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Contents

An International Bi-annual Refereed Research Journal

Founder
(Late) Sri Raj Kumar Goel

Commandment

from the Founder

We are building our institute as an ideal family , the ***RKGIT PARIWAR*** *where members strive for the development, well being and promotion of each other.*

अज्ञानेनावृतं ज्ञानं ।

श्रीमद भगवत गीता अध्याय 5, श्लोक.15

Aims and Scope

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

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कुलपति
Vice-Chancellor
प्रोफेसर आर. सी. सारस्वत
Professor R.C. Saraswat

डॉ. राम मनोहर लोहिया अवध विश्वविद्यालय, फैजाबाद
DR. RAM MANOHAR LOHIA, AVADH UNIVERSITY, FAIZABAD

दूरभाष कार्यालय : 05278-246223
निवास : 05278-246224
फैक्स : 05278-246330 (कार्यालय)
: 05278-245209 (निवास)
ई-मेल : rcswat@gmail.com
vc@rmlau.ac.in

Date: 04.06.2011

MESSAGE

I am pleased to learn that Raj Kumar Goel Institute of Technology is publishing SAARANSH–RKG JOURNAL OF MANAGEMENT. Management and Technical Education plays pivotal role in the growth of Society and Nation by accelerating the pace of Socio-Economic development. During recent past, the Country has witnessed a huge rise in the demand for technically and professionally competent man-power.

I am pretty sure that the professionals and faculty of various Colleges will contribute in the forthcoming issue of the journal.

I wish the very best and pray to almighty for the success.

(Prof. R.C. Saraswat)
Vice-Chancellor

Dr. Vinay K Srivastava
Associate Professor
Editor SAARANSH RKG JOURNAL OF MANAGEMENT
Secretary Indian Society for Management Development & Research
Raj Kumar Goel Institute of Technology (MBA),
5-KM Stone, Delhi-Meerut Road,
Ghaziabad-201003

SAARANSH
RKG JOURNAL OF MANAGEMENT
Vol. 3 • No. 1 • JULY 2011

From the Desk of the Chief Editor....

Change is always accompanied by new challenges. One of the major reasons people resist change is because sub consciously they know that ensuing change would demand more from them. It we consider it from the global perspective, we will observe that in the last twenty years the way countries are run has changed drastically. This change has gradually seeped into the mindset and the lifestyle of citizens too. The countries have ceased being welfare nations and have become more economically driven. All the wars being fought in the name of fighting terrorism and insurgencies are purely driven by economic reasons.

This approach demands more from an individual, it expects you to be more capable, more practical and career driven. this has eventually lead to a lot of 'stress' to perform. Stress management of employees is one of the biggest challenges faced by any enterprise of a growing nation.

Management of people has evolved from 'personnel management 'to 'human resources development'. It clearly emphasizes that companies cannot take their employees for granted, they have to continuously strive to keep their employees motivated and 'happy'. One of the main reasons for ever rising NPAs of public sector banks is also the ignorance of proper employee training and development. Grooming should be such that the personal goals are always directed towards the achievement of organizational goals. Here the role of leadership in promoting social resource development is significant. A good leader at any level is always an indispensable asset for any organization.

One of the major exports from India have always been handicraft items. Kashmir is famous all over the world for its hand woven and ethereal rugs and carpets. The present issue includes a case study on how this industry is becoming more environment friendly by the use of green business practices. This issue also includes a paper on the entry of organized retail in India and its probable impact on small retailers.

I would like to extend my sincere thanks towards all who have contributed quality and informative research papers. My heartfelt gratitude to our reviewers who contributed immensely in making SAARANSH a comprehensive and resourceful journal.

Dr. Arvind Singh

Contents

SAARANSH
RKG JOURNAL OF MANAGEMENT
Vol. 3 • No. 1 • JULY 2011

A very warm welcome to Prof P. Chakrabarti
Director
Motilal Nehru National Institute of Technology (MNNIT)
Allahabad

Prof. P. Chakrabarti, Professor of Electronics Engineering and former Head of the Department of Electronics Engineering, IT-BHU, Varanasi appointed as the Director of Motilal Nehru National Institute of Technology, Allahabad on June 3, 2011. Prof. Chakrabarti earned his B.Tech. and M.Tech. degrees from the University of Calcutta, Kolkata in 1980 and 1982 respectively. He earned his Ph.D. degree in Electronics Engineering from the Institute of Technology, Banaras Hindu University in 1988. Professor Chakrabarti has made a significant contribution in experimental and theoretical research in the areas of Microelectronics and Photonics. He has been the Coordinator (2005-11) of the Centre for Research in Microelectronics, Department of Electronics Engineering, IT-BHU and developed a dedicated Photonics laboratory in the Centre. He was the founder Coordinator of the MEMS Design Centre at IT-BHU. Following the tradition of Banaras Hindu University Prof. Chakrabarti established interdisciplinary research linkages involving the School of Material Science and Technology, IT-BHU for developing flexible electronic devices; Department of Physics, Faculty of Science and Department of Microbiology, IMS-BHU for exploring the potential of graphene and other composite materials for developing sensors. During the past one decade Prof. Chakrabarti developed a dedicated research team with his Ph.D. scholars and graduate students working in various areas of microelectronics and nanoelectronics. He has also established strong collaborations with the Optoelectronics Research group, Lancaster University, Lancaster, UK and the Nanomaterials research group, University of New South Wales, Australia. He has published 107 research papers in leading technical journals and 90 research papers in Conference Proceedings. He has delivered numerous invited talks at various National and International Conferences in the country and abroad. He has authored two text books and edited four Proceedings. He is a recipient of INSA Visiting Fellowship and Senior Visiting Fellowship of EPSRC, UK. Prof. Chakrabarti is a Senior Member of IEEE and Executive Member of IEEE India ED Chapter.

We welcome and wish you continued success on behalf of the RKG Group of institutions.

Vinay K. Srivastava

THE ROLE OF LEADERSHIP IN PROMOTING HUMAN AND SOCIAL RESOURCE DEVELOPMENT IN PUBLIC INSTITUTIONS – THE IMPLICATIONS FOR AFRICA

Wisdom Gagakuma* **S. P. Srivastava****

ABSTRACT

Tin Africa, there are many supply-side constraints affecting the continent's capacity to utilize the opportunities of trade for economic growth, development and poverty reduction. Lack of knowledge and skills is one such constraint. This article examines the role of leadership in promoting human and social resource development in public institutions with a special emphasis on Africa. It recognizes that while attention and effort is given to human resource capacity building, the issue of social resource development is largely neglected. This is attributed to the fact that, either the concept of social resource is largely not known or that its complementary role as well as the synergistic advantage that can be derived if integrated with human resource capacity development has not been appreciated. The paper therefore uses existing research and literature to explore this phenomenon and to bring out lessons and conclusions that will create the much needed awareness and knowledge in this field so that leaders on public institutions can focus attention on deploying the two together for better results.

Key words: *Leadership, Human Resource, Social Resource*

INTRODUCTION

Africa's development and indeed the development of the continents of the world is largely possible if public administration can earn the trust of the people, effectively provide services to all and operate in an efficient, effective, transparent and accountable way. In fact, it has been pointed out that, whereas the root causes of intrastate conflict - a common phenomenon in Africa, are usually assumed to be poverty and economic inequality or clashes among different ethnic or religious groups, the central cause of violent conflict is ineffective leadership, weak governance institutions, inappropriate human resources, lack of mechanisms to engage citizens in public policy-making decisions and lack of or ineffective delivery of public services (World Public Sector Report 2010).

The current Aid for Trade and Development initiatives in Africa is focusing attention on helping countries build trade-related capacities in the fields of trade policy, trade development, development of productive capacities and trade-related adjustment measures. There are many supply-side constraints affecting a country's capacity to utilize the opportunities of trade for economic growth, development and poverty reduction. Lack of knowledge and skills is one such constraint (UNCTAD/DTL/KTCD/2009/3, 2010)

The UNCTAD report is of the view that, ensuring that trade policies are development-friendly and adapted to local conditions requires access to knowledge and information, and the availability of wide-ranging skills and capacities. This requirement largely embodies both human and social resource development. Arguably the greater responsibility in achieving this rests with the institutions of higher learning that must ensure that qualified human resources are produced through their graduate programmes, providing research inputs for policymaking, and contributing to policy dialogue on trade and development in their countries. It is presupposed that such human resources with the right leadership qualities and psychologically transformed mindsets will facilitate the establishment of the right institutions, cultures, interpersonal and institutional linkages and cooperation as well the mutual adjustments – social resources, required for socio-economic development that is so urgently needed in the world at larger and in Africa in particular.

In a number of developing countries including African countries, universities are – to a varying extent – in need of support to strengthen their capacities to deliver relevant graduate programmes and research. Given the fast-changing nature and complexity of international economic issues, they also need to stay up-to-date with the most recent developments, and share knowledge, data and materials with their peers, and with other actors involved in the production and use of trade related knowledge (UNCTAD/DTL/KTCD/2009/3, 2010)

The foregoing clearly underscores the importance of the role of leadership in promoting human and social resource development in public institutions. This paper aims at exploring the conceptual definitions of human and social resources, the current state of their development in Africa and what is expected of leadership. Indeed much is expected of the public institutions of higher learning to fill in the gaps through effective capacity building which in the short to long term will facilitate the accelerated growth and development of the African continent.

*Professor, Ph. D. Programmes, Ethiopian Civil Service University, Addis Ababa, Ethiopia
**Professor, Ph. D. Programmes, Ethiopian Civil Service University, Addis Ababa, Ethiopia

SAARANSH
RKG JOURNAL OF MANAGEMENT
Vol. 3 • No. 1 • JULY 2011

Conceptual Definitions of Leadership, Human and Social Resources

Concept of leadership

According to John P. Kotter (1999), leadership is the development of vision and strategies, the alignment of relevant people behind those strategies and empowerment of individuals (and groups) to make the vision happen, despite obstacles"

Whenever a nation has a lack of quality, legitimate and just leaders, national (and corporate) deterioration occurs … Quality leadership is the key to prosperous and peaceful life and nation building. It is obvious that our nations are painfully in need of such leaders. Munroe (1996), clearly points out that, we are desperately in need of effective and efficient managers and leaders. Our homes are crying out for leadership. Our youth are begging for leaders. The answer to all our social, moral and economic problems is qualified and righteous leaders".

Good Leaders must possess relational skills which include effective communication-encouraging the hearer, "generosity", win-win thinking, synergy, proactivity, care, service and humility. Considerations in cultivating key relationships by leaders must include family, vocational and community. In leadership, there is the need to focus on the vision and getting the task done. To do so, team building is needed, not overlooking the fact that individuals have needs – physical, social, psychological etc. that must be satisfied for them to perform at their peak.

Concept of Human Resource

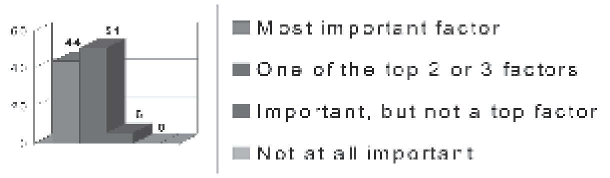
Human resource is a term used to describe the individuals who make up the workforce of an organization, although it is also applied in labor economics to, for example, business sectors or even whole nations. Human resources is also the name of the function within an organization charged with the overall responsibility for implementing strategies and policies relating to the management of individuals (i.e. the human resources). This function title is often abbreviated to the initials HR (http://en.wikipedia.org/wiki/Human_resources).

Human resource is a relatively modern management term, coined as late as the 1960s. The origins of the function arose in organizations that introduced 'welfare management' practices and also in those that adopted the principles of 'scientific management'. From these terms emerged a largely administrative management activity, coordinating a range of worker related processes and becoming known, in time, as the 'personnel function'. Human resources progressively became the more usual name for this function, in the first instance in the United States as well as multinational or international corporations, reflecting the adoption of a more quantitative as well as strategic approach to workforce management, demanded by corporate management to gain a competitive advantage, utilizing limited skilled and highly skilled workers

(http://en.wikipedia.org/wiki/Human_resources).

Human resources comprise the skills, knowledge, abilities and other characteristic such as attitudes etc. possessed by individuals or groups that constitute the labor force of the organization or the nation as a whole. It is these qualities in the human being that brings about the distinctive competencies of an organization or a nation and therefore imparts the needed competitiveness. Skills are critical for sustainable growth and skilled labor is critical for value-added productivity, a key determinant of sustainable growth that improves profitability.

A survey conducted to show how important human capital management is to the success of business reveal the results shown in figure 1 below: Fig. 1: Relative importance of Human Capital Management



Source: 2005 CFO Human Capital Survey, CFO Magazine, December 2005

A complementary study by Accenture (2004), also revealed that, Human Performance Leaders" are more likely to:

- Have high-performance workforces (at least ¾ of the workforce understands the company's strategic goals and how their job contributes to the achievement of those goals.)
- More highly value, and perform better in, HR including having comprehensive measures to understand the link between HR investments and business results

Concept of Social Resources

Li et., al, (2009) writes that, a social network also referred to as "Social Resource" is defined as a finite set or sets of actors that are connected by one or more specific types of relational ties and points out that social ties are likely to reach someone with the type of resource required for an ego to fulfill his or her instrumental objectives. A person who possesses characteristics or controls resources that are useful for attaining the person's goals can be considered a social resource. In their view, a social network is an important source for an individual's social life and career development. Li et., al, (2009) cite Luthans, Hodgetts, and Rosenkrantz (1988) as indicating that, successful managers on average spent 70% more time engaged in networking activities and 10 % more time engaging in routine communication activities than their less successful counterparts. Resources exchanged through networks include work-related resources (such as task advice and strategic information), social identity, norms, and social support (Podolny & Baron, 1997). Social relations also forge a sense of personal belonging. From the view of career development, social networks provide individuals access to resources such as information via direct and indirect links. Kilduff and Krackhardt (1994) demonstrated that a strong tie to a prominent person in an organization tended to boost an individual's performance reputation. Seibert et al. (2001)

explored the effect of social capital, which was conceptualized as a social network, on career success and found that social networks facilitate career success through three network benefits: access to information, access to resources, and career sponsorship.

Resources can be classified in two categories: personal resources and social resources. Personal resources are resources belonging to an individual; they include such ascribed and achieved characteristics as gender, race, age, religion, education, occupation, and income as well as familial resources. These resources are in the possession of the individual and at the disposal of the individual. Social resources, on the other hand, are resources embedded in one's social network and social ties. These are the resources in the possession of the other individuals to whom ego has either direct or indirect ties. A friend's car, for example, may be ego's social resources. Ego may borrow it for use and return it to the friend. Ego does not possess the car, and accesses and uses it only if the friend is willing to lend it. The friend retains the ownership. Similarly, a friend's social, economic, or political position may be seen as ego's social resources. Ego may seek the friend's help in exercising that resource in order for ego to obtain or achieve a specific goal (Encyclopedia of Sociology, 2001).

Peter Tammes, (2007) asserted that although the Holocaust may be an incomparable tragedy on its own, Jews had to decide on their survival strategy to escape Nazi persecution. Jews in the Netherlands who faced Nazi persecution during 1940–45 themselves referred to what they called the essential 'Vitamin R', or having the right relationships. Tammes continues in his writing that Jews who asked for help directly had a better chance of receiving help. Moreover, they concluded that Jews were more likely to ask people whom they knew and trusted and that these observations do indicate the importance of specific types of social resources.

Social resources indicate that certain actors are connected to others in some way. Peter Tammes, (2007) cite Portes as distinguishing family support as well as extrafamilial support. These connections and social support constitute much of the actors' social capital. Different perspectives of social capital can be incorporated into a more comprehensive theory of bonding, bridging and linking. This indeed is what is needed for the survival and development of communities and nations.

The current State of Human and Social Resource Development in Africa's Public Institutions

Currently, human resource and social development in Africa is froth with several challenges. Weak institutional linkages have resulted in little or no cooperation and interactions that bring about synergies for sustainable growth and development. There are instances of duplication of efforts by different public institutions as a result of a clear lack of harnessing of the social resources. On the human resource development front a study conducted in Ghana by Antwi, K B., Analoui, F., Cusworth, J.W, (2007) indicated that currently there are several challenges confronting human and social resources development in public institutions in Africa in general and in Ghana in particular. These challenges are categorized as policy induced challenges, skill/ task/ organization induced challenges and performance-motivation induced challenges. The study cites unclear career development path, lack of people with required skills and competence, inadequate funds for training and development of people, unequal training and development opportunity for all staff, poor interpersonal relationship among staff, individual interest in jobs with financial gains, inadequate recognition delays in promotions, low job satisfaction due to poor salaries and no HR department with trained professionals among others.

The Leadership Role – What is Expected of African Leaders?

The following are suggested for leaders on the continent to contribute to building the human and social resource capacities needed for the growth and development of the African continent.

i. Vision – seeing the future outcome today.
ii. Transvisioning: Ability to communicate the vision.
iii. Influencing others to follow:
   a. Putting in place strategies to realise the vision.
   b. Change Management
   c. Producing other Leaders
iv. Develop the requisite human and social resource competencies in terms of character (trustworthiness, integrity, honesty, humility, hard-work and modelling the way), control competencies (domain expertise and leadership skills) and relational skills (communication, encouraging the hearer, "generosity", win-win thinking, synergy, proactivity, care, service and humility).
v. Leadership has to recognize that all people have basic dignity. People have the right to help make decisions on issues that impact their well-being. Participatory democracy is the best way to conduct a community's civic business. People have the right to strive to create the environment they want. People have the right to reject an externally imposed environment. The more purposeful interaction and dialogue within a community, the more potential for learning and development. Implied within a process of purposeful interaction is an ever-widening concept of community. Every discipline and profession is a potential contributor to a community development process and that motivation is created through interaction with the environment (http : / / lcn.louisianaeconom icdevelopment.com / uploads/ppt)
vi. Craft resource development strategies. These are a plan that defines how the human resources would be utilized through the use of an integrated array of training, organizational development and career development efforts to achieve individual, organizational objectives. The major components of this strategy must include but not limited to the following:

SAARANSH
RKG JOURNAL OF MANAGEMENT
Vol. 3 ● No. 1 ● JULY 2011

a. Communications Strategy- In today's changing scenario, it is essential to educate and train employees about the change

b. Accountability And Ownership Strategy - Employee's accountability and ownership leads to higher productivity and customer excelleration.

c. Quality Strategy - Quality needs to be fostered in the employees through training and development.

d. Cost Reduction Strategy - Every employee's contribution in savings is crucial as small contributions from each employee can be pooled by organizations to save substantial savings at the end of a given period and enhance its competitive strategy.

e. Intrapreneurship Strategy - Every employee needs to be an independent entrepreneur, who can generate ideas and bring them to reality by using the existing resources and support of the org to create innovative and creative products and services.

f. Culture Building strategy - Organizations valuing its employees have a sustainable competitive edge over competitors because employees are highly charged, motivated and commitment to the organization.

g. Systematic Training Strategy - The planning and organization of formal on-job training and off-job training leads to improving vital employee characteristics, build and sustain appropriate work culture and brings in more professionalism in action.

h. Learning Strategy - Continuous development and learning environments promote self development of employees, of self and by self.

(Adapted from: http: // www. authorstream.com / Presentation/richadinker-85389-human-resource-development-strategies-ppt,)

Conclusion

Leadership is cause; everything else is effect. Leadership requires science and art, logic and intuition as well as rules and judgment. It is a truism that for African leadership in public institutions to make significant strides towards producing the required human and social resources needed for accelerated transformation of the continent in socio-economic terms, not only should attention be given to the underlying skills and competencies outlined in this paper but instead greater energy must be deployed in transforming the psychological disposition of the leaders of the current and future centuries. Looking into the future, the process of indoctrination for the right frame of mind and psyche must begin with our infants in both the private and public institutions of our nations.

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AN ANALYTICAL STUDY OF VALUATION MODELS OF INTANGIBLE ASSETS

R.L. Tamboli* **Shikha Sharma****

ABSTRACT

The paper considered highlighted three popular models related with valuation of Intangible Assets out of the eight valuation models developed recently in the first decade of 21st Century. A new look on the models related with intensiveness will serve better treatment of intangible assets. Although a number of intangible assets are there yet a few models are developed specifically for intangible assets.

***Keywords**: Tangible Assets, Intangibles Assets, Valuation Models*

INTRODUCTION

The present age is age of knowledge based economy and technical know-how and the most of the Intangible Assets (IAs) are created on the basis of knowledge and technical ideas. Therefore, it is better to highlight on the philosophy and concepts of intangible assets before making an attempt to do a scientific study of valuation models related with intangible assets. Generally, on intangible asset is an asset which has emense value for the business but without having physical existence. The term intangible Assets (IAs) defined in the Dictionary of Accounting by **Warshawe D. Cooper (2005)** as items such as goodwill, intellectual property including copyright, patents and trademarks. According to the Accounting Standard – 26 the term Intangible Assets is an identifiable not monetary assets, without physical substance, held for use in the production of supply of goods or services, rental administrative purpose. The Australian intangibles exposure draft; AARF ED (1989) stated IAs as non-monetary assets without physical substance includes brand names, copyright, franchises, intellectual property, licenses, patents, and trademark. **Hendriksen (1982)** rightly observed that the lack of physical substance may not be considered as the main difference between tangible and intangible assets and suggested that the most important single attribute of intangibles is the high degree of uncertainty associated to the future benefits expected from them.

The Intangibles Research Center of the Stern School of the New York University (1990) expressed as non physical sources of future economic benefits to an entity or alternatively all the elements of a business enterprise that exist in addition to monetary and tangible assets. Alternatively intangibles as non physical sources of probable future economic benefits to an entity that have been acquired in an exchange or developed internally from identifiable costs, have a finite life, have market value apart from the entity, and are owned or controlled by the entity. In opinion of **Egginton (1990)** which entail legal rights in relation to specific person (real or corporate) as well as assets with a physical existence and defined intangible assets as those which either entail legal right in relation to persons at large (such as patents as trade names usually referred to as separable intangible assets), or entail expectations of economics benefits which carry no legal right (goodwill). **C.P. Gupta (2006)** A legal claim to some future benefits, typically a claim to future cash, goodwill, intellectual property, patents, copyright and trademarks are examples of intangible assets. **Ph. Collin, Adrian Joliffe (1996)** Intangible fixed assets or intangible assets, such as copyright, patent, goodwill etc., which exists and have a value but cannot be seen. **Arthur Andersen (1992)** defined as resources controlled by the enterprise which are non physical in nature, capable of producing future economic not benefits and protected legally or through de facto right. **Stickney** and **Weil (1994)** opined as which can provide future benefits without having physical form such as investment in research and development, patent, advertising and goodwill. **Vosselman (1998)** proposed as comprising the current capital expenditure for intangible products that became available in the period under review and that remain in use for more than one year. Notwithstanding, he acknowledges that the distinction between investment and operating costs is difficult for intangible, as they are usually related to services. **Jeffrey H. Matsuwera (2004)** defined that the intellectual property includes all material that can be protected and managed under traditional legal principles of patents, copyrights, and trademarks. Intangible assets are those intangible materials that have commercial value, but are not in a form eligible for traditional intellectual property law protection. **Sylvain Roy (2004)** suggested that the value of an assets is best determine by the market, in the form of a transaction between two unrelated entities dealing at arm's length, unfortunately, intangible assets and IP that will eventually support products seldom benefit from open market conditions, either due to novelty or secrecy factors. **Kelvin King (2006)** Intellectual capital is recognized as the most important asset of many of the world's largest and most powerful companies, it is the foundation for the market dominance and continuing profitability of leading corporations. It is often the key

**Professor, Department of Accountancy & Statistics (Accounting & Finance Area), UCCMS, Mohan Lal Sukhadia University, Udaipur 313001, India*
***Ph.D. Research Scholar, Department of Accountancy & Statistics, UCCMS, Mohan Lal Sukhadia University, Udaipur 313001, India*

objective in mergers and acquisitions and knowledgeable companies are increasingly using licensing routes to transfer these to law tase jurisdictions.

Classification of IAs: As per observation made as above, there are a number of intangible assets such as goodwill, copyright, trademarks, Intellectual Property Right (IPR), patent right, brand names, scientific and technical know-how, design, advertisement, innovation of new process of product layout, license, market knowledge, legal claim on future benefits, franchises, prepayment, advances, financial assets, (shares, debenture, bonds and other hybrid securities including preference shares), investment in Research & Development, and Quotas-Rights. These different IAs are classified by the different scholars which may be reproduced as given below:

C.P. Gupta (2001) classified as (i) intangible fixed assets and non monetary fixed assets (without physical substance), (ii) purchased and non purchased, and (iii) identifiable and non identifiable eg. Goodwill can only be capitalized if purchased (for purchased consideration), but other intangible assets also be capitalized if created by the company itself as per Companies Act, 1956. **Mortensen, Eustance** and **Lannoo (1997)** classified into four categories viz., (i) Innovation capital (R & D), (ii) Structural capital (intellectual capital and knowledge assets, organizational coherence and flexibility, and workforce skills and loyalty), (iii) Executory contracts (operating licenses and franchises, media and other broadcast licenses, agricultural and other production quotas in regulated industries, maintenance, servicing and environmental contracts, and risk hedging financial instruments, derivatives, etc.), (iv) Market capital (brands, trademarks and mastheads) and goodwill. Similarly, **Guilding** and **Pike (1990)** classified into four categories viz., (i) Value creator (advertising, product development and other marketing support), (ii) Marketing assets (trademarks, brands, entry barriers and information systems), (iii) Value manifestation (image, reputations and premium price), and (iv) Competitive value advantage. **Brooking (1997)** first defined that Intellectual capital is the difference between the book value of the company and the amount of money someone is prepared to pay for it, then after distinguished into four categories of intellectual capital viz., (i) Assets which give the company power in the market place, (ii) Those representing property of the mind, (iii) Those which give the organization internal strength, and (iv) Those derived from the people who work in the organization.

Research Methodology

Research Lead – What should be exact treatment and valuation of Intangible Assets. A still in dollrob. Therefore a search of valuation models which can provide appropriate base in order to the following accounting process related to Intangible Assets. In simple word which model is suitable for valuation of particular Intangible Assets and how should be recorded and disclosure in the books of accounts. These thinks remains a matter of search out the fact therefore the paper and entitled An Analytical Study of Valuation Models of Intangible Assets organised. While reading Acccounting Standard 26 regarding Intangible Assets as issued by the ICAI questions arised whether standard having consistency with the models developed by the thinkers.

Objectives – The paper aimed to reach on certain conclusions with the following objectives – (i) To study the nature, scope, types, and classification of the Intangible Assets. (ii) To search out appropriate model for the particular Intangible Assets or a group of Intangible Assets. (iii) To access the consistency regarding the valuation and Accounting Standard are suggested models of Intangible Assets. and (iv) To developed individual or comprehensive model of Intangible Assets.

Hypothesis – (i) A single model is not applicable to all of the Intangible Assets. (ii) Accounting procedure of Intangible Assets are not based on the models developed by the scholars. and (iii) There is not consistency between set models and Accounting Standard 26.

Study Period – By the way the development of the Accounting of Intangible Assets, it continuous started the study of valuation process and the scholars of accounting to present their views in the disclosures of valuation of Intangible Assets and also present the different valuation models and disclosures. But the present research paper is concentrate in the 21st century developed models.

Collection of Data & Material – The present study will use primary and secondary data besides informations, figures and facts related in the valuation models of Intangible Assets. Main sources will be internet, journals magazines and news papers, libraries etc. The collected data, information, other figures and facts will be analysed using certain statistical, accounting and financial techniques.

