791	107238	------------	1.00
2800-3199	Bank of baroda	2934	106701	------------	1.00
3500-3899	Punjab national bank	3525	119501	------------	1.00
	HDFC Bank	3745	634260	------------	1.00
800-8399	ICICI Bank	8154	225616	------------	1.00
12400-12799	SBI Bank	12609	416768	------------	1.00
Source authors own calculation Data source: RBI Statistical table relating to banks in India, 2007-08					

FDH Cost Efficiency Results (2009-20010), Interest Margin

Cost class (Rs Cr)	Bank	Total cost (Rs Cr)	Net Interest Margin (Rs Cr)	Most dominating bank	Cost efficiency
0-399	Development Credit bank	200	141	------------	1.00
400-799	Yes bank	500	788	------------	1.00
	Jammu and Kashmir bank	577	1119	------------	1.00
	Fedral bank	677	1411	------------	1.00
	Indusind bank	736	886	Fedral bank	0.91
800-1199	ING Vysya bank	808	829	------------	1.00
	Dena bank	848	1100	------------	1.00
	Kotak mahindra bank	1189	1858	------------	1.00
1600-1999	Allahabad bank	1618	2650	------------	1.00
	Indian bank	17 30	3303	------------	1.00
	Oriental bank of commerce	1685	2907	------------	1.00
2000-2399	Central bank	2222	2545	------------	1.00
3600-3999	Bank of baroda	3811	5939	------------	1.00
	Bank of India	3668	5755	------------	1.00
	Canara bank	3477	5680	------------	1.00
	Axis bank	3709	5004	Bank of India	0.98
5600-5999	HDFC BANK	5764	8386	------------	1.00
	ICICI bank	5859	8114	HDFC bank	0.98
20000-20399	SBI Bank	20318	23671	------------	1.00
Source authors own calculation Data source: RBI Statistical table relating to banks in India, 2009-10					

FDH Cost Efficiency Results (2009-2010), Non Interest Income

Cost class (Rs Cr)	Bank	Total cost (Rs Cr)	Non Interest Income (Rs Cr)	Most dominating bank	Cost efficiency
0-399	Development Credit bank	200	107	------------	1.00
400-799	Yes bank	500	576	------------	1.00
	Jammu and Kashmir bank	577	416	Yes bank	0.86
	Fedral bank	677	530	------------	1.00
	Indusind bank	736	553	------------	1.00
800-1199	ING Vysya bank	808	620	------------	1.00
	Dena bank	848	588	ING Vysya bank	0.95
	Kotak mahindra bank	1189	628	------------	1.00
1600-1999	Allahabad bank	1618	1516	------------	1.00
	Indian bank	17 30	1173	Oriental bank of commerce	0.93
	Oriental bank of commerce	1685	1200	------------	1.00
2000-2399	Central bank	2222	1735	------------	1.00
3600-3999	Bank of baroda	3811	2806	------------	1.00
	Bank of India	3668	2617	Canara bank	0.94
	Canara bank	3477	2875	------------	1.00
	Axis bank	3709	3945	------------	1.00
5600-5999	HDFC BANK	5764	3807	------------	1.00
	ICICI bank	5859	7477	HDFC bank	0.98
20000-20399	SBI Bank	20318	14968	------------	1.00
Source authors own calculation Data source: RBI Statistical table relating to banks in India, 2009-10					

FDH Cost Efficiency Results (2009-2010), Loan

Cost class (Rs Cr)	Bank	Total cost (Rs Cr)	Loan (Rs Cr)	Most dominating bank	Cost efficiency
0-399	Development Credit bank	200	3459	------------	1.00
400-799	Yes bank	500	20754	------------	1.00
	Jammu and Kashmir bank	577	23057	------------	1.00
	Fedral bank	677	26950	------------	1.00
	Indusind bank	736	20550	Fedral bank	0.91
800-1199	ING Vysya bank	808	18507	------------	1.00
	Dena bank	848	35462	------------	1.00
	Kotak mahindra bank	1189	20754	------------	1.00
1600-1999	Allahabad bank	1618	71604	------------	1.00
	Indian bank	17 30	62146	Oriental bank of commerce	0.97
	Oriental bank of commerce	1685	84183	------------	1.00
2000-2399	Central bank	2222	102634	------------	1.00
3600-3999	Bank of baroda	3811	175035	------------	1.00
	Bank of India	3668	168490	Canara bank	0.94
	Canara bank	3477	169334	------------	1.00
	Axis bank	3709	104343	Canara bank	0.93
5600-5999	HDFC BANK	5764	125830	------------	1.00
	ICICI bank	5859	181205	------------	1.00
20000-20399	SBI Bank	20318	631914	------------	1.00
Source authors own calculation Data source: RBI Statistical table relating to banks in India, 2009-10					

FDH Cost Efficiency Results (2011-2012), Net Interest Margin

Cost class (Rs Cr)	Bank	Total cost (Rs Cr)	Net interest margin (Rs Cr)	Most dominating bank	Cost efficiency
0-399	Development Credit bank	24	22	------------	1.00
	Jammu and Kashmir bank	80	183	------------	1.00
	Fedral bank	97	195	------------	1.00
	Yes bank	93	161	------------	1.00
	ING Vysya	111	120	Yes bank	0.83
	Indusind bank	134	170	Dena bank	0.85
	Dena bank	115	210	------------	1.00
	Indian bank	218	441	------------	1.00
	Oriental bank of commerce	231	421	------------	1.00
	Kotak Mahindra bank	183	251	------------	1.00
	Central bank	374	517	Allahabad bank	0.71
	Allahabad bank	269	516	------------	1.00
400-799	Canara bank	467	768	------------	1.00
	Bank of India	494	831	------------	1.00
	Bank of baroda	515	1031	------------	1.00
	Axis bank	600	801	Bank of baroda	0.85
	Punjab national bank	700	1341	------------	1.00
	ICICI bank	785	1073	Punjab national bank	0.89
800-1199	HDFC Bank	859	1229	------------	1.00
2500-2899	SBI Bank	2606	4329	------------	1.00
Source authors own calculation Data source: RBI Statistical table relating to banks in India, 2011-12					

FDH Cost Efficiency Results (2011-2012), Non Interest Income

Cost class (Rs Cr)	Bank	Total cost (Rs Cr)	Non interest income (Rs Cr)	Most dominating bank	Cost efficiency
0-399	Development Credit bank	24	10	------------	1.00
	Jammu and Kashmir bank	80	33	------------	1.00
	Fedral bank	97	53	Yes bank	0.95
	Yes bank	93	85	------------	1.00
	ING Vysya	111	66	------------	1.00
	Indusind bank	134	101	------------	1.00
	Dena bank	115	58	Ing vysya	0.96
	Indian bank	218	123	------------	1.00
	Oriental bank of commerce	231	1240	------------	1.00
	Kotak Mahindra bank	183	97	Indusind bank	0.73
	Central bank	374	139	------------	1.00
	Allahabad bank	269	129	------------	1.00
400-799	Canara bank	467	292	------------	1.00
	Bank of India	494	332	------------	1.00
	Bank of baroda	515	342	------------	1.00
	Axis bank	600	542	------------	1.00
	Punjab national bank	700	420	Axis bank	0.85
	ICICI bank	785	750	------------	1.00
800-1199	HDFC Bank	859	524	------------	1.00
2500-2899	SBI Bank	2606	1435	------------	1.00
Source authors own calculation Data source: RBI Statistical table relating to banks in India, 20011-12					

FDH Cost Efficiency Results (2011-2012), Loan

Cost class (Rs Cr)	Bank	Total cost (Rs Cr)	loan (Rs Cr)	Most dominating bank	Cost efficiency
0-399	Development Credit bank	24	528	------------	1.00
	Jammu and Kashmir bank	80	3307	------------	1.00
	Fedral bank	97	3775	Yes bank	0.95
	Yes bank	93	3798	------------	1.00
	ING Vysya	111	2873	------------	1.00
	Indusind bank	134	3506	Dena bank	0.85
	Dena bank	115	5669	------------	1.00
	Indian bank	218	9032	------------	1.00
	Oriental bank of commerce	231	11304	------------	1.00
	Kotak Mahindra bank	183	3906	Dena bank	0.62
	Central bank	374	14860	------------	1.00
	Allahabad bank	269	11114	------------	1.00
400-799	Canara bank	467	23248	------------	1.00
	Bank of India	494	24883	------------	1.00
	Bank of baroda	515	28737	------------	1.00
	Axis bank	600	16975	Bank of baroda	0.85
	Punjab national bank	700	29377	------------	1.00
	ICICI bank	785	25372	Punjab national bank	0.89
800-1199	HDFC Bank	859	19542	------------	1.00
2500-2899	SBI Bank	2606	86757	------------	1.00
Source authors own calculation Data source: RBI Statistical table relating to banks in India, 20011-12					

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FDH Mean Efficiency Scores Of The Observed Commercial Banks

Output indicator	2007-08	2009-10	2011-12	Average
Net interest margin	0.955	0.96	0.95	0.95
Non interest income	0.91	0.93	0.96	0.93
loan	0.95	0.96	0.95	0.95
Source; authors own calculation				

The Bank Groupwise DEA Efficiency Scores

Mean Technical Efficiency of public sector banks				
Output indicator	**2007-08**	**2009-10**	**2011-12**	**Average**
Net interest margin	0.74	0.88	0.882	0.83
Non interest income	0.508	0.726	0.491	0.575
loan	0.805	0.662	0.781	0.74
Source; authors own calculation				

The mean technical efficiency of the private sector commercial banks				
Output indicator	**2007-08**	**2009-10**	**2011-12**	**Average**
Net interest margin	0.824	0.87	0.91	0.86
Non interest income	0.88	0.82	0.84	0.84
loan	0.95	0.85	0.88	0.89
Source; authors own calculation				

The mean allocative efficiency of the public sector commercial banks				
Output indicator	**2007-08**	**2009-10**	**2011-12**	**Average**
Net interest margin	0.824	0.87	0.86	0.85
Non interest income	0.83	0.81	0.92	0.85
loan	0.88	0.74	0.78	0.80
Source; authors own calculation				

The mean allocative efficiency of the private sector commercial banks				
Output indicator	**2007-08**	**2009-10**	**2011-12**	**Average**
Net interest margin	0.90	0.95	0.89	0.91
Non interest income	0.88	0.90	0.94	0.90
loan	0.94	0.52	0.58	0.68
Source; authors own calculation				

The mean cost efficiency of the public sector commercial banks				
Output indicator	**2007-08**	**2009-10**	**2011-12**	**Average**
Net interest margin	0.68	0.77	0.79	0.74
Non interest income	0.72	0.77	0.79	0.76
loan	0.72	0.58	0.58	0.62
Source; authors own calculation				

The mean cost efficiency of the private sector commercial banks				
Output indicator	**2007-08**	**2009-10**	**2011-12**	**Average**
Net interest margin	0.73	0.74	0.81	0.76
Non interest income	0.72	0.75	0.78	0.75
loan	0.80	0.81	0.71	0.77
Source; authors own calculation				

Results

In the FDH approach, we take segments of the cost frontier as the benchmark. In the DEA approach, we take a linear version of the entire frontier as the benchmark. The FDH efficiency scores indicate that the mean efficiency scores of the observed commercial banks improved between 2007 and 2012. When DEA is applied, we find a secular improvement in cost-efficiency during the period if net interest margin is taken as the output indicator. When non-interest income is taken as the output indicator, we find that in respect of 2007-08, the mean cost efficiency scores improved in 2009-10 , but declined in 2011-12. When loan is taken as the output indicator, no definite conclusion could be reached due to violent year-to-year fluctuations. Let us now make a comparison of the bank groups on the basis of available information. As per the FDH results, observed public sector commercial banks exhibit higher mean efficiency scores (when theyear-wise figures are averaged) than the observed private sector banks when net interest margin or non-interest income are taken as the output indicators. However, if loan is taken as the output indicator, the mean efficiency score of the observed private sector banks is higher than the observed public sector banks. In terms of DEA, the observed private sector commercial banks have higher mean cost, technical and cost efficiencies than the observed public sector commercial banks. In the case of allocative efficiency, however, the results indicate fluctuations in efficiency scores across the commercial bank groups when loan is taken as the output indicator.

Final Comment

The private sector banks have an edge over the public sector banks in the matter of generating the fees based income. This is reflected in their substantially higher mean cost efficiency as compared to the observed public sector banks.

Decomposition of the cost efficiency shows the difference is mainly due to the superior technical efficiency of the observed private sector banks. The fluctuations in the loan related efficiency scores may be due to effects of fluctuation in the business activity which influence banking sector allocation of investible resources between loan and investments

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Elements Influencing Apparel Buying Behavior In Working Females

Neelam Agrawal Srivastava[1]

Abstract

Rapid growth and rising urbanization have spawned a new class of consumers with more money to spend, and a growing passion for fashion. Growth in women's segment with inclination for branded apparels has increased in the market in India. Earlier, there only 20 percent of Indian urban women were in the workforce. Women's wardrobes had traditionally been limited to home wear and items for special occasions. Now, women are more willing to dress differently when they venture beyond the home—to shop, for example, or visit a school. Consumer behavior has changed dramatically in last decade. The behavior of the consumer is displayed in the research for place, purchase, consumption, evaluation and disposal of products and so consumer behaviors focuses on how individual take decision to spend their time, money, effort on consumable related items. The purpose of the study is to observe record and examine the behavior of working females buying habits, the factors which they consider carefully before taking the decision for the selection of style, brand and place. The identification of these factors could assist marketers and retailers to gain a better understanding of decision making process of female consumers and to predict the future actions of these consumers towards apparel purchasing.

Keywords Apparel Selection, Retail Formats, Consumer Behavior, Media Involvement, Buying Behavior.

1. Introduction

The Indian consumers are subjected to drastic changes in their spending habits. Recently, the consumers are giving more importance to life pleasures and they are becoming more status conscious. This has inspired them to shift to multichannel retail and mall culture. As consumers play a vital role to bring success to any business, there is a need to study the consumers buying behaviour in an organized retail market.

Current urban middle and upper class Indian consumer buying behaviour has been much influenced by western culture especially in women. The Indian consumer has become much more open minded and experimental in perspective.

A recent study by the National Council for Applied Economic Research has shown that the middle class in India with income level of Rs, 90,000- 100,000 is growing with faster pace. This indicates that household income and the disposable income of people in India is increasing to support the increasing demands of consumers to spend on luxury products and status rising consumables. Increase in household income has also inclined people towards more luxurious life which have also bought comforts in buying habits. Consumer behavior research is the scientific study of the process of consumer to select, secure, use and dispose the products and services that satisfy their needs. Knowledge of consumer behavior directly affects marketing strategy. Thus, marketing strategy must incorporate knowledge of consumer behavior at every stage of strategy planning.

Now a day, consumers seek an experience which is more than product variety and quality, a synthesis of multi analysis is important to create a favourite store image. As a result, a critical issue for retail management is to determine the factors affecting satisfaction to identify and target segments of customers, to ensure to bind them for long time (Sivadas and Baker- prewitt, 2000).

[1] Research Scholar, Faculty of Management Studies, Manav Rachna International University, Faridabad.

The accessibility of the consumers has also been magnified by creating a customer friendly ambience in the stores. The assurance of similar quality with larger domain of price differentiation, more variety within product category has made retail shopping more delightful. A trusted retail name provides comfort of shopping to the customer by providing certain advantages to the consumers. Hence, retail sector is going to play a major role to shape the competitive scenario in Indian market.

The growth of readymade females wear in India was very slow until early 1980's. The main reason for this was women believed in buying cloth material and getting their dresses tailored through a tailor shops in an unorganised local market until branded products started entering the market, which finally changed the scenario. By the mid 1980's however consumer's mindset started changing with the advent of increasing urbanisation and changes in socio and economic status of people in society, and thus women branded clothes entered in the market.

Female have special outlook and motives behind every purchase. Regarding female garment, it is easy to buy high fashion in low price. Over the past decade the fashion industry has gone through some major structural changes. In the fast evolving fashion industry even the best merchandise can be destabilized by economic change and strong competitive environment. Retailer even is very well aware of the fact and therefore they understand the requirement of complete perspective view of target consumers in ornamenting shopping inclination. Although apparel Industry is at maturity stage and growth is slow, fashion cycles are accelerating and the average successful clothing last only for a short span of time and to gain maximum profit is becoming more difficult and challenging.

The shopping culture is shifting towards malls because of shopping experience the consumers get. The most important source of information was found to be family, friend, internet and advertisements. It is majorly seen that females view shopping as a fun, satisfying and joyful activity. Female look toward shopping as communal event with cheerful activities and take it as very positive aspect. Clothing is important part and parcel of women's life and plays an imperative role in building women's self esteem and identity. Women's experience for shopping and its importance create a constant demand for clothes which gives this market a great potential for growth. There are many elements which impact the buying behaviour like, organised retail stores with fun activities, look style, multiple brand availability of same product.

2. Literature Review

(Sinha and Banerjee, 2004) mentioned that there is growing need to evaluate the drivers of shopping behaviour in the Indian context. The apparel shops with a high level personalised service, is making shoppers to averse to depart from traditional ways of shopping. The knowledge of consumer shopping behaviour is an essential input to the development of an effective marketing strategy, which is required for the effectiveness and success of business.

(Berman and Evans, 2005) stated that the behaviour of shoppers differs according to the place where they are shopping and their involvement level with the act of shopping.

(Berry, 1996 and Jackson, 1999) have identified situations which result consumers dissatisfaction towards retail brand unable to give comfort to consumers.

(Stone Rhee and Bell, 2002) believed that while shoppers often standby to many stores they typically have a primary association to a main store that captures the majority of their purchase.

(Apparel Retail, 2006) has mentioned that along with significance increase in salaries, these changes have increased the consumer spending on apparel significantly. Apparel is now the second largest consumption category in malls.

(Doyle, 2001) The consumer's perception on a brand is based upon the quality Individuals interested in clothing tend to pay more attention to physical properties and features of the clothing that include quality of garment.

Mintel, (2008) has stated, that in terms of spending on clothing, age is a strong determinant of women's budget than their 20-24 and 25-34 age groups are of supreme importance to the marketers as women is less worried about quality than style in their clothing.

(Solomon, 2002) had written, that, clothing interest among the consumers is measured with the help of the variables namely spending more on clothing, favourite activity is clothing, like the clothing than others and enhancement of appearance though clothing.

3. Objectives

1. To study the factors influencing the buying behavior in working females consumers.
2. To study and examine the effect of these factors on the selection of retail format.

4. Significance of the Study

Gender identity can be explained as to which degree a man or woman identifies with masculine and feminine behaviour traits. Gender differences refer to differences in their responsibilities, roles and privileges of men and women which make them behave differently to all stimuli offered by marketers to their products.

When marketers know accurately the fashion involvement of affluent female consumers and their apparel purchase behavior, retailers and marketers will be able to target them better. Marketers can benefit from this information by developing pricing and promotional tactics to appeal to this market. This would further even help the retailer to know what to consider while promoting products to affluent consumers.

Sciffman, 1993 observed a noteworthy trend of female emerging as a major change, which is considered to be the most important consumer, mainly because they have joined the labour market and there is a major rise in their disposable income. Consequently they are recognized by apparel marketers as a major sought after target market.