Survey of Literature - From the very beginning, intangible assets remained a subject of enquiry by the researchers, academicians and scholars in the field of Accounting and Finance. Simultaneously, the valuation of intangible assets also remained in the center focus for the researchers, authors and learned persons. A number of the studies organized on IAs taking one another aspect of goodwill, patent, copyright, trade marks, brand names, scientific and technical know how, intellectual property etc. but here a few studies are being referred as given below keeping in the views that the present study will cover a detail survey of literature:

Arkblad, Carolina, Liselotth and Milberg (2006) in their paper entitled "Accounting for Intangible Assets – Relevance Lost? cleared that intangible assets are getting more and more importance to companies and their owners as the economy has changed from being industrial to knowledge based. It is no longer the industrial value chain that creates value, it is innovation and constantly seeking new ways of meeting market demands, companies can no longer differentitive advantages without intangible assets. However, uncertainty connected with intangible assets, accounting cannot capture their increasingly important value.

Bryce J. David, Knott Marie Anne and Posen T. Hart (2003) in their paper entitled "On the Strategic Accumulation of Intangible Assets" cleared that firms can earn supernormal returns if and only if they have superior resources protected by isolating mechanism that has been proposed for intangible assets is their accumulation process with a hypothesis that intangible assets are inherently inimitable because would be imitators need to replicate the entire accumulation path to achieve the same resources position.

C. Dragonetti, Nicola, Jacolsen Kristine, Nick Bontis and **Roos Goran (1999)** in their paper entitled "A Review of tools available to measure and manage intangible resources" felt need for review of the most important tools available to managers and highlighted four measurement systems viz; (i) human resource accounting (ii) the balanced score card, and (iii) intellectual capital.

Cazavan Jeny Anne and Herve Stolowy (2001) in their paper entitled "International accounting disharmony: the case of intangibles" explained that application of all international standard is necessary in order to comply officially with International Accounting Standard. This appears to be a key statement for the move towards accounting harmonization. The feasibility of this kind of harmonization could be jeopardized if even one standard is "rejected" by companies.

Guthrie, James and Petty Richard (2006) in their paper entitled "Intellectual Capital Literature Review : Measurement, reporting and management" observed that the rise of the new economy one principally driven by information and knowledge is attributed to the increased prominence of intellectual capital as a business and research topic intellectual capital is implicated in recent economic, managerial, technological and sociological developments in a manner previously unknown and largely unforeseen. Whether these developments are viewed through the filter of information society, the knowledge based economy, the network society, or innovation, there is much to support the assertion that IC is instrumental in the determination of enterprise valued and national economic performance.

Hussi, Tomi (2004) in his paper entitled "Combining intellectual capital, intangible assets and knowledge creation" observed that intellectual capital, intangible assets and knowledge creation are all concepts that are strongly linked to the phenomenon of knowledge management.

Matsura H. Jeffrey (2004) in his paper entitled "An Overview of Intellectual Property and Intangible Assets Valuation Models" stated that the economic models applied to estimate the value of intellectual property and other forms of intangible assets. He highlighted key strengths and weakness of these models.

Powell Stephen (2003) in his paper entitled "Accounting for intangible assets: Current requirement key players and future directions" explained current requirement for intangible assets, identified the key trend setters and considers potential future directions in the area of accounting for intangible assets. He felt that accounting for intangible assets is one of the least developed areas of accounting theory and regulation. This article makeup part of the special forum devoted to furthering debate on accounting for intangible assets.

Villalonga Belen (2003) in his paper entitled "Intangible resources, Tobin's Q, and sustainability of performance difference" cleared that the greater the intangibility of a firm's resources, the greater the sustainability of its competitive advantage. He opined that resources intangibility may be measured by: (i) Tobin's Q and (ii) the predicted value from a hedonic regression of Q on several accounting measures of intangibles while sustainability is measured by the persistence of firm specific profits.

Wyatt Anne (2001) in his paper entitled "Accounting for intangibles: The great divide between obscurity in innovation activity: analysed that descriptive data from a discretionary accounting setting and several generic properties of intangible assets are grossly under – recognized in company balance sheet. He generated the debate surrounding recognized demonstrating how economic attributes of intangible assets arise from generic features of innovation activities, match between accounting principles and the economic attributes of intangible assets.

Scope for Future Research – The present paper focused on the central issue of valuation models regarding Intangible Assets. Inspect of the fact open a number of avenues ness to organised different studies considering any of the aspects of Intangible Assets and related models. A study organised on a disclosures parties and Intangible Assets models. Similarly a comparatively study of Indian V/s International Intangible Assets Models. A comparative study of accounting standard of Intangible Assets and models may also be organised.

The IAs Models

I. Matsuura H. Jeffrey (2004) in his paper entitled "An Overview of Intellectual Property and Intangible Assets Valuation Models" He explained four models, for valuation of intellectual property and other intangible assets, viz; (i) Cost Based Models, (ii) Market Based Models, (iii) Income Based Models, and (iv) Option Based Models and highlighted that how these models value the intellectual property right (IPR) and other intangible assets differently. **(i) cost based models** estimates the value of the assets that is tied to the cost to create or acquire the asset but does not address the potential future benefits. The model is backward looking and often included some form of adjustments for depreciation of the assets over time. Different companies choose to incorporate different costs into their models. The models are not provides a true estimate of the value of intangible assets. Instead, applied in response to specific regulatory requirement needed for accounting and tax purposes. The model is simple and accepted by regulators for tax or audit purpose. The utility of cost based models is limited, as the models do not present a complete picture of the potential application for the assets. For example, revenues derived from licensing and value created through direct use of the asset are not effectively captured or recognized in most cost based valuation models. Cost based models do not capture the full impact for legal costs associated with obtaining and maintaining intellectual property rights (costs of patent protections and maintenance; for example), they do not reflect the impact of other legal activities on the value of the assets. For example, cost based valuation models do not evaluate, in any way, the future enforceability of patent or other intellectual property rights. **(ii) market based models** estimate the value of intellectual property assets by looking to the market place. Assets that are comparable to those in question are identified, and the licensing revenue actually derived from those comparable assets in the market place is used as an estimate of the value of the new assets. A significant problem associated with market based valuation models is appropriate choice of comparable intangible assets. It is often difficult to identify an appropriate, truly comparable, and assets. The models fail to account for the full range of legal activities that affect intangible assets value. To the extent that the comparable assets that form the basis for the valuation model have legal characteristics comparable to those of the company applying the model, the legal attributes includes in the model are more likely to be valid. (iii) income based models make use of forecast future revenues to develop a current estimate of assets value. Under this valuation model, an intellectual asset's value is primarily established by the royalty revenue it can generate in a licensing structure. These models adopt a forward looking perspective, estimating future earnings that can be derived from commercial use of intangible assets. Different companies apply different definitions and projections regarding revenue forecasting. As a consequence of this diversity, the income based valuation model differs, in practice, from company to company. The models can be expanded assets based on estimates of future cash flow estimates associated with a particular asset. These models project future earnings and expenditures attached to the asset. The net present value of the future cash flows is calculated so that the estimated potential value of the asset can be compared with similar estimates for other potential projects, and current resource allocation decisions can be made based on comparative future value of different projects. The models function best when there is accurate information to support the future income and cash flow projections in the commercial or established market. Income based models are less effective when market information is sketchy or speculative. The models do not fully account for the impact of legal rights on intangible asset value. Those models can effectively capture the costs associated with obtaining and maintaining intellectual property rights. However, they do not assess the costs associated with enforcement of the legal rights that are tied to the assets. (iv) option models an option is a choice that can be exercised at a specific time, but need not be exercised. Owners of intellectual property have a variety of choices about the development and commercial use of their property. Those options include: what form of intellectual property rights to invoke, whether to license the asset how to price the asset, and when to apply legal means to enforce rights associated with an asset. Option models attempts to estimate economic value for each of those choices. The estimated economic values of the different option can be combined and compared, thus providing an analytical framework for selecting a commercialization strategy. Companies define and identify option differently, which may be quite varied in structure and result. Option models are most effective when the various options can be readily identified and valued and when the values for the options are stable, and not subject to dramatic shift in value. Options models also perform more effectively when the options have set terms and cannot be exercised before they mature.

II. Kelvin King (2006) in his paper "The value of Intellectual Property, Intangible Assets and Goodwill", classified valuation models into three major limps viz; (i) Market based, (ii) Cost based, and (iii) Base on estimates of past and future economic benefits, which determine the value of IPR, Trade Mark, and Brands. **(i) market based methods** In valuing an item of intellectual property, the search for a comparable market transaction becomes almost futile due to lack of compatibility, as intellectual property is generally not developed to be sold and many sales are usually only a small part of a larger transaction and details are kept extremely confidential. There are other impediments that limit the usefulness of this method, namely, special purchasers, differently negotiating skills, and the distorting effects of the peaks and through of economic cycles. **(ii) cost based method** such as the "Cost to create" or the "Cost to replace" a given asset, assume that there is some relationship between cost and value and the approach has very little to commend itself other than ease to use. The method ignore changes in the time value of money and ignore maintenance. **(iii) based on estimate of past and future economic benefits** also referred to as the income method which can be broken down in to four limbs (a.) Capitalization of historic profits, (b.) Gross profit differential method, (c.) Excess profit methods, and (d.) The relief from royalty method.

(a.) Capitalization of historic profits arrives at the value of IPRs by multiplying the maintainable historic profitability of the asset by a multiple that has been assessed after scoring the relative strength of the IPR. A multiple is arrives at after assessing a brand in the light of factors such as leadership, stability, market share, internationality, trend of profitability, marketing and advertising support and protection. While this capitalization process recognizes some of the factors which should be considered, it has major shortenings mostly associated with historic earning capability. The method pays little regard to the future.

(b.) Gross profit differential methods are often associated with trade mark and brand valuation. These methods look at the differences in sale prices, adjusted for differences in marketing costs. That the difference between the margin of the branded and/or patented product and an unbranded or generic product. This formula is used to drive out cashflows and calculate value. Finding generic equivalents for a patent and identifiable price differences is far more difficult than for a retail brand.

(c.) **The excess profit method looks** at the current value of the net tangible assets employed as the benchmark for an estimated rate of return. This is used to calculate the profits that are required in order to induce investors to invest into those net tangible assets. Any return over and above those profits required in order to induce investment is considered to be the excess return attributable to the IPRs. While theoretically relying upon future economic benefits from the use of the asset, the method has difficulty in adjusting to alternative used of the asset.

(d.) **Relief from royalty** considers what the purchases could afford, or would be willing to pay, for a finance of similar IPR. The royalty stream is then capitalized reflecting the risk and return relationship of investing in the asset.

III Sylvain Roy (2004) in his paper entitled "Intellectual Property Valuation" explained three approaches for intellectual property and other intangible assets viz; (i) Cost Approach, (ii) Market Approach, and (iii) Income Approach and determine the approaches how value estimate the intellectual property and Intangible Assets differently. **(i) cost approach** that is the cost to create or recreate the asset, based on several economic principles such as the principle of substitution, the principle of externality, the principle of functional, technological and economical obsolescence and finally the principle of shift in supply and demand. **(ii) market approach** that is the sales of comparable intellectual property, where a "Somewhat" similar deal could be used for the purposes of comparison. In the absence of a buyer - seller or a licensor – licensee relationship, the valuation process using the market approach seeks to reproduce the context in which a transaction would normally take place in an open market. Because transaction on comparable IP can be structured in different ways, the research and development of comparables and metrics, particularly for royalty rates, remains complex and time consuming. **(iii) income approach** which is based on the future economic benefits produced by the intellectual property. The various income valuation methods may be grouped into two analytical categories: (i) Direct Capitalization, and (ii) Discounted Future Economic Benefits. In a direct capitalization analysis, the appropriate measure of economic income for one period is defined and divided by an appropriate investment rate of return, which may be derived from the expected useful market life for the IP. In discounted future economic benefits analysis, the appropriate measure of economic income is projected for several time periods in the future. This projection of prospective economic income is converted into a present value by the use of a present value discount rate. This discount rate is consistent with the rate of return that would be required by an investor over the expected term of the economic income projection.

Accounting of Intangibles Assets

Accounting of intangibles assets follows some of the general principles used for tangible assets. They are both initially recorded at cost. Some intangibles are amortized and other are not amortized, but instead are reviewed for impairment. Those that are amortized are reported on a company's balance sheet at the book value, which is the cost less the accumulated amortization. The specific issues related to whether or not a company amortizes an intangible assets and the measurement of any amortization expense on its income statement in the sections. The other accounting principles of intangibles assets also applying. Thus the principle used for the determination of acquisition cost, capital and operating expenditures, impairment and disposal apply to both tangibles and intangible assets.

Cost of Intangibles

Intangibles may be classified by a company according to whether they are purchased from other (externally acquired) or internally developed. In addition they may be classified according to whether they are identifiable or unidentifiable. Identifiable intangible assets include such items as patents, franchises, and trademarks, whereas the primary unidentifiable intangible assets are goodwill. These classifications lead to the four alternatives and the proper method of accounting for each. **(i) Purchased identifiable intangibles:-** A company may purchased an intangibles assets, such as a patent, from another company. The initial accounting for acquisition of purchased intangibles presents no special issues and is handled in the same manner. **(ii) Purchased Unidentifiable Intangibles:-** A company capitalizes the cost of a purchased unidentifiable intangibles assets. The principle example of an unidentifiable intangible is goodwill which can be acquired only through the purchase of another company or segment of a company. **(iii) Internally Developed Identifiable Intangibles:-** When a company internally develops an intangibles asset, such as a patent, it can capitalize only certain costs. The costs of a patent include the legal and related costs of establishing the right associated but not the cost of developing the product or process that. A company includes those latter costs in research and development cost and must expense them as uncurred. Thus, the expensing of research and development costs represents general rule of capitalization of internally developed identifiable intangible. **(iv) Internally Developed Unidentifiable Intangibles:-** A company expenses the costs of internally developed unidentifiable intangibles. Such as employee training and design of quality products, as incurred even though they may be expected to have benefits extending beyond the current period, the measurement of the costs incurred or the determination of the expected life of the benefits is difficult to measure reliably. **(v) Amortization or Impairment:-** Intangible assets are separated into two categories to determine whether or not they are amortized, and how they are review for impairment. **(a.) Intangible Assets with a finite life are Amortized:-** An identifiable intangible assets such as a patent that has a finite life is amortized over its useful life. That is the useful life is the period over which the assets is expected to contribute directly or indirectly to the future cash flow of the company, a company should consider in estimating the useful life of an intangible assets include (i) the expected life of the assets, (ii) the expected useful life of another assets that is related to the life of the intangible assets, (iii) any legal, regulatory, or contractual provision, (iv) the effects of obsolescence, demand, competition, and other economic factors, and (v) the level of maintenance costs required to obtain the expected future cash flows from the assets. The calculation of the amortization of intangible assets follows the same principle as the depreciation of tangible assets. The amount of an intangible asset to be amortized is the cost less the residual value, if any. As with depreciation, a company selects the amortization method based on the expected pattern of benefits the intangible asset will produce. If the company cannot reliably determine the pattern then it must use the straight line method.

(b.) Intangible Assets with an Indefinite Life are Reviewed for Impairment:- Some identifiable intangible assets, such as trademarks and trade names, have a potentially indent finite life. An intangible asset with an indefinite life is not amortized, but is reviewed for impairment. A company tests an intangible asset for impairment by first estimating the fair value of the asset. The fair value of an intangible asset is the amount at which the assets could be bought or sold in a current transaction between willing parties. However, quoted market price is often unavailable for an intangible assets, a company may estimate the value by using the value of similar assets, or by using present value techniques. An intangible asset is impaired when its fair value is less than its carrying value. The loss is recorded by debiting an impairment loss account and crediting the intangible asset account.

Accounting for Goodwill

Goodwill is a difference between the purchase price and the book value while acquired. Goodwill arises either/or in two different ways such as internally generated or acquired through acquisition of another business of company. Goodwill is valued following two different approaches viz; (i) the residuum approach, and (ii) the excess profits approach. According to the first approach goodwill is difference between the purchase price and fair market value. The excess profits approach considered goodwill as the difference between the combined company's profits over normal determined profit but future earning have no certainty. Goodwill may be categorised as: (i) internally generated, (ii) purchased, and (iii) business combination and goodwill.

(I) Internally Generated Goodwill recognizes the economic value of a business. Internally generated goodwill is purchased such as name, developed market, managerial talent, labour force, government relations, ability to finance operations easily, etc. Such non-purchased goodwill have not been capitalized. The primary reason for not accounting for goodwill developed in this manner is the absence of generally accepted objective of measurement.

(ii) Purchased Goodwill arising on the acquisition of one business by another being excess of the purchase price of the acquired business over the fair value of its net tangible and identifiable assets. The pronouncements on accounting for goodwill in the United States and Canada apply equally to goodwill arising upon; (a.) Acquisition of the net assets of a business, (b.) Preparation of consolidated financial statements when the purchase method of accounting is followed for investing in companies consolidated, and (c.) Accounting for investments by the equity method.

(iii) Business Combination and Goodwill are events or transactions in which two or more business enterprise or their net assets, are brought under common control as a single accounting entity. The term "Mergers and acquisitions" are also referred to as business combination.

Accounting Methods for Goodwill

The three qualitative characteristics most directly concerned with goodwill are reliability prudence and consistency. Although much has been written on the problem of accounting for goodwill during the past century a solution remains elusive. The treatment of goodwill has changed over the years. The four different methods of accounting for goodwill are following **(i) Write-off** goodwill is immediately written off against an account in the stockholder's equity section, generally retained earnings. Another rational for this method is that overpayment for the assets of the company represents the expectations of superior future earnings. Since these earning eventually end up in the stockholders equity, they can be offset against the excess acquisition payment. Writing off goodwill immediately can bad to distorted results when tangible assets are undervalued allowing goodwill to be overstated. **(ii) Capitalization** This approach's proponents argue that if goodwill is an important as assets as many believe, it belongs on the balance sheet. **(iii) Non Amortization** Capitalization of goodwill without amortization allows the most advantageous financial reporting figures. A company gets to record an asset instead of a decrease in stockholders equity and net income is not periodically reduced. However, it probably would result in more abuse than any other method. The rationale for non-amortization is premised on the notion that goodwill does not decrease in value. High managerial ability, good name and reputation, and excellent staff generally do not decrease in value but they increase in value. **(iv) Amortization** enables companies to match the cost of intangible assets over the period deemed to benefit from their acquisition. Main arguments for amortization are the abuse of non-amortization and the unreliability of earnings without some attempt to recognize the impact, when amortization became required, the period for write-off became the focus. If the life of the asset is non determinable, which is normally the case with goodwill, amortization over a maximum of forty years should be used. This lengthy period was set to allow a minimum impact to the net income.

Valuation Models of Goodwill

There are following models of valuation of goodwill

(I) Average Profit Method is valued on the basis of average profits of past few years. Value of goodwill is certain number of years purchase price of average profit. Average profit generally profits of previous four of five years are considered. Past profits may require some following adjustments. (a.) Any non recurring or casual income will be deducted from profit. (b.) Any abnormal loss or non-recurring expense will be added back to profit. (c.) Profits will be corrected for any mistakes detected at the time of valuation. (d.) Average profit of past years will be increased for any expected income in future. (e.) Similarly average profit will be reduced for any expected expense in future. Normally simple average of past profits will be calculated, but in case past profits shown a constant increasing or decreasing trend, it is better to calculate weighted average.

Formula:–

Goodwill = Average Profit x Number of year purchase.

(ii) Super Profit Method is calculated on the basis of annual super profit. The formula for calculation of goodwill is a under. G/W = Annual super profit x Number of years. What is the Normal Profit: It is the profit which is expected by the proprietor from the business proprietor expects that a reasonable interest should be earned on the capital invested by him. The two rates (interest rate and risk rate) may be given separately in the question or a consolidated rate may be given. If these two rates are given separately, total of these two rates will be treated as normal rate.

(iii) Capitalisation Method is valued on the basis of capitalized value of business means the value which a buyer of business will be ready to pay for a particular business.

Formula:

(i) Capitalisation of Average

$$G/W = \frac{\text{Average profit} \times 100}{\text{Normal Rate}}$$

(ii) Capitalisation of Super Profit

$$G/W = \frac{\text{Annual Super Profit}}{\text{Normal Rate}} \times 100$$

(iv) Annuity Method time value of money is also considered. This method is an improvement over super profit method. Under super profit method annual super profit is multiplied by the number of years during which super profit are expected to be earned. Under annuity method, interest factor is also taken into consideration. The value of goodwill under this method is the present value of future annual super profit.

Formula:-

G/W = Annual Super Profit x PVR

PVR = (Present Value of Rupee one)

Valuation of Patents

Patents provide exclusive right to produce or sell new inventions. When a patent is purchased from another company, the cost of the patent is the purchase price. It a company invents a new product and receives a patent for it, the cost includes only registration, documentation, and legal fees associated with acquiring the patent and defending it against unlawful use by other companies.

Valuation of patent or patent application, whether explicitly or implicitly involves making judgements about the future in much the same way that stock market prices have embedded in them judgements of investors about the future performance of a company. In valuing a patent from any underlying invention, the fundamental issue as outlined above, first determine is by how much the returns from all possible modes of exploitation of the patented invention are greater than those that would be obtained in the absence of the patent. Making such a distinction is difficult even when the returns from the patented invention are well defined. However are well defined. However in the early life of the patent or application many other types of uncertainty are also involved. A patent viewed as a financial project running from filing the application to expiry of the granted patent possible twenty years later is thus a far from straight forward one. All shorts of outcomes are possible and there are many stages in the application process when it may be abandoned or after grant, when annual renewal fees become payable, when the resulting patent may be allowed to lapse. Additionally, at the end of the first year from the initial application the applicant may decide to file corresponding applications abroad thus considerably expanding the "application" in the broader sense. Any decision free describing it is thus going to be very complex and more of a decision forecast.

Valuation Models of Patents

Russell & Parr (1994) divide all possible type of valuation of individual patents into Cost, Market and Income Based Methods, the latter of which includes simple CDF methods. **Arthur Anderson (1992)** in a report on valuing intangible assets divide valuation methods into Cost, Market Value and Economic Value methods. However for the purpose of this decision it is perhaps better to classify valuation method for individual patents by the extra features they account for over and above less sophisticated method. These can be summarized in increasing order of sophistication as: **(i) Cost based methods:-** Accounting for Historical costs knowledge of at least the future costs of creating IPRs is needed as part of almost all valuation methods. However, valuation methods based on the histroic costs of acquisition perhaps less any allowances for depreciation or obsolescence are worth only the very briefest of comment. Their most serious failing is that they make no allowance for the future benefits which might accure from the patent. They are of no help other than in historical cost based accounting systems or where taxation methods dictate their used and useless for making rational decisions. **(ii) Market based methods - Accounting for market conditions:-** The aim of market based methods is to value assets by studying the prices of comparable assets which have been traded between parties at arm's length in a active market. The cost of an IPR is a possibly useful guide to its value is when the cost concerned is the price paid for the same IPR in a very recent comparable commercial transaction. In other case, comparability with other patents whose value is known from market transaction is the main problem. There is a risk that the comparisons made way not be justified and be no more than convenient measures of value. Market based valuation methods may also be based on comparable royalty rates. Royalty rates selected on an industry average rate can also have problems. Royalty rates set using returns to R & D costs or return on sales figures for the company or industry for example run the risk of valuing costs or other factors rather than value. However, whilst such a methods may be a vaild way of discovering the implicit market valuation of a "patented product", one cannot be sure that it provides an objective valuation. A more fundamental problem is that one is using a stock market valuation of the company as a basis for estimating the value of its IP and IPRs. One is thus making an assumption that the market is perfectly informed about the IPRs of the company and can calculate their value. It that is the case though, there is no reason why those who wish to calculate the value of the IPRs should not do the same calculations or have the same insights. **(iii) Income based methods – Accounting for future value:-** Improvements on cost based methods of valuation include at least some forecast of future income from a patent and thus some appreciation of the value of the patent as opposed to just its estimated market price or its cost. This will inevitably also involve some element of forecasting the future cash flows. However it is only with the additions of trying to account for the elements of time and uncertainty in future cash flows as is the case with conventional discounted cash flows (DCF) method that one begins to get valuation methods using projections of future cash flows to value patents without taking account of time & risk but such methods can be ignored. A further and very common method based on industry averae royalty rates assumes that the income due to a patent peruse is the royalty which would have to be paid by a license. **(iv) DCF based methods – Accounting for time & uncertainty:-** Discounted Cash flow (DCF) methods of valuation are now used for al manner of applications. The two key factors they account for are the time value of money and to some extent the riskiness of the forecast cash flows. These two problem can be solved in two ways. Either by using a risk adjusted discount rate to discount the forecast cash flows, thus accounting for both factor at once or using certainty equivalent cash flows, in which forecast cash flows are adjusted to account for their riskiness and changing riskiness overtime. These are then discounted at the risk free rate to account for the time value of money. The latter matter separate the two issues of risk and time and can help avoid problems when the risk adjustment varies over time as it will with patents. **(v) DTA based method – Accounting for flexibility:-** In addition to the problems of selecting discount rates appropriate to risk associated with the various stages in a patent's life and those of calculating the possible cash flows which might occur there is a third problem with simple DCF methods. This is that no account is taken of the various possibilities open to managers of a project or in the case of this discussion a patent. To a certain extent simulations such as those described above can be used to try and account for the possible outcomes of management decisions though the same caveats outlines above apply. Where the number of such possibilities is limited though and the possibilities for management choice only occur at defined times they may be accounted for the use of some form of Decision Tree Analysis. This ought to be based on a underlying DCF analysis of each branch, starting with the final ones and working backwards in time to give a present value. The big advantage of the DTA method over simple DCF analysis is that it builds in the value of flexibility encounted in a project on patent. **(vi) Option Pricing Theory (OPT) Method – Accounting for Changing Risk:-** The theory behind option pricing was primarily developed for use in pricing financial options and financial option markets have perhaps funded the research into an certainly provided the testing grounds for some of the underlying theories. An option can be defined generally as a right but not an obligation at or before some specified time, to purchase or sell underlying assets whose price is subject to some form of random variation. Options have in common with situations subject to DTA analysis the possibility of different over time. DTA method should use a discount rate appropriate to the risk involved in that stage and that the risk and thus discount rate may well very over time due to the differing nature of the payoffs and thus decisions at each stages. The certainty equivalent approach mentioned earlier in the context of basic DCF analysis is one possible approach however another and more powerful method is to use contingent claims analysis the underlying idea of which is used in both (i) discrete time period type analysis, and (ii) continuous time option valuation models.

(i) Discrete time – Binomial Model (B-M) based methods – contingent claim analysis begins to solve the problem of changing discount rate which conventional DCF/DTA methods cannot solve easily. It uses the basic assumption that the return to a call option on a share are equivalent to those of portfolio or "synthetic option" consisting of borrowing some money and buying some of the underlying shares a number of situations in which non-financial "Real options occur and in which a contingent claim analysis (CCA) valuation method can be used involving a portfolio of borrowing and shares being setup to replicate the returns of the project involving an option. For simple decision tree involving flexibility CCA is thus preferable to conventional DCF/DTA methods. **(ii) Continuous Time – Black Scholes (B-S) option pricing models –** DTA methods can become inordinately complex resulting in what Trigeories calls "Decision Bush Analysis". A further problem with DTA analysis methods is that whilst choices between course of action with a few discrete outcomes may occur in most cases a range of value is possible. Unlike DCF based DTA analysis using a single risk adjusted discounted rate OPT methods accounting for continuous time such as the equation derived a solution to these problems.

(a.) Financial options – The valuation of options on financial assets according to Black and Scholes the opening of Chicago Board Options Exchange and a great expansion in the trading of such options on common stock. As with discrete time CCA discribed above, their equation was based on the assumption that the returns to a call options on a share are equivalent to those of a portfolio or 'synthetic option' consisting of borrowing some money and buying some of the underlying shares. The Black and Scholes equation can in fact be derived from a discrete time based CCA analysis by letting the length of period studied for each stage in the tree tend to Zero for the case of continuous time though, if one assumes that there are no arbitrage opportunities the price 'C' of a European call option on a underlying share is

$$C = SN\frac{(\ln(S/E) + (r + \frac{1}{2}\sigma 2)t)}{\sigma t} - Ee^{-rt}N\frac{(\ln(S/E) + (r+\frac{1}{2})t)}{\sigma t}\ \sigma t$$

S = Current underlying share price

σ = Volatility of the share price

E = Exercise price if the option

r – risk free interest rate

t = time to expiry

N ( ) = cumulative standard normal distribution function

The equation that Black and Scholes provided was based on several key assumptions (i) interest rates are constant over time, (ii) share prices follows a random walk where the distribution of price at the end of a given time period is log normal with the variance assumed constant over time, (iii) only European option are considered, (iv) markets are friction free with no transaction costs, and (v) Dividend payments on the underlying share are exluded. Table can be made to calculate the value of put of or calls give S/(eS-rt) and $\sigma\sqrt{t}$ so valuing a simple call options need not be a particular complicated operation.

(b.) Real option – The basic definition of an option can be applied to a number of other situations other than directly financial assets. Such non-financial option have become known as "Real options" and a substantial literature has built up around the application of OPT methods to their valuation. The field of real options developed principally from the realisation that as outlined above conventional valuation methods do not or cannot cope very well with managerial flexibility. There is thus an equivalence between the inputs required to volve financial options and those involved in valuing real options.

Conclusion:

The intangible assets always remained interesting and impressive assets. Generally persons are very like tangible assets but in the business intangible assets play their alternative infect business is always about towards creations of intangibles. Intangible assets also remain is central point of decision among the scholars, thinkers and investors. Dealing with business resulted in the right way only if intangible assets are considered form otherwise both side are very dangerous and misleading. The paper highlighted concepts, nature and scope of intangible assets. Considering the opinion of the express by scholars, accountant, and investors. A rich survey of literature also recorded in the paper considering study organise by a number of scholars such as Arkbland, C. Dragontti, Cazavan Jeny Anne, Guthrie, **Kelvin King, Matsura H. Jeffrey, Sylvain Roy** etc. Paper highlighted for Goodwill categories into three part (i) Internally Generated Goodwill, (ii) Purchase Goodwill, and (iii) Business combination and Goodwill. Besides, methods of valuation of Goodwill including (i) Average Profit Method, (ii) Super Profit Method, (iii) Capitalisation Method, and (iv) Annuity Method also taken into account. Similarly patents also discuss with the concept of accounting and valuations considering the remound persons of accounting, (a) Cost Based Method, (b) Market Based Method, (c) Income Based Method, (d) DCF Based Method, (e) DTA Based Method, and (f) Option Pricing. The models developed by the authorities are being also applied in India but along with accounting policy set by the concern in the questions. A new look on the models related with intensiveness will surve better treatment of intangible assets. Although a number of intangible assets are there yet a few models are developed specifically for intangible assets.

Appendix - 1

A list of Valuation Models

Financial option on share	Real option
S = current price of the underlying share	Present value of project cash flows
E = Exercise price of the option	Investment cost of project
t = Time to expiry	Time left to invest in
σ = Standard deviation of underlying share returns	Standard deviation of the project value
r = Risk Free interest rate	Risk free interest rate
Scholar's Name	**Models Name**
1. Armis Petersons (2003)	(i) The Cost Approach (ii) The Income Approach (iii) The Market Approach
2. Matsuura H. Jeffrey (2004)	(i) Cost Based Models (ii) Market Based Models (iii) Income Based Models (iv) Option Based Models
3. Sylvain Roy (2004)	(i) Market Based Models (ii) Cost Based Models (iii) Based on estimate of past and future Economic Benefits.
4. MC. Graw Hill (2004)	(i) Cost Approach (ii) Market Approach (iii) Income Approach

5. Charies River Associates (2004)	(i) Discounted Cash Flow Analysis (ii) Analysis of Comparable Alternative (iii) Sensitivity Analysis of Value Drivers (iv) Analysis of Economic Alternative (v) Probability Tree Analysis (vi) Decision tree analysis (vii) Real Option Analysis (viii) Monte Carlo Analysis (ix) Flexible Models for License Negotiations.
6. Kelvin King (2006) 7. Paul Flignor and David Orozio (2006)	(I) Market Based Models (ii) Cost Based Models (iii) Based on Estimate of Past and Future Economic Benefits. (i) Transactional Models (ii) Cost Models (iii) Income Models (iv) Binomial/Option Models
8. Anastasia Vardavaki, John Mylonakis (2007)	(i) Asset Based Models (ii) Discounted Valuation Models (iii) Discounted Residual Income Models

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TQS IN RELATION TO THE PERFORMANCE OF SERVICE SECTOR

Jeevan Jyoti* R. D. Sharma** Jyoti Sharma***

ABSTRACT

Total Quality Service (TQS) is increasingly being followed as one of the management strategies for better in business performance consequently resulting into customer and employee satisfaction. This study empirically examines the impact of TQS on business performance. The TQS framework has been designed on the basis of comprehensive literature review. This framework demonstrates the impact through 12 dimensions of TQS on Business performance. Data collected from top management (Executives) of all automobile showrooms of Maruti, Hyundai and Tata motors from Jammu province has been purified with the help of factor analysis. The statistical tools like mean, standard deviation, correlation, multiple regressions and T-test were used for hypotheses testing. The reliability and validity also stand checked. The results reflected the positive and significant effect of TQS on business performance. Customer focus and satisfaction, information analysis, servicescape and employee satisfaction are the significant predictors of business performance. Suggestions for optimum implementation of TQS in service sector have also been discussed.

Keywords: *Business Performance, Customer Satisfaction, Top Management and Total Service Quality*

INTRODUCTION

In the context of ongoing of globalisation and liberalisation, business survival is difficult without inbuilt the competitive advantage (Adam et al., 2001). With increasing competition, pressure of business survival and the changing customer-employee oriented environment, total quality service (TQS) has figured as one of the important strategic actions in service sector and thus it is of great interest for managers and researchers (Ahire, 1995 and Benson et al., 1991). Leading pioneers in the quality management (Deming, 1986; Juran, 1993) focused competitive advantage gained by providing quality products or services because it is an effective tool for bringing stability, growth and prosperity in the business (Isaac et al.,2004). In fact service sector has played a significant role in many developed countries. Economies of developing countries in Asia have shown an increase in importance of the service sector where the percentage share of the service sector in GDP ranges from 21% up to 84 %.(Zailani et al., 2006). Virtually in the pursuit for service growth and success much depends on the service performance of the industry and service performance comes from the quality of the services.

The benefits of quality improvement can not only be reflected in decreasing costs, but also on maximising business profits (Freieslebenm, 2005). Thus the study of total quality service and business performance is critical for firms as well as for researchers for better understanding of the effect of total former on business later. Many studies on service quality indicate strategic efforts for ensuring meaningful business performance (Fisk et al., 1994). The majority of these studies have focused on the external factors such as customer perceived service quality and marketing. However in today's circumstances with limited resources, organisations are faced with disproportionately more objectives, challenges and opportunities. Therefore it would be fair to assume that organisations need to priorities and concentrate on relatively more important issues, such as effect of quality services on an organisation from different perspectives like operational, financial and employee performance (Reynoso, 1995).

TOTAL QUALITY SERVICE (TQS)

Total Quality service (TQS) is a socio-technical approach for revolutionary and effective management. This approach takes service as work done by one person for the benefit of another, with the help of changed management methodology based upon the system perspective for improvement in products and service quality.

Quality- being defined as meeting and exceeding customer needs and expectations-like marketing focusing on customer for sustainable customer satisfaction and profitability, quality meets exceeding customer needs and expectations. In other words it is the extent to which quality meets a need, solves a problem, or adds value for someone. It is the ability to achieve innate excellence (Samat et al., 2006). In manufacturing, this is measured technically through product specifications, conformance measures, and objective standards. In services, however, quality is much more subjective qualitative in nature. Total service quality is the integration of all functions and processes within an organisation in order to achieve continuous improvement in the quality of products and services for satisfying customer needs and wants (Ross, 1994). It is a state of affairs in which an organisation delivers superior value to its shareholders, its customers, its owners and its employees. This recognises the employer's need for cost-effectiveness and the employee's need for reward, in addition to the needs of the customer. TQS assumes all quality standards and measures used in the organisation as customer referenced. It recognises the importance of subjectively perceived quality as well as objectively perceived quality and provides both quantitative and qualitative measures. It in fact targets both quality of management and management of quality (Besterfield, 1995).

** Assistant Professor, Dept. of Commerce, University of Jammu, Jammu, India*
***Coordinator, SAP in Commerce, University of Jammu, Jammu, India*
****Ph. D Research Scholar, Dept. of Commerce, University of Jammu, Jammu, India*

Quality of management relies on the application of TQM philosophy and principles that are directed to the total involvement of the entire organisation towards performance improvement by providing quality services. Management of quality is directed to the generation of transformational change through application of quality improvement initiatives (Day, 1994). However, TQS may also be viewed functionally as an integration of two basic functions, i.e. total quality control and quality management. Total quality control is a long-term success strategy for organisations. Customer satisfaction, employee performance and satisfaction and innovation are the main ingredients of total quality control; whereas quality management is a way of planning, organising and directing to facilitate and integrate the capabilities of all employees for continuous improvement of anything and everything in an organisation to attain excellence (Hua et al., 2000). Thus, total quality implementation in a service organisation brings all the people together to ensure and improve the services provided by improving the work environment, working culture and satisfaction level of employees and customers.

Dimension of TQS: There is no consensus among the researchers about parameters of TQS. Very few researches have been conducted in service sector on TQS (Sureshchandar et al., 2001; Sarvanan and Rao, 2006 and Osman, 2007). These have used some of TQM dimensions to study TQS in service sector. The 12 critical dimensions of TQS widely referred to in the literature are discussed as under:-

1) Management Commitment: Top management commitment is essential for effective implementation of quality management practices in an organisation. Top management must establish and communicate a clear vision of organisation philosophy. Knowledge, awareness and understanding of basic concepts and principles of TQS are must for the managers and top executives who ultimately bear the responsibility of service quality improvement. (Milakovich, 1995 and Sureshchandar et al., 2001). Managing quality effectively requires clear understanding of the related concepts like satisfaction, quality, values in particular sector (Rust and Oliver, 1994), which calls for top management commitment.

2) Benchmarking: Benchmarking involves comparing current activities and outcomes against the best i.e. it continuously and integratedly focuses on developing a product or process that is better than that of the competitors. The issue is not how well the firm performs a service compared with relevant organisations, but how the service is provided within other standards, compared with a given agency (James, 1989). In other words, Benchmarking is a continuously monitored systematic process of measuring the products, services and practices against those of industry leaders. Ahire (1996) observed that the organisation can achieve global standards when the critical business processes are benchmarked. The organisation, in total can be transformed to world class status when benchmarking is directed at the key or critical business processes.

3) Human Resource Management: HRM is a system that utilises the available manpower in the organisation effectively for improving the whole system. Many organisations tend to become more eager for economic development to the extent that they put great emphasis on technology and completely ignore the fact that it is the human resources that activate the other factors of production. Schneider and Bowen (1992) viewed that if the employees are treated as valuable resources it will have significant effect on customer satisfaction. Thus the success of quality services programme will depends on the collaboration and coordination in firm's workforce. Quality of HRM system depends on the manner in which employees are recruited, selected, trained, developed and empowered in an organisation. Use of quality criteria in these processes ensure right person at right place (Schneider and Bowen, 1993) which enhances employee satisfaction and performance.

4) Employee Satisfaction: Employee satisfaction is the extent to which the employees of a firm feel that their interests are being looked after by the management. If employees are satisfied with the organisation they in turn will satisfy the need of customers in a better and efficient manner. Intrinsic satisfaction accompanied by extrinsic satisfaction makes employees fully satisfied with their job (Herzberg, 1957). Intrinsic satisfaction includes autonomy, recognition, growth and promotion and extrinsic satisfaction includes pay and related matters, physical conditions, behavior of superiors and subordinates (Sharma and Jyoti, 2006).

5) Information and Analysis: Information and analysis is the use of data to understand the impact of quality practices on business performance for deciding the corrective actions. Berkeley and Gupta (1995) suggested that the employees have to be provided with the information regarding the processes and customers. An organisation's quality management system is successful only with adequate and effective dissemination of general information.

6) Service marketing: Service marketing refers to the marketing strategies and techniques adopted by the service organisation to attract and retain customers. Service providers have to introduce new schemes, advertise through audio and visual media to keep close contact with customers in order to increase their market share. Barr and Mcneilly (2003) observed professional service organisations finding themselves increasingly involved with marketing in order to develop and maintain relationship with their clients.

7) Social Responsibility: Social responsibility refers to the responsibility of the organisation to perform with social considerations for the improvement of the society. All customers should be given equal importance irrespective of their status in the society (Zemke and Schaaf, 1990). It further improves its image, goodwill and performance in the long run (Sureshchandar et al., 2001).

8) Service Culture: Tangible such as size, numbers of employees, return on investment and so on are important features of business performance and similarly intangible like organisation culture is also equally important. It enables the people to form a common vision and helps in the achievement of organisational goals. Good service culture ensures reliable, responsive, empathetic service to customers and assures them of trust and confidence in the business. Chandon et al., (1997) examined that service encounters from the perspectives of both employees and customers and concluded that management has to create a culture of interdependence and teamwork for maximising employee potential and organisational performance.

9) Servicescape: Servicescape is the physical environment comprised of non-human element in organisation like equipment, machinery, building layout, employee dress, ventilation, lighting etc. It affects both customers and employees (Bitner, 1992). As the service is generally produced and consumed at the same time and at the same place, thus the consumer experience- the total service within the firm's physical facility. Therefore, the site for providing services can not be concealed and may have strong impact on consumer's perception.

10) Customer Focus and Satisfaction: Customer focus and satisfaction is the significant driving force to establish the quality goals which basically originates from customer's needs. It is the important component of quality movement because organisation can outscore their competitors by effectively addressing customer's needs and demands. Generally speaking, customer needs identify the operational goals for firms to meet. Oakland (2005) mentioned that quality starts with the understanding of customer' needs and ends when those needs are satisfied. In order to meet the requirements of customers, top management should satisfy the expectations of its customers.

11) Technical system: Technical system refers to the management of the processes, system and techniques that are required to standardise the service delivery. Up gradation of available technology helps the organisation in improving the service quality (Bowman and French, 1992). The technical system of the organisation should be able to provide quick service to the customers than the competitors. Recent technological development such as growth of internet and other information system allow the development of business by offering more efficient products and service to their customers and employees. These technical systems are designed to standardise the ways of working and decision making throughout the enterprise. They permit the automated flow of information to all affected functions in the enterprise. Networking and enterprise-level information systems offer many benefits to both the employees and the business including increased efficiency and productivity, lower costs, and greater flexibility.

12) Continuous Improvement: Continuous improvement refers to improving the quality of products and services to achieve customer satisfaction, costs reduction and effective performance. Milakovich (1995) noted that the overall performance of the organisation will increase through effective implementation of quality management programmes. The continuous improvement in all activities of the organisation will help to achieve the global standards that in turn will enhance the performance.

BUSINESS PERFORMANCE

Businesses develop traditional ways of operations and administration over the years. The business enterprise is generally defined as "the activity of providing goods and services having two components. The activity is called business performance and the goods and services are business results. Business cannot improve its performance without change. The change must be positively directed toward achieving results, providing customer service and satisfaction, and generating profits. Business performance improvement cannot occur in isolation. It requires integration with systems, operations people, customers, partners, and management (Stewens and Hisle, 2007). Thus, it is the combination of operational, financial and employee performance (Corbett et al., 2005). In operating performance, firms provide quality services to its customers that can get internal benefits like enhancement in productivity, improvement in sales, market share growth, reduction in customer's complaints and ultimately the business growth. Financial performance is reflected in profits and profitability growth, sales volume. Lastly the

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EMERGENCE OF CHANNEL SELECTION IN INDIAN RETAIL BANKING: A COMPARATIVE STUDY OF PUBLIC AND PRIVATE SECTOR BANKS

H.K.Singh* **Peeyush Kr. Pandey****

ABSTRACT

The Indian banking industry is presently in a transition phase. On the one hand, the public sector banks, which are the mainstay of the Indian banking system, are in the process of consolidating their position by capitalizing on the strength of their huge networks and customer bases. On the other, the private sector banks are venturing into a whole new game of mergers and acquisitions to expand their bases. The system is slowly moving from a regime of "large number of small banks" to "small number of large banks." The new era will be one of consolidation around identified core competencies. In India, one of the largest financial institutions, ICICI, took the lead towards universal banking with its reverse merger with ICICI Bank a couple of years ago. This trend may lead to promoting the concept of a financial super market chain, making available all types of credit and non-fund facilities under one roof or specialized subsidiaries under one umbrella organization. This study revels the how the customers of public and private sector bank's distribution channels are patronized by different customers. It is interesting to note that customer's choose and ranking for same type of distribution channels of public and private channels are dissimilar. Customer's motivational factors are different for private and public sector banks which other wise reveal the facts that perceptions of customers for various channels are also different.

***Keywords**: Distribution Channels, Public Bank, Private Bank, Customer's motivational, Perceptions of customers*

INTRODUCTION

Liberalization and de-regulation process started in 1991-92 has made a sea change in the banking system. From a totally regulated environment, we have gradually moved into a market driven competitive system. Our move towards global benchmarks has been, by and large, adjusted and regulator driven. The pace of changes gained momentum in the last few years. Globalization would gain greater speed in the coming years particularly on account of expected opening up of financial services under WTO. Four trends change the banking industry world over, viz. 1) Consolidation of players through mergers and acquisitions, 2) Globalisation of operations, 3) Development of new technology and 4) Universalisation of banking. With technology acting as a catalyst, we expect to see great changes in the banking scene in the coming years. The Committee has attempted to visualize the financial world 5-10 years from now. The picture that emerged is somewhat as discussed below. It entails emergence of an integrated and diversified financial system. The move towards universal banking has already begun. This will gather further momentum bringing non-banking financial institutions also, into an integrated financial system.

The traditional banking functions would give way to a system geared to meet all the financial needs of the customer. We could see emergence of highly varied financial products, which are tailored to meet specific needs of the customers in the retail as well as corporate segments. The advent of new technologies could see the emergence of new financial players doing financial intermediation. For example, we could see utility service providers offering say, bill payment services or supermarkets or retailers doing basic lending operations. The conventional definition of banking might undergo changes.

The competitive environment in the banking sector is likely to result in individual players working out differentiated strategies based on their strengths and market niches. For example, some players might emerge as specialists in mortgage products, credit cards etc. whereas some could choose to concentrate on particular segments of business system, while outsourcing all other functions. Some other banks may concentrate on SME segments or high net worth individuals by providing specially tailored services beyond traditional banking offerings to satisfy the needs of customers they understand better than a more generalist competitor.

International deal is an area where India's incidence is anticipated to show noticeable augment. Presently, Indian share in the global trade is just about 0.8%. The long term projections for growth in international trade are placed at an average of 6% per annum. With the growth in IT sector and other IT Enabled Services, there is tremendous potential for business opportunities. Keeping in view the GDP growth forecast under India Vision 2020, Indian exports can be expected to grow at a sustainable rate of 15% per annum in the period ending with 2010. This again will offer enormous scope to Banks in India to increase their forex business and international presence. Globalization would provide opportunities for Indian corporate entities to expand their business in other countries. Banks in India wanting to increase their international presence could naturally be expected to follow these corporate and other trade flows in and out of India. Retail lending will receive greater focus. Banks would compete with one another to provide full range

* Professor, Department of Commerce, B.H.U.Varanasi, India
** Research Scholar, KNIPSS Management Institute, Sultanpur (U.P), India

of financial services to this segment. Banks would use multiple delivery channels to suit the requirements and tastes of customers. While some customers might value relationship banking (conventional branch banking), others might prefer convenience banking (e-banking). One of the concerns is quality of bank lending. Most significant challenge before banks is the maintenance of rigorous credit standards, especially in an environment of increased competition for new and existing clients. Experience has shown us that the worst loans are often made in the best of times. Compensation through trading gains is not going to support the banks forever. Large-scale efforts are needed to upgrade skills in credit risk measuring, controlling and monitoring as also revamp operating procedures. Credit evaluation may have to shift from cash flow based analysis to "borrower account behavior", so that the state of readiness of Indian banks for Basle II regime improves. Corporate lending is already undergoing changes. The emphasis in future would be towards more of fee based services rather than lending operations. Banks will compete with each other to provide value added services to their customers. Structure and ownership pattern would undergo changes. There would be greater presence of international players in the Indian financial system. Similarly, some of the Indian banks would become global players. Government is taking steps to reduce its holdings in Public sector banks to 33%. However the indications are that their PSB character may still be retained.

New Trends and progress of Indian Retail banking

After the second phase of financial sector reform and liberalization of the banking sector in the early 90s the PSB s found it extremely difficult to compete with the new private sector banks and the foreign banks. The new private sector banks first made their appearance after the guidelines permitting them were issued in January 1993. 8 new private sector banks are presently in operation. These banks due to their late start have access to state-of-art technology, which in turn help them to save on manpower costs and provide better services.

Performance of Indian banks in terms of deposit and credits from1993-2000)

2.3 Current state of affairs

The industry is at present in a conversion stage. On the other hand PSBs, which are the stronghold of the Indian banking system, are in the progression of flaking their flab in the terms of needless manpower, excessive non performing assets and excessive governmental equity while on the other hand the private sector banks are consolidating themselves through mergers and acquisitions. Private Banks have pioneered internet banking, phone banking, phone banking any where banking mobile banking debit banking, automatic teller machine and combined various other services and

BANKS	Deposits	Credits
SBI and Associates	25%	28.1%
Nationalized banks	12.2%	8.41%
Foreign banks	5.7%	3.9%
Regional rural banks	53.2%	47.%
Other schedule banks	3.14%	12.85

integrated them into main banking arena while the PSBs are still grapping with disgruntled employees in the after myth of successful VRS schemes. Also following India's commitment to WTO agreement in respect of the service sector ,foreign sector banks including both new and old existing ones have been permitted to open up 12 branches a year with effect from 1998-99 as against the earlier stipulation of 8 branches.

Public and Private sector Banks

Banking in India could be traced back to the establishment of Bank of Bengal (Jan 2, 1809), the first joint-stock bank sponsored by Government of Bengal and governed by the royal charter of the British India Government. It was followed by establishment of Bank of Bombay (Apr 15, 1840) and Bank of Madras (Jul 1, 1843). These three banks, known as the presidency banks, marked the beginning of the limited liability and joint stock banking in India and were also vested with the right of note issue.

In 1921, the three presidency banks were merged to form the Imperial Bank of India, which had multiple roles and responsibilities and that functioned as a commercial bank, a banker to the government and a banker's bank. Following the establishment of the Reserve Bank of India (RBI) in 1935, the central banking responsibilities that the Imperial Bank of India was carrying out came to an end, leading it to become more of a commercial bank. At the time of independence of India, the capital and reserves of the Imperial Bank stood at Rs 118 mn, deposits at Rs 2751 mn and advances at Rs 723 mn and a network of 172 branches and 200 sub offices spread all over the country.

In 1951, in the backdrop of central planning and the need to extend bank credit to the rural areas, the Government constituted All India Rural Credit Survey Committee, which recommended the creation of a state sponsored institution that will extend banking services to the rural areas. Following this, by an act of parliament passed in May 1955, State Bank of India was established in Jul, 1955.

In 1959, State Bank of India took over the eight former state-associated banks as its subsidiaries. To further accelerate the credit to fl ow to the rural areas and the vital sections of the economy such as agriculture, small scale industry etc., that are of national importance, Social Control over banks was announced in 1967 and a National Credit Council was set up in 1968 to assess the demand for credit by these sectors and determine resource allocations. The decade of 1960s also witnessed significant consolidation in the Indian banking industry with more than 500 banks functioning in the 1950s reduced to 89 by 1969.

For the Indian banking industry, Jul 19, 1969, was a landmark day, on which nationalization of 14 major banks was announced that each had a minimum of Rs 500 mn and above of aggregate deposits. In 1980, eight more banks were nationalised. In 1976, the Regional Rural Banks Act came into being, that allowed the opening of specialized regional rural banks to exclusively cater to the credit requirements in the rural areas. These banks were set up jointly by the central government, commercial banks and the respective local governments of the states in which these are located.

The period following nationalisation was characterized by rapid rise in banks business and helped in increasing national savings. Savings rate in the country leapfrogged from 10-12% in the two decades of 1950-70 to about 25 % post nationalisation period. Aggregate deposits which registered annual growth in the range of 10% to 12% in the 1960s rose to over 20% in the 1980s. Growth of bank credit increased from an average annual growth of 13% in the 1960s to about 19% in the 1970s and 1980s. Branch network expanded significantly leading to increase in the banking coverage.

Indian banking, which experienced rapid growth following the nationalization, began to face pressures on asset quality by the 1980s. Simultaneously, the banking world everywhere was gearing up towards new prudential norms and operational standards pertaining to capital adequacy, accounting and risk management, transparency and disclosure etc. In the early 1990s, India embarked on an ambitious economic reform programme in which the banking sector reforms formed a major part. The Committee on Financial System (1991) more popularly known as the Narasimham Committee prepared the blue print of the reforms. A few of the major aspects of reform included (a) moving towards international norms in income recognition and provisioning and other related aspects of accounting (b) liberalization of entry and exit norms leading to the establishment of several New Private Sector Banks and entry of a number of new Foreign Banks (c) freeing of deposit and lending rates (except the saving deposit rate), (d) allowing Public Sector Banks access to public equity markets for raising capital and diluting the government stake,(e) greater transparency and disclosure standards in financial reporting (f) suitable adoption of Basel Accord on capital adequacy (g) introduction of technology in banking operations etc. The reforms led to major changes in the approach of the banks towards aspects such as competition, profitability and productivity and the need and scope for harmonization of global operational standards and adoption of best practices. Greater focus was given to deriving efficiencies by improvement in performance and rationalization of resources and greater reliance on technology including promoting in a big way computerization of banking operations and introduction of electronic banking.

The reforms led to significant changes in the strength and sustainability of Indian banking. In addition to significant growth in business, Indian banks experienced sharp growth in profitability, greater emphasis on prudential norms with higher provisioning levels, reduction in the non performing assets and surge in capital adequacy. All bank groups witnessed sharp growth in performance and profitability. Indian banking industry is preparing for smooth transition towards more intense competition arising from further liberalization of banking sector that was envisaged in the year 2009 as a part of the adherence to liberalization of the financial services industry.

Research Objectives

The objective of proposed research study is to reveal those motivational factors which are responsible for decision making in selection of retail distribution cannels in public and private sector banks. This study will also through some light upon relationship between bank selection and customers psychographic traits.

RESEARCH HYPOTHESIS

This study is an attempt to compare and analyze the motivational factors which are responsible for the choice of various retail banking channels among Public and Private Bank's consumers. The motivational factors selected for different channels are**- People Influence**

Following Hypothesis are tested –

1-H0: There is no significance difference between Public and Private Bank's customers regarding channel choice on the basis of. **People Influence.**

2-H0: There is no significance difference between Public and Private Bank's customers regarding channel choice on the basis of **Attractiveness. .**

3-H0: There is no significance difference between Public and Private Bank's customers regarding channel choice on the basis of. **Service provision.**

4-H0: There is no significance difference between Public and Private Bank's customers regarding channel choice on the basis of, ATM Service.