5. Methodology

The study is focused to study and examine the factors which influence buying habits in working women of education field. The study is based on primary data collection from the population of an education sector. The respondents are the female employees in college and university. The data is collected through a set of questionnaires which were checked earlier through a pilot study done on a group of working females employed with an education institute. Data is collected from age group of the respondent lies between 25 to 40 years. A set of questionnaire has been framed with 6 attributes on four points to observe and study the buying behavior.

The sampling method adopted for research work was simple random sampling method. The sample selected was 60 in three different age groups of 25-30 yrs, 30-35yrs and 35-40yrs. The data collection method was based on questionnaire.

The respondents have been observed from two colleges and two Universities.

6. Analysis and Interpretation of Results

A good marketing strategy is one which gives marketers a good understanding on consumer's insight. Study was conducted with females in three age groups of 30-35 years, 35-40 years and 25-30 years.

6.1 The first element for study was to know the frequency to go for shopping. The Observation as conducted on female between age group of 30 years to 35 years, 35 % females agreed on going to shopping weekly, whereas, maximum women preferred to shop only once in a month. Percentage of such women was 41%. However, the category who selected the option to go for shopping once in three months and fortnightly were only 11%.

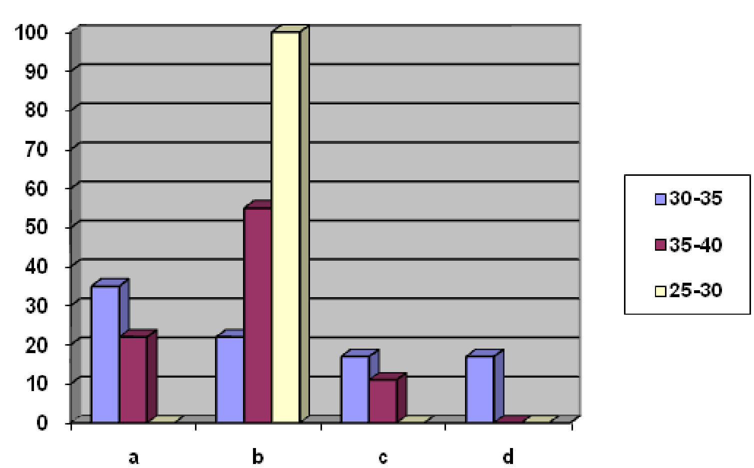

Fig.6.1 Frequency of the act shopping behavior (a. weekly, b. monthly. c. fortnightly. d. quarterly)

However, only 22% women were there in the category of 35 to 40 years responded to the same question as they prefer to shop weekly, 55% females preferred to shop monthly and 11% females preferred to shop in fifteen days, whereas, none preferred to shop once in three months. 100% women in the age group 25- 30 years responded that they do shopping only once in a month.

6.2 Where do you take information to decide upon the destination of shopping?
Same three different age groups were taken opinion for the selection of shopping place. 41% in the age group of 25 years to 30 years, collected information from friends, relatives, hoardings and neighbours and 17% gained information through print media. Similarly 11% got to know through electronic media and only 5% collect information through internet.

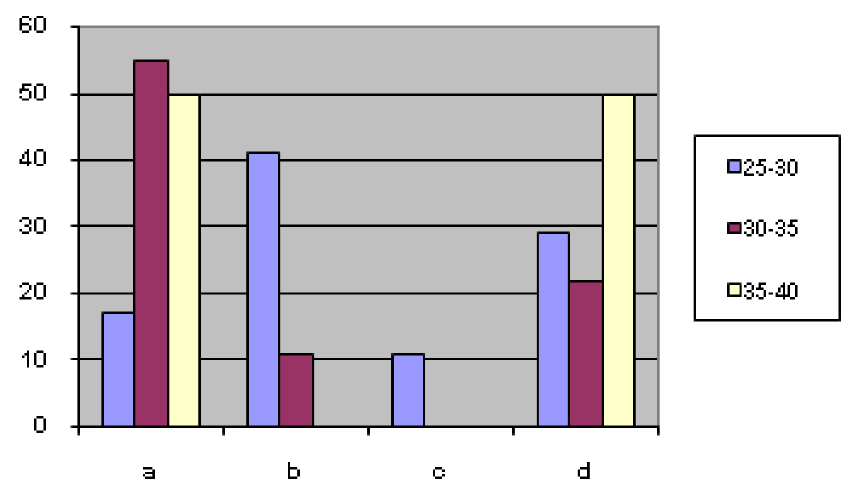

Fig.6.2 Selection for place (a. Print media, b. Outdoor media, c. Electronic media, d. Internet)

However, 55% of the females of age group between 30 to 35 years selected shopping place by knowing through print media and 22% consulted internet for this information. None of the female's trusted electronic media and only 11% consulted friends and relatives. On the contrary, response to internet and print media is on equilibrium in the females of age group 35 to 40 years.

6.3 Where do you go for shopping?
When the women of each of three age category were questioned, maximum preferred to go for shopping to Mall due to availability of multi brands and product variety. None of the women selected the option of local un organized market. This clearly indicates that habit of shopping has drastically changed in working women inclining them towards more comfortable places of shopping and to places where they get options for varied product and also get the feel, touch of the product and receive the factor of comparison.

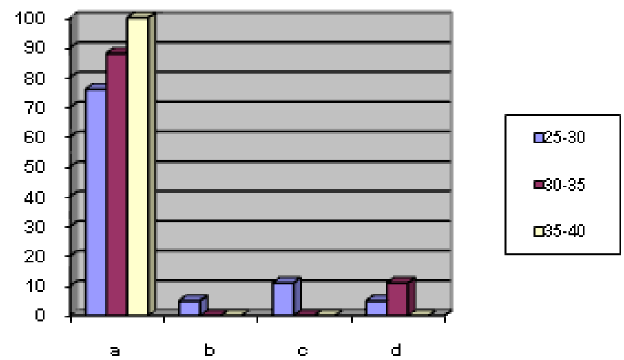

Fig.6.3 Selection of place for shopping (Mall, Specialty store, Local market, internet)

6.4 Preference of retail format
Maximum of the women in all age groups like the retail format which offers them fun, sales offer and good presentation of products. Whereas, women of age group 30-years to 35 years preferred to go to places with sales offers.

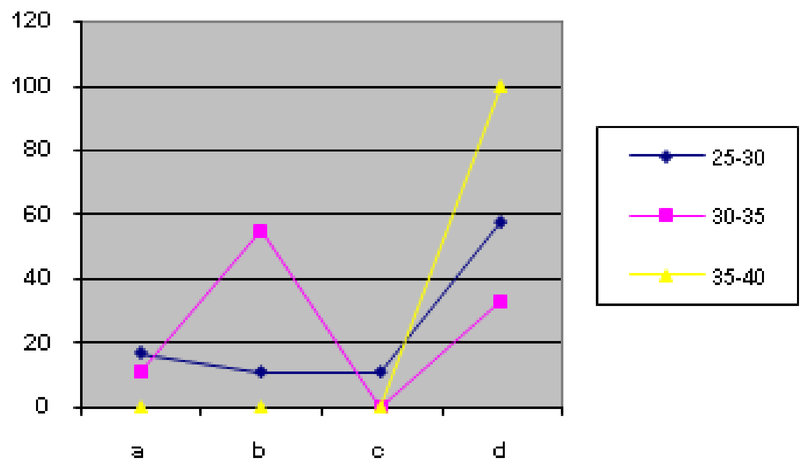

Fig.6.4 Selection of retail format (shopping with fun, sales offers, store display, all)

6.5 Apparel type preference
This category reflected varied options. The taste of apparel type selection differ with age group as 29% of women in age group 25 years to 30 prefers to buy branded western garment for occasions, whereas, 44% females of age group between 30 years to 35 years rated branded garment in any group ethnic or western. However, women of age group 35 years to 40 years preferred branded western garments.

6.6 Reason for shopping
An interesting figure revealed for the reasons women go for shopping and maximum women of age group 35- 40 years has chosen the option of "shopping as stress release factor" and to add latest apparel in the wardrobe, whereas, women of age group 30 -35 years shop to release stress, to add apparel and to fulfill the need of occasion. However, for the women of age group 25 to 30 years, shopping is a stress releasing activity.

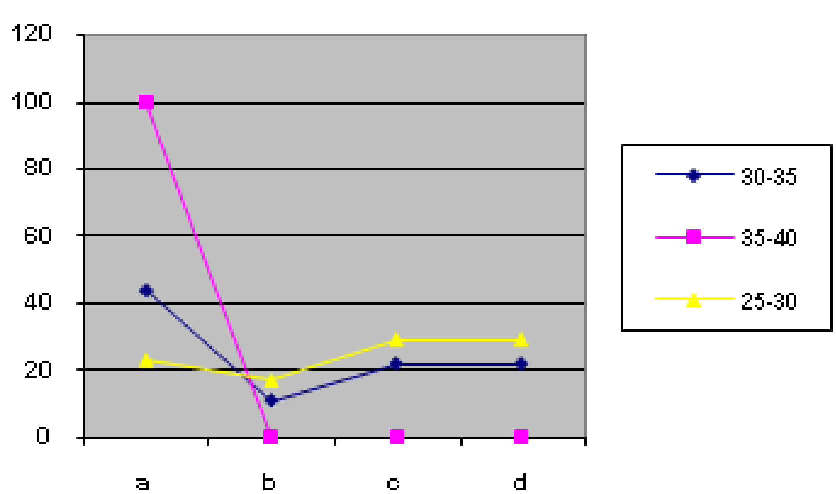

Fig.6.5 Selection of Apparel type (Branded western and ethnic)

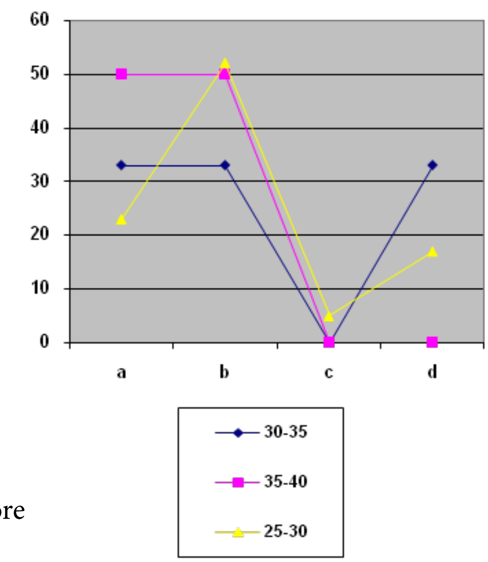

Fig. 6.6 Reason for shopping (stress releasing, fun activity, to add latest apparel, to maintain profile status)

Recommendations
As calculated by taking the mean of values for each question, and values as obtained from the respondents of all three age groups. Recommendations are as shown in the graph.

The data analysis on the shopping behavior of working women, in spite of the age factor maximum of the female prefer to shop monthly and they trust to receive information from either print media or internet for the selection of place for shopping. For them shopping is a stress releasing activity and they prefer to select a retail format which provide them good display, sales offers and fun with shopping. Now, they are more likely to add branded western garment instead of tailored garments and they do so to add new apparels in their wardrobe.
Marketers now take the consideration of all these factors while designing the layout for

interior display of the store for women apparels in order to bind them to a particular shop and to take maximum gain out of the product with short time span.

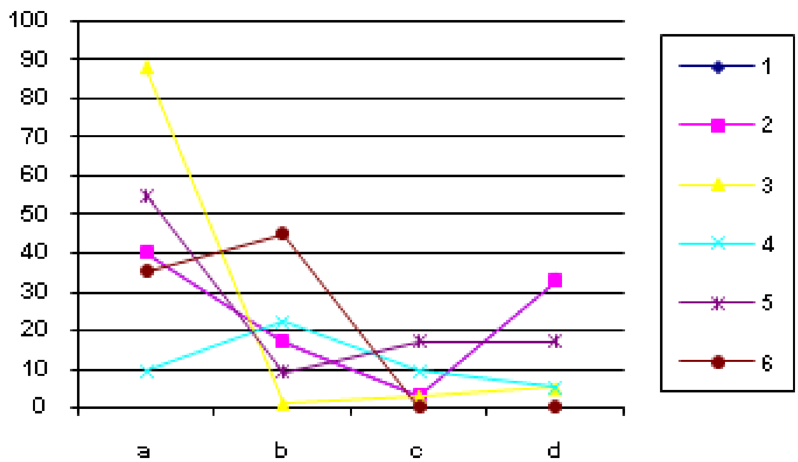

Fig. 6.7 Recommendations for shopping behaviour

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Cash Conversion Cycle and Organisation's Profitability - An Empirical Study of Indian Auto Sector

Rupali Misra Nigam[1]

Abstract

Working capital is a financial metric which represents operating liquidity. Working Capital Management also directly impacts firms' profitability (Deloof, 2000). In the current turbulent times, it becomes imperative for the organisations to manage WC efficiently. Cash Conversion Cycle – the time lag between the payments made for the purchase of raw material and collection received from sales is an important measure of WCM. Shorter the time lag, lesser is the financing requirement of working capital.

In the light of this statement, certain industries strategize their bargaining power (Porter, 1985) and reduce cash conversion cycle. This paper investigates the creative strategies envisaged and implemented by Auto industry in managing WC efficiently. We have used a sample of 10 auto companies which also form a part of BSE Auto sector index, listed in Bombay Stock Exchange (BSE). Time period of the study has been kept at five years (FY 2007-12), increasing the number of observations as 50. .

The purpose of this paper is to establish a relationship that is statistical significant between profitability, the cash conversion cycle and its components for listed Auto firms in the BSE. The results of the research will explain that there is statistical significance between profitability, measured through net operating profit, and the cash conversion cycle.

Keywords Corporate Finance, Strategic Working Capital Management, Profitability, Cash Conversion Cycle.

Introduction

The ultimate objective of any firm is to maximize the profit. But, preserving liquidity of the firm is an important objective too. The problem is that increasing profits at the cost of liquidity can bring serious problems to the firm. Therefore, there must be a tradeoff between these two objectives of the firms. One objective should not be at cost of the other because both have their importance. If we do not care about profit, we cannot survive for a longer period. On the other hand, if we do not care about liquidity, firms may face the problem of insolvency or bankruptcy. Working capital management involves the decision of the amount and composition of current assets and the financing of these assets. Current assets include all those assets that in the normal course of business return to the form of cash within a short period of time, ordinarily within a year and such temporary investment as may be readily converted into cash upon need. The Working Capital Management of a firm in part affects its profitability.

Delaying payments to suppliers allows a firm to assess the quality of bought products, and can be an inexpensive and flexible source of financing for the firm. On the other hand, late payment of invoices can be very costly if the firm is offered a discount for early payment. A popular measure of Working Capital Management (WCM) is the cash conversion cycle, i.e. the time lag between the expenditure for the purchases of raw materials and the collection of sales of finished goods. The longer this time lag, the larger the investment in working capital.

A longer cash conversion cycle might increase profitability because it leads to higher sales. However, corporate profitability might also decrease with the cash conversion cycle, if the costs of higher investment in working capital rise faster than the benefits of holding more inventories and/or granting

[1] Asstt. Professor, Asian Business School

more trade credit to customers. This discussion of the importance of working capital management, its different components and its effects on profitability leads us to the problem statement which needs analysis.

Literature Review

The following studies provide with the background required for analysis of working capital management and its components and their further interactions.

- The standard measure for working capital management is the cash conversion cycle (CCC). Cash conversion period reflects the time span between disbursement and collection of cash. It is measured by estimating the inventory conversion period and the receivable conversion period, less the payables conversion period (Deloof, 2003), (Lazaridis and Tryfonidis, 2006), (Wongthatsanekorn, 2010), (Dong and Su 2002).
- Working capital management is a very important component of corporate finance because it directly affects the liquidity and profitability of the company. It deals with current assets and current liabilities. Working capital management is important due to many reasons. For one thing, the current assets of a typical manufacturing firm accounts for over half of its total assets. For a distribution company, they account for even more. Excessive levels of current assets can easily result in a firm's realizing a substandard return on investment. However firms with too few current assets may incur shortages and difficulties in maintaining smooth operations (Horne and Wachowicz, 2000).
- Shin and Soenen (2008) used net-trade cycle (NTC) as a measure of working capital management. NTC is the cash conversion cycle (CCC) where all three components are expressed as a percentage of sales. NTC maybe a proxy for additional working capital needs as a function of the projected sales growth. They examined this relationship by using correlation and regression analysis, by industry and working capital intensity. They found a strong negative relationship between the length of the firm's net-trade cycle and its profitability.
- Raheman and Nasr (2006) studied the effect of different variables of working capital management including average collection period, inventory turnover in days, average payment period, cash conversion cycle, and current ratio on the net operating profitability of Pakistani firms. They selected a sample of 94 Pakistani firms listed on Karachi Stock Exchange for a period of six years from 1999 - 2004 and found a strong negative relationship between variables of working capital management and profitability of the firm. They found that as the cash conversion cycle increases, it leads to decreasing profitability of the firm and managers can create a positive value for the shareholders by reducing the cash conversion cycle to a possible minimum level.
- Uyar (2009) purpose of research was to set industry benchmarks forcash conversion cycle (CCC) of merchandising and manufacturing companies and to examine the relationship between the length of the CCC and the size of the firms, and the length of the CCC and profitability. The data was collected from the financial statements of the corporations listed on the Istanbul Stock Exchange (ISE) for the year 2007.
- Padachi (2005) examined through regression that high investment in inventories and receivables is associated with lower profitability. An analysis of the liquidity, profitability and operational efficiency of the five industries shows significant changes and how best practices have contributed to performance.
- Eljelly (2004) elucidated that efficient liquidity management involves planning and controlling current assets and current liabilities in such a manner that eliminates the risk of in ability to meet short-term obligations and avoids excessive investment in these assets. The relation between profitability and liquidity was examined, as measured by current ratio and cash gap (cash conversion cycle) on a sample of joint stock companies in Saudi Arabia using correlation and regression analysis. The study found that the cash conversion cycle was of more importance as a measure of liquidity than the current ratio that affects profitability.
- Ghosh and Maji (2003) examined

the efficiency of working capital management of the Indian cement companies during 1992 – 1993 to 2001 – 2002. For measuring the efficiency of working capital management, performance, utilization, and overall efficiency indices were calculated instead of using some common working capital management ratios. Deloof (2003) discussed that most firms had a large amount of cash invested in working capital. Hence, the way in which working capital is managed will have a significant impact on profitability of those firms. Managers could create value for their shareholders by reducing the number of day's Accounts receivable and inventories to a reasonable minimum.

- Firms may have an optimal level of working capital that maximizes their value. Large inventory and a generous trade credit policy may lead to high sales. Larger inventory reduces the risk of a stock-out. Trade credit may stimulate sales because it allows customers to assess product quality before paying (Long, Maltiz and Ravid, 1993, and Deloof and Jegers, 1996). Another component of working capital is accounts payable.

Research Methodology

The purpose of this paper is to establish a relationship that is statistical significant between profitability, the cash conversion cycle and its components for listed Auto firms in the BSE. We have used a sample of 10 auto companies which also form a part of BSE Auto sector index, listed in Bombay Stock Exchange (BSE). Time period of the study has been kept at five years (FY 2007-12), increasing the number of observations as 50.