5-H0; There is no significance difference between Public and Private Bank's customers regarding channel choice on the basis of **Branch Services.**

6-H0: There is no significance difference between Public and Private Bank's customers regarding channel choice on the basis of proximity ***consciousness.***

7-H0; There is no significance difference between Public and Private Bank's customers regarding channel choice on the basis of **Secure feeling.**

8-H0 There is no significance difference between Public and Private Bank's customers regarding channel choice on the basis of **Financial Benefits.**

H1 There is significance difference between Public and Private Bank's customers regarding channel choice on the basis of **Financial Benefits.**

Literature Survey

Wendy Wan et al. (2005) have studied the customers' adoption of banking channels in Hong Kong. It covers four major banking channels namely ATM, Branch Banking, Telephone Banking and Internet Banking. It segments customers based on demographic variables and psychological beliefs about the positive attributes processed by the channels. The psychological factors are Ease of use, Transaction security, transaction accuracy, speediness, convenience, time utility, provision of different personal services, social desirability, usefulness, economic benefits and user Involvement. Nancy Black et al. (2004) explore the factors that may influence the selection and use of distribution channels in the financial services. They propose a conceptual model where in the factors are grouped as consumer related, product related, channel related and organization related. The consumer related factors are product category involvement, confidence, socioeconomic and lifestyle factors and ethical stance. The product related factors are complexity, perceived risk and price. The channel related factors are personal contact, perceived risk, convenience and costs of using the channel. The organization related factors are image, size, longevity and range of channel provision. But this paper has not been able to test ex post facto that these are the relevant factors. It is only a proposed conceptual model. Mark Durkin (2004) uses decision-making styles in the study of Internet banking customers. He has considered the factors like Face to face oriented, information searching oriented, convenience seeking oriented, creativity oriented, brand oriented, technology oriented and speed of decision oriented and has used cluster analysis to discover customer groups based on their decision making styles namely Decisive, Flexible, Hierarchical, Integrative, and systemic. Serkan et al. (2004) in their research on adoption of Internet banking among sophisticated consumer segments in an advanced developing country have focused on segmenting the academicians as users and non users based on demographic, attitudinal and behavioral characteristics. Jane Kolodinsky et al. (2004) have studied the adoption of electronic banking by US consumers. The customers have been profiled based on E banking characteristics like trialability, relative advantage, complexity/simplicity, compatibility, observability, safety, risk and involvement. Walfried Lassar et al. (2004) have studied the relationship between consumer innovativeness, personal characteristics and online banking adoption. Simon Ho et al. (1994) have studied the customers risk perceptions of electronic payment system. They have classified risk as physical risk, performance risk, psychological risk, financial risk and time loss risk. Norman Marr et al. (1993) have studied the customer's adoption of self-service technologies in retail banking. This is to check if the suppliers of technology do have an understanding of variables that affect customer adoption of self-service technologies in retail banking. Srivastava & Srinivasan have studied (2007) the Indian customer's choise criteria of retail distribution channels and subjected that channel convenience, channel control and channel security plays an important role in the selection of channels. Some regions still see people who are struck to branch banking and are not ready for a change in mindset

Research Gap

There has been no comprehensive psychographic based study that encompasses the bank selection criteria, channel selection criteria and product selection criteria of customer of Public and Private sector banks. In India there are no studies encompassing the above mentioned criteria. India is witnessing rapid changes in the constituents of banking industry along with technology and information system that has been used from last 20 years. Since all the banks or financial institution are offering almost same type of product that is why it is worthwhile to know the role of different motivational factors for specific channel choose. Lifestyle of consumers, thought process of consumers, savings power etc that would make this studies a worthwhile exercise to conduct. This part of the research study is an attempt to understand the psychographic factors of customers that are responsible for the rural and urban customers for choosing a particular bank and banking channel.

Research Methodology

Instrumentation

Since the research is exploratory in nature the appropriate research strategy has been research survey. In the questionnaire, both the User of public and private bank's respondents was asked to rate the relative importance of 6 motivational factors (Security, Service convenience, ATM service, proximity, location, people influence, and promotion.) They were measured on a five point Likert-type scale of importance ranging from 5 (not important at all) 4-some what unimportant 3-neither important nor unimportant 2-some what important 1- Extremely important

(Table 3)

For the purpose of testing hypothesis the scores are averaged and standard deviation is calculated, then Z-test is used to test the hypothesis .**table-4.**

The Z-test is a parametric test to determine the statistical significance between a sample distribution mean and population parameter. The Z-test is selected as parametric tests are more powerful because their data are derived from interval and ratio measurements. The Z-test is used two independent samples, large sample size and two tailed test, Respondent understanding as well as ability to complete the survey instrument. The respondents were asked if they had any problems understanding the questionnaire or have specific comments regarding the questionnaire. The respondents were encouraged to be very free with their responses, make suggestions for improvement and delineate any difficulties they found. After each questionnaire was completed, each respondent was asked what he/she meant in checking various answers. Comments were solicited on the clarity of the questions and what the changes should be done in order to make the questions simpler. These respondents also gave their comments on understanding the instructions about the scaling and the time taken to answer the questions. The test found no serious problems and minor amendments were made to the survey questions based on the respondent convenience.

Sample and Data Administration

As per the demand of the study, probability (convenience) sampling was chosen. A total of 400 sets of questionnaires were distributed to the Public and Private bank's customers of Lucknow and Allahabad, Sultanpur and Bareilly.Out of that only 334 questionnair were usable (83.5%) For the purpose of study Respondents will be asked to rate 8 motivational factors which are important to them for channel choice on 5 point likert scale .The Z-Test is used for analysis.

The Motivational factors for channel selection

In the Table -4 the calculated value of Z-test statistics at 5% level of significance indicate thefollowing findings –

@ The difference between. Public and Private Bank's customers for specific channel selection on the basis of **People influences** (z-test value is 13.92), aresignificant.

@ The difference between Public and Private Bank's customers on the basis of **Attractiveness** (z-test value 23.92), consciousness is **significant.**

@ The difference between Public and Private Bank's customers for specific channel on the basis of, **ATM**

SAARANSH
RKG JOURNAL OF MANAGEMENT
Vol. 3 ● No. 1 ● JULY 2011

services (z-test value2.5) is significant.

@ The difference between Public and Private Bank's customers for specific channel selection on the basis of **proximity** (z-test value is 11.5), is significant.

@ The difference between Public and Private Bank's customers for specific channel selection on the basis of **financial benefits** (z-test value is 6.47) is significant.

@ The difference between Public and Private Bank's customers for specific channel selection on the basis of. **Service provision** (z-test values is 1.62) is not significant.

@ The difference between Public and Private Bank's customers for specific channel selection on the basis of **branches services** (z-test value is 1.29) is notsignificant.

@ The difference between Public and Private Bank's customers for specific channel selection on the basis of **secure feeling** (z-test value is 0.88) is not significant.

Factor wise Analysis for public sector bank and private sector banks Customers

The findings of table 1 reveal the followings information-

People Influence

People influence as a motivational factor is much greater in case of public sector bank with the mean score of 3.63 in comparison to the private sector banks with the mean score of 3.24.it is clearly indicated that private sector banks have to go for long distance to gain the confidence of Indian customers.

Attractiveness

Attractiveness like attractiveness of bank premises, staff appearance, bank reception and bank atmosphere as a motivational factor is much greater in case of public sector banks in comparison to the private sector banks. though bank premises is more attractive in case of private sector bank but staff appearance bank reception and bank atmosphere is much better in case of public sector banks that means cultural impact is much more penetrated in the Indian customers. The overall mean score of private sector bank are 3.26 whereas it is 3.79 for public sector banks

Service provision

The element wise description of service provision as a motivational factor for Private and Pubic sector bank and their mean scores are showing that there are very slight difference and almost customers are indifferent. Mean scores shows that Private bank offer better service promptness (mean score 4,06)and verity of service offered (4.10) in coperission to Pubic sector bank where mean score is slightly less ie.4.05 and 4.00.But overall mean score indeed greater in Pubic sector bank (4.04) in compression to the Private bank(4.02)

ATM Service

ATM Services as motivational factors for channel chaise is better in case of Pubic sector bank (mean score is 4.39) in comparison to the Private bank (mean score is 4.29). The location of ATM (mean 4.42) and number of ATM (4.25) are creating big difference for Pubic sector bank. Ease of ATM operation is slightly better in Private bank (mean score 4.30) where as for Pubic sector bank it is (4.25). 24x7 availability of ATM Services of both banks ATM are almost same, where mean score are 4.66 in case of Private bank and 4.65 are for Pubic sector bank.

Branch Service

Location and number of Pubic sector bank have greater influence with the mean score of 4.15 and 3.84 respectively on customers in comparison to the Private bank where the mean score for the same factors are 3.80 and 3.80 respectively. But Private bank Branches are more convenient with the mean score (3.93) in comparison to the Pubic sector Bank where mean score is 3.66.overall branch services as a motivational factor is greater in case of Pubic sector with the mean score of 3.88 in comparison to the Private bank ie.3.84.

Proximity

Proximity as a motivational factor have greater influence on customers for Private bank with the higher mean score i.e. (3.95), in comparison to the Pubic sector bank where mean score is 3.76.

Secure feeling

It is quite interesting to know that customer of Private bank's feel more secure in comparison to the Pubic sector bank. The overall mean score for Private bank is 4.23 where as it is 4.08 in case of Pubic sector bank.

Financial Benefits

The over all mean score for financial benefits in case of Private bank is 4.10 in comparison to the Pubic sector bank where as it is 4.36 .that means Pubic sector bank offers more benefits to the customers and have positive motivational effects on users.

Comparative mean score of Private Sector Bank and Public Sector Bank

Customers For channel choice

Table-1

S.N	Motivational Factors	Private Sector Bank Mean scores x/n	Private Sector Bank Mean scores x/n
1	People Influence	ΣX=3.24	ΣX=3.63
2	Attractiveness	ΣX=3.26	ΣX=3.79
3	Service provision	ΣX=4.02	ΣX=4.04
4	ATM Service	ΣX=4.02	ΣX=4.04
5	Branch Service	ΣX=3.84	ΣX=3.88
6	Proximity	ΣX=3.95	ΣX=3.76
7	Secure feeling	ΣX=4.23	ΣX=4.08
8	Financial Benefits	ΣX=4.18	ΣX=3.96

Ranking of motivational factors by public and private banks Customers (Table2)

S.N	Motivational Factors	Private Sector Bank Mean scores x/n	Ranking	Private Sector Bank Mean scores x/n	Ranking
1	People Influence	ΣX=3.24	7	ΣX=3.63	7
2	Attractiveness	ΣX=3.26	6	ΣX=3.79	5
3	Service provision	ΣX=4.02	3	ΣX=4.04	2
4	ATM Service	ΣX=4.02	3	ΣX=4.04	2
5	Branch Service	ΣX=3.84	5	ΣX=3.88	4
6	Proximity	ΣX=3.95	4	ΣX=3.76	6
7	Secure feeling	ΣX=4.23	1	ΣX=4.08	1
8	Financial Benefits	ΣX=4.18	2	ΣX=3.96	3

The findings of table 2 indicate the relative importance of different motivational factors in the decision making regarding to the channel choice. Secure feeling as motivational factor is top ranked by both type of customers whereas financial benefits is 2nd ranked followed by ATM services and service provision (3rd) than Proximity (4th) Branch services (5th) Attractiveness and at last people influence in case of private sector bank customers. However Service provision and ATM Services is ranked 2nd followed by financial services (3rd) Branch services (4th) Attractiveness (5th) Proximity (6) and at last people Influence in case of public sector customers.

Conclusion

Indian banking industry was public bank dominantly industry up till 1991, but after that the scenario is being changing gradually and in coming future cut throat competition is an inevitable phenomenon, where more and more private and foreign sector bank will come into existence with strong technological support and modern concept of marketing .In such case it is now right time for public sector banks to restructure their self and think out of box for not only retention of old customers but also attract new customers. Motivational factors ranking indicates that public sector banks should concentrate more on financial benefits, branch services, Attractiveness and advertising for increasing their market share.

Limitation of study

The present study is confined to four districts of Utter Pradesh and findings may not be applicable to other states of the country because of socio cultural difference. Further, customer behavior being dynamic in nature, there is every possibility that over time and space findings of today may become invalid tomorrow. The above lists of motivational factors are not the exhaustive list for cannel chooses for both Public and Private sector bank's customers. The responses of respondents were treated as correct. Time and money was also remarkable limitation for the proposed study.

Comparative mean- score of Private Sector Bank and Public Sector Bank Customers For channel choice Table 3

Factors	Private Sector Bank Mean scores x/n	Public Sector Bank Mean scores x/n
People Influence		
Relative Recommendations	2.76	2.95
Family Recommendations	3.40	3.50
Parents Recommendations	3.76	3.73
Self Evaluation	3.03	4.35
Total Score	ΣX=3.24	ΣX=3.63
Attractiveness		
Attractiveness of bank premises	3.30	2.95
Staff Appearences	2.73	3.55
Bank Reception	3.26	4.54
Bank Atmosphere	3.75	4.15
Total Score	ΣX=3.26	ΣX=3.79
Service provision		
Service Promptness	4.06	4.05
Service System	4.17	4.27
Service Tools	3.76	3.85
Service offered	4.10	4.00
Total Score	ΣX=4.02	ΣX=4.04
ATM Service		
Ease Of ATM operation	4.30	4.25
Location of ATM	4.16	4.42
No. of ATM	4.06	4.25
24X7 Availability of ATM Services	4.66	4.65
Total Score	ΣX=4.02	ΣX=4.04
Branch Service		
Location of Branches	3.80	4.15
No.of Branches	3.80	3.84
Convenient Associated With branches	3.93	3.66
Total Score	ΣX=3.84	ΣX=3.88
Proximity		
Proximity of Office	4.00	4.08
Proximity to Home	3.83	3.65
Proximity to business Piont	4.03	3.55
Total Score	ΣX=3.95	ΣX=3.76
Secure feeling		
Financial Stability	4.36	3.95
Financial Strangeness	4.10	4.21
Total Score	ΣX=4.23	ΣX=4.08
Financial Benefits		
Low service charges	4.25	3.94
Low interest rate on loans	4.26	4.00
Low minimum balance requrement	4.03	3.94
Total Score	ΣX=4.18	ΣX=3.96

Table-4- THE Z TEST(Two Tailed, Significance level- 0.05) Public and Private Sector Bank's Customers

Sr. No.	Motivational Factors	Respondents Public Sector Bank		Private Sector Bank				
		MEAN	S.D	MEAN	S.D No.	Calculated Value(Z)	Critical value	S/NS
1.	People Influence	3.63	0.249	3.24	0.273	13.92	1.96	S
2.	Attractiveness	3.79	0.275	3.79	0.275	23.92	1.96	S
3.	Service provision	4.04	0.284	4.02	0.323	0.06	1.96	NS
4.	ATM Service	4.39	0.315	4.29	0.350	2.5	1.96	S
5.	Branch Service	3.88	0.271	3.84	0.300	1.29	1.96	NS
6.	Proximity	3.76	0.220	3.95	0.312	10	1.96	S
7.	Secure feeling	4.08	0.285	4.23	0.347	0.88	1.96	NS
8.	Financial Benefits	3.96	0.279	4.18	0.339	6.47	1.96	S
	Total	3.94	0.272	3.94	0.314	7.38	1.96	S

Table5a
Public Sector Bank

	Factors	Not important at all(1)	Somewhat import2)	Can Not Say (3)	Important (4)	Very Important (5)	Total	Mean Score	S.D σ
1	People Influence								
	Relative recommendations	20	50	70	40	20	200	2.95	0.223
	Family Recommendations	0	60	10	100	30	200	3.50	0.237
	Parents Recommendations	0	40	20	80	50	190	3.73	0.238
	Self Evaluation	0	20	10	50	120	200	4.35	0.301
								ΣX=3.63	Σσ=0.249
2	Attractiveness								
	Attractiveness of bank premises	30	50	40	40	30	190	2.95	0.229
	Staff Appearance	0	40	50	70	40	200	3.55	0.239
	Bank Reception	10	20	15	90	50	185	4.54	0.343
	Banks Atmosphere	0	10	10	120	60	20	4.15	0.288
								ΣX=3.79	Σσ=0.275

SAARANSH
RKG JOURNAL OF MANAGEMENT
Vol. 3 • No. 1 • JULY 2011

3	Service provision								
	Service Promptness	0	10	30	100	60	200	4.05	0.283
	Service System	0	0	20	90	70	180	4.27	0.316
	Service Tools	0	10	60	80	50	200	3.85	0.260
	Service offered	0	10	40	80	60	190	4.00	0.280
									$\Sigma X=4.04$ $\Sigma\sigma=0.284$
4	ATM Service								
	Ease Of ATM operation	0	20	10	70	100	200	4.25	0.298
	Location of ATM	0	10	10	60	110	190	4.42	0.324
	No. of ATM	0	0	20	110	70	200	4.25	0298
	24X7 Availability of ATM Service	0	0	10	50	140	200	4.65	0.342
									$\Sigma X=4.39$ $\Sigma\sigma=0.315$
5	Branch Service								
	Location of Branches	0	0	20	130	50	200	4.15	0.288/
	No. of Branches	0	10	40	110	30	190	3.84	0.268/
	Convenient Associated with branches	10	20	20	100	30	180	3.66	0.259/
									$\Sigma X=3.88$ $\Sigma\sigma=0.271$
6	Proximity								
	Proximity of Office	4	19	23	64	90	200	4.08	0.265
	Proximity to Home	19	31	21	59	70	200	3.65	0.205
	Proximity to buss	12	29	47	61	51	200	3.55	0.191
									$\Sigma X=3.76$ $\Sigma\sigma=0.220$
7	Secure feeling								
	Financial Stability	0	0	40	130	30	200	3.95	0.269
	Financial Strangeness	0	10	30	110	50	190	4.21	0.301
									$\Sigma X=4.08$ $\Sigma\sigma=0.285$
8	Financial Benefits								
	Low service charges	0	10	20	120	30	180	3.94	0.282
	Low interest rate on loans	0	20	20	90	60	190	4.00	0.280
	Low minimum balance requirement	0	40	10	60	80	190	3.94	0.275
									$\Sigma X=3.96$ $\Sigma\sigma=0.279$

Table 5b
Private Sector Bank

	Factors	Not important at all(1)	Some what important2)	Can Not Say (3)	Important (4)	Very Important (5)	Total	Mean Score	S.D σ
1	People Influence								
	Relative recommendations	25	50	20	45	10	150	2.76	0.268
	Family Recommendations	20	30	5	60	35	150	3.40	0.268
	Parents Recommendations	20	0	10	85	35	150	3.76	0.292
	Self Evaluation	0	5	5	60	75	145	3.03	0.262
									$\Sigma X=3.24$ $\Sigma\sigma=0.273$
2	Attractiveness								
	Attractiveness of bank premises	20	30	15	55	30	150	3.30	0.263
	Staff Appearance	15	40	15	65	15	150	2.73	0.262
	Bank Reception	15	40	10	60	25	150	3.26	0.262
	Banks Atmosphere	10	25	5	55	50	145	3.75	0.297
									$\Sigma X=3.26$ $\Sigma\sigma=0.271$
3	Service provision								
	Service Promptness	0	15	20	55	60	150	4.06	0.322
	Service System	0	5	10	80	45	140	4.17	0.346
	Service Tools	0	25	30	50	45	150	3.76	0.293
	Service offered	5	10	30	45	60	145	4.10	0.332
									$\Sigma X=4.02$ $\Sigma\sigma=0.323$
4	ATM Service								
	Ease Of ATM operation	0	15	10	40	85	150	4.30	0.350
	Location of ATM	0	15	10	60	65	150	4.16	0.333
	No. of ATM	0	10	20	70	50	150	4.06	0.322
	24X7 Availability of ATM Service	0	0	5	40	105	150	4.66	0.398
									$\Sigma X=4.29$ $\Sigma\sigma=0.350$
5	Branch Service								
	Location of Branches	0	20	10	50	60	150	3.80	0.296
	No. of Branches	5	30	5	60	50	150	3.80	0.296
	Convenient Associated with branches	10	5	15	75	45	150	3.93	0.308
									$\Sigma X=3.84$ $\Sigma\sigma=0.300$
6	Proximity								
	Proximity of Office	10	10	10	60	60	150	4.00	0.316
	Proximity to Home	0	35	15	65	40	150	3.83	0.298
	Proximity to buss	10	5	10	70	55	150	4.03	0.323
									$\Sigma X=3.95$ $\Sigma\sigma=0.312$
7	Secure feeling								
	Financial Stability	0	5	10	60	75	150	4.36	0.357
	Financial Strangeness	0	5	15	80	40	140	4.10	0.338
									$\Sigma X=4.23$ $\Sigma\sigma=0.347$
8	Financial Benefits								
	Low service charges	0	0	0	70	75	145	4.25	0.350
	Low interest rate on loans	0	15	15	35	85	150	4.26	0.345
	Low minimum balance requirement	0	25	5	60	60	150	4.03	0.323
	Z-Test=								$\Sigma X=4.18$ $\Sigma\sigma=0.339$

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DIVIDEND PAYMENT PRACTICES IN INDIAN CORPORATE

Sunil Gupta* **Sambhavna Gupta**** **Pradeep Aggarwal*****

ABSTRACT

In the present paper an attempt has been made to assess the dividend payout policies of Indian Companies. For the purpose of study BSE Sensex -30 companies have been selected as sample for the study. To study impact of profitability, liquidity and size of business on dividend payout regression analysis were carried out. An attempt has also been made to calculate estimated dividend payout based on regression results. The result of the study indicates dividend policies of Indian companies were highly influenced by profitability and liquidity of the firm. The major companies follow conservative dividend policy.

***Keywords**: Dividend Payout, profitability, liquidity, retained earning, cash dividend, stock dividend, dividend per share, earning per share.*

INTRODUCTION

Dividend policy is one of the most controversial subjects in finance. Dividend policy is one of the most important financial policies, not only from the viewpoint of the company, but also from that of the shareholders, the customers, the workers, regulatory bodies and the Government. Finance scholars have engaged in extensive theorizing to explain why companies should pay or not pay dividends. Lintner, 1956; Brittain, 1964; Modigliani and Miller, 1961; Pettit, 1972; Black and Scholes 1973, Michael, Thaler and Womack, 1995; Dhillon and Johnson, 1994; Amibud and Murgia, 1997; Charitou and Vafeas, 1998, studies has determined on the developed countries, the decision between paying dividend and retaining earnings has been taken seriously by both investors and management, and has been the subject of considerable research by economists in the last four decades.

Financial economists have therefore, acknowledged the after tax earnings of any business firm as an important internal source of investible funds and also a basis for dividend payments to shareholders. The decision to retain, reinvest or pay out after tax earnings in form of cash or stock dividend is important for the realization of corporate goal which is the maximization of the value of the firm (Soyode, 1975), (Oyejide, 1976), (Ariyo, 1983). In this study we analyze the impact of profitability, liquidity and size of the business operations of selected firms on its dividend policy of corporate firms in India. Initially, we examine the main determinants of dividend decisions of corporate firms in India using pooled cross sectional data and address shortcomings of prior studies by presenting a more comprehensive model of dividend policy.

Literature Review

Miller and Modigliani (1961) view dividend payment as irrelevant. According to them, the investor is indifferent between dividend payment and capital gains. Black (1976) poses the question again, "Why do corporations pay dividends?" In addition, he poses a second question, "Why do investors pay attention to dividends?" Although, the answers to these questions may appear obvious, he concludes that they are not. The harder we try to explain the phenomenon, the more it seems like a puzzle, with pieces that just do not fit together. After over two decades since Black's paper, the dividend puzzle persists. Gupta and Sharma (1981) have made an attempt to study the dividend behaviour of 112 tea companies of India and they concluded that Linter's model is applicable to the tea industry. Narasimhan and Vijayalakshmi (2002) analyze the influence of ownership structure on dividend payout of 186 manufacturing firms. Regression analysis shows that promoters' holding as of September 2001 has no influence on average dividend payout for the period 1997-2001. Oza (2004) study on thirty non financial Indian companies dividend behaviour, finds that current earnings is the most influencing factor while deciding on dividend policy followed by pattern of past dividends. Reddy (2004) has examined the dividend behaviour of Indian corporate firms over the period 1990-2001 of companies listed on NSE and BSE. He concluded that dividend changes are impacted more by contemporaneous and lagged earnings performance rather than by future earning performance. Sur (2005) has tried to study the dividend payout trends of Colgate Palmolive Ltd. And concluded there was a significant deviation between actual DPR and estimated DPR. George and Kumudha (2005) has tested Linter Model in Hindustan Construction Co. Ltd. and finds that current year's dividend per share is positively related to current year's earning per share and previous year's dividend per share. A Study of Dividend Policy of Indian Companies was carried out by Singhania (2007) on the 590 listed Manufacturing firm of India over the period of 1992-2004. She finds that average dividend per share increased significantly during the study period. Bhayani (2008) has conducted a study on the dividend policy behaviour of BSE 30 companies of India for the period of 1996-97 to 2004-05. He finds that the linter model of dividend is followed by the firm under study. Mishra and Narender (1996) analyze the dividend policies of 39 state-owned enterprises (SoE) in India for the period 1984-85 to 1993-94. They find that earnings per share (EPS) are a major factor in determining the dividend payout of SoEs.

Objectives of the Study

The primary objectives of the study are:

1. To recognize the factors influencing on the dividend payout policies of the Indian firms.
2. To identify management attitudes towards dividend payout with estimated DPR and actual DPR.

*Faculty, SOMS, IGNOU, MaidanGarhi, New Delhi-110068, INDIA
**Visiting Faculty, GGSIP University, New Delhi, INDIA
***Centre for mgmt. Studies, IILM, Greater Noida, INDIA

Methodology

Sample Selection: The present study has been based on BSE 30 companies. BSE Sensex covered diversified industries consisting of Textile & Clothing, Pharmaceuticals & Chemicals, Cement, and Engineering & Electrical products etc. Reason behind the selection of BSE 30 is that Indian Stock Market is highly influenced by the BSE 30 index. Researcher has tried to study the dividend payout practices of BSE 30 companies which are significant for deciding dividend policy of other Indian corporate.

The study is based on secondary data. The data are retrieved from Capitaline database provided by the Capital Market. The initial data set includes the universe of BSE 30 Indian Private Sector firms. The period of study is 1996-97 to 2006-07. Three companies (Bharati Airtel Ltd., Reliance Communication Ltd., and Tata Consultancy Services Ltd.) were dropped from the sample due to non availability of the data for entire period.

Data Analysis: For the purpose of analyzing the data various ratios have been used. For the study of correlation among various variables correlation analysis also used. To identify the factors influencing on dividend payout of Indian firms multiple regression analysis has been carried out and based on this model estimated DPR have been found out and deviations form actual DPR have been also tested by using t test. For actual DPR average DPR of entire study period have been calculated.

For judging factors influencing on dividend payout policies of Indian firm following model has been developed.

Variables of the Study

Dividend Payout Ratio: This ratio indicates what percentage of the firms earnings, after tax less preference dividend is being paid to equity shareholders in the form of dividends. It is computed as follows:

Where, DPRj, t is dividend payout ratio, DPSj, t refers to amount of dividend per share paid by the company j in year t and EPSj,t refers to earnings per share for company j in year t.

Dividend per Share: It shows how much company has paid out. It is calculated as follows:

Where, DPSj,t refers to amount of dividend per share paid by the company j in year t, Dividend refers to amount of dividend paid by company j in year t and NOSj,t refers to number of outstanding shares for company j in year t.

Liquidity Ratio: It refers to the ability of a firm to meet its short-term obligations. It is calculated as follows:

Where, Liquid Assetsj,t includes cash and book debt of the company j in year t. Liquid Liabilities includes creditors and other short term liabilities other than bank overdraft of the company j in the year t.