The objectives of the study are –

- To establish a relationship between the length of Cash Conversion Cycle and profitability over a period of five years (FY 2007-12) for 10 Indian Auto sector companies listed in Bombay Stock Exchange.
- To find out the effects of different components of working capital management on profitability
- To find out the relationship between debt used by the An Indian firm and its profitability

Data Set & Sample

The financial statements of the 10 auto sector companies used in this study were collected from Bombay Stock Exchange (BSE) website. The companies used in analysis are – Tata Motors, Bharat Forge, Maruti Suzuki, Mahindra and Mahindra, Hero MotoCorp, Bosch, Cummins India, Exide Industries, Ashok Leyland and Bajaj Auto. The financial statements of FY 2007-12 have been used for analysis. The reason for restricting to this period was that the latest data for investigation was available for this period. Finally, the firms with data of the number of day's accounts receivable, number of days inventories, number of days accounts payable and net operating income are included in sample.

Hypotheses Testing

Since the objective of this study is to examine the relationship between profitability and working capital management, the study makes a set of testable hypothesis {the Null Hypotheses H0 versus the Alternative ones H1}.

Hypothesis

The hypothesis of this study is as follows:

H01: There is no relationship between length of cash conversion cycle and profitability of Indian Auto sector companies.

H11: There is a possible positive relationship between length of cash conversion cycle and profitability of profitability of Indian Auto sector companies. Firms with shorter cash conversion cycle pose high level of profitability and vice versa.

Descriptive Analysis

Table 1 presents descriptive statistics for 10 Indian Auto Sector companies for a period of five years from 2007 to 2012 and for a total 50 observations. The mean value of net operating profitability is 20.32% of total assets, and standard deviation is 13.98%. It means that value of the profitability can deviate from mean to both sides by 13.98%.

Table 1 – Descriptive Statistics of Indian Auto Sector Companies for FY 2007-12

10 firms – 50 observations

	N	Minimum	Maximum	Mean	Standard Deviation
Net Operating Profitability (as a % of Total Assets)	50	0.0313	0.6379	0.2032	0.1398
Average Accounts Receivable	50	2.43	81.35	29.04	19.80
Average Accounts Payable	50	0	467.60	73.74	99.34
Inventory Turnover	50	11.26	99.64	44.41	24.80
Cash Conversion Cycle	50	(308.70)	133.71	2.58	92.01

Source – Calculations based on published annual reports of firms from FY 2007-12.

The cash conversion cycle has been used for measuring working capital management of the Indian Auto Sector. Average cash conversion cycle is just 2.5 days with a standard deviation as 92 days which signifies a deviation of 92 days on either side of mean.

Average Accounts Receivable or the time within with the firms receive cash payment against credit sale is 29 days with the standard deviation of 19.80 days. Minimum time taken by a company to collect cash from receivables is 2.43 day while the maximum time for this purpose is 81.35 days. It takes an average 44.41 days to sell inventory with standard deviation of 24.80 days. Here, maximum time taken by a company is 99.64 days. Firms wait an average 73.74 days to pay their purchases with standard deviation of 99.34 days. Here, minimum time taken by a company is 0 day which is unusual, and maximum time taken for this purpose is 467.60 days.

Quantitative Analysis

Pearson's correlation coefficient has been used to measure the degree of association between different variables under consideration. The important variables considered for evaluation are the different components of the gross operating cycle, namely, Accounts Receivable (in days), Accounts Payable (in days), Inventory turnover (in days) and Cash Conversion Cycle. The genesis is that well managed operating cycle will have a positive impact of the firm's Net Operating Profitability (as a % of Total Assets). As multiple variables are influence working capital management, crucial factors have been identified.

Table 2 presents Pearson correlation coefficients for all variables considered.

	Net Operating Profitability (as a % of Total Assets)	Accounts Receivable	Accounts Payable	Inventory Turnover	Cash Conversion Cycle
Net Operating Profitability (as a % of Total Assets)	1				
Accounts Receivable	(0.30)	1			
Accounts Payable	(0.55)	0.26	1		
Inventory Turnover	(0.48)	0.75	0.45	1	
Cash Conversion Cycle	(0.37)	0.12	(0.89)	(0.08)	1

Source – Calculations based on published annual reports of firms from FY 2007-12.

Net Operating Profitability

The first variable considered in net operating Profitability (as a % of Total Assets) and Average Accounts Receivables. The result of correlation analysis shows a negative coefficient (0.30). It indicates that the average accounts receivables period increases it will have a negative impact on the profitability and vice-versa. Correlation results between Accounts payables in days and the net operating Profitability also indicate the same type of result. The correlation coefficient is (0.55). It means that the less profitable firms wait longer to pay their bills. Correlation results between inventory turnover in days and the net operating Profitability also indicate negative correlation coefficient as (0.48). This again signifies that blocking the inventory will increase the cost of holding or carrying inventory and reduce net operating profitability. Or, if the firm takes more time in selling inventory, it will adversely affect its profitability. The cash conversion cycle is a comprehensive measure of working capital management also has a negative coefficient (0.37). This signifies that the firms can improve their profitability by reducing the cash conversion cycle. By analyzing the results we conclude that if the firm is able to reduce these time periods, then the firm is efficient in managing working capital. This efficiency will lead to increasing its profitability.

Cash Conversion Cycle

Cash Conversion Cycle is a financial metric that represents the number of days firm's is in need of short term financial capital. Shorter the time duration, lesser will be the dependence on outside sources for meeting short-term requirements. Table 3 shows that 50% of the companies have Cash Conversion Cycle less than 15.4 days and 75% of the companies have Cash Conversion Cycle of 65.79 days. This also depicts that Indian Auto Sector companies are able to manage their short term finance requirement efficiently by delaying the payment of credit purchases.

Table 3

Minimum	**(308.70)**
Maximum	133.71
Mean	2.58
Standard Deviation	92.01
Quartile 1	(26.93)
Quartile 2 (Median)	15.42
Quartile 3	65.79

Source – Calculations based on published annual reports of firms from FY 2007-12.

Other Variables - Accounts Receivables, Accounts Payable, Inventory Turnover

Pearson's correlation (Table 2) also displays a significant positive relationship between the average collection period and cash conversion cycle; the correlation coefficient is 0.12.This means that if a firm takes more time to collect cash against the credit sales it will increase its operating or cash conversion cycle.

A negative relationship between accounts payable and profitability is consistent with the view that less profitable firms wait longer to pay their bills. In that case, profitability affects the account payables policy and vice versa. An alternative explanation for a negative relationship between the number of days accounts payable and profitability could be that Indian Auto Companies firms wait too long to pay their accounts payable.

The average payment period and cash conversion cycle have a negative relationship. The coefficient is – 0.89. It means that if firms take more time to pay their purchases than the time for collection and selling inventory, the cash conversion cycle will be reduced. Now, these negative relationships between Cash conversion cycle, Average collection period, Average payment period and Inventory turnover in days with the profitability of companies are consistent with the literature review and have significant effect on the profitability of company.

Conclusion

Indian Auto Sector has improved their profitability significantly by managing their working capital efficiently. The Auto sector companies are enjoying significant bargaining power leading to longer payables time duration and shorter (even negative) cash conversion cycle. Tata Motors, Mahindra and Mahindra Bajaj Auto, Bharat Forge have negative cash conversion cycles owing to their customer's poor bargaining power and credit policies.

Regarding our hypotheses, Alternate hypothesis (H11) that there is a possible positive relationship between length of cash conversion cycle and profitability of profitability of Indian Auto sector companies is accepted and null hypothesis rejected. Firms with shorter cash conversion cycle pose high level of profitability and vice versa. The conclusions are in confirmation with (Deloof 2003), (Eljelly 2004), (Shin and Soenan 1998), (Lazaridis and Tryfonidis, 2006), (Wongthatsanekorn, 2010), (Dong and Su 2002) who found a strong negative relationship between the measures of working capital management including the average collection period, inventory turnover in days, average payment period and cash conversion cycle with corporate profitability. The scope of further research may be extended to the working capital components management including cash, marketable securities, receivables and inventory management.

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Impact of Human Resource Accounting on Employee Performance in Indian Nationalized Banks

Dr. Arun Kumar Pandey[1]

Abstract

This research paper explores the importance of Human Resource Accounting on Employee Performance in Indian nationalized banks. Human Resource Accounting (HRA) involves accounting for expenditures related to human resources as assets, as opposed to traditional accounting which treats these costs as expenses that reduce profit. Interest and contributions to growth in HRA have been evident in a number of countries. HRA has three main roles i.e. to provide organizations with objective information about the cost and value of human resources, provide a framework to guide human resource decision-making and to motivate decision-makers to adopt a human resources perspective. Despite the strong research interest in the area, human resource accounting did not gain wide acceptance in practice for a variety of reasons. There are a few banks, however, that do recognize the value of their human resources, and furnish the related information in their annual reports. In India, some of the banks are State Bank of India, Indian overseas, Bank of Baroda, UCO Bank, Punjab National Bank and Oriental Bank of commerce. The concept of HRA is developing at a fast pace and in coming years it would be widely practiced among banking and non banking organizations

Keywords Human Resource Accounting; Recruitment Cost; Training Cost; Compensation Cost; Performance Appraisal Cost.

Introduction

The American Accounting Association's Committee on Human Resource Accounting (1973) has defined Human Resource Accounting as "the process of identifying and measuring data about human resources and communicating this information to interested parties". HRA, thus, not only involves measurement of all the costs/ investments associated with the recruitment, placement, training and development of employees, but also the quantification of the economic value of the people in an organization. As far as the statutory requirements go, the Companies Act, 1956 does not demand furnishing of HRA related information in the financial statements of the companies. The Institute of Chartered Accountants of India too, has not been able to bring any definitive standard or measurement in the reporting of human resources costs. While qualitative pronouncements regarding the importance of Human Resources is often made by the chairmen, in the AGM, quantitative information about their contribution is rarely recorded or communicated. There are a few banks, however, that do recognize the value of their human resources, and furnish the related information in their annual reports.

Need of Human Resource Accounting

HRA serves the following purposes in an organization (i) It furnishes cost/value information for making management decisions about acquiring, allocating, developing, and maintaining human resources in order to attain cost-effectiveness; (ii) It allows management personnel to monitor effectively the use of human resources. (iii) It provides a sound and effective basis of human asset control, that is, whether the asset is appreciated, depleted or conserved; (iv) It helps in the development of management principles by classifying the financial consequences of various practices.

[1] Professor, Amity Business School, Amity University, Noida.

Basically, HRA is a management tool which is designed to assist senior management in understanding the long term cost and benefit implications of their HR decisions so that better business decisions can be taken. If such accounting is not done, then the management runs the risk of taking decisions that may improve profits in the short run but may also have severe repercussions in future. For example, very often banks hire young people from outside on very high salaries because of an immediate business requirement. Later on, however, they find that the de-motivating impact of this move on the existing experienced staff has caused immense long term harm by reducing their productivity and by creating salary distortions across the organizational structure.

In addition to facilitating internal decision making processes, HRA also enables critical external decision makers, especially the investors in making realistic investment decisions. Investors make investment decisions based on the total worth of the organization. HRA provides the investors with a more complete and accurate account of the organization's total worth, and therefore, enables better investment decisions.

Literature Review

James A. Craft and Jacob G. Birnberc (2001). Current interest in HRA can be traced directly to the influence of Rensis Likert, former director of the Institute for Social Research at the University of Michigan. He concludes that only by improving intervening variables such as employee attitudes, morale, loyalties, and motivation can long-run successful performance be obtained. Realistically, however, Likert recognizes that "so long as no quantitative surveillance is maintained over a firm's human assets..." managers would only have limited incentive to devote the time and resources necessary to develop these. He proposes a system of accounting for human resources by estimating the value of a firm's human assets and monitoring changes in their value. Such a system would involve the rigorous measures of causal variables (e.g., leadership style, organizational climate) and intervening variables (e.g., attitudes, motivation). These measurements at regular intervals would indicate changes in human organizational characteristics, which can influence the organization's operating efficiency. This, in turn, could result in changes in the organization's end result variables, profitability, and effectiveness.

R. Parameswaran and K. Jothi (March 2004). The concept of human resource accounting can be basically examined from two dimensions: (i) the investment in human resources; and (ii) the value of human resources. The expenditure incurred for creating, increasing, and updating the human resource quality is known as investment in human resources. Such investment yields fruitful results like higher productivity and higher income to the organization. The yield that the investment in human resources generates will be considered as the basis of human resource value.

Shraddha Verma and Philip Dewe (2004). Contrary to the dominant image of human resource accounting as "putting people on the balance sheet", the aim of HRA was wider. In fact, as outlined by Flamholz (1999), HRA had three main roles: to provide organizations with objective information about the cost and value of human resources, to provide a framework to guide human resource decision-making and to motivate decision-makers to adopt a human resources perspective. Despite the strong research interest in the area, human resource accounting did not gain wide acceptance in practice for a variety of reasons. These included questions as to whether it was appropriate to quantify people, whether people qualified as assets in accounting terms, and a lack of consensus on how to measure human resources in practice. Recently, there has been recognition that the focus within human resource accounting needs to be on the value or worth of human resources rather than upon the cost of human resources. In addition, human resources need to be measured in terms of their strategic management potential, expressed through such concepts as human value management and human resource expense models.

Raunak Narayan (2010). In order to estimate and project the worth of the human capital, it is necessary that some method of quantifying the worth of the knowledge, motivation, skill, and contribution of the human elements as well as that of organizational processes, like recruitment, selection, training, etc which are used to build and support these human aspects, is properly developed. HRA denotes this process of quantification/ measurement of Human Resources. The physical assets like land, building, plant and machinery are recorded in the books of accounts at their purchase price. Now, depreciation on these assets is considered as the cost for the particular year and debited to profit and loss accounts and the remaining balance is shown in the balance sheet as written down value of the assets. Hence, on similar lines the human resources should also be evaluated, recorded in the books, operated and disclosed in the financial statements. In this paper the author has elaborately discussed about the objectives and process of HRA in the Indian context. The basic objective of the paper is to study the Human Resources Accounting practices, to identify the issues and challenges, to examine these issues and challenges and lastly, to give suggestions based on the findings of the study.

Shalini Sharma and R.K. Shukla (2010). The past few decades have witnessed a global transition from manufacturing to service based economies. Human elements are becoming more important input for the success of any corporate enterprise. It helps the management to frame policies for human resources. Human resource accounting (HRA) is a process of identifying and measuring data about human resources. It means accounting for people as an organizational resource. It involves measuring the cost incurred by an organization to recruit, select, hire, train and develop human assets and also involves measuring the economic value of people in the organization. It is concerned with measurement of cost and value of people in the organization. In every business concern physical assets as well as human resources are required for its success. Physical assets like plants, machinery, building etc. are unproductive without human resources. Thus, human resource accounting provides quantitative information about the value of human assets, which helps the top management to take decisions regarding the adequacy of human resources

Data And Research Methodology

Research Objectives. Besides studying the overall impact of human resource accounting on employee performance, the impact of individual parameters of human resource accounting such as recruitment cost, training cost, compensation cost and performance appraisal cost on employee performance was also studied. The objectives of the study are as under:-

- To study the overall impact of Human Resource accounting on Employee Performance.
- To study the impact of Recruitment Cost on Employee Performance
- To study the impact of Training Cost on Employee Performance
- To study the impact of Compensation Cost on Employee Performance
- To study the impact of Performance Appraisal cost on Employee Performance

3.2 Hypothesis. Five hypotheses were created as under:

a) H0: Human Resource accounting has no impact on Employee performance.
H1: Human Resource accounting has an impact on Employee performance.

b) H0: Recruitment Cost has no impact on Employee performance.
H1: Recruitment Cost has an impact on Employee performance.

c) H0: Training Cost has no impact on Employee performance.
H1: Training Cost has an impact on Employee performance.

d) H0: Compensation Cost has no impact on Employee performance.
H1: Compensation Cost has an impact on Employee performance.

e) H0: Performance Appraisal Cost has no impact on Employee performance.
H1: Performance Appraisal Cost has an impact on Employee performance.

Data Collection

Two banks i.e. State Bank of Indi and Punjab National Bank have been studied. There were 100 respondents from each bank who were asked to fill two survey questionnaires, one for employee performance and another for evaluation of human resource accounting done by the bank. The participants were chosen on the basis of convenience sampling technique. The participants included managerial level employees as well as executive level employees.

The questionnaires were prepared using Likert scale with 12 items in employee performance questionnaire and 22 items in Human Resource Accounting Questionnaire and the data was analyzed using Statistical Package for the Social Sciences (SPSS) version 19.0. The geographical area covered was Delhi and NCR

Results & Discussions

The ANOVA, correlation and Regression analysis has been done to confirm if any relationship exists between human resource accounting and employee performance. The ANOVA as per table 1 depicts that there is statistically significant relationship between HRA and employee performance. (Significance value 0.000 < 0.05)

Table 1

ANOVA Table Of Overall Analysis

ANOVA						
Model		Sum of Squares	Df	Mean Square	F	Sig.
1	Regression	24.136	1	24.136	359.813	0.000
	Residual	6.574	98	.067		
	Total	30.709	99			
a. Predictors: (Constant), HUMAN RESOURCE ACCUNTING						
b. Dependent Variable: EMPLOYEE PERFORMANCE						

The correlation analysis as per Table 2 indicates that there is a strong positive relationship between HRA and employee relationship. (r =0.887)

Table 2

Correlation Table of Overall Analysis

Correlations			
		Human Resource Accounting	Employee Performance
Human Resource Accounting	Pearson Correlation	1	.887**
	Sig. (2-tailed)		.000
	N	100	100
Employee Performance	Pearson Correlation	.887**	1
	Sig. (2-tailed)	.000	
	N	100	100
**. Correlation is significant at the 0.01 level (2-tailed).			

Table 3

Regression Table of Overall Analysis

Model	Unstandardized Coefficients		Standardized Coefficients	T	Sig.	95.0% Confidence Interval for B	
	B	Std. Error	Beta			Lower Bound	Upper Bound
(Constant)	-.275	.139		-1.981	.050	-.550	.001
HUMAN RESOURCE ACCOUNTING	.794	.042	.887	18.969	.000	.711	.877
a. Dependent Variable: EMPLOYEE PERFORMANCE							

The regression analysis is carried out by assuming employee performance as dependent variable and human resource accounting as independent variable. Regression analysis in Table 3 indicates that if there is 1% change in human resource accounting then there will be 79.4% change in employee performance.

The above analysis indicates that there is a strong and positive relationship between human resource accounting and employee performance .The extent of the relationship is such that if human resource accounting increases by 1% it would cause an increase of 79.4% in employee performance.

Parameter wise Analysis

Recruitment Cost Analysis

Table 4

Correlation Table for Recruitment Cost Analysis

		Job Performance	Recruitment Cost
Employee Performance	Pearson Correlation	1	.872**
	Sig. (2-tailed)		.000
	N	100	100
Recruitment Cost	Pearson Correlation	.872**	1
	Sig. (2-tailed)	.000	
	N	100	100

Explanation: The value of Pearson Correlation is 0.872 which depicts that there is very high correlation between recruitment cost and employee performance.

Training Cost Analysis

Table 5

Correlation Table for Training Cost Analysis

		Employee Performance	Training Cost
Employee Performance	Pearson Correlation	1	.909**
	Sig. (2-tailed)		.000
	N	100	100
Training Cost	Pearson Correlation	.909**	1
	Sig. (2-tailed)	.000	
	N	100	100

Explanation: The value of Pearson Correlation is 0.909 which depicts that there is very high correlation between training cost and employee performance.