Total Assets: Size is expected to be an important determinant of firm performance. This variable may be important if economies of scale operate. Size as measured refers to total assets employed in the business. Growth in size is expected to reflect the direction of change in operating efficiency. In the present study natural logarithm of total assets of the firm has been used as independent variable.

Earning Per Share: Earning per share is arrived at by dividing the earning available to the equity or common shareholders by the number of outstanding shares.

Where, EPSj,t refers to earnings per share of the company j in year t, PAT refers to Profit After Tax of the company j in year t, Preference dividend means dividend paid by company j on it's preference share capital and NOSj,t refers to number of outstanding shares for company j in year t.

Analysis

The descriptive statistics of the variables of the study has been presented in the Table 1. The mean value of DPS was Rs. 109.807, while its maximum value was Rs. 394.09 which reflects the high standard deviation (11442.219) in the DPS among the sample companies. The average dividend pay out ratio of sample companies was 12.58, which indicates higher retention of profit by sample companies. The minimum EPS of sample companies were Rs. 7.04 and maximum EPS were Rs. 101.83. In liquidity ratio of sample companies showed a stable position. The volumes of total assets among the sample companies were highly deviated and the value of Standard deviation was too high.

Table 1: Descriptive statistics

	Minimum	Maximum	Mean	Std. Deviation	Variance
DPS	8.970	394.090	109.807	106.968	11442.219
DPR	11.700	67.120	27.563	12.589	158.479
EPS	7.040	101.830	33.480	23.829	567.816
LR	0.230	3.450	1.103	0.871	0.758
TA	1046.870	285060.070	22337.119	54646.322	2986220469.272

To study the relationship among the various variables of study correlation analysis was carried out. It is revealed from the table that DPS has partial positive correlation with DPR, and DPS. The values of r were 0.328 and 0.349 with DPR and DPS respectively, and both the variables were significant at 5 percent level. The correlation value of r between DPS and TA was – 0.166. This indicates when size of assets increased the DPS reduces. The value of r of liquid ratio indicates lack of correlation among liquidity and dividend per share.

Table 2: Correlation

	DPS	DPR	EPS	QR	TA
DPS	1				
DPR	0.328*	1			
EPS	0.349*	-0.217	1		
QR	0.040	-0.335*	0.228	1	
TA	-0.166	-0.185	0.064	0.091	1

* Correlation is significant at the 0.05 level.

The multivariate regression analysis of above model has been presented in Table 3. As per year wise pooled cross section of sample companies regression results indicates that independent variables EPS and LR were found to be significant at 1 percent level of significant with standardized beta coefficient of -0.079 and -4.354 respectively. The t value of EPS and LR were 2.48 and 3.01 respectively. The TA was not found significant with DPR. So, it can be concluded the dividend payout policies of the sample companies highly influenced by earnings of the companies and liquidity position of the companies. This result has supported by the Sur (2005). The over all model is also significant with R^2 value of 0.68.

Table 3: Multivariate regression analysis

Year	Constant	EPS_{ti}	LR_{ti}	TA_{ti}	R^2	F Value
Cross Section of Sample Companies Pooled						
Coefficient	37.690	-0.079	-4.354	-0.302	0.68	5.03*
t value	2.256	2.48*	3.01*	-0.91		

* t and F value is significant at 5% level.

To evaluate the dividend pay out policies of sample companies the estimated DPR has been calculated based on above regression equation and the deviation between actual DPR and estimated DPR have been presented in Table 4. It shows the actual DPR and estimated DPR and excess/shortage of DPR of sample companies. From the tables it reveals that out of 27 sample companies the 15 companies DPR were less as compared to its estimated DPR. The paired t value of actual dividend and estimated dividend was also found significant at 1 percent level of significance. So, it can be concluded the majority of the sample companies were conservative in payout of dividend to its equity shareholders.

Table 4: Estimated dividend payout ratio

Name of Company	Actual DPR	Estimated DPR	Excess/ Shortage
Associated Cement Cos. Ltd.	45.348	32.996	12.352
Bajaj Auto Ltd.	24.909	27.301	-2.392
Bharat Heavy Electricals Ltd.	16.582	30.749	-14.167
Cipla Ltd.	17.105	29.985	-12.880
Dr. Reddy'S Laboratories Ltd.	18.719	26.955	-8.237
Grasim Industries Ltd.	23.346	27.178	-3.832
Gujarat Ambuja Cements Ltd.	34.210	31.455	2.756
HDF C Bank Ltd.	24.632	24.669	-0.037
Hero Honda Motors Ltd.	35.355	30.158	5.197
Hindalco Industries Ltd.	12.358	20.001	-7.644
Hindustan Lever Ltd.	67.125	31.558	35.567
Housing Development Finance Corpn. Ltd.	36.719	20.312	16.408
ICICI Bank Ltd.	34.288	20.085	14.203
ITC Ltd.	26.360	30.123	-3.764
Infosys Technologies Ltd.	19.017	16.437	2.580
Larsen & Toubro Ltd.	40.255	31.713	8.542
Maruti Udyog Ltd.	11.699	30.012	-18.313
NTP C Ltd.	21.828	31.428	-9.600
Oil & Natural Gas Corpn. Ltd.	27.797	28.562	-0.764
Ranbaxy Laboratories Ltd.	40.853	30.544	10.309
Reliance Energy Ltd.	22.973	29.329	-6.356
Reliance Industries Ltd.	18.367	29.008	-10.642
Satyam Computer Services Ltd.	19.249	19.169	0.080
State Bank of India	15.416	24.362	-8.946
Tata Motors Ltd.	38.475	32.197	6.278
Tata Steel Ltd.	37.577	30.780	6.797
Wipro Ltd.	13.622	27.178	-13.557
Paired t Value -0.001*			

* t value is significant at 1% level.

Conclusion

The study shows that these companies have paid constant dividend and follows stable dividend policies. The multiple regression results indicate that the earning per share and liquidity ratios were found significant. It shows that profitability of the firm and liquidity position of the firm highly influencing factors in determining dividend policies of Indian companies. The estimated dividend payout based on regression results indicates major companies follows conservative dividend payout policies. It means the top management believes that retained earnings will give higher return and it results in higher value of the firm.

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Analysis of effects of Strategic Alliance on performance of Corporation Assessment

Vahid Rangriz* **M. G. BasavaRaja****

ABSTRACT

Most studies on strategic alliances have absorbed on exact issues connecting to strategic alliance formation and its valuation implication. Less is known, though, about strategic alliance termination which is equally valued in understanding the net benefits corporations get, or fail to obtain from partnering. Using real choices viewpoint and the dynamics of market entry and exit decisions, this paper inspects the conditions under which strategic alliance terminations create value for the shareholders of the partnering corporations. Exactly, this study classifies the reason for termination as well as the consent to terminate as factors that can affect termination outcome. The results show that strategic alliance termination may not often be detrimental to parent corporations. This study proposes that terminating an alliance as a means of exploiting developing occasions creates shareholder value while terminating an alliance as a means of sequential adaptation dissipates value because the market perceives the unexpected termination as a signal of unpredictability or alliance failure rather than as an act of sequential adaptation by parent corporations. In addition, this study also proposes that mutual agreement of the parties to terminate the alliance alleviate the negative effects of terminating an alliance. Also, this study illustrates that parent corporations' presentation consequences from forming and terminating an alliance are generally complementary in nature.

***Keywords**: Strategic alliances, Termination, Parent Corporations, Corporation Assessment*

INTRODUCTION

A review on the research on strategic alliances discloses that the vast mainstream of work has attempted to answer the question, "Why do these operations make strategic sense?" Considerable literature has appeared attributing connection for strategic alliances to the political economy of international trade (Contractor & Lorange, 1988), the appearance of new competitive constructions (Child, 1987), the influence of advancing technology (Clark, 1989), the value of network organizations (R. E. Miles & Snow, 1986). Forging an alliance brings many compelling benefits. First, it can improve the corporations' competitive location through market power for competence (Kogut, 1988). By bringing together complimentary assets owned by dissimilar organizations, strategic alliances enable the corporations' effort to alter their competitive position. Second, it can decrease manufacture and transaction cost for the corporation's concerned (Hennart, 1988; Williamson, 1985) as well as defrays costs and share risks when they undertake high-cost projects or very speculative strategic initiatives. Third, it can also be a means to learn or absorb critical skills or capabilities from an alliance partner (Hamel, 1991; Khanna et. al., 1998). Learning alliances give participants opportunities to access some useful information or know-how from the spouse and to adopt some complimentary competences and skills possessed by the partner. Finally, for corporations in concentrated industries, it can help them conspire or gain market power at the expenditure of other competitors (Stuart, 2000). Despite the popularity of strategic alliances and its supposed benefits for participating corporations, failures abound, with the failure rate reported at or higher than 50% (Harrigan, 1988).

Objectives and Contribution

This paper study examines parent corporation presentation consequences using the occasion study methodology to assess the shareholder wealth belongings of strategic alliance terminations. This investment decision is supposed to have an important influence on the total value that a parent corporation creates or dissipates from teamwork. So leading to the question of whether and under what circumstances value is created when two or more corporations decide to retract their efforts to pursue a set of agreed-upon goals. This study also investigates whether mutual agreement of the alliance partners to terminate the alliance has an effect on the termination outcome. Also, this study also examines the relationship between strategic alliance formation and termination.

This paper hopes to make the following contributions.

First, it efforts to challenge previous studies on Joint Venture (JV) termination, which usually operated under the supposition that alliance longevity is in parent corporations' best interest and termination is revealing of failure on the part of the alliance or the collaborators by showing that alliance unpredictability may not always represent failure and that the termination of the alliance may even create or augment value for the parent corporations.

Second, it accompaniments several recent studies in the strategy field that view termination as a natural part of collaboration as parent corporations alter their commitments in uncertain investment context (Balakrishnan & Koza, 1993), learn from their partners (Hamel, 1991; Khanna et. al., 1998), adapt over time (Koza & Lewin, 1998), seize upon uncertain growth opportunities while reducing downside risks (Kogut, 1991), invest sequentially (Reuer & Koza, 2000), and exploit emerging opportunities (Reuer & Tong, 2005).

Third, by combining the real choices method with the dynamics of market entry and exit decisions and examining whether mutual consent to dismiss the alliance have an effect on the termination outcome, this study is able to provide a more complete sympathetic of the circumstances under

*Research Scholar, Ph. D program, Department of Economics,Mysore University, Karnataka state, India
**Professor of Economics & Director, Sir M.V.P.G Centre, University of Mysore, No.742, AMRUTHA, Mysore-570009, Karnataka State, India.

which terminating an alliance would create value for the parent corporations.

Strategic Alliance Formation

Empirical research on parent corporation valuation insinuations of strategic alliance formation has produced mixed results. Several studies detect that corporations usually obtain an optimistic abnormal return upon announcement of the formation of the strategic alliance (Chen et. al., 1991). Other studies find a negative average valuation effect (Chung, et. al., 1993) and some find insignificant valuation effect (Merchant, 1997). Higher abnormal returns can be obtained by parent corporations when the alliance entails capital market change (Lummer & McConnel, 1990) when the parent corporation has less international experience (Hu et. al., 1992), and when the alliance is formed during a period of a strong home country currency (Crutchley et. al., 1991). Abnormal returns tend to be worse if activity hazards arising from dispersed parent corporation ownership, high levels of free cash flow, or an unsuitable capital construction are present (Wild, 1994).

Strategic Alliance Termination

Complementary research on the dissimilar kinds of strategic alliances terminations were bundled composed within the broader notions of unpredictability. Franko (1971), in his pioneering study, confirmed that changes in a multinational corporation's (MNC's) international strategy, as signified by shifts in its organizational construction, pretentious the corporation's tolerance for shared control and decision-making required by joint ventures. He found that changes in organizational constructions that bring about greater concentration and worldwide coordination triggered and precipitated unpredictability. These early findings are dependable with the more recent growths that view alliances as being embedded in the developing strategies of parent corporations rather than as stand-alone, independent operations with their own raison for existance (Koza & Lewin, 1998).

According to Park and Ungson (1997), strategic alliances fail because of the unscrupulous hazards as each partner tries to exploit their own individual interests instead of the collaborative interests. Also, strategic alliances fail because of the difficulties in coordinating two independent corporations as well as the difficulties in aligning processes at the alliance level with parent corporations' long term goals.

Hypotheses Development

Numerous scholars used dissimilar theoretical viewpoints to measure strategic alliance terminations, drawing various inferences and inspecting it otherwise as an indication of failure, as a alteration of the initial market entry decision, or as an adaptive reply to changing environmental or corporation-specific conditions. In order to determine if corporation value can be shaped when two or more corporations decide to retract their efforts to pursue a set of agreed-upon goals, I view that parent corporations terminate alliances by either redeploying additional resources to or withdrawing resources from the alliance. This is reliable with Reuer's (2000) view that strategic alliance termination includes separate changes in organizational commitments as corporations either deploy extra capitals to the business or withdraw from the alliance. The necessity to increase or decrease the resources such as capitalization of the strategic alliance invariably requires a renegotiation of the agreement and this often leads to the termination of the original alliance. By defining termination this way, this study is able to classify terminated alliances that were successful and thus expected to create value from those that were failures or more neutral for parent corporations such as agreement expiration or satisfaction of the alliance objectives

1. **Effect of Reason for Termination on Termination Outcome**

The task of structure a market location and modest competences needs lumpy and nontrivial investments. As a result, it is frequently beyond the resources of a single corporation to enlarge in all possible market opportunities. Any given corporation is unlikely to possess the full range of skills. A partner, particularly one which brings the necessary skills, may be sought to share the costs of placing the bet that an opportunity will be realized in the future. This viewpoint is connected to the use of strategic alliances to share risk. A strategic alliance not only shares the asset burden, but occasionally reduces it, as the parties may bring dissimilar skills, thus lowering the total investment cost. In many industries, strategic alliances not only share risks, but also decrease the total investment. Because the parties bring different capabilities, the alliance no longer need the full development costs. Due to its benefits of sharing risk and of plummeting overall investment costs, strategic alliances serve as an attractive device to invest in an option to expand in risky markets. In the event the investment is judged to be favorable, the parties to the strategic alliance would decide to enlarge their investment by further committing capital.

Joint ventures permit corporations to pool risks and share the new investment at the time of incoming into a new market. Though this surrenders some degree of managerial control, it delivers corporations with a relatively cheap way of monitoring a new environment while incrementally fascinating skills from a partner. Once the essential skills have been absorbed and the environment in the target market becomes favorable, a corporation may enhance its commitment by contributing extra investments up to the point of obtaining the venture from the partner. Thus in the real options view, joint ventures act as a bridge between the replacements of irreversibly committing resources at the time of incoming into a new market versus waiting to enter later when circumstances prove promising.

The real options opinion proposes that joint ventures proposal a number of advantages in terms of entering a new market. The overall implication is that once the essential capabilities have been absorbed and learning is complete, a corporation may upsurge its asset to the venture to the point of acquiring it as a step toward further growth and growth in the target market. In addition, the real options view proposes that value is shaped for parent corporations because apart from allowing a timely response to environmental opportunities, parent corporations can limit its monetary risk because they are likely to be well knowledgeable of the value of the venture's assets and the rents they are capable of generating before they increase their investments into the venture. Therefore I posit:

H1: Alliances terminated as a means of abusing developing opportunities will have optimistic abnormal revenues upon closure.

There are various reasons that would suggest that alliance terminations through divestitures would create value for parent corporations. First, they are probable to signify deployment of resources toward more moneymaking opportunities. Second, gains come about because the spin-off or divestiture reorders and rationalizes an uncontrollable managerial construction (Schipper & Smith, 1983). Third, corporations consuming high diversification and poor success comparative to their industry counterparts have the propensity to refocus. Henceforth, the suitable remedial action will be for these corporations to decrease their diversification by refocusing. By refocusing on core businesses, corporations are moving back closer to optimal change levels thus suggesting that refocusing helps improve success and market value (Hoskisson & Turk, 1990). Changing can therefore be viewed as an adjustment process that brings over-diversified corporations closer to their optimal limits and thus recovers their efficiency (Schipper & Smith, 1983).

Therefore, I posit:

H2: Alliances terminated as a means to change a corporation's creation market portfolio will have optimistic abnormal revenues upon closure.

An alternative viewpoint is that strategic alliances may be often be a good asset decision by parent corporations but the altering conditions no longer justify the continuation of the alliance in its present form. Through time, the objectives, resources, and relative power of the parents will progressively change. Even the most astute parent companies cannot forestall trends and other events that will occur during the life of the alliance. Somewhere along the line, alliances are likely to find that their markets are shifting, new technologies are emerging, or customers' needs are changing. Also, the strategies, skills, and resources of the parent corporations may change. And once the alliances are up and running, they often discover new opportunities like a new market for their products or a new way to influence their expertise (Bleeke & Ernst, 1995).

In this context, it is generally supposed that a strategic alliance apparent as performing successfully is more likely to remain in operation than those viewed as less successful (Porter, 1987). Although difference exists concerning whether closure implies failure of a strategic alliance, there has been considerable theoretical and empirical support for dissolution as a sign of downside in inter-corporation teamwork. In addition to economic thoughts, dissolving an ongoing cooperative construction also becomes important in the light of influential social and psychological incentives to reservation the cooperative relationships. This is because investments in strategic alliances comprise not only economic and technological resources, but also social commitments and predicaments.

So, it is not only in the economic but also in the psychological and social best welfares of the parent corporations to find ways to preserve their socially embedded relationships as they face adverse circumstances (Ring & Van De Ven, 1994). For that reason, the unforeseen termination or closure of a cooperative partnership can too be considered as a signal of instability or alliance failure. Because of the contradictory views in the literature about whether the unexpected termination of the alliance represents parent corporations' exercising their suppleness to evolve in order to overcome problems and adapt to the changes over time or that the unexpected termination reproduces business failure or irresolvable conflict among the partners, I posit:

H3: Alliances terminated as a means of consecutive version will have an ambiguous effect on abnormal returns upon termination.

2. Effect of Mutual Consent on Termination Outcome

Corporations in alliances need to reflect ahead of time the supplies for how the alliance might be terminated. In some cases, the cost of closing an alliance is a defensible reason not to do so. In other cases, as suggested by Ross and Staw (1993), the closing cost can be an impediment to terminating a project even when termination is the rational monetary decision.

Strategic alliances are integrally imperfect agreements because the partners cannot forestall all future eventualities at the time of writing the contracts. The suppleness in the business preparations allowed in strategic alliances leads to the option that property rights related with alliance output and future income are not well defined. Such preparations therefore expose each corporation to unscrupulous exploitation by its partner (Williamson & Ouchi, 1981) that could lead to renegotiation and unequal gain sharing, a situation commonly known as the hold-up problem (O. Hart & Moore, 1990).

Since the more dependent partners, by intuition, would not initiate the termination, they are typically the partners left out and more pretentious by the termination. Thus, I posit:

H4: Alliances terminated equally by the partners have lesser negative consequence on abnormal returns than alliances ended by unilateral extraction.

Relationship of Strategic Alliance Formation and Termination

The strategic alliance creation can be observed as a good asset decision but because of application challenges such as social changes, structural challenges and modest problems, the strategic alliance is terminated.

The strategic alliance formation decision may in some cases have been a poor one due to the corporation's lack of knowledge in teamwork, insufficient information for measuring comparative costs and benefits of collaboration, and so on. So, a very dissimilar condition rises when corporations terminate strategic alliances to correct an initial market entry decision. This opinion of termination parallels prior findings on the subtleties of market entry and exit through attainments and divestitures as reported by Chang (1996). Allen et al. (1995) suggested that wealth gains related with corporate spin-offs result partially from the alteration of a prior mistake. The mistake was a loss-making earlier gaining and the spin-off signifies the downfall of that unwise takeover. Particularly, their consequences designated that the optimistic stock price response around the statement of business spin-offs that has been documented by Hite and Owers (1983), signifies, at least in part, the recalling of wealth that is lost as the result of an unwise gaining, rather than a wealth gain related with the spin offs itself. Just as corporations can use divestiture as a means of retrogressive attainments that may have been poorly considered, parent corporations also may turn to termination to salvage some value from an unattractive strategic alliance. If parent corporations can use terminations as a corrective device, the shareholder wealth belongings of termination will tend to be positive when the market originally replied damagingly to the alliance formation. Thus I posit:

H5: Abnormal returns of alliance formation and termination are damagingly connected.

Sample design and Methodology

Samples

In order to develop a sample of strategic alliance terminations, the Worldwide Mergers and Acquisitions Section of the Securities Data Company database (SDC) were examined for the period 1989-2009. The objective was to identify strategic alliance terminations and the parent corporations. Following the identification of the termination and the 335 parent corporations, the Lexis-Nexis' India company news library was searched for citations of termination announcements and the reference articles were examined to confirm that they pertained to terminations. Then the following criteria were applied:

- At least one partner should be publicly listed India corporation;
- Corresponding stock returns should be obtainable on the Center for Research in Security Prices database (CRSP). To ensure that there were no confusing events on or about the statement date for each parent corporation, a 4-day period around the announcement date [-2,2] was checked for confounding events (McWilliams & Siegel, 1997) such as dividend and earnings announcements, rearrangement, main contract awards, new product announcements, change in a key executive and labor disputes. After removing corporations with confounding events, 213 corporations were left in the sample.

Independent Variables

To test H1 to H4, dummy variables were coded for each corporation. For H1, each of the corporation was assigned a dummy variable taking on the values of 1 to indicate that the alliance was terminated as a means of exploiting emerging opportunities and 0 otherwise. For H_2, another dummy variable was assigned with values of 1 to indicate that the alliance was terminated to refocus a corporation's product market portfolio and 0 otherwise. For H_3, a dummy variable taking on the values of 1 was assigned to indicate that the alliance was terminated as a means of sequential adaptation and 0 otherwise. For testing H_4, a dummy variable taking on values of 0 and 1 was used to indicate terminations by mutual consent and unilateral withdrawal, respectively. For testing H_5, the cumulative abnormal returns of each corporation over trading days t = 0 to t = 1 around the formation announcement date were used as the independent variable.

Dependent Variables

The occasion study used was conducted by first approximating the standard Sharpe-Lintner market model for a parent corporation prior to the statement of alliance termination using the following equation:

$R_{it} = \alpha_i + \beta_i R_{mt} + \varepsilon_{it}$ (1)

Where Rit is the return for corporation i on day t, Rmt is the return on the market portfolio, and εit is an error term assumed to be usually dispersed and self-governing across corporations and time.

Approximation intervals for this equation vary considerably in length, examples can be found for time frames as short as 45 days and as long as 600 days. Though, a trade-off is among approximating a model over a longer interval to recover the statistical correctness of limits versus estimating a model over a shorter interval close to the statement date to accommodate unstable parameters. As a importance of this trade-off and following previous studies, the chosen estimation interval was of intermediate length prior to the announcement date, surrounding trading days t = -250 to t = -50, where t = 0 corresponds to the event date.

When manifold announcements were made for an alliance termination, the earliest statement date was used as the event date. The corporation valuation effects of alliance termination were designed as deviations of actual returns from prediction returns using the Sharpe-Lintner benchmark. Abnormal returns for the trading days nearby each event date were derived using the following equation:

$AR_{it} = R_{it} - (a_i + b_i R_{mt})$ (2)

Where Rit is the corporation i's actual return on day t, and $(a_i + b_i R_{mt})$ is corporation i's forecast return on day t. The forecast return is constructed from the real market return on day
t (i.e., Rmt) and the corporation exact OLS stricture estimates, ai and bi, obtained from equation (1).

Corporation i's abnormal returns can then be summed over intermissions near the statement date to obtain Cumulative Abnormal Returns (CARs) from the alliance termination and is signified by the following equation.

$CAR_{i,r,k}$, = it (3)

Following H_4, it is expected that the abnormal returns of terminations by unilateral withdrawal are more negative than the abnormal returns of terminations by mutual consent of the partners involved. Following H5, the abnormal returns of alliance formation and termination are expected to illustrate negative correlation.

Regression Models

To test H1, ordinary least square regression analysis is employed in this study and is represented by the following equation:

$Y_{it} = \beta_0 + \beta_1 D_{1it} + \beta_2 X_{1it} + \beta_3 X_{2it} + \beta_4 X_{3it} + \mu_{it}$ (4)

Where:

Y_{it} = Cumulative Abnormal Returns (CAR) of corporation i in period t

D_{1it} = dummy variable of corporation i in period t for the alliance that terminated as a means of exploiting emerging opportunities or otherwise

X_{1it} = scope of corporation i in period t

X_{2it} = R&D strength of corporation i in period t

SAARANSH
RKG JOURNAL OF MANAGEMENT
Vol. 3 • No. 1 • JULY 2011

X_{3it} = influence of fir m i in period t
β_0 through β_4 = parameters to be estimated, and
μ_{it} = random error of corporation i in period t.

To test H_2, ordinary least square regression analysis is employed in this study and is represented by the following equation:

$Y_{it} = \beta_0 + \beta_1 D_{2it} + \beta_2 X_{1it} + \beta_3 X_{2it} + \beta_4 X_{3it} + \mu_{it}$ (5)

D_{2it} = dummy variable of corporation i in period t for the alliance that terminated as a earnings to refocus a corporation's product market collection or else

To test H3, ordinary least square regression analysis is employed in this study and is represented by the following equation:

$Y_{it} = \beta_0 + \beta_1 D_{3it} + \beta_2 X_{1it} + \beta_3 X_{2it} + \beta_4 X_{3it} + \mu_{it}$ (6)

D_{3it} = dummy variable of corporation i in time t for the alliance that terminated as a earnings of sequential adaptation or else

To test H_4, ordinary least square regression analysis is employed in this study and is represented by the following equation:

$Y_{it} = \beta_0 + \beta_1 [\sum_{T=\Gamma}^{K} AR X_{1it} + \beta_3 X_{2it} + \beta_4 X_{3it} + \mu_{it}$ (7)

D_{4it} = dummy mutable of corporation i in period t for the alliance that completed by independent withdrawal or joint agreement

To test H_5, ordinary least square regression analysis is also employed and is represented by the following equation:

$Y_{it} = \beta_0 + \beta_1 X_{1it} + \beta_2 X_{2it} + \beta_3 X_{3it} + \beta_4 X_{4it} + \mu_{it}$ (8)

The above equations comprise all self-governing variables that are reviewed as having possible influence on the dependent variable–cumulative abnormal returns of parent firms.

Results

Empirical Tests of Abnormal Returns

Table1 presents the results for the 169 corporations which comprise the full sample. Event study results are presented for 3 days prior and after the announcing date. Table1 show that the 169 corporations experienced insignificant negative abnormal returns on the day of the announcement. However, on day +1 the mean abnormal return is a significant -1.45% ($p < 0.01$; Wilcoxon < 0.05). The cumulative abnormal returns over trading days t = 0 to t = +1 is -1.95% ($p < 0.05$; Wilcoxon < 0.01). The mean abnormal returns on other trading days surrounding the termination date are not significantly different from zero at the 0.10 level (Table 1).

Table2 presents the result of the binomial test and Wilcoxon signed rank test for H1. Dummy variables taking on the values of 1 were used to represent alliances terminated as a means of exploiting emerging opportunities and 0 for otherwise. The table shows that parent corporations of alliances that terminated as a means of exploiting emerging opportunities experienced positive cumulative abnormal returns over trading days 0 and +1 however the difference in cumulative abnormal returns between the two sub-samples is not significantly different from zero at the 0.10 level. It is however, worthwhile to note that although the p-value and Wilcoxon score ($p = 0.107$, Wilcoxon = 0.161) did not reach the required significance level, it is close to significance therefore given that the period under study is longer than what is actually employed; the sample size would have increased and the result would have shown a more convincing result (Table 2).

Table3 presents the consequence of the binomial test and Wilcoxon signed rank test for H2. Dummy variables taking on the values of 1 were used to signify alliances terminated as a means to refocus a corporation's product market portfolio and 0 for otherwise. The table shows that parent corporations of alliances that terminated as a means to refocus a corporation's product market portfolio knowledgeable optimistic increasing abnormal returns over interchange days 0 to +1 and that the 3.44% difference in abnormal returns between the two sub-samples is important using the binominal test ($p<0.05$) but not significant using the Wilcoxon signed rank test. The result though, increases a caution flag because of the small sample size. Even however the sample size is small, there were no outliers driving the results as skewness value is between the allowable ranges of ±1. Again, it is also worthwhile to note if the period under study is longer than what is actually employed; the sample size would have increased and the result would have been more undoubted (Table 3).

Table4 presents the consequence of the binomial test and Wilcoxon signed rank test for H3. Dummy variables taking on the values of 1 were used to signify alliances terminated as a means of consecutive adaptation and 0 for otherwise. The table shows that parent corporations of alliances that terminated as a means of sequential adaptation knowledgeable negative increasing abnormal returns over trading days 0 to +1 and that the difference in abnormal returns between the two sub-samples is significant using the binomial test ($p < 0.10$) but not important using the Wilcoxon signed rank test. The change in the mean abnormal returns between the two sub-samples is 2.91%. Thus, this study shows that market reply to unexpected termination signals unpredictability or alliance failure rather than as an act of sequential adaptation by parent corporations (Table 4).

Table5 presents the result of the binomial test and Wilcoxon signed rank test for H4. Dummy variables taking on values of 0 and 1 were used to indicate terminations by mutual consent and unilateral withdrawal respectively. The table shows that parent corporations of alliances that terminated by unilateral withdrawal experienced more negative cumulative abnormal returns on trading days 0 and +1 than those alliances that terminated by mutual consent. It can also be noted from the table that there is a 4.71% significant difference in the mean abnormal returns between the two sub-samples ($p < 0.01$, Wilcoxon < 0.01) thus, showing support for H_4 (Table 5) .

Table6 presents the results for the 111 corporations which comprise the formation-termination sample. Event study results are presented for 3 days prior and after the announcing date. The table shows that the 111 corporations experienced significant positive abnormal returns on the day of the formation announcement with a mean abnormal return of 2.02% ($p < 0.05$; Wilcoxon < 0.05). The cumulative abnormal returns over trading days t = 0 to t = +1 is 2.62% ($p < 0.10$; Wilcoxon n.s.). Except for the mean abnormal returns on the day and 2 days after the formation announcement date, all other mean abnormal returns for the other trading days surrounding the formation announcement date are not significantly different from zero at the 0.10 level. Table6 also shows that the 111 corporations experienced significant negative abnormal returns on the day following the termination announcement date. The mean abnormal returns on day +1 of the termination announcement is -1.53% ($p < 0.05$; Wilcoxon n.s.) and the cumulative abnormal returns over trading days t = 0 to t = 1 is -1.92% ($p < 0.10$; Wilcoxon < 0.05).

The mean abnormal returns on other trading days nearby the termination statement date are not meaningfully dissimilar from zero at the 0.10 level. Taken composed, this means that when the formation announcement is originally well received by the market, the shareholder wealth effect of the termination will tend to be negative. On the other hand, when the market initially responded negatively to the alliance formation, the stockholder wealth effect of the termination will tend to be positive. So, we can conclude that the abnormal returns of alliance formation and termination are negatively correlated thus H5 is supported (Table 6).

Descriptive Statistics and Correlation of Variables

Tables7 and 8 present the descriptive statistics and the correlation matrices for the two sets of sample. Table7 refers to the 169 corporations that form the full sample and table 8 refers to the 111 corporations that form the formation-termination sample (Table 7 & 8)..

Regression of Cumulative Abnormal Returns ($CAR_{0,1}$)

Table9 presents the results of the multiple regression analyses employed in this study. Since the 169 corporations experienced significant abnormal return on day +1 but not on the day of the announcement, this study uses the corporation's cumulative abnormal returns over trading days t = 0 to t = +1 as the dependent variable. The regression results show that the dummy variable representing hypothesis 1 has a significant positive effect on the $CAR_{0,1}$ of parent corporations therefore H1 is supported.

The results also show that the dummy variable representing H2 has a optimistic result on the CAR0,1 of parent corporations. Though the binomial test reported meaning, the regression model does not show support for H2. Taken composed, this proposes that not all strategic alliance terminations destroy value, and that there are instances that parent corporations do create value when terminating alliances however the very reason why parent corporations generate positive abnormal returns is yet to be determined. This study presents three possible reasons why alliance terminations generate positive market response.

According to this study, strategic alliance terminations create value

1. If the alliance is terminated as a means of exploiting emerging opportunities as suggested by H1;
2. If the alliance is terminated as means to refocus a corporation's product market portfolio as suggested by H2; and
3. If the alliance is terminated as means of sequential adaptation as suggested by H_3.

The above mentioned reasons could be the key in understanding when and under what circumstances do strategic alliance terminations create value for parent corporations but because the study is restricted by the small sample size, the study has only provided support for the first reason. Indeed, given that the period under study is longer than what is actually employed; the sample size would have increased and the results would have shown better support. In addition, the results also show that the dummy variable representing H3 has a significant negative effect on the CAR0,1 of parent corporations. This means that when alliances terminate as a means of sequential adaptation, the market perceives the unexpected termination as a signal of instability or alliance failure rather than as an act of sequential adaptation by parent corporations therefore they react negatively. Furthermore, the results also show that the dummy variable representing H4 has a significant negative effect on the CAR0,1 of parent corporations. This means that parent corporations of alliances that terminate by unilateral withdrawal experience more negative market response than alliances that terminate by mutual consent.

This finding settles that end-games in global alliances are important and often multifaceted and those corporations in alliances essential to consider ahead of time the provisions for how the alliance might be terminated as consent of the partners to terminate the alliance is believed to have an influence on termination outcome. It can too be noted that the formation CAR0,1 has a significant negative association with the CAR0,1 of parent corporations. This means that the increasing abnormal returns of formation and termination are damagingly correlated with each other. Obviously, this finding illustrates that when the formation announcement is initially well received by the market, the stockholder wealth effect of the termination is negative.

Otherwise, when the market initially responded damagingly to the alliance formation, the stockholder wealth effect of the termination is positive. This proposes that just as corporations can use divestiture as a means of retrogressive acquisitions that may have been poorly conceived, parent corporations may also turn to termination to salvage some value from an unattractive strategic alliance.

Further additional points are worth noting from table9. The table shows that the coefficient of corporation size has a consistent significant positive relationship with parent corporations'CAR0,1. This result is in contrast with previous empirical studies which reported that larger parent corporations experience smaller abnormal returns than smaller corporations.

While this study has low R2, it does not mean that the model is unreliable. It simply indicates that there is correlation between the variables. As you can observe in tables7 and 8, the variables for corporation size and R&D intensity are significantly correlated at 0.01 levels. In fact the most important thing about R2 is that it is not important in the CR (Classical Regression) model. The CR model is concerned with parameters in population, not with the goodness of the fit of the sample. If one insists on a measure of predictive success (or rather failure), then 2 might suffice: after all, the parameter 2 is the expected squared forecast error that would result if the population were used as the predictor.

According to Nau (2005), an R2 of 10% or even as little as 5% might even be considered statistically important in some requests, such as forecasting stock returns (Table 9).

Conclusion

The results of this investigation are significant in several respects. First, the results demonstration that strategic alliance termination may not frequently be harmful to parent corporations, as what most preceding studies on alliance termination generally assume. The finding that parent corporations using strategic alliances as transitional instruments can make shareholder value at the termination phase proposes that alliance permanence can often be an unsuitable indicator of the effectiveness of the alliance or of the parent corporations' collaborative strategy.

Second, though some parent corporations improve value at the termination phase; most parent corporations make shareholder wealth upon formation but only to dispel value when terminating the alliance. This consequence points to the problems that researchers' face, in sketch simple implications from alliance termination without investigating the specific conditions surrounding the said event. This study proposes that there can be a diversity of issues that can affect termination consequence. This study classifies the reason for termination as well as the consent to terminate of the partners complicated in the alliance as factors that can affect termination outcome. Exactly, this study proposes that terminating an alliance as a means to exploit emerging opportunities makes stockholder worthwhile terminating an alliance as a consecutive adaptation dissipates worth because the market observes the unexpected termination as a signal of unpredictability or alliance failure rather than as an act of consecutive adaptation by parent corporations.

In addition, this study too proposes that mutual agreement of the alliance partners to terminate the alliance alleviate the negative belongings of terminating an alliance. The managers should keep in mind the compromise among the economic advantage versus the psychological cost of terminating an alliance. Also, the negative association among the stockholder prosperity effects of strategic alliances formation and termination illustrates the complementary nature of parent corporations' performance consequences from forming and terminating an alliance thus managers should be additional cautious in terminating an alliance that is especially well received by the market. On the other hand, the negative association also proposes that managers who undertake poor formation decisions can redeem themselves by subsequently terminating the alliance.

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Event Day	Mean AR (%)	Medium AR (%)	P-value	Wilcoxon
-3	-0.20	-0.28*	0.3986	0.0881
-2	0.32	-0.06	0.3826	0.7386
-1	0.04	-0.27	0.9147	0.6644
0	-0.50	-0.18	0.3987	0.1760
1	-1.45***	-0.34**	0.0077	0.0319
2	0.10	-0.22	0.7720	0.9024
3	0.43	0.07	0.2652	0.7587

N=169, *p-value, 0.10; **p-value<0.05; ***p-value<0.01

Table 1: Abnormal Returns from Strategic Alliance Termination

Variable	Dummy H1	N	Mean(%)	Medium(%)
$CAR_{0,1}$	0	139	-2.80	-0.77
$CAR_{0,1}$	1	30	2.00	0.17
$CAR_{0,1}$	Difference		-4.80	-0.94

*p-value, 0.10; **p-value<0.05; ***p-value<0.01

Table 2: Binominal Test of Alliance Terminated as a Means of Exploiting Emerging Opportunities

Variable	Dummy H2	N	Mean(%)	Medium(%)
$CAR_{0,1}$	0	162	-2.09	-0.65
$CAR_{0,1}$	1	7	1.35	0.90
$CAR_{0,1}$	Difference		-3.44**	-1.55

*p-value, 0.10; **p-value<0.05; ***p-value<0.01

Table 3: Binominal Test of Alliance Terminated as a Means to Refocus a Corporation's Product Market Portfolio

Variable	Dummy H3	N	Mean(%)	Medium(%)
$CAR_{0,1}$	0	117	-1.05	-0.23
$CAR_{0,1}$	1	52	-3.96	-1.02
$CAR_{0,1}$	Difference		2.91*	0.79

*p-value, 0.10; **p-value<0.05; ***p-value<0.01

Table 4: Binominal Test of Alliance Terminated as a Means of Sequential Adaption

Variable	Dummy H4	N	Mean(%)	Medium(%)
$CAR_{0,1}$	0	115	-0.44	-0.03
$CAR_{0,1}$	1	54	-5.15	-1.28
$CAR_{0,1}$	Difference		4.71***	1.25***

*p-value, 0.10; **p-value<0.05; ***p-value<0.01

Table 5: Binominal Test of Alliance Terminated as by Mutual Consent and Unilateral Withdrawal

Event Day	Mean AR (%)	Medium AR (%)	p-value	Wilcoxon
		Formation		
-3	0.15	-0.06	0.6839	0.9162
-2	0.13	-0.04	0.6608	0.9348
-1	-0.21	-0.47	0.4946	0.3751
0	2.02**	0.46**	0.0419	0.0134
1	0.79	-0.09	0.2857	0.8908
2	-0.56*	-0.10	0.0854	0.1477
3	0.38	0.21	0.1415	0.2481
$CAR_{0,1}$	2.62*	0.49	0.0903	0.1428
		Termination		
-3	-0.37	-0.53**	0.1805	0.0380
-2	0.30	0.08	0.5156	0.8631
-1	-0.10	0.00	0.7989	0.7412
0	-0.39	-0.31	0.6180	0.1545
1	-1.53**	-0.15	0.0394	0.2030
2	-0.14	-0.12	0.7364	0.8448
3	0.80	0.25	0.1205	0.2410
$CAR_{0,1}$	-1.92*	-0.77**	0.0774	0.0120

N=111;*p-value, 0.10; **p-value<0.05; ***p-value<0.01

Table 6: Abnormal Returns from Formation and Termination

	Hypotheses				
Variables	**1**	**2**	**3**	**4**	**5**
Intercept	-0.025** (-2.22)	-0.018* (-1.67)	0.001 (0.09)	-0.003 (-0.22)	-0.073*** (-4.35)
Dummy H1	0.057** (2.07)				
Dummy H2		0.035 (0.83)			
Dummy H3			-0.052** (-2.40)		
Dummy H4				-0.046** (-2.08)	
fCAR0,1					-0.173* (-1.80)
Corporation Size	0.020** (2.35)	0.019** (2.11)	0.018** (2.05)	0.017* (1.98)	0.058*** (2.50)
R&D Ratio	-5.8406-4 (-0.39)	-6.0946-4 (-0.40)	-9.1126-4 (-0.61)	-3.6656-4 (-0.24)	0.051*** (4.38)
Leverage	-1.0176-4** (-2.21)	-9.4066-5** (-2.02)	-1.0826-4** (-2.35)	-7.6716-5** (-1.65)	-1.2326-4** (-2.64)
F-value	3.13**	2.17*	3.53***	3.14**	8.81***
R2	0.104	0.074	0.116	0.104	0.345
Adjusted R2	0.071	0.040	0.083	0.071	0.306

[a]t-statistics appear in parentheses

*p-value, 0.10; **p-value<0.05; ***p-value<0.01

Table 9: Regression of Cumulative Abnormal Returns (CAR0,1)[a]

$CAR_{0,1}$	Mean	S.D.	CAR0,1	Dummy H1	Dummy H2	Dummy H3	Dummy H4	Corporation Size	R&D Ratio	Leverage
$CAR_{0,1}$	-0.019	0.102	1.0000							
Dummy H_1	0.173	0.380	0.1810**	1.0000						
Dummy H_2	0.040	0.198	0.0677	-0.941	1.0000					
Dummy H_3	0.306	0.462	-0.1322*	-0.3044***	-0.1365*	1.0000				
Dummy H_4	0.312	0.465	-0.2167***	-0.0779	0.0665	-0.075	1.0000			
Corporation Size	0.107	1.178	0.1947**	-0.1182	-0.0049	0.0341	-0.0151	1.0000		
R&D Ratio									1.0000	
Leverage	52.773	235.487	-0.1893**	0.0302	-0.0134	-0.1368	0.0594	0.0495	-0.0123	1.0000

[a] Reported correlations and Pearson coefficients

*p-value, 0.10; **p-value<0.05; ***p-value<0.01

Table 7: Descriptive Statistics and Correlation Matrix of Full Sample[a]

Variable	Mean	S.D.	CAR0,1	$fCAR_{0,1}$	Corporation Size	R&D Ratio	Leverage
$CAR_{0,1}$	-0.019	0.113	1.0000				
F $CAR_{0,1}$	0.028	0.160	0.3133***	1.0000			
Corporation Size	0.305	1.108	0.2457***	-0.2370**	1.0000		
R&D Ratio	0.603	1.169	0.2432**	0.0743	-0.4299***	1.0000	
Leverage	58.969	287.200	-0.2201**	0.1870*	0.04	-0.0207	1.0000

[a] Reported correlations and Pearson coefficients

*p-value, 0.10; **p-value<0.05; ***p-value<0.01

Table 8: Descriptive Statistics and Correlation Matrix of Formation-Termination Sample[a]

SAARANSH
RKG JOURNAL OF MANAGEMENT
Vol. 3 • No. 1 • JULY 2011

NON PERFORMING ASSET (NPA) ANALYSIS IN PUBLIC SECTOR BANKS-A STUDY ON STATE BANK OF INDIA

S.Ghosh*

ABSTRACT

Public Sector Banks (PSBs) had taken proper steps in reducing the burden of NPA amount in making proper amount of provision against profit for averting risk and in recovering the mounting NPAs during the period from 1997 to 2007. The growth rate of recovery of NPA was highest positive for PVTs followed by PSBs and negative for FBs. So FBs were lagging behind PVTs and PSBs in collecting NPA amount. SBI was able to reduce the NPA burden keeping parity of other Public Sector Banks and consequently reducing the amount of provision for NPA.

***Keywords**: Strategic alliances, Termination, Parent Corporations, Corporation Assessment*

INTRODUCTION

With a view to move towards internationally accepted norms for asset classification and income recognition, RBI had been tightening the definition of NPAs in a phased manner. RBI has now advised banks to move to the 90 days norm for recognizing loans as non performing, with effect from March 31, 2004.

NPAs may be classified as standard assets if the borrower makes the payment of interest and principal arrears.

Sub-standar accounts subject to restructuring/rescheduling can be upgraded to the standard category only after 1 year from the date when first interest /principal payment whichever is earlier, falls due subject to satisfactory performance during the period.

NPAs are again be classified into Gross Non-performing Assets (GNPA) and Net Non-performing Assets (NNPA). Net Non-performing Asset is derived by deducting provisions from Gross Non-performing Assets.

The concept of NPAs and their proper system of accounting have come into force from the year 1997. Here we had analysed NPA from three angles - (i) Gross NPA, Net NPA, Provisions & Recovery analysis. (ii) Sectorwise NPA analysis and (iii) Types of NPA (Componentwise) analysis. Only nominal growth rates were calculated here and as the data were available from 1997 there was no scope for comparison among sub periods.

Objective of the Study:

1. To study the recovery performance of public sector banks in liberal period.
2. To identify the major sectors responsible for NPA in public sector banks.
3. To study the recovery performance of a major public sector bank, State Bank Of India in relation with other public sector banks in liberal period

Hypothesis:

Recovery performance of Public Sector Banks have improved in liberal period

Methodology:

Linear Trend equation $Y_t = a + bt + ct^2 + ut.$ [k] Growth rates are'b' represented in the form of percent per annum and acceleration and deceleration rate by 'c' .

Ratio analysis like Standard Assets to Total NPA, Sub-Standard Assets to Total NPA,Doubtful Assets to Total NPA, Loss Assets to Total NPA, Gross NPA to Gross Advances (GNPA/GADV), Gross NPA to Total Assets (GNPA/ T.ASSETS

1.a. GROSS NPA, NET NPA, PROVISIONS & RECOVERY ANALYSIS OF PSB as a whole

In this group we had considered six (6) parameter to study the growth rate. They were - Gross Non-performing Assets (GNPA), Net Non-performing Assets (NNPA), GNPA/Gross Advances (GADV), NNPA/Net Advances (NADV), Provision for NPA and Recovery of NPA.

From Table 1 it is observed that the trend lines fitted to nominal amount of GNPA, NNPA, GNPA/GADV, NNPA/NADV, Provision for NPA and Recovery of NPA gave us a good fit as all the values of were statistically significant at either 1% or 10% probability level

and in no cases auto correlation problem in the disturbance term was found to be present. It is seen that the nominal growth rates of GNPA and

NNPA was negative -1.17% and -4.38% respectively. On the other side if we consider comparative NPA amount with respect to advances the growth rates of GNPA/GADV and NNPA/NADV were also negative i.e. -155.50% and -88.10% respectively indicating decelerating rate for all. But the growth rate of Provision for NPA and Recovery of NPA were positive i.e. 4.39% & 9.45% respectively and they were grown at an accelerating rate. Thus the PSBs had taken proper steps in reducing the burden of NPA amount in making proper amount of provision against profit for averting risk and in recovering the mounting NPAs during the period from 1997 to 2007.

b. SECTOR WISE NPA ANALYSIS OF PSB AS A WHOLE

For the sake of sector wise analysis we had considered NPA from priority sector, non-priority sector and public sector. Again priority sector is divided into three major groups - agriculture, SSI and other advances. Advances are given to the weaker section of the community by the bankers for their

**Reader, Department Of Commerce with Farm Management, Vidyasagar University, india*

proper development and it is mandatory also. So from this angle we had considered the nominal growth rates of all the above parameters for the period from 2001 to 2007 because the data was not available before 2001.

From Table 2 it is seen that the trend lines fitted to the nominal amount of NPA in priority sector, NPA in non-priority sector, NPA in public sector, NPA in Agriculture, NPA in SSI NPA in other advances and NPA in weaker section gave us a good fit as all the values of were statistically significant at 1% and 5% probability level and in no cases auto correlation problem in the disturbance term was found to be present. It is observed that the nominal growth rate of priority, non-priority and public sector were negative and they were -1.66%, -10.70% and -24.50% respectively. Among priority sectors the growth rates of agriculture, small sector industries (SSI) and other advances were -3.43%, -10.20% and +8.324% respectively. In weaker section also the growth rate was -6.83%. It is also seen that the NPAs were grown at a decelerating trend except NPA in other advances. So it may be concluded that the PSBs had given stress in reducing the NPA amount in all sectors except other advances category and the negative growth rate was maximum in case of NPA in Public Sector followed by NPA in non-priority sector and NPA in priority sector in that order. Again we see that comparatively less negative growth rate of NPA in priority sector was due to the positive growth rate of NPA in other advances (8.324%). So the PSBs should have taken steps in collecting NPAs from other advances in priority sector group.

c. NPA - TYPE ANALYSIS OF PSB AS A WHOLE

In this analysis we had grouped NPAs into three categories depending upon the time for which the advances were non-performing as discussed earlier. Three categories are sub-standard, doubtful and loss assets. We had taken standard assets also to show the accumulation of standard assets either from fresh generation by issuing advances or from shifting NPAs to standard assets.

From Table 3 it is observed that the trend lines fitted to the nominal amount of standard sub-standard, doubtful and loss asset gave us a good fit as all the values of were statistically insignificant except standard asset at 1% probability level and in no cases auto correlation problem in the disturbance term was found to be present. It is seen the nominal growth rate of standard assets was 18.30% at an accelerating rate of .83% for the period form 1997 to 2007. But it is also seen that the nominal growth rate of sub-standard, doubtful and loss assets were negative but insignificant and they were -1.29, -1.43 and -1.09 respectively. So it may be concluded that the standard assets were grown at the cost of reduction of sub-standard, doubtful and loss assets. So the PSBs were efficient in reducing and collecting NPAs and turning them into standard assets.

In componentwise NPA analysis in respect of total NPA ,it was found that in each cases (Standard Assets, Substandard Assets, Doubtful Assets and loss Assets) there was no discernable trend over the study period (see table-4).

But from table-5, it was found that both the gross and net NPA ratios in respect of advances and total assets were declined over the study period.

In table 6 it was found that in both the priority and non-priority sectors NPA percentage were fluctuated time to time.

2. A. COMPARISON OF GNPA, NNPA, PROVISION & RECOVERY ANALYSIS OF PSBS, PVTS AND FBS

From table 7 it is observed that the trend lines fitted to the GNPA, NNPA, GNPA to GAdv, NNPA/Net Adv. Provisions for NPA and Recovery of NPA gave us a good fit as all the values of were statistically significant at 1%, 5% and 10% probability level and there was no problem of auto correlation. The nominal growth rates of GNPA and NNPA were highest for PVTs (12.90% and 7.909%) followed by FBs (2.774% and 2.823%) and PSBs (-1.17% and -4.38%) in that order. But if we considered the growth rates of GNPA/G Adv and NNPA/N Adv the negative growth rate was highest for PSBs (-155.50% and -88.10%) followed by PVTs (-73% and -57.40%) and FBs (-46.50% and -18.00%) in that order. So it may be concluded that PSBs were most efficient in reducing the NPA burden than PVTs and FBs.

Again the growth rate of provisions for NPA was highest for PVTs (13.10%) followed by FBs (5.0681%) and PSBs (4.387%). This indicates that the PVTs were making provisions against NPA in larger amount than FBs and PSBs thereby making profit growth rate highest for PSBs in comparison to PVTs and FBs from operating profit growth rate (discussed earlier in profit analysis). The growth rate of recovery of NPA was highest positive for PVTs followed by PSBs and negative for FBs. So FBs were lagging behind PVTs and PSBs in collecting NPA amount.

b. SECTOR WISE NPA ANALYSIS OF PSBS, PVTS AND FBS

From Table 8 it is observed that trend lines fitted to NPA in priority sector, non-priority sector, public sector, agriculture, SSI, other advances and weaker section gave us a good fit as all the values of were statistically significant at 1%, 5% and 10% probability level and there was no problem of auto correlation .From table 5.34 it is observed that the data were not available for FBs. The nominal growth rate of NPA in priority sector and in public sector was positive for PVTs (3.873% and 63.40%) and negative (-1.66% and -24.50%) for PSBs but the growth rates in non-priority sector were negative for both PSBs (-10.70%) in reducing the NPA burden in all sector (comparatively lower in priority sector) than PVTs.

But the growth rates of NPA were negative for both PSBs (-3.43% and -10.20%) and PVTs (-16.80% and -10%) in agriculture and SSI respectively and positive for other advances 8.32% and 14.70% for PSBs and PVTs respectively. So PSBs and PVTs both were efficient in reducing NPA amount in agriculture and SSI but they were not given stress in collecting NPA in other advances which lead to positive growth rate of NPA in priority sector advances for PVTs and comparatively less negative growth rate for PSBs. Again in collecting NPA in weaker section PSBs were more efficient than PSBs as the rate was negative (-6.83%).

c. COMPONENT WISE NPA ANALYSIS

From table 9 it is observed that the trend lines fitted to Standard Assets,Sub-standard Assets, Doubtful Assets and loss Assets gave us a good fit as all the values of were statistically significant at 1%, 5% and 10% probability level except for Sub-standard, Douftful and Loss Assets for PSBs and there was no problem of auto correlation. The nominal growth rates of Standard Assets were positive for all bank groups indicating highest for PVTs (27.20%) followed by 18.30% for PSBs and 15.10% for FBs in that order. But the generation of Standard Assets was due to the reduction of Sub-Standard, Douftful and Loss Assets which had negative growth rates (-1.29%, -1.43% and 1.09%) for PSBs where the generation of Standard Assets was due to the fresh generation of NPAs in terms of Sub-standard, Douftful and Loss Assets as they were positive for PVTs (6.912%, 18.10% and 13.30%) and FBs (1.157%, 10.10% and 2.08%).

From table 10 it is found that standard and sub-standard assets of foreign banks were highest followed by private banks and public sector banks. On the other hand doubtful and loss asset was highest in public sector banks followed by private and foreign banks.

In table 11 it is found that both the gross NPA and Net NPA ratios are highest in public sector banks followed by private and foreign banks.

3. NPA ANALYSIS OF SBI

Non -Performing Assets (NPA) are analysed in two aspects: Gross & Net NPA aspect and sector wise NPA aspects, but due to non-availability of component wise NPA data (Sub-standard doubtful and loss Assets) it is not possible to show the shifting of NPA into standard Assets.

a. GROSS AND NET NPA ANALYSIS OF SBI

From table 12 it is seen that the trend lines fitted to the nominal values of Gross NPA, GNPA/GADV, NNPA/NADV, Provision for NPA and Recovery of NPA gave us a good fit as all the values of R2 was statistically significant either at 1% or 5% or 10% probability level and in no case problem of auto correlation was found to be present in the disturbance term. The nominal growth rates of GNPA, NNPA, GNPA/GADV, NNPA/NADV and Provision for NPA were negative and of Recovery of NPA was positive for the period from 1997 to 2007. The rates were growing at a dccelerating rate except Recovery of NPA having accelerating rate. Thus it signified that SBI was able to reduce the NPA burden keeping parity of other Public Sector Banks and consequently reducing the amount of provision for NPA. The SBI was also efficient in recovering NPA amount.

b. SECTOR WISE NPA ANALYSIS OF SBI

From table 13 it is seen that the trend lines fitted to the nominal values of NPA in Priority sector, NPA in Non-priority sector; NPA in Public sector, NPA in Agriculture, NPA in SSI, NPA in Other Advances and NPA in Weaker Section gave us a good fit as all the values of R2 were statistically significant either at 1% or 5% or 10% probability level and in no cases problem of auto correlation was found to be present in the disturbance term. It is seen from table 6.4 that the nominal growth rate of NPA in priority sector was positive (.86%) and was grown at an accelerating rate. But the nominal growth rates of NPA in non-priority sector and in public sector were negative (-43.40% and -9.42%) and they were grown at a decelerating rate. Again in the priority sector, the nominal growth rates of NPA in Agriculture and SSI were negative (-2.25% & -15.60%) and in other advances was positive (13.40%) and they were grown at an accelerating rate except for NPA in agriculture having decelerating rate. The nominal growth rate of NPA in weaker section was negative (-6.52%) and it was grown at a decelerating rate.