Compensation Cost Analysis

Table 6

Correlation Table for Compensation Cost Analysis

		Employee Performance	Compensation Cost
Employee Performance	Pearson Correlation	1	.890**
	Sig. (2-tailed)		.000
	N	100	100
Compensation Cost	Pearson Correlation	.890**	1
	Sig. (2-tailed)	.000	
	N	100	100
**. Correlation is significant at the 0.01 level (2-tailed).			

Explanation The value of Pearson Correlation is 0.890 which depicts that there is very high correlation between Compensation and employee performance.

Performance Appraisal Cost Analysis

Table 7

Correlation Table for Performance Appraisal Cost Analysis

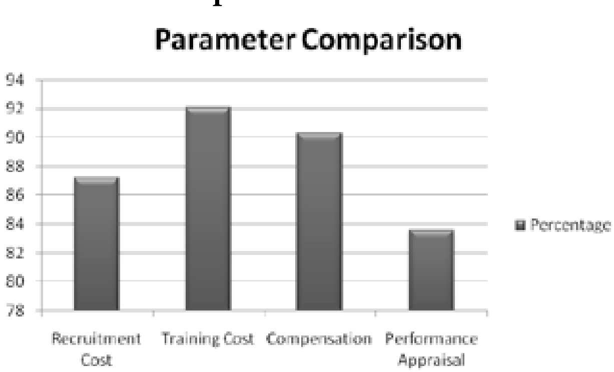
Correlations			
		Employee Performance	Performance Appraisal Cost
Employee Performance	Pearson Correlation	1	.840**
	Sig. (2-tailed)		.000
	N	100	100
Performance Appraisal Cost	Pearson Correlation	.840**	1
	Sig. (2-tailed)	.000	
	N	100	100

Explanation The value of Pearson Correlation is 0.840 which depicts that there is high correlation between performance appraisal and employee performance.

Comparative Analysis

Figure 1

Parameter Comparisons



Explanation From the above graph it can be concluded that Training Cost Accounting has the highest impact on the Employee performance followed by Compensation Accounting then Recruitment cost Accounting. Performance appraisal Accounting has the least impact on employee Performance

Overall Findings. Based on the analysis it has been found that that there is a strong and positive relationship between human resource accounting and employee performance in both SBI and Punjab National Bank. It has been revealed that all the parameters of human resource accounting like recruitment cost, training cost, compensation cost and performance appraisal cost all have a strong correlation and impact on employee performance

Conclusion

Human resource accounting provides quantitative information about the value of human assets, which helps the top management to take decisions regarding the adequacy of human resources. Quantitative data on the human asset has an impact on the decisions of the investors, clients, and potential staff of the company. When proper valuation and accounting of the human resources is not done then the management may not be able to recognize its negative effects. If not recognized on time, this could lead to a fall in productivity levels, high turnover rate and low morale of existing employees and thus manifest in low interest of employee towards their work leading to low employee performance. Both the banks

SBI and PNB have realized the importance of human resource accounting and its impact on employee performance and have prepared their systems and processes in a manner which can ascertain and calculate the employee performance based on human resource accounting parameters

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Survey on leadership style of managers pertaining to interpersonal skills and human behaviour

V.Lalitha

Abstract

Today's manager performs in a very complex business environment and is affected by fast changing economic conditions. Along with external business environment conditions, he/she is more affected by the internal business environment such as multi-cultural organisation, diversity and horizontal & vertical reporting hierarchy spread across time zones.Managers have to perform many roles in an organisation and how they handle various situations will depend upon their leadership style. The leadership style also may reflect the adaptability of the manager to the complicated business structure.

A manager's personal style of managing is considered to be of significance, both for the organisation and also the people working under him/her. How are you managing people or teams in your organisation? Are you empowering them?Are you yelling at them?Are you coaching and supporting them?The managers interpersonal skills shows to a major extent as to his chances of becoming a good leader. A leader's personality can be recognised by his desire to achieve goals, his attitude towards seeking fresh approaches to problems,his/her intense working relationships and ethical & moral values.

This behavioural research is based on German-American Psychologist Kurt Zadek Lewin's (1890-1947)research on leadership styles viz Autocratic, Participative and Laizez-faire.It uses the survey questionnaire method to categorise manager's leadership traits into the three identified styles by Kurt Lewin. Managers were questioned on different aspects of "leader-member relations" i.e the quality of interpersonal relationships among a leader and group members (Nelson, Quick, Khandelwal 2011) to assess the managers leadership styles.

While leadership itself can be categorised as formal and informal leadership, wherein the formal is based on officially sanctioned formal position and informal is based on followership in an organisation. This assessment is about formal position leadership and the data alsobased on the same. Individual leadership styles have been assessed and analysis has been written keeping in consideration the industry in which the manager is working. A conclusion about which out of the three above mentioned styles are more prevalent in today's scenario has also been researched and presented.

Keywords Human Resource Accounting; Recruitment Cost; Training Cost; Compensation Cost; Performance Appraisal Cost.

Introduction

There is no universal definition of leadership and the qualities of the leadership varies in many facets such as traits, influence, occupation and administrative position. Leadership skills also emerge from experiences and different experiences sharpen different leadership skills"[There are] almost as many definitions of leadership as there are persons who have attempted to define the concept."-Stogdill (1974, p.259). Leadership is a function of knowing yourself, having a vision that is well communicated, building trust among colleagues, and taking effective action to realize your own leadership potential."- Warren Bennis. The US Army defines leadership as influencing people by providing purpose, direction and motivation, while operating to accomplish the mission and improve the organisation (AR 600-100, 2007)

Free Lancer ; Visiting Faculty

With the opening up of many industries due to the reforms of 1991, India is now a major trade hub for south-east Asian region. As a developing country, India is an attractive investment destination, has many multi-national and trans-national organisation which have set up full-fledged business operations in this country.

In this scenario, the requirement of managers who can manage the business operations in a globalised environment has become a necessity. The last 22 years of Indian economy have seen the development of many young entrepreneurs and managers. This has further led to managers adopting a multitude of leadership styles to deal with new situations that a globalised environment throws at them. The determining factors of leadership styles are behaviour and traits, while behaviour changes with time, trait is considered genetic and impossible to change. Apart from this the organisational culture also influences the leadership style.

The managers/respondents are from a wide range of industries and can be considered to represent the globalised scenario or to be more specific the current business environment which is relevant for this study. The study in other words, is not to clarify the degree of the changing business environment affecting the leadership styles.

This behavioural research has selected managers from across various industries to determine the leadership styles of individual managers. The objective of this research is to analyse the mix of leadership styles in managers. Can authoritative style co-exhibit with democratic? Can Laissez-faire(free reign/delegate) co-exist with authoritative style? Can there be extreme form of a particular style be found in a individual manager?

Leadership- The Concept

Interest in leadership increased during the early part of the twentieth century. In the beginning, leadership theories focused on what qualities distinguished between leaders and followers, while later the theories considered other variables such as situational factors and skill levels. While many different leadership theories have emerged, most can be classified as one of four major types:

There Are Four Major Leadership Theories

1. The early Trait Theories of Leadership
2. Behavioural Theories
   a. Lewin, Lippet and White
   b. The Ohio State Studies
   c. The Michigan Studies
3. Contingency Theories
   a. Fielder's Contingency Theories
   b. Path-Goal Theory
   c. The Situational Leadership Model
4. Recent Leadership Theories
   a. Inspirational Leadership–Transactional & Transformational
   b. Leader-Member Exchange

Thisstudybasedonthe Behavioural theory and specifically of Lewin's identified styles of Authoritative, Democratic and Laissez Faire and hence the same has been dealt with in detail. These three styles even today are considered to be the basic styles of leadership and influences the leadership style of the manager to a great extent and hence has been adopted by the researcher

The early Trait Theories of leadership attempted to identify what physical attributes, personality characteristics and abilities distinguished leaders from other members of a group. (Nelson, Quick, Khandelwal, 2009). Scholars taking the trait approach attempted to identify physiological (appearance, height, weight), demographic (age, education and socio-economic background), intellective (intelligence, judgement, decisi-veness and knowledge), task related (achievement drive, initiative and persistence) and social characteristics (sociability and co-cooperativeness), overall personality and self-confidence with leader emergence and leader effectiveness. According to this theory successful leaders have distinctive traits that are difference from less effective leaders. Traits have universal applicability, however it gives rise to questions as to whether leaders are born or made. Whether traits can be developed by managers over a period of time for example, is a person born with self-confidence, a parameter such as co-cooperativeness can appear in a person due to maturity. There has been insufficient evidence to prove the trait theories are successful and thetheoryfailed to identify the universal, distinguishing attributes of leaders.

Behavioural Theories emerged to address the deficiencies of Trait theories and studies the behaviour of leaders.The inability to explain leadership solely by traits led researchers to look at the behaviour of specific leaders. Behavioural theories of leadership are classified as such because they focus on the study of specific behaviours of a leader. For behavioural theorists, a leader behaviour is the best predictor of his leadership influences and as a result, is the best determinant of his or her leadership success. Researchers wondered effective leaders exhibited something unique in their behaviour. For example do leaders tend to be more democratic than autocratic?

Lewin, Lippet and White studies are the earliest research on behavioural theories. Each leader uses one of the three basic styles viz Authoritative, Democratic and Laissez-faire or a mix of styles when approaching a group of followers in a leadership situation. The researcheris categorising the situation as the interpersonal relationship based on human skills.

Background

Kurt Lewin (1890-1947) was a social psychologist whose extensive work covered studies of leadership styles and their effects, work on group decision-making, the development of force field theory, the unfreeze/change/refreeze change management model, action research, and the group dynamics approach to training, especially in the form of T-Groups.

Life and Career

The German-born Kurt Lewin was Professor of Philosophy and Psychology at Berlin University until he fled to the United States in 1932 to escape from the Nazis. There, he taught at Cornell University, and then at Iowa, becoming Professor of Child Psychology at the latter's Child Research Station. In 1944, with Douglas McGregor and others, Lewin founded the Center for Group Dynamics at the Massachusetts Institute of Technology (now based at the University of Michigan).

Leadership Styles And Their Effects

With colleagues L. Lippitt and R. White, Lewin carried out studies relating to the effects of three different leadership styles on outcomes of boys' activity groups in Iowa (1939). Three different styles were classified as autocratic, democratic and laissez-faire. It was found that in the group with an autocratic leader, there was more dissatisfaction and behaviours became either more aggressive or apathetic. In the group with a democratic leader, there was more co-operation and enjoyment, while those in the laissez-faire led group showed no particular dissatisfaction, though they were not particularly productive either.

Significantly, when the respective leaders were asked to change their styles, the effects for each leadership style remained similar. Lewin aimed to show that the democratic style achieved better results. The possibility of social and cultural influences undermines his finding to some extent, but the studies nevertheless suggested the benefits of a democratic style in an American context. They also showed that it is possible for leaders and managers to change their styles, and to be trained to improve their leadership and adopt appropriate management styles for their situation and context.

Authoritarian Leadership, also known as autocratic leaders, provide clear expectations for what needs to be done, when it should be done, and how it should be done. There is also a clear division between the leader and the followers. Authoritarian leaders make decisions independently with little or no input from the rest of the group.

Researchers found that decision-making was less creative under authoritarian leadership. Lewin also found that it is more difficult to move from an authoritarian style to a democratic style than vice versa. Abuse of this style is usually viewed as controlling, bossy, and dictatorial.

Authoritarian leadership is best applied to situations where there is little time for group decision-making or where the leader is the most knowledgeable member of the group.

Democratic (Participative) Leadership Lewin's study found that participative leadership, also known as democratic leadership, is generally the most effective leadership style. Democratic leaders offer guidance to group members, but they also participate in the group and allow input from other group members. In Lewin's study, children in this group were less productive than the members of the authoritarian group, but their contributions were of a much higher quality.

Participative leaders encourage group members to participate, but retain the final say over the decision-making process. Group members feel engaged in the process and are more motivated and creative.

Laissez-Faire (Delegative) Leadership. Researchers found that children under delegative leadership, also known as laissez-fair leadership, were the least productive of all three groups. The children in this group also made more demands on the leader, showed little cooperation and were unable to work independently.

Delegative leaders offer little or no guidance to group members and leave decision-making up to group members. While this style can be effective in situations where group members are highly qualified in an area of expertise, it often leads to poorly defined roles and a lack of motivation.

Other Major Theories on Leadership

Contingency theories developed in the late 1960's hold that leadership effectiveness is related to the interplay of a leader's traits or behaviours or situational factors. Contingency theories of leadership focus on particular variables related to the environment that might determine which particular style of leadership is best suited for the situation. According to this theory, no leadership style is best in all situations. Success depends upon a number of variables, including the leadership style, qualities of the followers and aspects of the situation.Contingency theory is a class of behavioral theory that claims that there is no best way to organize a corporation, to lead a company, or to make decisions. Instead, the optimal course of action is contingent (dependent) upon the internal and external situation.

Transformational and Transactional leadership theories by James MacGregor Burns (1978) first introduced the concept of transforming leadership in his descriptive research on political leaders. According to Burns, transforming leadership is a process in which "leaders and followers help each other to advance to a higher level of morale and motivation". He established two concepts: "transforming leadership" and "transactional leadership". Transactional leaders are those who use rewards and punishment to strike deals with followers and shape their behaviour.

Bernard M. Bass (1985), extended the work of Burns (1978) by explaining the psychological mechanisms that underlie transforming and transactional leadership.According to Bass, transformational leadership can be defined based on the impact that it has on followers. Transformational leaders, Bass suggested, garner trust, respect and admiration from their followers. Bass suggested that leadership can simultaneously display both transformational and transactional leadership.

Interpersonal Skills

Interpersonal skills are the foundation of human relations. Inter means "between", thus interpersonal skills are between people, as are human relations. Interpersonal skill is the ability to work well with a diversity of people. How well do you work with others? People with interpersonal skills have the ability to initiate, build and maintain relationships; to see things from the other persons point of view, and to understand and meet other people's expectations. They also have good communication and conflict resolution skills.(Lussier, 2010) Interpersonal skills are an part of vital part of Leadership skills. Below defined are some of the essential interpersonal skills required for a successful leader.

Listening Skills is the ability to accurately receive messages in the communication process. Good listening skills can lead to better communication between the leader and team members. An effective leader, has good listening skills and catches all the things he/she can learn from everyone they meet. Listening in leadership is important for another reason; to show that the leader care for other's view point.

Assertiveness

is a characterisation of how a person responds in a situation in which her position or interests are or could be in conflict with others position or interests. Various research have proved that interpersonal assertiveness up to middle range is useful and has harmful effects on teams beyond the middle range point. Getting assertiveness "right" is the prevalent challenge for leaders. (Ames Daniel, 2009)

Decision Making is the act of choosing between two or more courses of action. A leader has to accept responsibility and also delegate tasks to others. A good leader deliberately asks and encourages others to participate. She/he maintains total control of the decision because, even though outside information is considered, the leader alone decides. In some situations, the leader may also accept consensus of majority in decision making to obtain total commitment

Problem-Solving

Relationships can fail because of poor problem solving. This applies to both personal and professional relatio-nships. Problem-solving is closely linked to decision-making. The old adage: "A problem shared is a problem halved" is sound advice. Sharing problems with subordinates can bring about potential solutions and hence is an good skill

Verbal Communication is making clear and convincing oral presentations to individuals or groups, listening effectively and clarifying information as needed, facilitating an open exchange of ideas and fostering an atmosphere of open communication. Leaders must effectively communicate the team's role in the organisation's mission, both to the team and to others within the organization. They effectively reduce and communicate complex goals or tasks to a workable set of fundamentals so that others can understand and take necessary actions. They must help team members learn to communicate in productive ways, with each other and with other units or groups.

Non-verbal Communication include facial expressions, the tone and pitch of the voice, gestures displayed through body language (kinesics) and the physical distance between communicators (proxemics). These non-verbal signals can give clues and additional information and meaning over and above spoken (verbal) communication.Leaders can use this constant nonverbal communication to motivate their teams and instil loyalty and confidence.

The above is a narrow list and many more skills have been identified to be a part of leadership.

Scope of Study

Leadership styles being too many types, this study is limited to analysing the styles of Authoritative, Democratic and Laissez-faire. This study also concentrates on the interpersonal and human skills of managing people or teams and hence does not include the technical knowledge or any other aspect of managerial skill.

Sampling and Data Collection

The universe of managers is an infinite one and the samples have been selected from a few range of industries. The sample size is 30 selected managers from various industries of Information Technology, Public Sector employees, Hospitality, Indu-strial Automation and Oil & Gas. Non-probability sampling has been used as there is an assumption that there is an even distribution of characteristics within the population.It has been assumed that Leadership styles as characteristic irrespective of location and industry will be the same.

The data required for this study has been collected from primary sources. A structured questionnaire was prepared and distributed among managers working in various industries.

Questionnaire Development

The questionnaire based on a five point Likert scale was used starting from "Strongly Disagree" and ending on "Strongly Agree" was used in questionnaire and the respondents were asked to evaluate parameters in point scale and weights were allotted to each of the scale levels.

The respondents were asked :

- To give immediate impressions as there are no right or wrong answers
- To circle what they think they "would do" and not what they "should do"
- To circle the item that most closely resembles what they would do in case there was no alternative action

Limitations

This study does not answers questions on "how" and "why" managers act in a particular manner. It cannot manipulate the behaviour of the managers involved in the research.

Findings

The questionnaire was designed to measure three common styles of leadership: authoritarian, democratic and laissez-faire in relation to interpersonal skills. By comparing scores, it was determined which styles are most dominant and least dominant over the sample unit.

Scoring Interpretation

Score range (points)	Indication towards a leadership style
26-30	Very high range
21-25	High range
16-20	Moderate range
11-15	Low range
6-10	Very low range

Table 1

Experience of Respondents

The purpose of the chart is to show the managers interviewed had work experience from lowest 8 to highest 30 years. The analysis shows that within the sample/ respondents there was no specific or commendable relationship between work experience and leadership style.

Figure 1

Spread of sample units

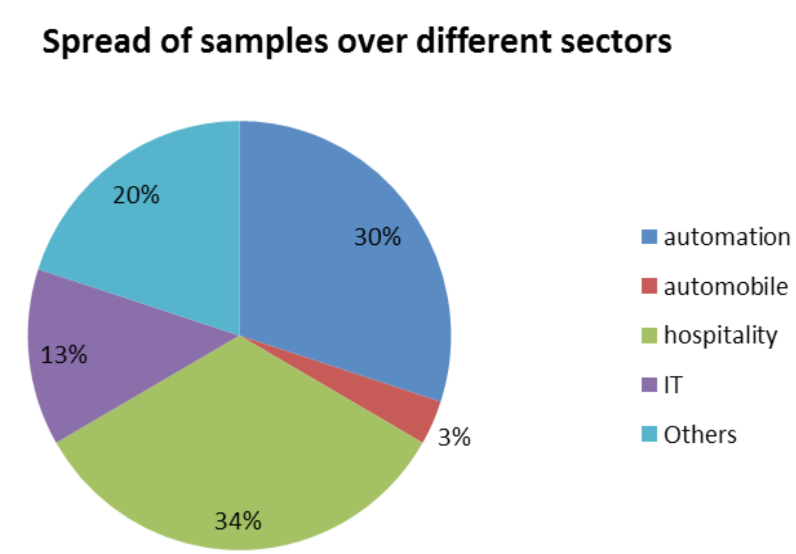

Figure 2

The sample was spread over Automobile, Automation, Hospi-tality, IT, Public sector, Oil & Gas, HR Consultancy and Market Research Bureau. Leadership styles are adapted to the particular demands of the situation and the particular requirements of the people involved. This study does not analyse for any specific leadership style in a specific industry, hence has unequal spread of samples and the assumption is that leadership style is of the individual and not affected by industry.