Further from table 14 it is found that growth rate of standard assets was positive but the growth rate of sub-standard, doubtful and loss assets were negative. This is a good sign of the banking health.

Thus from the above discussion it is clear that the SBI was efficient in reducing NPA burden in non-priority and public sector, whereas it (SBI) was inefficient in reducing NPA burden in priority sector. In priority sector advances of SBI the major cause of NPA was other priority sector advances. But in respect to weaker section the SBI was efficient in collecting NPA amount.

c. GROSS AND NET NPA ANALYSIS OF SBI

From table 15 it is seen that the trend lines fitted to the nominal values of Gross NPA, GNPA/GADV, NNPA/NADV, Provision for NPA and Recovery of NPA gave us a good fit as all the values of R2 was statistically significant either at 1% or 5% or 10% probability level and in no case problem of auto correlation was found to be present in the disturbance term. The nominal growth rates of GNPA, NNPA, GNPA/GADV, NNPA/NADV and Provision for NPA were negative and of Recovery of NPA was positive for the period from 1997 to 2007. The rates were growing at a dccelerating rate except Recovery of NPA having accelerating rate. Thus it signified that SBI was able to reduce the NPA burden keeping parity of other Public Sector Banks and consequently reducing the amount of provision for NPA. The SBI was also efficient in recovering NPA amount.

Conclusion: State bank of India is able to reduce NPA burden in a drastic way over the study period keeping parity with public sector banks. But NPA burden is much higher in public sector banks followed by private and foreign banks. Further NPA burden arises in public sector banks mainly due to priority sector advances.

Table 1: Estimated whole periods' nominal growth rates of NPAs Provision & Recovery amounts of Public Sector Banks from 1997 to 2007

Component	$\bar{R}^2$	DW +	Growth Rate k (Percentage)	Acceleration/ Deceleration
Gross Non-Performing Assets(GNPA)	.782* (12.834)	.576	-1.17*** (.012)	1.329* - (.002)
Net Non-Performing Assets(NNPA)	.604* (18.693)	.603	-4.38** (.019)	-1.672* (.004)
GNPA/GADV	.989* (887.775)	1.264	-155.50* (.052)	-2.317* (.001)
NNPA/NADV	.974* (379.992)	.801	-.88.10* (.045)	-1.252* (.003)
Provision for NPA	.597** (3.004)	1.143	4.387* (.065)	.2532 (.005)
Recovery of NPA	.843** (33.147)	.825	9.446* (.016)	.9752* (.007)

Notes: '*' implies significant at 1% probability level; '**' implies significant at 5% probability level; '***' implies significant at 10% probability level,

Figures in the parentheses under R columns indicate observed values of F statistic; all other figures within the parentheses are standard errors. + All the values of DW statistic indicate the absence of autocorrelation problem in the disturbance term.

a Acceleration /deceleration in growth rate is represented by the estimated coefficient c of the log-quadratic trend.

$Y_t = a + bt + ct^2 + ut$. k Growth rates are represented in the form of percent per annum

Table 2: Estimated whole periods' nominal growth rates of different sector wise NPAs of Public Sector Banks from 2001 to 2007

Component	$\bar{R}^2$	DW +	Growth Rate k (Percentage)	Acceleration/ Deceleration a
NPA in Priority Sector	.603* (10.107)	1.650	-1.66** (.005)	-.259* (.002)
NPA in Non-Priority sector	.840* (32.417)	1.452	-10.70* (.019)	-.4536* (.003)
NPA in Public Sector	.825* (31.331)	1.740	-24.50* (.044)	-.6587* (.004)
NPA in Agriculture	.675* (12.734)	1.718	-3.43** (.009)	-.1563* (.006)
NPA in SSI	.908* (60.484)	1.171	-10.20* (.013)	-.2364* (.005)
NPA in Other Advances	.970* (195.631)	1.265	8.324* (.006)	.5634* (.001)
NPA in Weaker Section	.789* (.145)	.737	-6.83 (.032)	-.2563* (.025)

Notes: Same as those in table 1

Table 3: Estimated whole periods' nominal growth rates of Standard Assets & different types of NPAs amount of Public Sector Banks from 1997 to 2007

Component	$\bar{R}^2$	DW +	Growth Rate k (Percentage)	Acceleration/ Deceleration a
Standard Assets	.987* (753.914)	.610	18.30* (.007)	.8287* (.002)
Sub-Standard Assets	.118 (.825)	1.594	-1.29 (.014)	.4526 (.004)
Doubtful Assets	.128 (.092)	.552	-1.43 (.015)	----------
Lost Assets	.238 (.632)	.513	-1.09 (.014)	----------

Notes: Same as those in table 1

Table 4: NPA Analysis (Component wise Ratio) of Public Sector Banks

Year	Standard Assets to Total NPA	Sub-Standard Assets to Total NPA	Doubtful Assets to Total NPA	Loss Assets to Total NPA
1993	3.314	0.320	0.512	0.100
1994	3.036	0.296	0.568	0.099
1995	4.141	0.202	0.597	0.097
1996	4.552	0.223	0.593	0.104
1997	4.604	0.286	0.597	0.117
1998	5.242	0.317	0.565	0.118
1999	5.291	0.310	0.566	0.124
2000	6.132	0.307	0.573	0.120
2001	7.072	0.269	0.611	0.119
2002	8.014	0.279	0.596	0.125
2003	9.683	0.276	0.598	0.126
2004	11.844	0.328	0.558	0.114
2005	17.689	0.233	0.644	0.124
2006	24.880	0.275	0.599	0.125
2007	34.589	0.366	0.517	0.117

Table 5: NPA Analysis (Gross NPA and Net NPA Ratios) of Public Sector Banks as a whole

Year	Gross NPA to Gross Advances (GNPA/GADV)	Gross NPA to Total Assets (GNPA/T.ASSETS)	Net NPA to Net Advances (NNPA/NADV)	Net NPA to Total Assets (NNPA/T.ASSETS)
1997	17.80	7.80	9.20	3.60
1998	16.00	7.00	8.20	3.30
1999	15.90	6.70	8.10	3.10
2000	14.00	6.00	7.40	2.90
2001	12.40	5.30	6.70	2.70
2002	11.10	4.90	5.80	2.40
2003	9.40	4.20	4.50	1.90
2004	7.80	3.50	3.10	1.30
2005	5.70	2.80	2.10	1.00
2006	3.60	2.10	1.30	0.70
2007	2.70	1.60	1.10	0.60

Table 6: NPA Analysis (Sector wise) with res pect to Total NPA of Public Sector Banks as a whole

Year	% of Priority Sector NPA to Total NPA	% of Non-Priority Sector NPA to Total NPA	% of Public Sector NPA to Total NPA	% of NPA in Weaker Section
1995	50.040	46.531	3.428	NA
1996	48.267	48.168	3.565	NA
1997	47.672	48.973	3.353	NA
1998	46.402	50.614	2.983	NA
1999	43.717	53.390	2.893	NA
2000	44.498	53.522	1.980	NA
2001	45.428	51.354	3.218	22.515
2002	46.182	52.159	1.658	21.709
2003	47.227	50.715	2.058	19.387
2004	47.540	51.243	1.216	18.894
2005	48.063	50.963	0.973	16.787
2006	54.072	45.106	0.824	8.446
2007	59.463	39.267	1.269	6.571

Table 7; - Estimated whole periods' nominal growth rates of NPAS, Provisions & Recovery amounts of different groups of banks for the period from 1997 to 2007

Component	$\bar{R}^2$			DW+			Growth Rate k (Percentage)			Acceleration/ Deceleration a		
	PSBS	PVTS	FBS	PSBS	PVTS	FBS	PSBS	PVTS	FBS	PSBS	PVTS	FBS
Gross Non-Performing Assets(GNPA)	.782* (12.834)	.624* (17.584)	.817** (11.71)	.576	.657	.686	-1.17*** (.012)	12.90* (.031)	2.774 (.026)	-1.329* (.002)	.2365* (.001)	.1236* (.003)
Net Non-Performing Assets(NNPA)	.604* (18.693)	.560* (16.629)	.756*** (28.43)	.603	1.024	1.298	-4.38** (.019)	7.909* (.031)	2.823 (.017)	-1.672* (.004)	.3458* (.003)	-----
GNPA/GADV	989* (887.775)	.680* (22.219)	.528* (12.180)	1.264	.958	.716	-155.50* (.052)	-73* (.155)	-46.50* (.133)	-2.317* (.001)	-.3650* (.002)	-----
NNPA/NADV	.974* (379.992)	.742* (29.720)	.692* (23.497)	.801	1.536	1.225	-.88.10* (.045)	-57.40* (.105)	-18.00* (.037)	-1.252* (.003)	-.4927* (.003)	-----
Provision for NPA	.597** (3.004)	.513** (3.732)	.793*** (8.129)	1.143	.804	1.002	4.387* (.065)	13.10*** (.1320)	-.0681 (.040)	.2532* (.005)	.5632* (.025)	.2581* (.005)
Recovery of NPA	.843** (33.147)	.524** (3.89)	.603*** (5.045)	.825	1.080	1.982	9.446* (.016)	14.10*** (.073)	-4.69*** (.021)	.9752* (.007)	.3241* (.004)	.4512* (.006)

Notes: Same as those in table 1

Table 8: Estimated whole periods' nominal growth rates of different sector wise NPA amounts of different groups of banks for the whole period from 2001 to 2007

SAARANSH
RKG JOURNAL OF MANAGEMENT
Vol. 3 ● No. 1 ● JULY 2011

Component	$\bar{R}^2$			DW+			Growth Rate k (Percentage)			Acceleration/ Deceleration		
	PSBS	PVTS	FBS	PSBS	PVTS	FBS	PSBS	PVTS	FBS	PSBS	PVTS	FBS
NPA in Priority Sector	603* (10.107)	.542*** (2.917)	NA	1.650	1.979	NA	-1.66** (.005)	3.873*** (.023)	NA	-.259* (.002)	.3452* (.052)	NA
NPA in Non- Priority sector	.840* (32.417)	.591 (.038)	NA	1.452	1.466	NA	-10.70* (.019)	-1.08 (.055)	NA	-.4536* (.003)	-.1256* (.003)	NA
NPA in Public Sector	.825* (31.331)	.718* (16.280)	NA	1.740	1.372	NA	-24.50* (.044)	63.40* (.157)	NA	-.6587* (.004)	-.6524* (.013)	NA
NPA in Agriculture	.675* (12.734)	.640* (11.665)	NA	1.718	1.844	NA	-3.43** (.009)	-16.80** (.030)	NA	-.1563* (.006)	-.356* (.006)	NA
NPA in SSI	.908* (60.484)	.474*** (6.410)	NA	1.171	1.412	NA	-10.20* (.013)	-10.0*** (.040)	NA	-.2364* (.005)	-.2358* (.001)	NA
NPA in Other Advances	.970* (195.631)	.936* (88.963)	NA	1.265	1.792	NA	8.324* (.006)	14.70* (.016)	NA	.5634* (.001)	.3659* (.005)	NA
NPA in Weaker Section	.789* (.145)	.501 (.995)	NA	.737	1.674	NA	-6.83 (.032)	6.719 (.067)	NA	-.2563* (.025)	.3214* (.023)	NA

Notes: Same as those in table 2

Table 9: Estimated whole periods' nominal growth rates of Standard Assets & different types of NPAs amounts of different groups of banks for the whole period from 1997 to 2007

Table 10:NPA Analysis (Component wise Ratio) of different groups of banks as a whole

Component	$\bar{R}^2$			DW+			Growth Rate[k] (Percentage)			Acceleration/ Deceleration[a]	
	PSBS	PVTS	FBS	PSBS	PVTS	FBS	PSBS	PVTS	FBS	PSBS	PVTS
Standard Assets	.987* (753.914)	.993* (1448.75)	.958* (228.86)	.610	1.808	.705	18.30* (.007)	27.20* (.007)	15.10* (.025)	.8287* (.002)	3269* (.006)
Sub-Standard Assets	.118 (.825)	.301** (5.298)	.176 (.291)	1.594	1.284	1.630	-1.29 (.014)	6.912** (.030)	1.157 (.021)	.4526 (.004)	.2531** (.001)
Doubtful Assets	.128 (.092)	.575* (14.520)	.301** (5.315)	.552	.555	.506	-1.43 (.015)	18.10* (.047)	10.10** (.044)	------	.3274* (.006)
Lost Assets	.238 (.632)	.771* (34.575)	.181*** (.249)	.513	1.749	.561	-1.09 (.014)	13.30* (.023)	2.08*** (.042)	------	.5236** (.001)

Table 11: NPA Analysis (Gross NPA and Net NPA Ratios) of different groups of banks

Year	Standard Assets to Total NPA			Sub-Standard Assets to Total NPA			Doubtful Assets to Total NPA			Loss Assets to Total NPA		
	PSBs	**PVTs**	**FBs**	**PSBs**	**PVTs**	**FBs**	**PSBs**	**PVTs**	**FBs**	**PSBs**	**PVTs**	**FBs**
1993	3.314	NA	NA	0.320	NA	NA	0.512	NA	NA	0.100	NA	NA
1994	3.036	NA	NA	0.296	NA	NA	0.568	NA	NA	0.099	NA	NA
1995	4.141	NA	NA	0.202	NA	NA	0.597	NA	NA	0.097	NA	NA
1996	4.552	NA	NA	0.223	NA	NA	0.593	NA	NA	0.104	NA	NA
1997	4.604	10.786	22.347	0.286	0.539	0.557	0.597	0.350	0.221	0.117	0.111	0.221
1998	5.242	10.536	14.672	0.317	0.554	0.606	0.565	0.338	0.127	0.118	0.108	0.267
1999	5.291	8.582	13.159	0.310	0.572	0.511	0.566	0.341	0.211	0.124	0.087	0.278
2000	6.132	10.810	13.314	0.307	0.433	0.419	0.573	0.477	0.305	0.120	0.089	0.276
2001	7.072	10.706	13.592	0.269	0.425	0.282	0.611	0.505	0.386	0.119	0.070	0.332
2002	8.014	9.361	17.208	0.279	0.406	0.308	0.596	0.560	0.361	0.125	0.033	0.331
2003	9.683	9.872	17.583	0.276	0.278	0.344	0.598	0.638	0.326	0.126	0.084	0.330
2004	11.844	16.154	19.787	0.328	0.302	0.329	0.558	0.618	0.365	0.114	0.080	0.307
2005	17.689	24.905	32.327	0.233	0.255	0.316	0.644	0.642	0.432	0.124	0.104	0.252
2006	24.880	38.078	46.302	0.275	0.308	0.453	0.599	0.571	0.334	0.125	0.121	0.213
2007	34.589	41.401	51.148	0.366	0.474	0.558	0.517	0.424	0.257	0.117	0.102	0.185

Table 12: Estimated whole periods' nominal growth
rates of NPAs Provision & Recovery amounts of State Bank of India from 1997 to 2007

Year	Gross NPA to Gross Advances (GNPA/GADV)			Gross NPA to Total Assets (GNPA/T.ASSETS)			Net NPA to Net Advances (NNPA/NADV)			Net NPA to Total Assets (NNPA/T.ASSETS)		
	PSBs	PVTs	FBs	PSBs	PVTs	FBs	PSBs	PVTs	FBs	PSBs	PVTs	FBs
1997	17.80	8.48	4.30	7.80	4.14	2.10	9.20	5.37	1.90	3.60	2.51	0.90
1998	16.00	8.67	6.40	7.00	3.94	3.00	8.20	5.26	2.20	3.30	2.30	1.00
1999	15.90	10.81	7.60	6.70	4.51	3.10	8.10	7.41	2.90	3.10	2.85	1.10
2000	14.00	8.18	7.00	6.00	3.59	3.20	7.40	5.41	2.40	2.90	2.29	1.00
2001	12.40	8.37	6.80	5.30	3.68	3.00	6.70	5.44	1.80	2.70	2.28	0.80
2002	11.10	9.64	5.40	4.90	4.35	2.40	5.80	5.73	1.90	2.40	2.49	0.80
2003	9.40	8.07	5.30	4.20	3.98	2.40	4.50	2.85	1.70	1.90	1.34	0.80
2004	7.80	5.85	4.60	3.50	2.79	2.10	3.10	2.42	1.50	1.30	1.11	0.70
2005	5.70	4.44	2.80	2.80	2.08	1.40	2.10	2.20	0.80	1.00	1.00	0.40
2006	3.60	2.46	1.90	2.10	1.41	1.00	1.30	1.01	0.80	0.70	0.57	0.40
2007	2.70	2.20	1.80	1.60	1.26	0.80	1.10	0.97	0.70	0.60	0.55	0.30

Component	$\bar{R}^2$	DW+	Growth Rate[k] (Percentage)	Acceleration/ Deceleration[a]
Gross Non-Performing Assets(GNPA)	.515*** (14.67)	5770	-13.61*** (.065)	-.2564* (.002)
Net Non- Performing Assets(NNPA)	.507** (7.222)	1.098	-3.21** (.011)	-.2358* (.006)
GNPA/GADV	.920* (128.042)	.707	-128.40* (.113)	-.2314* (.003)
NNPA/NADV	.860* (68.448)	.935	-53.50* (.065)	-.4561* (.009)
Provision for NPA	.526 (12.15)	1.656	-11.10 (.101)	.2132 (.001)
Recovery of NPA	.620* (14.071)	1.432	11.20* (.030)	.1653* (.002)

Notes: Same as those in table 1

Table 13: Estimated whole periods' nominal growth rates of different sector wise NPAs of State Bank of India from 2001 to 2007

Component	$\bar{R}^2$	DW+	Growth Rate[k] (Percentage)	Acceleration/ Deceleration[a]
NPA in Priority Sector	.150 (.217)	51.209	.864 (.019)	-.2564* (.002)
NPA in Non- Priority sector	.556** (8.513)	1.920	-43.40** (.149)	-.2358* (.006)
NPA in Public Sector	.765* (20.545)	1.985	-9.42* (.021)	-.2314* (.003)
NPA in Agriculture	.119 (1.811)	1.898	-2.25 (.017)	-.4561* (.009)
NPA in SSI	.905* (57.860)	1.566	-15.60* (.021)	.2132 (.001)
NPA in Other Advances	.833* (30.856)	1.131	13.40* (.024)	.1653* (.002)
NPA in Weaker Section	.291*** (3.467)	1.630	-6.52*** (.035)	-.1247** (.005)

Notes: Same as those in table 1

Table 14: Estimated whole periods' nominal growth rates of Standard Assets & different types of NPAs amount of State Bank of India from 1997 to 2007

Component	$\bar{R}^2$	DW+	Growth Rate[k] (Percentage)	Acceleration/ Deceleration[a]
Standard Assets	.876* (746.964)	.823	20.15* (.005)	.8532* (.002)
Sub-Standard Assets	.253 (.825)	1.369	-3.26 (.014)	.6341 (.004)
Doubtful Assets	.453 (.092)	.736	-2.561 (.015)	.3567 (.001)
Lost Assets	.856 (.569)	.845	-2.357 (.014)	.5634 (.003)

Notes: Same as those in table 1

Table 15: NPA Analysis (Gross NPA and Net NPA Ratios) of the State Bank of India as a whole

Year	Gross NPA to Gross Advances (GNPA/GADV)	Gross NPA to Total Assets (GNPA/T.ASSETS)	Net NPA to Net Advances (NNPA/NADV)	Net NPA to Total Assets (NNPA/T.ASSETS)
1997	16.02	7.01	7.30	2.89
1998	14.14	6.38	6.07	2.50
1999	15.56	6.32	7.18	2.65
2000	14.25	5.83	6.41	2.40
2001	12.93	5.03	6.03	2.17
2002	11.95	4.45	5.64	1.96
2003	9.34	3.59	4.49	1.64
2004	7.75	3.11	3.45	1.33
2005	5.96	2.71	2.65	1.16
2006	3.60	1.95	1.88	0.99
2007	2.92	1.76	1.56	0.93

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GREEN BUSINESS PRACTICES: A CASE STUDY OF INDIAN RUGS AND CARPETS

Syed Hussain Ashraf* **Sadaf Khan****

ABSTRACT

The present era is experiencing all around concern about the disastrous impact of environmental de-stability. The "climatic issues" that resulted as "global warming" have become one of the most threatening moral and economic issues that the world is facing. It is of utmost importance that businesses take care of the community and society in which they are operating. Therefore, Green Business Practices is the only positive approach left for the business units to create its niche in this competitive world. Keeping in view the growing concern for the greener future for the country and the increasing awareness of consumers on environmentally friendly products, my paper focuses on the case study of Indian Carpet Industry which is 100% export oriented. It is the great foreign exchange earner of the country and provides employment to the millions of artisans. But the rug industry is under heavy scrutiny from many parties because of its environmental impacts. In this paper we have tried to assess the impacts of the carpet industry on the environment and discusses about economy and ecology and their interdependence. The paper has argued regarding ecology and economy and their inter-dependence. It talks about the new concept of corporate social responsibility in carpet industry. It tells about the importance of natural fibers, dyes and biotechnology in rug industry so that it can compete with its competitors in the international market. It advocates about the awareness programme on eco-aspects of carpets. Besides, the study emphasis on the prominent parameters and possible package of corrective measures for the various pollution problems and the various new measures taken to make carpet business more green and eco- friendly.

***Keywords**: Eco friendly, Green, Rugs, Carpets, Industry, Harmful, Environment*

INTRODUCTION

The present decade is experiencing an increasing all around concern about the disastrous impact of environmental de-stability and a renewed emphasis on environmental protection. 'Climate' has dominated a significant gamut of discussion at business level as well as at various stages of national policy design, planning and implementation. The 'Climate Change' has become the most threatening moral and economic issue the world is facing. The unrestricted burning of hydrocarbons has led to excess amounts of carbon dioxide and other GHGs in the atmosphere. The global carbon market has grown from USD 33 billion globally in 2006 to USD 60 billion in 2007 and is bound to grow even further. We are surrounded by signs that the world is not on an environmentally sustainable path. The increasing development in business and commerce is further enhancing the problem. Everyone is concerned about the problem and trying to rectify the damage already caused. There is an urgent need of safe and clean environment for the better future and healthy tomorrow. And in this sense green business practices is the only alternative left for us. These practices might include the use of organic and natural products to build factories, tighter protections against emissions, and environmentally responsible sourcing of supplies. Implementing sustainable manufacturing best practices can improve industry competitiveness and create a more stable environment for job growth. The business owners have realized that consumers as well as the planet needs qualitative products. Clearly, green business is not about obligation, regulation or fixing old problems: it is a license to re-imagine your business, inspire employees and customers and create new products for a more demanding world. It is an opportunity to invent new product categories and business processes to meet the needs of a transforming international economy. The companies which may not embrace green practices, having a risk of being shut out of supply.

The world wide awareness and concern for eco friendly products and practices have not left the consumer goods including carpet as well. The adoption of green business practices is vital in the floor covering industry; as the consumer is "living" with this product every day. The major challenges Indian Carpet Industry are facing are the environmental pollution arising from wet processing and the poor eco image. In the fields of textiles, it is now realized that the number of dyes and chemicals used by carpet industries contains toxic and hazardous substances which not only affect the consumer but also cause serious damage to the environment. At present, the Industry in India, including the mill sector, power looms, handlooms, process houses and even Khadi Village are using the harmful substances either for enhancing aesthetic appeal or for imparting certain desirable characteristics to the textiles. It is, therefore, required to look at the production, quality and environmental friendliness of both process and products. There is a need to produce "Green" or "Eco friendly" carpets to face global competition in the international market as today's consumers are more than conscious of their health and the environment. The drastic changes of consumer trends, consumer needs, changes of life styles world wide and legislation starting in Germany require immediate action in Indian Carpet Industry as the industry generates plenty of foreign exchange for the country and provides employment to billions of rural artisans. Besides, Indian carpets which are world over known for its charm and beauty should be handled delicately so that it can compete in this competitive market.

*Department of Commerce, AMU, Aligarh, India
**Research Scholar, Department of Commerce, AMU, Aligarh, India

DEVELOPMENT OF CARPET INDUSTRY IN INDIA

The recorded history of the Indian Pile Carpet started in the 16th century around 1580 AD. During the reign of Emperor Akbar, who was very much interested in the carpets, invited some Persian carpet weavers to India and set up a workshop in his own palace. But the turning point came in the London exhihibition of 1851 where the Indian carpets caught the imagination of Europeans with their allure and beauty. Not only did the carpets find buyers but a number of foreign manufacturers set—up factories in India to produce and distribute carpets in Europe. There was flew impetus to the growth of the carpet industry and after the independence the active commercial production was started. The Carpet industry, thereafter, rapidly grown and spread all over India having concentration in Uttar Pradesh, Rajesthan, Haryana, J&k, Gujarat, North East, Punjab, Himachal Pradesh etc. By 1950 the good American market was developed. This was accompanied by an appreciable improvement in the quality of carpet woven. In 1965, Persian designs were reintroduced in the Bhadohi carpet weaving belt. By the mid—eighties Indian carpet weavers had demonstrated to the world their extraordinary skills in the weaving of hand knotted carpets. In 1987- 88, the country exported carpets valued at Rupees 2450 millions. This value has grown to Rs. 7500 million by 1991-92. The figure itself reveals that the industry became well known for their range, colours and designs, and was considered good value for money. The carpet industry had become a sizable and significant foreign exchange earner. The range of carpets had expanded from Indo—Persian to cover Central—Asian, Queen Anne, Aubuson, Chinese. Scandinavian and others. The middle of eighties saw the emergence of a new interest in human rights and its violations in the developed world. During this period our Carpet Industry received a lot of adverse publicity in the International media associating Indian hand— knotted carpets with the exploitation of child labor. In 1986, a bill was introduced in the House of Representatives of the United States of America by Representative Killer to ban the imports of products made by child labor. But the Government of India took the matter with the concerned authorities and was able to convince the U.S. Government and its friends in the U.S.A. that the reports distorted the factual position as it existed in India and the Indian Carpet Industry kept surviving in the International market. At present, India is the only country in the world to produce carpets from the lowest Hamadhan to the high count Kashmir, Aubussons, Berper or Caucesion design. India's 400 year old traditional carpet industry has professional weavers who are world famous for their versatility, quality or workmanship and commercial flexibility. Indian Carpet Industry's greatest specialty is to produce the carpet of any size and any quality as per choice of the buyers. In American cities wall to wall carpets and rugs are required while in West European countries small size carpets are preferred as per requirement of rooms, space etc. Indian Carpet Industry is capable to accept this challenge within a short period.