Interpretation Of Leadership Styles

Democratic Leadership Style

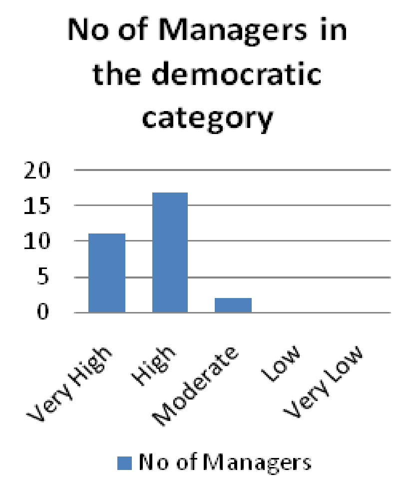

Figure 3

The above graph shows that very low and low democratic leadership styles do not exist. As seen 57% respondents have a high score in this style. Democratic style being prevalent shows a healthy work atmosphere in organisations where participation is encouraged and guidance is provided to subordinates. This leadership style is one of the most effective and creates higher productivity, better contributions from group members and increased group morale.

Laissez-Faire (Free-reign) leadership style

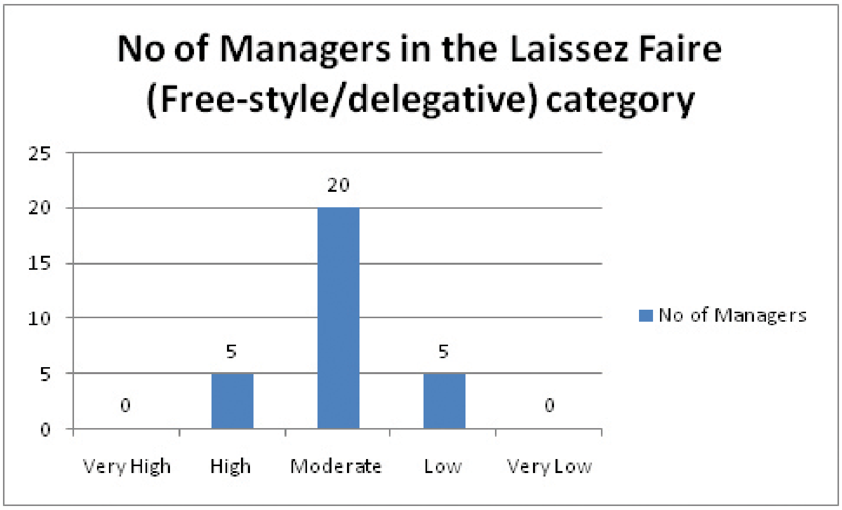

Figure 4

"As we look ahead into the next century, leaders will be those who empower others."- Bill Gates

Managers have to delegate authority and also and empower sub-ordinates to take their own decisions. 66% of managers are favouring laissez-faire or popularly known as free-style management and it needs to noted that it is in the moderate range. This shows a balanced managerial style wherein the managers do not believe in extreme free-style and exhibit control to some extent over their teams. It is to be noted that a 100% free style of leadership does not exist as the very high range shows "zero"

Authoritative Leadership Style

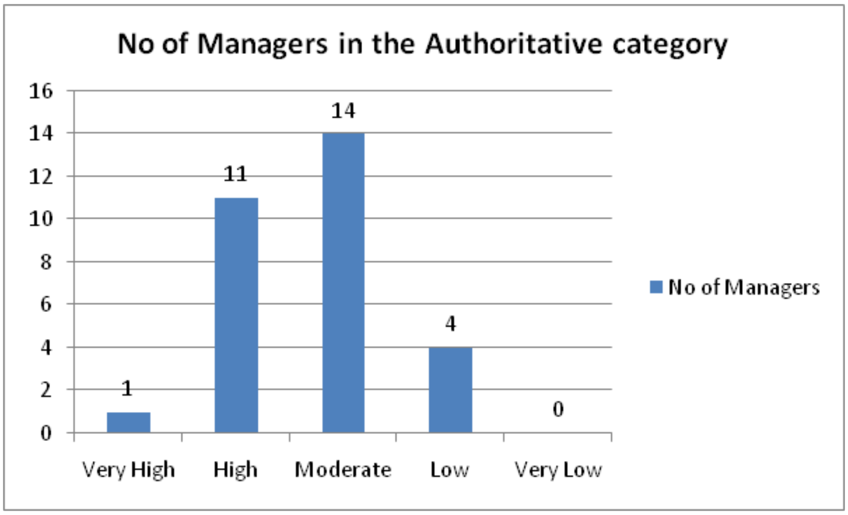

Figure 5

46% of managers fall under the category of moderately authoritative and 36% fall under the high category. This could be due to the managers belief that direct supervision is the key in maintaining a successful environment and follower-ship. In fear of followers being unproductive, authoritarian leaders keep close supervision and feel this is necessary in order for work to be done.

Scoring Representation
Very High Range (Score 26-30 Points)

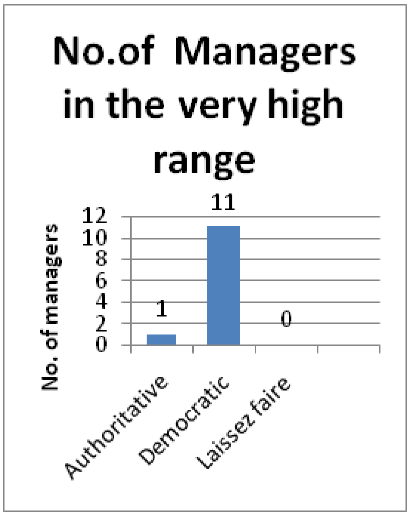

Figure 6

The above shows that 11 managers had a very high score and this shows that democratic style of leadership is predominant while working with sub-ordinates. Democratic managers encourage discussion, debates and welcome sharing of ideas so that sub-ordinates feel total involvement. Only 1 believed in authoritarian style of leadership, but the same manager also showed a very high range of democratic style. It is notable that Laissez-faire style has zero in the very high range which denotes zero free-reign style/delegation and democratic managers favour control over the sub-ordinates.

High Range (score 21-25 points)

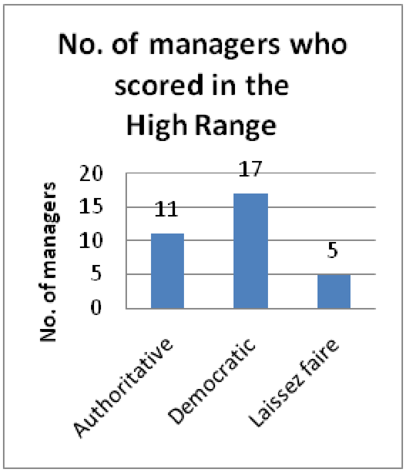

Figure 7

56% out of 30 managers fall in the high range of democratic style. It would be difficult to determine the factors to eliminate between very high range democratic and high range democratic. It can only be considered that some managers are less democratic than others.

Moderate (Score 16-20 points)

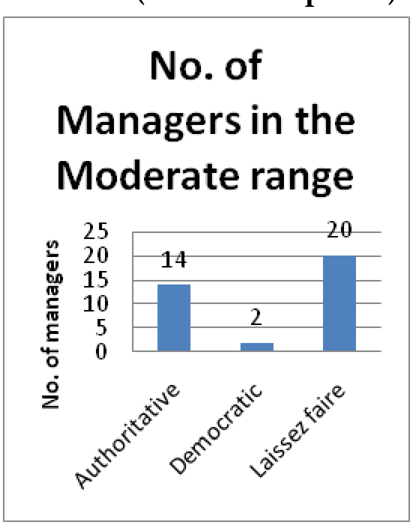

Figure 8

66% of managers out of 30 adopted a free-style or Laissez-faire style of leadership with sub-ordinates, which shows a relationship of trust and a "hands-off" approach to a moderate extent. Laizzez Faire leadership can be effective in situations where group members are highly skilled, motivated and capable of working on their own. While the conventional term for this style implies a completely hands off approach, mainly leaders still remain open and available to group members for consultations and feedback.

Low range (Score 11-15 points)

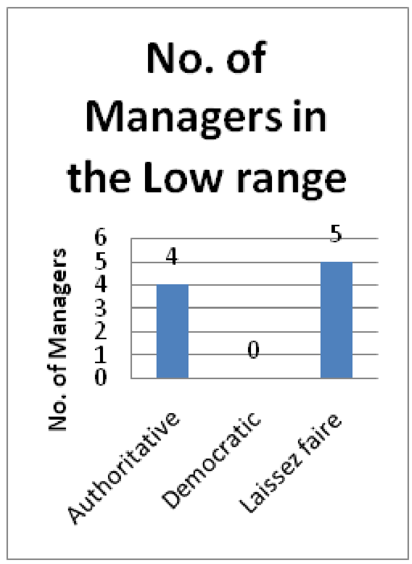

Figure 9

There were very few managers in the low range of authoritative and Laissez-faire. It is also to be noted that there are zero managers in the category of low democratic which means that extremely less democratic managers do not exist and some amount of control and authority is necessary to be a leader.

Very Low Range (6 - 10 points)

There were no respondents in this category which shows that there is no extreme form of leadership.

Conclusion & Direction For Future Research

This study shows that no two managers are the same and there is no single best style of leadership. All the respondent exhibited a different mix and no two respondents had the same mix of styles which is notable. Today's manager leadership style is on the higher side of democratic which is proved by this research. The study also proves that the combination of authoritative can be co-exhibited in the same frequency along with democratic orLaissez-faire by a manager. On a general note, a manager exhibits a combination on various leadership styles more than the one presented in this research and this study only determines as to dominance of leadership style identified by Kurt Lewin.

In the light of India, there is a vast scope of such a study which intends to take on a cross-sectional survey of global managers who have the potential to become good leaders. With one of the world's fastest growing economies as a base, many Indian businesses are running to take their place on the global stage. India is poised for future business growth. The situation demands a new kind of leader at all levels.

Although this study provided some interesting results, there are some limitations arising from the research that should be addressed. The current study checks only for interpersonal skills and other characteristics such as future-focus, motivation, communication skills , vision realistic , so on has not been included. Also the population frame was relatively small and hence led to a small no of respondents. As a result, subsequent research should try and replicate the present study by seeking a larger population.

A Classic scene from Lewis Carroll's Alice in Wonderland

Alice was a little startled by seeing the Cheshire Cat sitting on a bough of a tree a few yards off.

The Cat only grinned when it saw Alice……

"Cheshire Puss", she began, rather timidly,…..''Would you tell me , please, which way I ought to go from here?"

"That depends a good deal on where you want to get to," said the Cat.

"I don't much care where------" said Alice.

"Then it doesn't matter which way you go," said the Cat.

"----so long as I get somewhere," Alice added as an explanation.

For leaders it is not the Alice travelled path.For those aspiring to be tomorrow's business leaders, the challenges ahead are formidable. Good leaders know where they are headed and also take their team on a path to achieve the common objectives of the organisation.

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A Systemic Approach to Identifying Vulnerabilities in Traditional Textile Clusters of India for Innovative Capacity Building

Surabhi Chaddha[1]
Dr. Sanjay Bhushan[2]
Prof Sanjeev Swami[3]

Introduction

I. Textiles Industry In India: A Brief Profile

The Indian textile industry is one of the largest in the world, with a huge raw material and textile manufacturing base. In terms of Indian GDP, this sector has been quite beneficial in the economic life of the country. The textile industry is one of the leading sectors in the Indian economy as it contributes nearly 14 percent to the total industrial production. It is claimed to be the biggest revenue earners in terms of foreign exchange among all other industrial sectors in India. The textile industry is the second largest employer, after agriculture, with a total workforce of around 35 million. India is next only to China among the world's largest producers of textiles and garments (UNCTD, 2005, 2006). The industry is the largest foreign exchange earner, as the import content is insignificant compared with those of other major export products. Today this sector is highly globalized but, it is further organizing itself to crave a bigger share to become the market leader. This large and ancient industry has carved out a special niche for itself as a facilitator of the county's economic growth and participative development (www.fibre2fashion.com).

Government Initiatives

Over a period of few years, Government Of India at central as well as state level realized the importance of CDP & made it an integral part of its industrial policy. Central Government adopted a few clusters (Landes, M. MacDonald et al. 2005). Taking lead from this, many State Governments adopted clusters. Then organizations like SIDBI, Textile Committee – Ministry Of Textiles & many more Central & state agencies started adopting clusters & running programs. As of today, CDP can be said to be a grassroots movement for a resurgent SME sector in India (Texsummit, 2007).

State Of Unorganised Hand-loom And Handi-Crafts Sector In India

Handloom and handicraft items, which come under informal sector, play an important role in the economy of this region. As per recent census, there are 55,000 handloom units in Varanasi, Chandauli and Mirzapur districts. However, the number of handloom units has reduced from 75,000 due to the slump in silk industry. These handlooms are associated with 37,500 households in these districts. Since the entire family is engaged in a handloom unit, the number of people in this industry may be many times more. Similarly, around 18-20 lakh people of eastern UP are engaged in the manufacturing of handicraft items like carpet, zari and embroidery, metal craft, stone craft, textile, artificial jewellery, beads and jute craft (www.timesofindia.indiatimes.com). Craft Revival Trust presents an active, live address directory listing of over 60,000 craftspersons and weavers working across India in over 880 crafts.

II. Systems Thinking (Systemic Anaysis)

Systems' thinking is the process of understanding how things influence one another within a whole. In organizations, systems consist of people, structures, and processes that work together to make an organization healthy or unhealthy. Systems Thinking has been defined as an approach to problem solving, by viewing "problems" as parts of an overall system, rather than reacting to specific part, outcomes or events and potentially contributing to further development of unintended

[1] Research Scholar, Department Of Management, Faculty Of Social Sciences, Dayalbagh Educational Institute, (Deemed University), Dayalbagh, Agra.

[2] Assistant Professor, Department Of Management, Faculty Of Social Sciences, Dayalbagh Educational Institute, (Deemed University), Dayalbagh, Agra.

[3] Professor, Department Of Management, Faculty Of Social Sciences, Dayalbagh Educational Institute, (Deemed University), Dayalbagh, Agra.

consequences. It proposes to view systems in a holistic manner. Consistent with systems philosophy, system thinking concerns an understanding of a system by examining the linkages and interactions between the elements that compose the entirety of the system.

Systemic analysis attempts to illustrate that events are separated by distance and time and that small catalytic events can cause large changes in complex systems. Acknowledging that an improvement in one area of a system can adversely affect another area of the system, it promotes organizational communication at all levels in order to avoid the silo effect.

Tools of system analysis: Causal loop diagrams (CLD): Graphic tools of Systems methodology, namely causal loops and flow diagrams offer powerful communicability between modeller and decision maker. Its characteristics as a learning tool find favour with the policy planners. The following model broadly illustrates some of the macro industrial dynamics of Textile industry using CLD architecture.

Vulnerability Profile of Indian Textile

Against all the merits mentioned in the beginning, It is difficult to find such a large-scale industry in the country that is so disorganized as the Indian textile industry. The industry is often plagued by obsolescence, unhealthy regulations and problems of labour (Utamsingh, V. 2003). This emphasizes the need for strengthening the management mechanism in the industry in order to build competitive capacities and to face the emerging international challenges. It is projected that, the textile industry in India will face intensified competition in both their export and domestic markets. However, the migration of textile capacity will be influenced by objective competitive factors and will be hampered by the presence of distorting domestic measures and weak domestic infrastructure in developing countries like India. Sickness and inter-sector contradictions that are a bane of the industry have to be solved through a wise approach and well-calibrated steps, to ensure healthy growth. (www.ukessays.com)

Traditionally, crafts were produced and managed by the craftsmen themselves. However, "Globalisation" demands innovative products, materials, and processes with new standards of quality and creativity (Verma, S. 2002). Today, due to changes in social set ups, culture and economy, the crafts and the crafts persons are increasingly becoming vulnerable to new realities. Strengths of Indian handicrafts is increasingly being recognised both in export as well as domestic urban markets, but the qualitative market intelligence flow between market-place and the crafts persons is not up to the desired level. Besides, quality of production, approaches for further market development, protection of traditional wisdom and practices through IPR, sustainability, crafts promotion, etc. are the other aspects that need to be addressed for effective growth of Indian handicrafts. Design plays a major role in empowering the crafts and crafts persons, both as an enabler and a value adder. Only knowledge empowerment and efficient multi-disciplinary networking can lead to cutting edge advantage to Indian crafts. Attributes of Indian handicrafts have a great potential to contribute in this direction if hand held properly. (International Centre for Indian Crafts –ICIC-2008).

Innovative Capacity Building

UNDP (United Nations Development Program) defines 'Innovative capacity building' as the creation of an enabling environment with appropriate policy and legal frameworks, institutional development, including community participation (of women in particular), human resources development and strengthening of managerial systems, adding that, UNDP recognizes that capacity building is a long-term, continuing process, in which all stakeholders participate (ministries, local authorities, non-governmental organizations and water user groups, professional associations, academics and others). The WCO defines capacity building as "activities which strengthen the knowledge, abilities, skills and behavior of individuals and improve institutional structures and processes such that the organization can efficiently meet its mission and goals in a sustainable way."It is, however, important to put into consideration the principles that govern community capacity building.

Innovative Capacity Building is much more than training and includes the following:

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• Human resource development, the process of equipping individuals with the understanding, skills and access to information, knowledge and training that enables them to perform effectively.

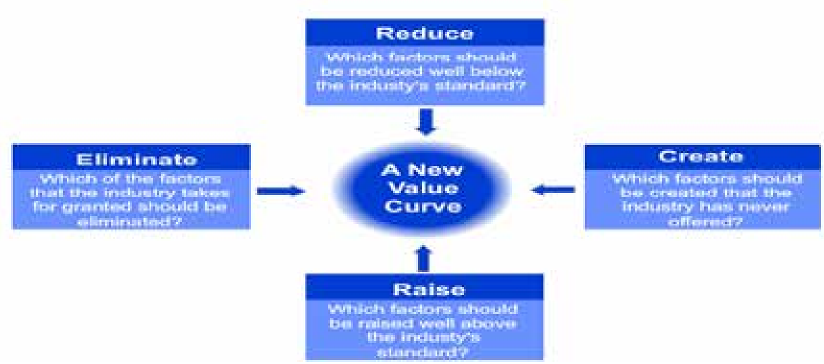
• Organizational development, the elaboration of management structures, processes and procedures, not only within organizations but also the management of relationships between the different organizations and sectors (public, private and community).

• Institutional and legal framework development, making legal and regulatory changes to enable organizations, institutions and agencies at all levels and in all sectors to enhance their capacities. In nut shell, Innovative Capacity building can be attributed as the "process of developing and strengthening the skills, instincts, abilities, processes and resources that organizations and communities need to survive innovatively, adapt, and thrive in the fast-changing world. For organizations, capacity building may relate to almost any aspect of its work: improved governance, leadership, mission and strategy, administration (including human resources, financial management, and legal matters), program development and implementation, fundraising and income generation, diversity, partnerships and collaboration, evaluation, advocacy and policy change, marketing, positioning, planning, etc. For individuals, capacity building may relate to leadership development, advocacy skills, training/ speaking abilities, technical skills, organizing skills, and other areas of personal and professional development. Capacity building is the element that gives fluidity, flexibility and functionality of a program/organization to adapt to changing needs of the population that is served. In the context of the Traditional Indian Textile Sector, there are many aspects that need to be catered to for which an implementation of a strategy is required that may encompass the vulnerability aspect and innovation prospecting in this sector.

Blue Ocean: A Strategy Tool For Vulner Ability Assesment And Innovative Capacity Building - Blue Ocean Strategy can be referred as one of those strong strategic initiatives which are in wide application across various industrial sectors globally for the intended purpose of innovative capacity building. The key concepts of blue ocean strategy, include Value Innovation — the simultaneous pursuit of differentiation and low cost — and key analytical tools and frameworks such as the strategy canvas, the four actions framework and the eliminate-reduce-raise-create grid.

The strategy describes the four principles of blue ocean strategy formulation: how to create uncontested market space by reconstructing market boundaries, focusing on the big picture, reaching beyond existing demand and getting the strategic sequence right (Kim, Chan 2005). These four formulation principles address how an organization can create blue oceans by looking across the six conventional boundaries of competition (Six Paths Framework), reduce their planning risk by following the four steps of visualizing strategy, create new demand by unlocking the three tiers of noncustomers and launch a commercially-viable blue ocean idea by aligning unprecedented utility of an offering with strategic pricing and target costing and by overcoming adoption hurdles. The concept applies across industries to demonstrate how to break out of traditional competitive strategic thinking and to grow demand and profits for the operating units and the industry by using blue ocean strategic thinking.

The corner-stone of Blue Ocean Strategy is 'Value Innovation'. A blue ocean is created when a company achieves value



(Source: Chan Kim and Renée Mauborgne, Harvard Business School Press 2005) innovation that creates value simultaneously for both the buyer and the company. The innovation (in product, service, or delivery) must raise and create value for the market, while simultaneously reducing or eliminating features or services that are less valued by the current or future market

Need Of The Study

The need of the study is to identify the vulnerability profile of the traditional textile sectors as to why certain reasons deter the handloom / handicraft units to grow multi-dimensionally; provide a database for the policymakers to address the causes of those problems / factors and not the symptoms even though the handloom and handicraft sector have enough cause to flourish despite the government claims to be implementing various plans and schemes for the well being of the industry. Some of the problems prevalent ubiquitously in the traditional textile clusters of India are:

- The competitiveness of selected sectors in terms of limited market share and poor productivity because of lack of higher unit value realization of the products.
- Ineffective integration of scattered artisans, unable to build their grass roots enterprises and link them to latest technology in the sector for customized interventions and ensure economies of large scale in operations.
- Lack of a supply system that is geared to responding to large-scale orders, adhering to quality and product standardization, limiting them from taking a plunge into global markets.
- Scarce livelihood opportunities to the people in the industry and creation of sustainable employability for the artisans/ craftsmen already engaged in this sector.
- Missing requisite support/ linkages in terms of adequate infrastructure, technology, product diversification, design development, raw material banks, marketing & promotion, social security and other components that are vital for sustainability of artisans/ craftsmen engaged in the Handicrafts / handloom sector.
- Inability to utilize the resources available under various ongoing schemes of the Central Government.
- Lack of linkages within the industry isolating and thus restricting Public Private Partnership (PPP) model in the form of collaboration between the Central/State Governments, beneficiary artisans & their groups, financially creditworthy & commercially linked marketing enterprises and the financial Institutions.
- Scarcity of Proactive and visionary socially responsible leaders.
- Weak technical and program management assistance for capacity building, designing of the interventions and their implementation, through a competent professional agency.
- Lack of follow ups by various agencies, ownership, trust-worthy middlemen, education, biases, single window facility and concept of globalization.

Objectives Of The Research

1) To Identify and evaluate critical vulnerability factors (Cause-Effect variables) of selected traditional textile clusters of India.
2) To examine the prospect and areas for Innovative Capacity Building in the Unorganized Traditional textile clusters of India.
3) To recommend a holistic systems model (Decision-Framework) of Policy Initiatives and Value Innovation for selected Clusters under the study based on value-inputs from various stakeholders.

Research Design And Methodology

I. Sources Of Data

A. Primary Data Field Scan (Pilot Study), Interviews / Schedules, Observation, Demographic Survey.

Methodology:

1) Initial pilot field visit to interact with the artisans, organizations and agencies working in the area selected for study.
2) Identifying and interviewing local cluster members and promoting agencies to carry out an objective and issue based assessment.
3) Observation / business profile review: Collection of samples from cluster to review design, quality of product, marketability and overall business prospect.
4) Demographic Survey – Classification and analysis of respondents based on demographic parameters.

B. Secondary Data

Gathering of information on cluster actors and contacts with a range of institutions (not limited to) such as:

1) Crafts Council India
2) Crafts Revival Trust
3) National Institute of Fashion Technology-NIFT
4) Ministry of Textiles
5) Textile Committee, Mumbai
6) The Nabha Foundation
7) Weavers' Service Center
8) Others: Journals, trade magazines, Government of India Textile Ministry Reports, Indian Textile and Clothing Exports Association Reports, Indian Chambers of Commerce and Industry (FICCI) Reports, Confederation of Indian Industries (CII) Reports and various other related private and public reports

II. Sample Design / Plan

a) Sampling Technique Cluster Sampling is the technique adopted for the study in which population is divided into clusters and drawing random sample from all or selected clusters

b) Geographical Area Coverage & Sample Size & Sample Composition (Respondents)

Sample Size: 95

c)Statistical Techn-Iques For Data Analysis

- Descriptive Statistics
- Likert Scaling / Ranking
- Weighted Average

a) Duration Of The Study: Year 2010-2012

Traditional Indian Textile Clusters Under Study:

A. Chanderi – Traditio-Nal Textile Of Madaya Pradesh

Chanderi is one of the best-known handloom clusters in India, particularly famous for its sarees, made with mix of silk and cotton. But if we look at its history, Chanderi has been adapting itself as per needs. Sari is the product of second half of twentieth century only. Then, there have been changes in the methodologies, equipments and even the compositions of yarns in past. The heritage is attached with the skills of weaving high quality fabric products here. The weavers are actually the symbol of the heritage, as they have been the ones, who produced the kinds of stuff that received appreciation even from the royals.

Unlike past, in modern time of changes in lifestyle, Chanderi tends to stick with what it has been doing for decades now. It is because of the inability of those, who lead the decision-making about the product, to adapt as per the changes. Their ability has partly been affected by lack of patronage it used to have in past. Till independence royal families of Gwalior provided the required patronage. After that, state and central government supported the cluster through purchases of the goods and subsidies. But that support has slowly reduced to bare minimum and the cluster is on the decline now. Realizing the difficulties well in advance, the resourceful traders/master weavers have generated several options for themselves. They have invested in alternative business activities for a possible shift in future. But unfortunately, the 'symbol of heritage'- weavers, are the most vulnerable unit on the scene, having no options, weavers are facing increasingly difficult time. (www.indianhandloomscluster-dchl.net)

Name of the Traditional Textile	Name of State	Name of City / Village:	No. of Respondents
Phulkari	Punjab	Patiala, Tripuri ,Nabha, Galwatti, Sohali	25
Madhubani	Bihar	Patna, Madhubani, Ranti	9
Block Printing	Rajasthan	Jaipur, Sanganer, Bagru	14
Chanderi	Madhya Pradesh	Chanderi	18
Chamba Rumaal	Himanchal Pradesh	Chamba	14
Banaras Brocade	Uttar Pradesh	Varanasi, Ram Nagar, Lalla Pur, Pili Kothi	12
Gov / End Users		Delhi, Bombay	3
Total Respondents			95

1) B. Chamba Rumal – Traditional Textile Of Himanchal Pradesh

The embroidery art form of the Chamba rumal originated in the erstwhile princely hill states of Chamba, Kangra, Basohli and nearby states which now form part of the Himachal Pradesh Though practiced throughout the region, the craft came to be associated specifically with Chamba owing to the patronage given by the rulers of the area. Artistic styles of Pahari miniature painting was reflected in the rumals of the 18th-19th century A. D. Chamba rumals were ultimately done by the upper class women of royalty. They had the use of the trained miniature artist who would draw the theme of the rumal in charcoal and provide guiding color schemes. The themes were religious especially Krishna theme. Fabric was handspun unbleached mulmul or fine Khaddar. Embroidery was done in double satin stitch called dorukha. No rumal was in single color. The stitch was carried forwards and backwards alternately and was done simultaneously on both sides of the cloth. Rumals were expressions of the life of the common man.

The state government has got the Chamba handkerchief, Kullu and Kinnauri shawl and Kangra tea registered under the Geographical Indications (GI) of Goods (Registration and Protection) Act, 1999, with the Chennai-based Geographical Indications Registry. (www.hdmuseum.nic.in/art_gallery/textiles.html)

C. Phulkari – Traditional Textile Of Punjab

Phulkari literally means flower working which was one time used for word embroidery but in course of time word "Phulkari" became restricted to embroidered head cloth/odini. Simple and sparsely embroidered odini and shawls made for everyday use are called Phulkaris whereas closely and all covered over are made for special and ceremonial occasions are known as Baghs (Garden).

D. Banarasi Brocade – Traditional Textile Of Uttar Pradesh

Banarasi saris are saris made in Varanasi, a city which is also called "Benares." These saris are historically considered to be among the finest saris in India and are known for their gold and silver brocade, fine silk and opulent embroidery, and being highly sought after. These saris are an inevitable part of any Indian bride's trousseau.

Depending upon the intricacy of designs and patterns, a sari can take anywhere from 15 days to a one month and sometimes up to six months to complete. Banarasi saris are mostly worn by Indian women on important occasions such as when attending a wedding and are expected to be complemented by the woman's best jewelry. (www.banarasipaaninred.blogspot.com).

E. Block Printing – Traditional Textile Of Rajasthan

Archaeological remains from the Indus Valley civilisation in the 3rd millennium BC include cotton fragments dyed with madder, a dye commonly used for Block Printing even today. Dye vats, spindles and bronze needles found at sites like Mohenjedaro indicate highly developed fabric work.

In Rajasthan, colourful Block Prints of birds, animals, human figures, gods and goddesses are popular. The important centres for this form of Hand Printing are Jaipur, Bagru, Sanganer, Pali and Barmer. Barmer is known for its prints of red chillies with blue-black outlines, surrounded by flower-laden trees. The other famous prints are of horses, camels, peacocks and lions, called Sikar and Shekahawat prints. In Madhya Pradesh, printed textiles are created by a community of printers called Chheepa (derived from the Hindi word chhapna meaning printing). The printers of Bagh use vegetable and Natural Dyes, in bright shades of red and black and also occasional Indigo. The blocks are made of intricately stylized motifs, which have evolved over hundreds of years. These prints have a tonal and a three dimensional effect which is impossible to replicate in the screen printing or machine printing process. (www.farpaviliontents.co.uk/block-printing.asp)

F. Madhubani – Traditional Craft On Textile Of Bihar

Madhubani paintings and textiles, (also referred to as Mithila Art as it flourishes in the Mithila region of Bihar), are characterized by line drawings based on mythological themes, in bright colours and decorative borders. They are so called because they originated in and around a large agricultural town in Bihar, Madhubani or 'Forest of Honey'.

Today, Madhubani Paintings are made on silk, handmade paper, cloth, canvas etc for commercial purposes. The uses of chemical dyes and paints have resulted in brighter multicoloured paintings. Madhubani art came to the notice of the rest of the country in the 1960s. Bihar had been hit by a terrible drought and the government decided to promote Madhubani Paintings to create an alternative non agricultural source of earning. The All-India Handicrafts Board encouraged the artists of Madhubani to paint on Handmade paper instead of on walls. Since then, painting has become a primary source of income for scores of families.

The Madhubani Artists: Madhubani paintings are mostly made by Hindu village women who traditionally passed on this skill from mother to daughter. Different castes use different colours and motifs in their painting. For example, Brahmins use yellow, lemon, blue and black, while the paintings made by Kayasthas are usually in just black or deep red. Even today, most of their work remains anonymous. Few women like to mark their paintings with their names, and are quite reluctant to consider themselves individual producers of "works of art".

Images of the Traditional Textiles

		
CHANDERI –MADHYA PRADESH	CHAMBA RUMAL – HIMAN-CHAL PRADESH	PHULKARI –PUNJAB
		
BANARASI BROCADE –UTTAR PRADESH	BLOCK PRINTING – RAJASTHAN	MADHUBANI –BIHAR

Findings & Analysis

The following are the vulnerabilities that have been identified across the six clusters:

Area	Vulnerability Issues (Causes)
Finance	Lack of formal/informal sources of funding
	Poor wage rates / remuneration
	Lack of Professional financial Practices
	Lack of liquidity
	Inequitable distribution of margins / earnings
	Excessive Mark-up decided by traders / dealers / middlemen
	Final price of product depends on capacity of customer to pay
	Delayed recovery of payments from market
Production/ Operations	Decentralised production centers not supporting quality control (TQM)/ process enhancement
	Inadequate Basic Facilities (Light/ Fan/Electricity etc)
	Unhealthy & unhygienic working conditions
	Non adaptability to changing trends
	Poor productivity / Capacity utilisation

	Lack of Standardisation
	Lack of Innovation in Quality/Process/Material/Designs
	Lack of Transformation into Functionality/Usability of fabric
	Lack of Environment Friendly Dyeing / Processes
	Use of Sub-Standard Raw Material / Inputs
	Designs are clichéd (stereo type) aiming at high end customers
	Poor Product Finishing
HR	Lack Of Business Orientation / HR Sensitivity
	Closely guarded Knowledge Systems
	Decline In Skill Transference / Continuity
	T&D Programs Not Aiming At Long Term Sustainability
	Low Level Of Job Satisfaction / empowerment
	Ineffective Employee Welfare Schemes
	Bad/Unhealthy Habits (Liquor Consumption, Lethargy etc)
Market	Monopoly Of Master Craft-Persons / weavers
	High Dependency for Market Access
	Limited Knowledge of Potential Markets / Prospective Buyers
	Reduction Of Margins (Price War) due to Rivalry & Competition
	Lack Of Customer / Market Feedback
	Exploitative Practices by Middlemen / Agents / Brokers etc
	Inconsistent & Intermittent Demand
	Limited Distribution Channels / Network
	Lack of Customer Sensitisation towards Traditional Products
	Customer Trust Deficit owing to Unethical Practices
	Lack Of Education Amongst Artisans
	Poverty Restricts Overall Growth Of Artisans
	Social Obligations Force Artisans To Borrow/Lend Money
Government	Inability To Reach Grass Root Level
	Unrealistic & Superficial Cluster Development Schemes
	Schemes Implemented for Limited Time in Limited Areas
	Lack of Incentives / Promotion
Banks	Services are not User Friendly / accessible
NGO's	Promotion Of Limited Artisans / lack of spread
Consultants/	Operating At Unequal / distant Places
Experts	Lack of Sensitisation / Commitment
Economic	Unmatched Competition Due To Rapid Mechanisation / Industrialisation
Political-Legal	Distraction Of Workers From Local-Traditional Jobs due to MNREGA etc.
	Unfavourable Labour Laws Reducing Skill Transference
Natural Environment	Extreme Climatic Conditions / Pollution etc
Technological/IT	Lack Of Use Of Computers or IT for Documentation /Design Library /Forecasting / Costing/Marketing etc.

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The following are the vulnerabilities most critical to each cluster:

Punjab (Phulkari)

Five Most Critical Vulnerabilities	WAvg
Poverty Restricts Overall Growth Of Artisans	4.04
Lack Of Education Amongst Artisans	3.92
Social Obligations Force Artisans To Borrow/Lend Money	3.64
Low Level Of Job Satisfaction / empowerment	3.52
Poor wage rates / remuneration	3.2
Five Least Critical Vulnerabilities	**WAvg**
Limited Knowledge of Potential Markets / Prospective Buyers	2.24
Schemes Implemented for Limited Time in Limited Areas	2.08
Operating At Unequal / distant Places	2.08
Delayed recovery of payments from market	1.68
Lack of liquidity	1.44

Bihar (Madhubani)

Most Critical Vulnerabilities	WAvg
Poor wage rates / remuneration	4.78
Monopoly Of Master Craft-Persons / weavers	4.78
Lack of Customer Sensitisation towards Traditional Products	4.67
Customer Trust Deficit owing to Unethical Practices	4.67
Ineffective Employee Welfare Schemes	4.22
Lack Of Education Amongst Artisans	4.22
Promotion Of Limited Artisans / lack of spread	4.22
Least Critical Vulnerabilities	**WAvg**
Lack of liquidity	2.00
Unfavourable Labour Laws Reducing Skill Transference	2.00
Distraction Of Workers From Local-Traditional Jobs due to MNREGA etc.	1.56
Lack Of Use Of Computers or IT for Documentation /Design Library / Forecasting / Costing/Marketing etc.	1.56
Extreme Climatic Conditions / Pollution etc	1.44

Rajasthan (Block Printing)

Most Critical Vulnerabilities	WAvg
Low Level Of Job Satisfaction / empowerment	4.43
Decline In Skill Transference / Continuity	4.43
Poverty Restricts Overall Growth Of Artisans	4.36
Closely guarded Knowledge Systems	4.21
Social Obligations Force Artisans To Borrow/Lend Money	4.14
Least Critical Vulnerabilities	**WAvg**
Lack of Transformation into Functionality/Usability of fabric	1.86
Poor Product Finishing	1.71
Operating At Unequal / distant Places	1.71
Lack of Sensitisation / Commitment	1.57
Unfavourable Labour Laws Reducing Skill Transference	1.5

Madhya Pradesh (Chanderi)

Most Critical Vulnerabilities	WAvg
Poor wage rates / remuneration	**4.67**
Lack Of Education Amongst Artisans	**4.56**
Poverty Restricts Overall Growth Of Artisans	**4.44**
Low Level Of Job Satisfaction / empowerment	**4.39**
Monopoly Of Master Craft-Persons / weavers	**4.33**
Least Critical Vulnerabilities	**WAvg**
Unrealistic & Superficial Cluster Development Schemes	**2.28**
Lack of liquidity	**2.00**
T&D Programs Not Aiming At Long Term Sustainability	**1.89**
Extreme Climatic Conditions / Pollution etc	**1.39**
Delayed recovery of payments from market	**1.33**

Himanchal Pradesh (Chamba Rumal)

Most Critical Vulnerabilities	WAvg
Poor wage rates / remuneration	**4.5**
Social Obligations Force Artisans To Borrow/Lend Money	**4.10**
Low Level Of Job Satisfaction / empowerment	**4.00**
Poverty Restricts Overall Growth Of Artisans	**3.90**
Extreme Climatic Conditions / Pollution etc	**3.6**
Least Critical Vulnerabilities	**WAvg**
Schemes Implemented for Limited Time in Limited Areas	**1.9**
Operating At Unequal / distant Places	**1.9**
Delayed recovery of payments from market	**1.8**
Lack of Environment Friendly Dyeing / Processes	**1.7**
Lack of liquidity	**1.1**

Uttar Pradesh (Banaras Brocade)

Most Critical Vulnerabilities	WAvg
Lack of formal/informal sources of funding	**4.00**
Lack of Professional financial Practices	**3.92**
Lack of Innovation in Quality/Process/Material/Designs	**3.92**
Use of Sub-Standard Raw Material / Inputs	**3.92**
Low Level Of Job Satisfaction / empowerment	**3.92**
Lack of Customer Sensitisation towards Traditional Products	**3.92**
Services are not User Friendly / accessible	**3.92**
Least Critical Vulnerabilities	**WAvg**
Lack of Incentives / Promotion	**1.67**
Lack of Sensitisation / Commitment	**1.75**
Lack of liquidity	**1.75**
Schemes Implemented for Limited Time in Limited Areas	**1.92**
Lack of Transformation into Functionality/Usability of fabric	**1.92**

Most Critical Vulnerabilities in The Clusters Under Study:

Most Critical	WAvg
Lack Of Education Amongst Artisans	4.04
T&D Programs Not Aiming At Long Term Sustainability	4.00
Customer Trust Deficit owing to Unethical Practices	3.93
Poverty	3.87
Lack of formal/informal sources of funding	3.86
Least Critical	WAvg
Lack of Professional financial Practices	1.79
Promotion Of Limited Artisans / lack of spread	2.14
Operating At Unequal / distant Places	2.21
Final price of product depends on capacity of customer to pay	2.24
Distraction Of Workers From Local-Traditional Jobs due to MNREGA etc.	2.43

Factor Wise Ranking Of Each Cause Variable

FINANCE	WAvg	Vulnerabilities
1	3.00	Lack of formal/informal sources of funding
2	3.86	Poor wage rates / remuneration
3	3.07	Lack of Professional financial Practices
4	1.79	Lack of liquidity
5	3.05	Inequitable distribution of margins / earnings
6	2.96	Excessive Mark-up decided by traders / dealers / middlemen
7	2.63	Final price of product depends on capacity of customer to pay
8	2.24	Delayed recovery of payments from market

PRODUCTION	WAvg	Vulnerabilities
9	2.98	Decentralised production centers not supporting quality control (TQM)/ process enhancement
10	3.04	Inadequate Basic Facilities (Light/ Fan/Electricity etc)
11	2.96	Unhealthy & unhygienic working conditions
12	3.32	Non adaptability to changing trends
13	3.33	Poor productivity / Capacity utilisation
14	3.17	Lack of Standardisation
15	3.46	Lack of Innovation in Quality/Process/Material/Designs
16	2.62	Lack of Transformation into Functionality/Usability of fabric
17	2.73	Lack of Environment Friendly Dyeing / Processes
18	3.11	Use of Sub-Standard Raw Material / Inputs
19	2.68	Designs are clichéd (stereo type) aiming at high end customers
20	3.24	Poor Product Finishing

HR	WAvg	Vulnerabilities
21	3.23	Lack Of Business Orientation / HR Sensitivity
22	3.48	Closely guarded Knowledge Systems
23	3.44	Decline In Skill Transference / Continuity
24	2.63	T&D Programs Not Aiming At Long Term Sustainability
25	4.00	Low Level Of Job Satisfaction / empowerment
26	3.44	Ineffective Employee Welfare Schemes
27	3.01	Bad/Unhealthy Habits (Liquor Consumption, Lethargy etc)

MARKET	WAvg	Vulnerabilities
28	3.74	Monopoly Of Master Craft-Persons / weavers
29	2.98	High Dependency for Market Access
30	3.07	Limited Knowledge of Potential Markets / Prospective Buyers
31	3.21	Reduction Of Margins (Price War) due to Rivalry & Competition
32	3.21	Lack Of Customer / Market Feedback
33	3.14	Exploitative Practices by Middlemen / Agents / Brokers etc
34	3.13	Inconsistent & Intermittent Demand
35	3.01	Limited Distribution Channels / Network
36	3.37	Lack of Customer Sensitisation towards Traditional Products
37	3.21	Customer Trust Deficit owing to Unethical Practices

SOCIO-ECONOMIC	WAvg	Vulnerabilities
38	3.94	Lack Of Education Amongst Artisans
39	4.04	Poverty Restricts Overall Growth Of Artisans
40	3.87	Social Obligations Force Artisans To Borrow/Lend Money

OTHER INSTITUTIONS	WAvg	Vulnerabilities
41	2.87	Inability To Reach Grass Root Level
42	2.88	Unrealistic & Superficial Cluster Development Schemes
43	2.62	Schemes Implemented for Limited Time in Limited Areas
44	2.58	Lack of Incentives / Promotion
45	3.25	Services are not User Friendly / accessible
46	3.15	Promotion Of Limited Artisans / lack of spread
47	2.15	Operating At Unequal / distant Places
48	2.21	Lack of Sensitisation / Commitment

MACRO ENVIRONMENT	WAvg	Vulnerabilities
49	3.27	Unmatched Competition Due To Rapid Mechanisation / Industrialisation
50	2.87	Distraction Of Workers From Local-Traditional Jobs due to MNREGA etc.
51	2.43	Unfavourable Labour Laws Reducing Skill Transference
52	2.63	Extreme Climatic Conditions / Pollution etc
53	2.73	Lack Of Use Of Computers or IT for Documentation /Design Library /Forecasting / Costing/Marketing etc.

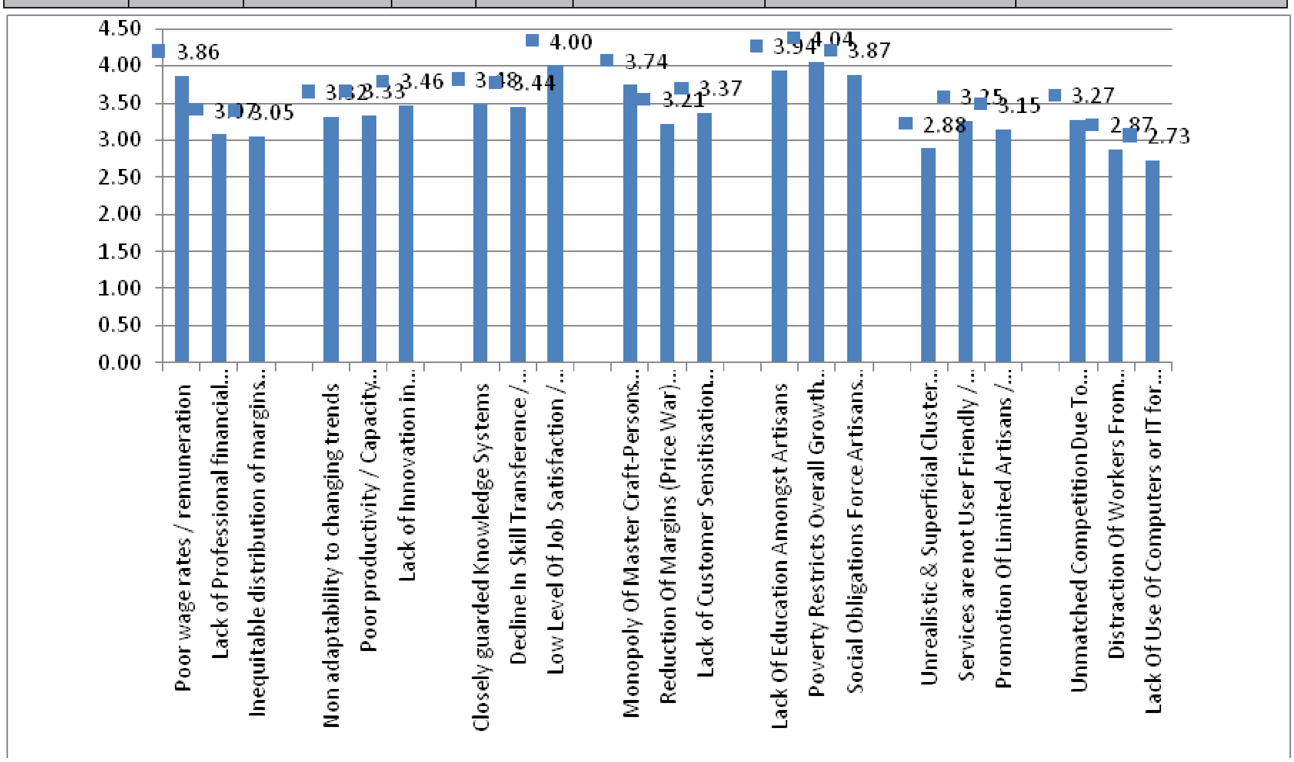
Most Critical Vulnerabilities Specific To Each Area Of The Traditional Textile Industry Based On The Weighted Average Of The Responses

FINANCE		
3.86	1	Poor wage rates / remuneration
3.07	2	Lack of Professional financial Practices
3.05	3	Inequitable distribution of margins / earnings
PRODUCTION		
3.32	3	Non adaptability to changing trends
3.33	2	Poor productivity / Capacity utilisation
3.46	1	Lack of Innovation in Quality/Process/Material/Designs
HR		
3.48	2	Closely guarded Knowledge Systems
3.44	3	Decline In Skill Transference / Continuity
4	1	Low Level Of Job Satisfaction / empowerment

MARKET		
3.74	1	Monopoly Of Master Craft-Persons / weavers
3.21	3	Reduction Of Margins (Price War) due to Rivalry & Competition
3.37	2	Lack of Customer Sensitisation towards Traditional Products
SOCIO-ECONOMIC		
3.94	2	Lack Of Education Amongst Artisans
4.04	1	Poverty Restricts Overall Growth Of Artisans
3.87	3	Social Obligations Force Artisans To Borrow/Lend Money
GOV-BANKS-NGO'S-EXPERTS		
2.88	3	Unrealistic & Superficial Cluster Development Schemes
3.25	1	Services are not User Friendly / accessible
3.15	2	Promotion Of Limited Artisans / lack of spread
ECO-POLITICAL-LEGAL-NATURAL ENV-IT		
3.27	1	Unmatched Competition Due To Rapid Mechanisation / Industrialisation
2.87	2	Distraction Of Workers From Local-Traditional Jobs due to MNREGA etc.
2.73	3	Lack Of Use Of Computers or IT for Documentation /Design Library /Forecasting / Costing/ Marketing etc.

The following bar chart shows most critical vulnerabilities specific to each area of the traditional textile industry based on the weighted average of the responses

Factors>	Finance	Production	HR	Market	Socio-Economic	Other Institutions	Macro Environment



The recommendations can be summarized in the following four areas for vulnerability assessment and innovative capacity building-

The following is the four actions framework and the eliminate-reduce-raise-create grid.

Eliminate

Old infrastructure, Daily wage / weekly wage system (resulting in dependability, security, ability to plan, worrying about the big picture for both- employer and employee), Home cum worksheds system of working, Bargaining by master weavers, middlemen, traders and customers, Inequity in margins, Corruption in the entire supply chain, Corruption in the implementation of Government schemes, Ignorance towards the big picture, 'Satti' system, Fooling of Tourists in language not known to them for getting higher price, Allowing powerloom in fairs like Tajmahotsav, Suraj Kund and Delhi Haat, Fake implementation of cluster development schemes, Word 'wage' for artisans, Monitoring agencies, Evaluating agencies, Errors in artisans' identity cards, Overlapping dates for exhibitions, Unhealthy dyes and dyeing processes, Bottlenecks in supply chain, 'labour intensive' product cost and value unawareness.

Reduce

Middlemen, Stress on marginal weavers, Spoon feeding, Number of monitoring agencies, Self pity, Wastage of resources, Migration of artisans to non-handloom related trades, Nuclear units with no set procedures/ processes/ standardisation of raw material and quality, Fluctuation in product price and number of man hours spent in making it, Arbitrage, Weaver-master weaver interface, Cash transactions, Discounts (generally on cost), Multi tasking, Tax evasion, Retail corruption.

Raise

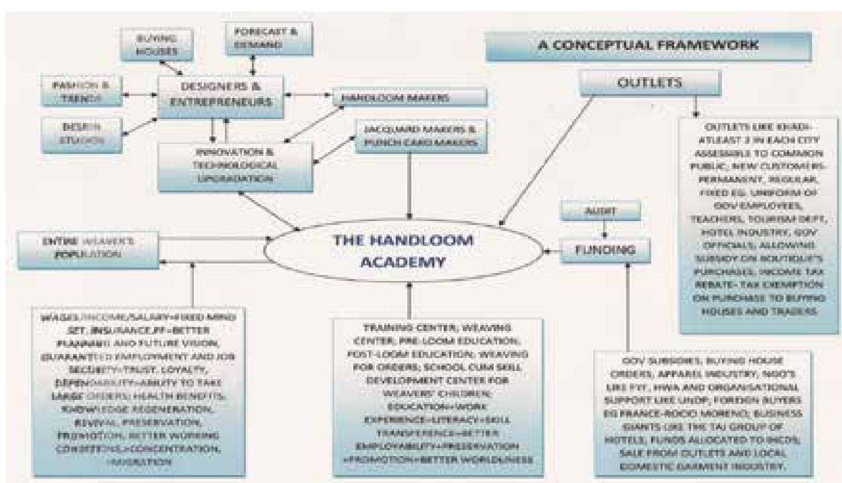
Weavers awareness, Customers awareness, Government officials awareness, Fixed price of each process that adds value, Eco-friendly dyes use, Wages / income, Innovation in design, Standard of living, Standard of thinking (of corrupt stakeholders), Trust, Skill transference, Technique preservation and documentation with video demonstrations, Satisfaction, Education of literate class, Technology interface, Value for value additioners, Outlets for sale, Specialisation in processes, Skill transference, Financial flexibility, A makeover of concept for the domestic market, Basic facilities for the weavers .

Create

Customers from fixed professions, Buyers- repetitive like fashion designers, export buying houses, Assured, regular, permanent Employment, All inclusive infrastructure, System of effective economical mass production along with timely innovation, Product differentiation, Bank accounts / Aadhars, Transparency, Patronization of villages / tiny clusters, Academic (paid) learning from traditional practioners, Self contained organisation with common facility centres, Multifinality in approach, Costing of each process and the fixed margin which should not be compromised taking into consideration the current cost of raw materials or value additions, Live videos and documents of the entire pre loom and post-loom operations, Standards like Levi Strauss' RSL to operate internationally and globally, Dignity of labour, Accountability.

The above mentioned aspects in the 'create' and 'raise' grid can only be effective if first the recommendations in the 'Reduce' and 'Eliminate' grid are taken care of. Since the researcher is still working on the study; there is more to the systemic decision- action framework model being developed.

A Conceptual Fram-Ework For The Hand-Loom Academy For The Banaras Brocade Cluster



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A Line of Attack on Bootlegging: Potential Approaches to Terminate Cyber – Plagiarism in Higher Education

Kamal Gulati[1]
Puja Bhattacharyya[2]

Abstract

Plagiarism is an intricate misdemeanor in today's academic world. This is not only an ethical issue but also a legal concern, specifically when it comes to higher education. Even a couple of decades ago, the only information bank available as an aid for a topical research was the encyclopedia and its effective use called for tools like directories, catalogues, white index cards and what not. But now, students just spoon out chunks of scholastic information through the World Wide Web that hardly demands any endeavor or genuineness. Its lethal effects are as far extending as dejection of moral codes, erasing one's own individuality, putting the instructors at a vulnerable position and missing out opportunities to bloom as a prospective researcher. In addition to detection or prevention tactics, methods that can be adopted to bring this misconduct to a halt should emerge from a detailed understanding of pedagogy, i.e. the science or art of being a teacher. A thorough breakdown of 'why' and 'how' students plagiarize will undoubtedly show some way out of this crisis. Restructuring the processes of formulation of assignments and evaluation can discourage plagiarism up to a considerable extent. This paper suggests a need for a comprehensive solution that involves both technical and behavioral modes to combat this complex problem.

Keywords Plagiarism, Cheating, Academic Fraudulence, Academic Integrity, Poor Educational Practice, Higher Education

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Higher Education: A Dive into the Learner's Mind

Why do students find it so alluring to plagiarize? We can put a stop to this immoral practice by simply striking these roots. Some of the key reasons are as follows:

- Massive misconception or even utter ignorance about what plagiarism is. Most of the pupils, specially the greenhorn first year students bear an urban legend in their mind that everything on the internet is in public domain and can be copied without citation.
- Rest of the students, though know what plagiarism is and don't consider it as unethical. Bootlegging from the internet and inserting a few words of one's own is just what they think to be 'patch writing', an usual way of writing.
- Most of the students prefer to be extremely instrumental in their course of achieving a degree. They seek for the shortest possible road. Copying a write-up from the internet is short cut to get through an assignment, especially when they are loaded by the strains of numerous subjects. A solution to this problem is to give the assignment well before the terminal examinations. The students should be made realized that completing an assignment enhances attributes like inquisitiveness, tenacity, perseverance, commitment. It's obvious that more a student hone these skills, more smooth his path of career is supposed to be.
- At this tender age and stage, most of the students face the problem of prioritization. They have countless works to do, both educational and recreational. So many of them merely procrastinate with the assignment that doesn't stir their interests. A way-out to this is to make them choose a topic from several ones so they have a genuine interest in the selected subject matter.

[1] Assistant Professor, Amity University, Noida
[2] Student, Actuarial Science, ASIBAS, Amity University, Noida

- The transitional parts of an assignments, i.e. topic, early research, draft, prospectus, outline and final draft should be made due at regular interval so that the students don't get panicked by the time pressure. This will keep 'some' of the students from searching inappropriate short-cuts.
- Some student view writing as a daunting task and they fear that their own task will be of poor quality. So they end up searching some 'superior' items in the web. In fact, these are the students who are least aware of how inferior web articles can actually be. It calls for a demonstration of the pitiable qualities of web articles to them. They should also be assured of personal assistance of the faculty or some writing centre while preparing their write-up. They should also be made realized that it is not at all shameful to ask for such assistance from instructors. An ambience needs to get created that they don't hesitate to ask for such help.
- There will always be some students who take immense pleasure in breaking rules. The harder you censure plagiarism, the more ecstasy they find in doing it. Some real, tangible detective and preventive measures should be taken on board to make them abstain from this malpractice.

Alertness about Plagiarism among Instructors is Something Badly Needed

The instructor(s) should be well aware of the various forms of plagiarism. Some of the most common ways are as follows:

- Downloading free term papers, written and shared by other students. Most of these papers are continuously being used for years by plagiarists. As these swappers are generally not among the most promising students, these papers are also very inferior and contain extremely old citations (even older than seventies).
- Purchasing a paper from commercial paper mills. Qualities of these papers are generally satisfactory and sometimes too delightful. Comparing the levels of students' in-class assignments with home assignments may help detecting such form of plagiarism.
- Copying an article from the web. If a high-style write-up has been submitted without a single citation, then high chances are there that it's copied from electronic database.

Edify Your Students

- It should not be assumed that the students know what plagiarism is, even if they claim to do so. It's necessary to provide them with explicit definition of plagiarism.
- Discussing with them why plagiarism is a fraud may be fruitful. It should be clarified that plagiarism is a nasty combination of both stealing and lying.
- The rules for quotation, documentation and citations should be made very clear to the students. The line of distinction between plagiarism and appropriate collaboration must be vividly marked.
- Encourage students to write an annotated bibliography at the end of their work. The references mentioned by the students should be as recent as possible.
- An 'Academic Integrity' statement should be integrated with each syllabi and programs. Many universities have a model for Academic Integrity statement in place. The students must sign on the same after they have gone through the definition, forms, and serious consequences of plagiarism mentioned in it.

Stratagems Intended for the 'Prevention' Purpose

- The more unusual an assignment is, the less likely the students are to find something on the net to submit as their own work. The topic should be a bit twisted, or have a different perspective on a problem, a statement or a question. It's better if the topic is narrowly focused than being one among the broad, general ones. Also, a very recent topic is less likely to be thoroughly covered by web. Assignments having multiple parts reduce the chance of plagiarism.
- A very precise formatting style should be asked for the papers. The style should be specified well in advance, i.e. whether APA, MLA or CMS style is going to be followed. Even slight deviations from these requirements must NOT be allowed.
- Students should require submitting research notes and preliminary drafts with their final drafts. This will discourage plagiarism. The

task of writing will get spread over a comparatively longer period. Hence, the students will not be in situation to search for immoral expedients.

- Before the students start writing their project, the instructors should make them know that they are well aware of cyber-plagiarism and plagiarism detection software is used for this purpose. The instructors should also demonstrate their ability to detect plagiarism by identifying a lifted passage through submitting it to comprehensive search engine.

  Instructors can use the online resource named Turnitin as an instructional and educational tool as well as a detection aid. It provides valuable information to students on drafts if we allow them to view their "originality reports" where they see how much of the paper is actually written in their own words, and then alter in view of that.
- Students should be made discussing and explaining their projects at regular intervals. If the students know in advance that they will be giving a presentation on their research topic, they will comprehend the necessity to be familiar with both the process and the content of the topic. A one-to-one office meeting can also be conducted where students will be asked critical questions about their research area.
- Specific criteria should be framed for the researched paper. Criteria that strictly inhibit use of copied papers are:

1. Use of one or more sources written within the past year. This will filter out most of the paper mill articles.
2. Use of one or more specified articles or books named by the instructors.
3. Use of some specific information provided by the instructor. (For example, a data set)
4. A personal interview with an expert or an authority.

- Assignments topic should be changed from person to person and/or from year to year.
- The penalties should be made explicitly clear. If an anti-plagiarism policy exists for the university, it should be stated within the syllabi. If an instructor has his own policies, it should be notified, specifying the penalties involved. It should be made clear that these policies are to honor the efforts of honest student against those who escape the work by fakery.

Strategies to 'Detect' Plagiarism

- Some internal evidence gives very lucid indication of plagiarism. For instance,

1. Mix-up styles of citations or a jumble of MLA, APA or CMS (Chicago) styles.
2. Unusual format, odd margins, off-center tables, lines wrecked in halves, mixed sub-head styles and other formatting inconsistencies may indicate a hasty copy-paste.
3. Signs of datedness in fonts, styles, themes, headings, titles, subtitles or emphasis.
4. Anachronisms like 'It has only been two months that Bill Gates had a visit to…'

- Knowledge regarding where the sources of papers are is very important. It comprises mainly of the

1. Free and for-sale term paper sites
2. The free visible web that contains everything that has been publicly mounted to the web.
3. The free invisible web, where certain contents are available only by going directly to the site.
4. The paid databases over the web.

- The library's online database subscription and other subject-oriented databases may reveal the source of plagiarism, if provided with appropriate key words.
- The commercial services that provide plagiarism detection services may come handy in this context. Some of the popular Plagiarism Prevention Plug-ins are:

1. Plagiarism Prevention Crot 2.0
2. Plagiarism Prevention Turnitin
3. Plagiarism Prevention URKUND

The first one is an open source kit, while the last two require commercial subscription.

Most faculty members, when confronted with cases of cheating and plagiarism, talk to the student(s) caught up and find out a penalty that appears proper. After this, a letter or an e-mail should be written to the student describing the infraction and the penalty that has been levied, and explaining that a second offense will result in university action. This should also be advanced to the Department Head, Dean, and the Dean of Student Affairs. This enables the University to retain a documentation of individual student behavior across courses and spot repeat wrongdoers.

Conclusion

The expansion of alertness regarding anti-plagiarism in higher education is but a schema to help people learn how to declare intellectual debts. Proper ascriptions admit those debts dutifully, usefully, and reverently. An attribution is responsible when it comes at a location and in a fashion that leaves readers in no doubt about whom you are thanking and for what. It's good to remember that nothing booths a career more rapidly than shoddy, unreliable work.

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Reforms And Growth In Retail Sector-Some Regional Aspects In India

Dr. Naseer M. Jaffer[1]
Ms. Neeta Kavalil[2]

Abstract

Those who oppose foreign direct investment in multi-brand retail trade in India give various reasons to support their opposition. Those who support foreign direct investment in multi-brand retail trade give equally convincing arguments. Both the sides generally assume that there will be either adverse or favourable impact in all parts of the country. In other words these discussions generally ignore regional aspects of impact of foreign direct investment in multiband retail trade in India. The present paper is a small attempt in the direction of filling up the gap in the enquiry.

Keywords Good Governance, Local Sourcing, Regional Aspects, Traditional And Non-Traditional Retailing, Economic Performance Of States

Introduction

Those who support and those who oppose entry of foreign direct investment in multi-brand retail trade in India present various arguments to strengthen their points of view. Most of these arguments contain a basic assumption is that all parts of the country will experience, in general, a uniform impact as the result of the reform in retail trade.1 The major reason for this assumption is that there are not many studies on regional impact of economic reforms in India. It is possible that economic reforms in general and entry of foreign direct investment in retail trade in particular may bring about different outcomes in different regions of the country. There are not many studies to highlight this area of enquiry.2 The present paper is a small attempt in this direction.

It will be useful to recollect the main features of proposed policy on allowing FDI in multi-brand retail trade in India. The policy which was approved by the government, allows up to 51 percent equity participation provided there is an investment of at least $100 million by the foreign organization. About one-half of this investment must go to infrastructure development such as refrigeration, packing, processing and transportation. This will be allowed only in cities with a population of more than 1 million. Then there is a requirement that at least 30 percent of the products must be sourced from local micro and small enterprises. It is expected that these conditions will minimize possible adverse effects and enhance benefits resulting from the entry of FDI in multi-brand retail trade in the country. Most importantly individual states have the option of allowing the exercise to happen.

In 1991, the government brought the „License Raj' to an end and introduced several pro-market reforms. This contributed towards higher rates of economic growth in the following years and the country witnessed decline in poverty ratio and other aspects of economic development of the community. However, some states benefitted from economic reforms more than others. For example, Andhra Pradesh and Gujarat experienced spectacular growth of about 10 percent while a few others such as Assam, Odisha, Madhya Pradesh and West Bengal grew at 3 percent or less per year.

As pointed out earlier there are not many studies on regional aspect of reform impact on economic

[1]Professor, Xavier Institute of Management & Entrepreneurship (XIME), Bangalore
[2]Lecturer, Xavier Institute of Management & Entrepreneurship (XIME), Bangalore

performance of individual states. The following are the objectives of the present study:

1. What are the potential factors which may benefit some states to out-perform others in the event of FDI entry in multi-brand retail trade?
2. What role does good governance play in the possible better performance of these states?

The study will make use of published data from reliable sources for the purpose of analysis. Statistical tools used in similar studies will be part of the methodology used in the study. The outcome of the analysis will provide the ground for suggestions and directions for further research.

The first objective of the study addresses the question of potential factors which may determine the regional outcomes of the entry of FDI in multi-brand retailing in India. The state governments will ultimately decide whether to allow FDI in retail business in respective states.

There are indications that apart from non-Congress and non-UPA II state governments, several

Congress ruled states also may not allow FDI entry into retail business.3 With the entry of FDI in retail there will be benefits as well as problems. There are three important issues. They are benefits for farmers, job impact on traditional retail sector and inflation containment. The expectation of policy makers are that farmers will get better remunerative prices for agricultural products, more jobs will be created in modern retail sector not withstanding marginal initial job losses in traditional retail trade and that food inflation will be curtailed to a large extent. Those who oppose give passionate arguments to stop FDI entry in retail trading in India 4. As pointed out earlier most discussions ignore the possibility of regional differences in the impact of FDI in retail business. In a vast country like India it is essential to take into account factors which may lead to different outcomes in different regions even though the reform initiative may be similar.

There are several studies which attempt to find trends in regional income inequalities in India. Most studies take states as sub-national regions. Net State Domestic Product (NSDP) and per capita NSDP are most often taken as key variables to determine inter-state differences in economic condition and economic growth over the years. Co-efficient of variation (CV) and Gini coefficient are the most commonly used statistical techniques to measure the extent of inequality in the distribution. 5 These studies are able to identify some broad trends in inter-state economic inequalities among the major states of India over a period of time.

In the early years of economic planning there was a declining trend in inter-state inequalities in income and this trend was very visible during 1960,s mainly due to the success of „Green revolution,. This declining trend was particularly pronounced in terms of rural incomes in different states which experienced higher agricultural productivity. However, during 1970's regional inequality increased and this trend continued during 1980's also. Ahluwalia (2000) and S.L. Shetty (2003) make use of Gini coefficient to measure extent of inequality among states and show that there was a sharp increase in regional inequality during 1990's onwards. The coefficient of variation of per capita NSDP was 0.22 per cent during the 1980,s and it increased to 0.43 per cent during the 1990,s. There are other studies also which point out increasing inter- state income disparities from 1970,s to 1990,s. 6 These studies, in general, reveal that there has been an increasing trend in the interstate disparities since the introduction of economic reforms in 1990,s. It will be interesting to know whether economic reforms contributed to increasinginterstate income inequalities.

A study made in recent times addresses the issue of impact of economic reforms on regional disparities in India.7 It makes use of Gross State Domestic Product (GSDP) data obtained from Central Statistical Organization (CSO). The time periods taken in the study are 1980-81 to 1989- 90(pre-reform decade) and 1990-91 to 1999-2000(post reform decade). Data on 17 major states namely Andhra Pradesh, Assam, Bihar, Gujarat, Karnataka, Maharashtra, Madhya Pradesh, Orissa, Punjab, Rajasthan, Tamil Nadu, Uttar Pradesh, West Bengal, Goa, Haryana and Himachal Pradesh are taken into account. The relative contribution of the three major sectors, agriculture, industry and services to interstate disparities during the two periods is presented in the following tables:

Table 1

Regional Inequality And Sectoral Decomposition (1980'S And 1990'S)

Years	1980-81	1984-85	1988-89	1990-91	1994-95	1998-99
Contribution of agricultural sector to interstate inequality	0.06	0.06	0.06	0.05	0.06	0.05
Contribution of industrial sector to interstate inequality	0.09	0.09	0.09	0.11	0.12	0.13
Contribution of service sector to inter-state inequality	0.11	0.11	0.11	0.12	0.16	0.18
Aggregate inequality	0.26	0.26	0.26	0.28	0.34	0.36

Source: Sabyasachi and S. Sakthivel (2007)

It can be observed that aggregate interstate disparities remained almost the same i.e. the C.V remained around 0.26 during the pre-reform decade(1980,s). Naturally the contribution to interregional inequality by individual sectors also remain negligible during this period. In the following post-reform decade (1990,s) there was sharp increase in the extent of regional inequality i.e. from 0.28 to 0.36. It can be seen that services sector contributed the maximum in widening the gap between rich and poor states. The services sectors contribution increased from 0.12 to 0.19 when industrial sector,s contribution increased only marginally. It may be noted that service sector includes transport, storage, communication, wholesale and retail trade, hotels and restaurants, banking and insurance, real estate, business and other related services.

In the context of the above facts, it may be argued that among the three sectors, service sector displays the highest degree of unequal performance among the states of India during the first decade of economic reforms. Which factors contributed how much to this unequal performance of service sector among the various states we do not know. There may be strong economic, social, and political factors which play important roles in the process. Future research may identify and establish the relative importance of various factors. The trend of widening interstate disparities and service sector playing a major role in the divergence may be continuing during the period 2000-2012 also. It is beyond the scope of the present paper to go into these important issues of enquiry.

One of the major economic reforms introduced in recent times is allowing entry of foreign direct investment in multibrand retail trading in India. Economic reforms, in general, seem to contribute to increase in interstate disparities in India. Service sector seems to play a vital role in the process of widening disparities. Retail trading is an important constituent of service sector. It follows that the degree of success or failure of entry of FDI in retail trading will depend upon regional factors. What these factors are and how they will influence the impact of FDI in retail trade on economic growth of regions are exciting areas of research. However they are beyond the scope of the present paper.

The second objective of the paper is to analyze the role of good governance in better performance of more successful states and to find out how it may influence the outcomes of FDI in retail trading. There are problems of definition and measurement of good governance. However there are attempts to define and measure what constitutes good governance. 8 It is important to know the extent of influence of good governance on the growth and development of a region. A few indicators of good governance can be taken to represent the degree of good governance in states of India. Then this degree or extent of good governance can be related to the level of economic growth achieved in the respective states. Such an exercise has been undertaken

In a recent study. 9 It is found that extent of good governance and rate of economic growth show positive and significant correlation indicating a strong association between them. It will be interesting to know whether good governance will play a positive role in better performance of service sector in which retail trade is a part. If that is the case then it can be inferred that FDI entry in retail trade may bring in more results in those states in which there is a record of good governance.

Measuring the extent of good governance is a difficult task. One recent study attempts to numerically express the degree of good governance obtained in major states of India. 10 Inter- state difference in labour productivity levels (rupees per worker) calculated from NSS data per 14 states are taken from another study. 11 We calculated Pearson,s coefficient of correlation between numerical values of extent of good governance and labour productivity in various economic activities for the 14 major states. The correlation coefficient values between good governance index and labour productivity in agriculture, manufacturing, trade repair services and hotels, transport and communication and percentage of urban population are 0.596, 0.558, 0.661, 0.553 and 0.510 respectively.

All the correlation coefficient values are positive and all except percentage of urban population are statistically significant. The states which have high degree of good governance display higher levels of labour productivity in all major areas of economic activity and especially in trade and related services. It means that in the event of FDI entry into multiband retail happening, the sates with higher level of good governance will be able to experience better results than other states. In other words there may be differential impact of FDI in retail trade depending upon the extent of good governance obtained in different rates.

The arguments presented in the preceding paragraphs can be recapitulated. Inter-rate inequality has been increasing since the introduction of economic reforms. This has been established in studies made in recent years. It means that certain factors facilitate positive effects of economic reforms in some states. The same factors may also work in the case of FDI entry into retail trading and produce differential results in different states. The extent of good governance in a state may play a positive role in enhancing benefits of FDI in multi brand retail trading. Again one can expect differential impact of FDI in retail trading because different states display different degrees of good governance. It is suggested that this analysis can be extended by including more variables and taking longer period of time in future research efforts.

Notes

1. There are views expressed in business dailies and journals which fall in either of the two categories, namely those who support and those who oppose the entry of FDI in retail trade in India. See, for example, Sukhpal Singh (2011): „FDI in Retail : Misplaced Expectation and Half- truths, Economic and Political Weekly Vol XLVI No.51.pp.13-16, Ullekh „Kerala,s Retail Paradox Economic Times, Sep 23 2012 Prabhat Patnaik, „Legitimising an inhumane discourse, The Hindu Dec.12, 2011 and Jagdish Bhagwati „Untenable Crtiques of Retail Liberalisation Economic Times,Dec.15, 2012.
2. There are only a few studies which attempt to relate economic growth with regional inequality. Very few studies address the question of impact of economic reforms on regional inequalities. See, for example, Sabyasachi Kar, S. Sakthivel(2007) "Reforms and Regional Inequality in India, Economic and Political Weekly Vol XLII No.47 pp.69-77 and Kunal Sen„ The State of Capitalism in States, Economic Times July 17, 2009.
3. Speaking about Kerala, a Kannur based Congress leader says, "In Kerala, it is difficult to implement decisions without public endorsement. Besides, even Congress leaders are socialist by nature". The situation is not very different in other Congress-ruled states. See, Ullekh (2012)
4. One observer says "In fact the argument for FDI in retail is a precise recreation of the discourse of colonialism." See Prabhat Patnaik(2011)
5. See, for example, Ahluwalia. M.S. (2000)„ Economic performance of states in post-reform period, Economic and Political Weekly, May. Shetty S.L (2003) „Growth of SDP and Structural Change in State Economics: Interstate Comparisons, Economic and Political Weekly, Dec. and Sabyasachi and Kar and S. Sakthivel(2007)
6. See, for example, Rao.M et al (1999) „Convergence or divergence of incomes across Indian States, Economic and Political Weekly, March.
7. Sabyasachi Kar and S.Sakthivel(2007) „Reforms and Regional Inequality in India, Economic and Political Weekly, Nov.

8. See, for example, DARPP (2009) State of Governance: A Framework of Assessment, Department of Administrative Reforms, Public Grievances and Pensions, Government of India, New Delhi and George T and Sanjeev Gupta(ed) (2002) Governance, Corruption and Economic Performance International Monetary Fund, Washington.
9. Sudipto Mundle, Pinaki Chakraborty, Samik Chowdhury and Satadru Sikdar(2012) The quality of governance Economic and Political Weekly, December.
10. Sudipto Mundale et al (2012)
11. Ramaswamy K.V. (2007) 'Regional dimension of growth and employment, Economic and Political Weekly, December.

Appendix I

Correlation Coefficient Values

		Good Governance index	Percent Of Urban population	Trade Repair services And hotels	Financial And Business services	Transport And communication	Manufacturing	Agriculture
Good Governance index	Pearson Correlation	1	.510	.661*	-.011	.553*	.558*	.596
	Sig. (2-tailed)		.062	.010	.971	.040	.038	.024
	N	14	14	14	14	14	14	14
Percent Of Urban pop	Pearson Correlation	.510	1	.561*	.477	.480	.653*	.243
	Sig. (2-tailed)	.062		.037	.084	.082	.011	.403
	N	14	14	14	14	14	14	14
Trade Repair services and hotels	Pearson Correlation	.661*	.561*	1	.082	.735**	.740**	.445
	Sig. (2-tailed)	.010	.037		.780	.003	.003	.111
	N	14	14	14	14	14	14	14
Financial And Business services	Pearson Correlation	-.011	.477	.082	1	.052	.372	.115
	Sig. (2-tailed)	.971	.084	.780		.859	.190	.695
	N	14	14	14	14	14	14	14
Transport And communication	Pearson Correlation	.553*	.480	.735**	.052	1	.749**	.161
	Sig. (2-tailed)	.040	.082	.003	.859		.002	.581
	N	14	14	14	14	14	14	14
Manufacturing	Pearson Correlation	.558*	.653*	.740**	.372	.749**	1	.272
	Sig. (2-tailed)	.038	.011	.003	.190	.002		.347
	N	14	14	14	14	14	14	14
Agriculture	Pearson Correlation	.596*	.243	.445	.115	.161	.272	1
	Sig. (2-tailed)	.024	.403	.111	.695	.581	.347	
	N	14	14	14	14	14	14	14

*. Correlation is significant at the 0.05 level (2-tailed).

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

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