The weaving of carpets has now spread to the districts of Eastern U.P. and to Agra. Jaipur. Gwalioor, Amrtsar , Kashmir and Elluru (A.P.) covering the North, West, Central and southerns parts of the country. However, the largest number of looms are located in eastern U.P. which produces about 80 percent of the total volume of carpets exported. Our weavers have transferred their traditional skills across the boundaries of caste and religion. The craft is successfully spread to cover areas where carpet weaving did not exist at all This industry is a traditional, rural based, highly labor intensive and export oriented cottage industry. It is an unorganized sector industry which provide directly or indirectly employment to million of workers in all over the India. The main quality of the employment is to give work at their own home, village of the same district or state. It is best suitable industry for Indian atmosphere to achieve maximum profit, labor employment with little investment.. Carpet industry job is highly based on part time working as villagers and domestic ladies work for weaving the carpets after completing their agriculture, education, and domestic work. So it gives independence to the workers to work as per their choice. This industry is a means to provide a supplement income source. It provides employment to 2.5 million workers in U.P. Rajasthan, Haryana, Bihar, Madhya Pradesh and J&K etc. According to official Sources, around l million people find employment in weaving clipping, washing and embossing etc. of carpets. As weaving is carried out in the villages, using traditional methods and skills, the industry is labour intensive. As a matter of fact the investment required to provide employment in the Handicrafts sector is substantially lower than that of agriculture.

The Indian handmade Carpet Industry is a boon to India as it gets tremendous amount of foreign exchange as well. This Industry is so much fertile and foreign exchange oriented that the average foreign exchange earning in last three years is around Rs.3000 crores p.a. India is having market share of around 35.5% of total world's exports of handmade floor coverings. Indian pile carpets industry is famous in all over the world for its beautiful design, wide variety, fine craftsmanship and most popular second choice after Persian carpets. So day by day export of Indian pile carpets are increasing. This industry is a source of earning foreign exchange from the hard currency areas and reasonable labor charges are distributed to the craftsman at their home. Today the total export of hand made Woolen carpets, Rugs, Tufted Carpets, and Synthetic carpets is around 1000 crores per annum. Day by day demand of hand made carpets, rugs, druggets and silk carpets is increasing in the major market of the world. Indian handicraft, floor coverings, like Hand made wollen carpets, Rugs, druggets, durries, namdhas, silk carpets and synthetic carpets are very much liked in all over the world. Therefore Indian Textile Export is recognized as 'Carpet Export'; in European Countries. Indian Handmade Carpet is ranked No 1 status in the international market and achieved highest share both in terms of valve and production on the world market. It is having market share of around 35.5% of total world import of Handmade Carpets. Developed countries are major importer of handmade carpets. The U.S.A. & the Germany are the biggest buyers of Indian carpets that have gone up almost double in last ten years. The direction of exports from India to USA, Germany and the rest of the world are 45.90%, 22.01% and 32.09% respectively. Export of handmade/Hand knotted Carpets for the year 2009- 2010 are Rs. 2505.33 crores and US $ 525.87 million. Carpets comprise over 42 percent of the total foreign exchange earnings in the handicraft sector. According to experts the growth of the Indian Carpet Industry has been quite impressive in the recent past. It has attained global recognition and popularity.

WHAT IS AN "ECO FRIENDLY" OR "GREEN" CARPETS

The term eco- friendly, nature friendly or the green rugs refers to the no use of harmful chemicals and fertilizers while growing the fiber plants and while processing the fibers into the complete product. Maintenance, storage and recycling techniques are also important in this segment. Normally in the growing process various fertilizers, insecticides and pesticides are used that have an adverse affect on our health. Like for producing cotton about 25% of the whole insecticides arc utilized, which is a daunting number in itself. Apart from this, machine picking of cotton needs growth regulator, harvest aid chemicals and herbicides. Further, in spinning small cotton fibers float in the airs which are harmful if inhaled. To strengthen the cotton, the process of sizing is done in which many harmful chemicals like pentachlorophenol are used with starch. This specific chemical has harmful effects on human skin. Again in dyeing with azo dyes, which liberate carcinogenic amines, many hazardous effects have been noticed. While making eco-friendly or green carpets no harsh chemical at any stage is used.

To make eco-friendly home textiles of cotton, the cotton seeds are untreated with no use of GMO/BT. Soil and water are conserve by using manure instead of fertilizers and doing crop rotation. Furthermore weeds are also removed by hand instead of harmful herbicides. Weeds are also controlled by using machines, which again are harmless. Pest control in eco-friendly fabrics is done with the help of natural predators and for harvesting natural defoliation is done. The dying of these cottons are done through eco friendly dyes made from vegetables or low impact dyes. By following these processes eco-friendly cotton carpet is produced that is safe to the environment and human.

CHEMICALS USED IN CARPET INDUSTRY

There are various noxious and harmful substances used in carpet industry. The negative effects of these chemicals have originated the idea of green carpets. The chemicals used in carpet Industry can be studied in following heads.

a) Wool processing chemicals.
b) Wool dyeing chemicals.
c) Tufting process chemicals.
d) Chemical coating auxiliaries (Latex)
e) Carpet washing chemicals.

(A) Wool Fiber Processing Chemicals- For wool fiber washing and scouring purpose Non- Ionic detergent L.D. paste, Sodium Carbonate are used while Acid Slurry, Sodium Hydroxide used for better cleaning of the fiber. For carbonizing the wool diluted Sulphuric Acid is used. To remove the fiber yellowing whitening agents Tinopals are applied. Beside above chemicals Batching oils, Spinning oil and antistatic agents are employed. In few cases Softening Agents arc applied to get softer and desired feel of the fibre. In some cases stain removers are also used.

(B) Wool Dyeing Chemicals- Woollen fiber is dyed with Acid dyes, Acid Milling Dyes, Metal complex Dyes, Chrome dyes and Vegetable Dyes. Beside dyes several chemicals are used too. Sequestering agent (sarquest EL, metaclaw CL, EDTA salt, calastrine 4L and cidaclaw CL). P.H. controlling agent (Acetic Acid, formic Acid), Dispersing cum levelling agent (Uniperol FBSE (BASE), Lyogen SMK (Sandoz) and Acid liberating salt cum exhausting agents (Ammonium sulphate, Ammonium chloride) are used successfully. In case of chrome dyes, development of dyes is employed with Sodium Bichromate and Potassium dichromate. Finally non ionic detergents are used for soaping.

(c) Tufting Process Chemicals- Though tufting process is not a chemical oriented process. But few chemicals are used under it. For trace marking kerosene oil, ultramine blue, thinner, white petrol, carbon tetra chloride, petroleum jelly (White grease) etc are used during tufting process.

(D) Chemical Coating Auxiliaries- For tuft binding and fixing of cotton nets on the backside of the carpet, natural rubber solution (latex) is used. Now synthetic latex are also available which is very strong bonding for tuft binding but contain no rubber contents. For extra thickening of the paste gum CMC, synthetic thickeners are used. For better dispersion of the paste Dispersol F(ICI) and Bilaux T(BASE) is used while Nonex SP, Emolvan T applied as a wetting agent. Chalk powder's function is a filler while sodium silicate used to give additional body a well as catalyst function. Sodium Hexa Meta Phosphate is added for softening the water. Rest Chemicals like casien. Accelerator ZDC, Sulphur Powder, Zinc Oxide are used as a accelerator, curing agent, whitening agent etc respectively.

(E) Carpet Washing Chemicals- To get extra softness, lustre and desired handle of the pile yarn, carpet washing is employed. To remove the fibre's impurities, alkali stripping is performed with the help of Sodium Hydroxide solution. Mercerising agent like Merasine NCNF, Dikanol 112 or Merck NA arc added for even and uniform reaction. Acetic Acid and Hydrochloric Acid is used to neutralize the effect of Sodium Hydroxide and Bleaching Powder. Sodium hexa meta phosphate may be use as a sequestering Agent Sodium carbonate, L.D paste, Sun light soap and Non Ionic detergents are used as a soaping to make the carpet alkali-free. Bleaching powder used as a strong oxidizing agent cum reducing agent to reduce the residual impurities of the pile yarn surface. If super soft feet is required then non ionic and cationic softner can be use with the addition of diluted acetic acid at P. H. value 5.0 5-5. Such softners are used at the time of final washing of the carpets. Though whitening agents are not used in carpet washing process but it is found that application of such agents yield additional shining of the pile yarn. Now days such compounds are common in use for carpets washing which has no contents of sodium hydroxide and bleaching powder in itself but provide the results of these chemicals collectively.

VARIOUS MEASURES TAKEN WORLDWIDE TO MAKE THE CARPETS "GREEN"

Manufacturing floors are under heavy scrutiny. There are mounting concerns over the pollution caused by it. Carpet industry has been attacked by NGOs for much of the river pollutions in the third world. Now the rug industries are realizing their responsibility towards the society and the environment. In fact selling green products has become much easier for them than the normal product because people are so well read about them. Government legislative and regulator initiatives have taken several steps to effectively capture all the issues related to eco friendly carpets. Globally, the business owners as well as the customers are finding various innovative ways to make their carpets more green and eco friendly. These innovative ideas are being generated every day in different corners of the world. Some of the effective measures taken are discussed in detail.

Many leading carpet manufacturers have been aggressively addressing these sustainability issues and changing their industry. One of the carpet company known as Mohawk floorings has devised a way to utilize PET bottles in carpet making. The PET bottles are drudged and pulverized first. Grinding will give them a shape of very small chips. These PET chips are then melted down and squeezed and pressed into the fiber. Then the fiber is gyrated into carpet thread. The labels and caps of the PET bottles were also being utilized in making the base of the carpet. This is where the carpet is wrapped and placed on outlet floors. The company's website showed that since 1999 they have recycled more than 18 billion PET bottles that saved 1 billion pounds. Similarly, corn fibre is starting to be blended in to some carpets. It is made from corn sugar.The manufactures use very innovative method for producing eco friendly corn carpets. Corn is harvested and then, in the mills and factories, grinded and cooked to make starch. Starch is a type of carbohydrates, which can be converted to sugar. Sugar is then converted to plastic which is utilized in making the carpets the same way PET bottles are utilized by extruding and then spinning. Petroleum is not used in the whole process, thus, carbon dioxide release is reduced to a considerable extent. No extra fiber or chemical is added to the carpets in order to increase the stain resistance of the material being used in the carpet making. Corn carpets are naturally biodegradable and recycled in landfills. Corn carpeting is thought to be the most advanced and effective way to manufacture environment friendly carpets.

The Bureau International Pour la Standardisation de la Rayonne et des Fibres , Synthetiques (BISFA) agreed a new classification for solvent – spun celluiosic fibres. Tencel lyocell fibres are produced by Lenzing (Austria), using an amines oxide as the solvent for cellulose. In the Tencel fibre production process, wood pulp and amine oxide, as a solution in water, are mixed and then passed to a uninterrupted dissolving unit to get a clear, pasty solution. This is then extruded into a dilute aqueous solution of the amine oxide, which precipitates the cellulose fibre. After washing and drying the fibre can be processed. The diluted amine oxide is purified and then reused after the removal of excess water. Thus the Tencel fibre production process uses materials that are considered to be environmentally clean and solvent recycling is an integral part of the production cycle. Waste products are minimal and non-hazardous. The Tencel fibre production process was designed with the environment in mind and has received the prestigious 'European Award for the Environment' of the European Union. By 2012 Lenzing hopes to generate all of its process energy from waste incineration. Similraly, Steve Cibor of Tamarin Carpets, is among those taking steps to production more environmentally friendly in Nepal. For instance, when washing rugs, the discarded water is collected and shipped in trucks and later reused by cement companies for mixing cement for buildings. They have recently converted to Swiss-made metal- free chrome dyes which do not "out gas" as one walks over the rugs.

Among other interesting recent green initiatives is that of Megerian Brothers Oriental Rugs, Inc., New York, NY, in America where ecological aspect was taken into consideration not only with the respect to the rugs themselves but also with the weavers who make them. All components of the rug making process are local from the natural dyes extracted from roots, flowers, and plants (e.g., pomegranate for the tobacco hue and walnut skin for yellow and brown) to the extra virgin wool free from exposure to toxic materials. The employees are also offered milk and yogurt at the end of the day to purify their digestive system of any dust. Michaelian & Kohlberg's facility in China are adjoining fields whose plants generate all the dyes for their collections.

Kamal Kanti Goswami, Indian Institute of Carpet Technology, hopes to introduce modern polymer to the traditional craft of creating hand- tufted carpets. Such carpets are typically backed with two fabric layers and a latex adhesive. In this system, a thin(1-mm) polymer sheet is placed between the carpet and textile backing, and heated. The research proposes that this technique provides better adhesive properties with less material. The use of less adhesive makes the carpet lighter, more flexible and more eco friendly.

In January, 2002, many manufacturers voluntarily signed the National Carpet Recycling Agreement (NCRA) which encourages them to accept product stewardship and accountability. They have established a third party organization, the Carpet America Recovery Effort (CARE) to establish collection systems for used consumer carpet. They are evolving technologies for use of natural materials content, for recyclable content and for reclamation of carpeting through reuse and recycling. Carpet leasing programs are another smart option for commercial applications. The manufacturer bears responsibility for maintaining the carpet for its life, replacing worn sections of carpet and recycling the carpet at the end of its life. Various leasing programs are available from many manufacturers. For example, carpet can be removed, cleaned, and reused within the same building, depending on its condition. It can be recovered, cleaned, and resold or down-cycled into other products or it can be repurposed. Some traders maintain small carpet collector rooms in different areas where one can collect the old carpets. Then the old carpets can be recycled and made into new ones. This will save a lot of the carpet garbage to be wasted out.

Use of Trade marks and labels

The environmental aspect of home textiles has attracted attention in recent years and different eco- labels and standard are in place for its regulatory control. With the increase in eco – friendly fabrics, there has been rise in the various trademarks for these environmentally friendly home textiles. This is not only to meet the regulatory requirement but also guide the consumer for its proper care. Consumers are getting aware of such labels and check these before buying their products. The increase in the number of labels shows the growth in the consciousness towards green home textiles. The eco label shall contain the following text

- Reduced water pollution
- Hazardous substances restricted
- Whole production chain covered

Eco-label generally represents a an overall evaluation of a product's environmental quality. Environmental label works as informative and voluntary market instrument and in some cases regulatory in nature for the country of export. Eco-labeling helps in achieving several goals. It improves sales or image of a labeled product, stimulating consumer awareness about environmental impact of products. It provides a better guidelines to manufacturers for the environmental impact of their products and ultimately improving the quality of the environment and encouraging the

sustainable management of resources. There are different trademarks, which are used globally for eco friendly products

These are:

EU- eco labels - The EU eco-label award scheme is the eco label of the EU (European union, i.e. Austria, Belgium, Cyprus, Czech Republic, Denmark, Estonia, Finland, france, Germany, Greece, Hungary, Ireland, Italy, Latvia, Lithuania, Luxembourg, Malta, Netherlands, Poland, Portugal, Slovenia, Spain, Sweden, United Kingdom, Romania, Bulgaria and Slovakia). The label sets standards for each product on the basis of a 'cradle- to-grave' assessment of the environment impact of the product group. This means that the complete life cycle of a product is examined, starting with the extraction of the raw materials, progressing through the production, distribution and ending with disposal after use. The label is awarded only to those products with the lowest environment impact in a product range. Eco-label criteria can be used in order to review the environmental and occupational health and safety of the chemicals. In the EU eco – label criteria, the R- and S- sentences are listed that indicate what substances are hazardous and should be avoided, if possible, R- and S- sentences provide information on the risks of chemicals and safety measures. Such information is available on Material Safety Data Sheet (MSDS.

ECO MARK — To increase consumer awareness the Government of India launched the eco-labeling scheme known as Ecomark in 1991 for identification of environmental friendly products. The 'Ecomark' label is awarded to consumer goods, which meet the specified environmental criteria and the quality requirements of Indian Standards. Any product with the Ecomark will be the right environmental choice . A product is claimed under this scheme in terms of the following main environmental impacts:

- that they have less potential for pollution than other comparable products in production, usage and disposal;
- that they are made from recycled products or bio-degradable, where comparable products are not;
- that they make remarkable contribution to saving non-renewable resources including non-renewable energy sources and natural resources compared with comparable products;
- that the product must contribute to a reduction of the adverse primary criteria which has the highest environmental impact associated with the use of product

MUT— Any green home textile that is made from environmentally sound protection methods will have MUT trademark. While manufacturing of these environmentely-friendly textiles acceptance to certain pre-specified rules is required.

GUT— GUT stands for Gemineinschaft Umweltfreundlicher Teppichboden and an eco-friendly trademark for the carpet companies in Europe. It is an association for environmental-friendly carpets with an objective of maximising textile floor-coverings and their protection cycle.

CLEAN FASHION — Clean Fashion, which is an eco-friendly label was developed by private companies that and related to home textiles. The ultimate objective of this programme is to improve environmental performance.This programme is exclusively developed to reconcile economic targets with ecological and social goals.

GREEN COTTON — The Danish textile manufacturer Novotex developed the concept of 'Green Cotton', with strict requirements for all phases of production. It is a label based on an internal evaluation system that considers social, ecological, and toxicological values. The concept can be licensed to other companies who produce organic and sustainable produced products. Novotex has been instrumental in aiding its suppliers to employ more sustainable methods. It is recognized internationally in both textile and environmental management circles as an innovator and a leader in sustainable textiles.

MST (Markenzeichen Schadostoffgeprufter Textile) — This is a product label to be used for products that are made in Germany and referring only properties of textiles. MST is a life cycle based ecolabel that is a voluntary method of environmental performance certification and labelling for textile products in Germany. The labeling ensures compliance with their national production standards.

Establishments of Eco Testing Labs- The drive for turning towards clean products due to strict scrutiny of export material has made it important to establish good eco testing laboratories all over India. Testing method help in analyzing home textiles products and help in understanding inherent characteristics of the product to accept and reject. It is stated that Carpet Industry alone contributes 600 M.T. chemicals and 1 crore litre industrial waste annually in Gyanpur Block of Bhadohi, which supports the largest handloom carpet industry in the world, in which approximately 6 M.T. sulphuric acid are used. Testing of river water adjoining city revealed upto 2.02 mg Chromium per litre, one fourth of which is enough to cause killer diseases like cancer and diabetes. Further in order to meet the challenges posed due to the implementation of eco regulations by Germany and other countries, the Government of India through the Ministry of Textiles has taken various steps to safeguard the precious industry of our country. Government of India through its Committee, as its nodal agency has worked out a plan for the consortium of Eco Testing facilities such as: Creation of awareness, setting of Eco Testing laboratories, Eco- auditing leading to eco marketing under eco- labeling scheme, phasing out of harmful dyes, setting up of quality appraisal scheme and specification of Eco- parameters for textiles

An Eco Testing laboratory of CSTRI, Central Silk Board has been established at the campus of Indian Institute of Handloom Technology, where testing facilities are available for fiber, yarn, fabric analysis, dyes/pigment, color fastness, effluents, and eco specification. This laboratory has exclusive rights to perform related tests. Thus the final product that would come out of the factories would not only be environmental friendly but also be considered to be produced by clean technology. Another Eco Testing lab at Varanasi has been set up to serve the local industries and to generate awareness among the local industrialists about eco testing and its importance in terms of export business. This will enable Eco lab to be an ecological, material and analytical testing standards. The lab at Varanasi is equipped with six major equipments. They are—Gas Chromatography-Mass spretrometer (GC-MS),High Performance Lquid Chromatography (HPLC), Atomic Absorption Spectrometer (AAS), Gas Chromatography (GC), UV- VIS spretrometer (UV-VIS), Forier Transform Infra Red spectrophotometer (FTIR

Green Label Plus - It is another independent testing program that identifies carpet with very low emissions of VOCs to improve indoor air quality. This test methodology for small scale environmental chamber testing was developed in cooperation with the U.S. Environmental Protection Agency (EPA). It is an enhancement to the CRI Green Label Carpet Testing Program. By selecting Green Label Plus carpet or adhesive, you are assured one of the lowest emitting products on the market, and you may be able to earn LEED (Leadership in Energy and Environmental Design), Green Globes, or Green Guide for Health Care points. To receive Green Label Plus certification, carpet and adhesive products undergo a rigorous testing process, as required by Section 01350 guidelines that measure emissions for a range of chemicals and is administered by an independent laboratory. Annual and semi-annual testing of certified adhesive products is done that is based on 24-hourchamber testing for targeted chemicals and the total level of volatile organic compounds (TVOC). Green Label Plus expands in several respects, including annual tests for the specific chemicals, a chain of custody process and an annual audit of the testing laboratory.

Eco- Auditing Eco Auditing is done to review the product performance in a well systematic way like documentation objective sources available, environmental conditions, operation review and statistical data etc. under eco parameter norms. It is carried out in two heads- Eco product Auditing and Eco production Auditing. These heads maintains the continuous chain of information from the raw material to finished product for absolute implementation of eco friendly parameters. The complete assessment of textile goods related to the eco criteria is done. Necessary information about unit, processing schedule, used fiber dyes, chemicals, quality control measurement, sources available, textile raw material, dyes, and auxiliaries used, energy source application, water source and their application and working conditions of job and environment are also furnished. For Eco auditing, the various eco parameters are taken into consideration such as sizing, desizing, no carcinogenic dye stuff, no allergic dyestuff, no chloroorganic carriers, no flameproof finish, no biocide finish, heavy metals analysis, use of pesticides, formaldehyde level study, P.H value of the product and processes, recyclibility and disposal of effluent. Germany is the country which controls headquarters of eco friendly system as well as provides eco auditing, sample analysis and testing as per eco parameters. Because of the high processing time and sample testing charges, India has established a sample test house in Bombay for the benefits of the industries.

NEED FOR GREEN CARPETS IN THE INDIAN CARPET INDUSTRY

Indian carpet companies are finally getting in the green game. Our carpet manufacturers have realized that the green products and services are in demand around the world. It is, therefore, instantly needed to start considering the manufacturing of eco friendly carpets until the situation becomes very critical. By the time, often it becomes too late to control the damage, and we are forced to pay a heavy price for the same. There are several unconventional issues with which our carpet industry is confronted from time to time. In almost all the industrialist countries, rapid evolution of environment legislation has taken place. The step taken by such countries has no doubt an impact on products marketed internationally. World trade in carpet will certainly be influenced by the legislation. It is therefore imperative that Carpet Industry should take step well in advance to ensure that Indian carpets will comply with the mandatory requirements of the customers. Companies are fighting to find ways that make their products more environmentally friendly.

Following are the reasons for eco friendly rugs in Indian Carpet Industry.

Harmful Effects of Chemicals Chemicals The carpet industry consumes large amounts of chemicals, including dyes, auxiliaries, acids, alkalis and finishing chemicals to improve qualities such as insect, stain or fire resistance. It is also affected by contaminants such as pesticides and heavy metals in raw materials such as wool and cotton. Water quality can also be a major problem in an industry which consumes large quantities of water during processing. As a result, even hand made carpet production faces significant environmental problems. Standard carpet is made of synthetic materials — nylon, acrylic, polyester, and polypropylene (PP) face fibers. Such materials consume large amounts of water and energy during production, along with the inevitable release of greenhouse gases, air pollutants and volatile organic compounds. These are non-renewable and toxic resources. Sometimes they contain mixture of about 100 chemicals — for stain resistance, wear resistance, mothproofing, fungicides, soil repellents, processing aids and adhesives required to hold the tufts together — many of which are toxic volatile organic compounds (VOCs) producing toxic emissions which can outgas for a long time. Synthetic carpets of all kinds are known to off-gas dozens of chemicals, not only from the materials themselves but also from the heavy chemical treatments that they receive, including dye, stain proofing, fungicide, antistatic, and fire retardant. Additionally, worries remain that carpet fibers provide a breeding ground for mildew, allergens, and airborne toxins. Installation is another area of great concern with respect to the use of VOC-containing adhesives. Installation of new carpet and flooring can fill the air with hundreds of volatile organic compounds (VOCs), including known and suspected carcinogens like formaldehyde and benzene. It can take years for these substances to dissipate. The SB latex (called SBR for styrene butadiene rubber), polyurethane, or polyvinyl chloride (PVC)—all of which are petroleum products backing of the carpets further aggregate the problem. SB latex, is used on at least 90% of carpet, contains the toxin styrene and is a suspected carcinogen. Adhesives 4-PC (4-phenylcyclohexene) and many chemicals such as Styrene come from SB latex backing and create the fumes associated with regular new carpets. The out gassing of harmful chemicals used in carpet backing cause headaches, runny eyes and nose and odors persist for months and years These chemicals include formaldehyde, toluene, benzene, xylene and styrene which are carcinogens or cancer causing agents Health complaints associated with carpets include neurological, central nervous system and respiratory problems. Asthma, allergies, multiple chemical sensitivity (MCS) and environmental illness (EI) are on the increase as people become exposed to low level exposures whether chronic or in one onslaught. Carpets are sometimes labeled as being dangerous to people with chemical sensitivities yet industry persists in using carpet adhesives and seam sealants cushions, and pads, emitting dangerous toxic chemical fumes. The Healthy Flooring Network (HEN) asked Dr Jill Warner of the University of Southampton to investigate the role of carpets in asthma and allergies. Her report, a thorough review of published scientific literature, showed that carpets are a major source of allergens, which can both sensitize children and trigger asthma attacks in children who have been sensitized. One study showed that concentrations of dust mite allergens in the dust from carpets could be six to 14 times higher than that from smooth floors. Later research by HFN also showed that in an attempt to control the dust mites the carpet industry is adding chemicals to our carpets which are highly toxic and have been banned in other applications.

Ban Imposed By European Countries Going with the idea of eco friendly trend, Germany, the biggest buyer of our carpets after USA has imposed a ban on the export of textile goods dyed with Azo dyes which on reduction release certain harmful amines. Some of the amines that are banned by Germany are Benzidine, 4-Chloro-o-toluidine, 2-Napthylamine, 4-Aminodiphenyl, 3,3 Dimethyl Benzidine, O-Toluidine, O- Aminoazotoluene and 4-Methyl-1 3-Phenylenediamine. These amines are either carcinogenic in character or allergenic in nature. Approximately 70 percent of all dyes being used by the Industry in India are Azo dyes and out of which 25 percent are in the banned list. The ban imposed by Germany on Azo dyes is going to be extended to cover other toxic and harmful substances such as Penta Chioro phenol (PCP), Formaldehyde, Heavy Metal traces and Pesticides. Further, similar bans may be imposed by the other European countries also in future.

The German ban came on 1 5-7-94, when an ordinance for second amendment to the German. Commodity Goods Ordinance dated the 10th April 1992 was issued, According to that ordinance, from 1st January, 1995 the azo dyes that could form any of the 20 listed prohibited amines through cleavage of one or more azo groups, were not to be used in the manufacture of the products, whose contact with the human body was intended to be not merely of a temporary nature. By a 3rd Ordinance dated 16-12-94, the German Government postponed the deadline by six months and from 1st July, 1995, no textile product containing banned azo dyes would be allowed for import in Germany. From 1st January, 1996, the designated products (including textile items) that have been dyed or printed with the banned dyes, will be prohibited for sale, marketing or distribution in Germany, even if those had been Imported into Germany before 1-7-1995. The violation of the regulation will be treated as a criminal offence and those who violate are liable to be prosecuted and punished either with imprisonment upto 3 years or with fine, depending upon the damage incurred. The ordinance will not be enforced by the German customs authority at the border. Instead, the relevant food and consumer products administration of individual federal states will conduct random sample checks on commodities in retail shops, probably on complaints or suspected non-compliance with the ordinance. The German buyers are, therefore, apprehensive about placing orders from India, because they are not sure whether such supplies may contain banned dyes or not. Any consignment containing the banned dyes may, not only be rejected but may also pose a threat on India being blacklisted for such supplies. This has put a lot of pressure on developing countries like India. The demand of eco friendly carpet has changed the whole scenario and the urgent need of eco friendly carpet has been emerged in the whole carpet sector.

Disposable Problem Causing Landfill Wastes Waste has also been a major sustainability issue in the carpet industry. Carpet has a relatively short life expectancy compared to other floor coverings (approximately 8 years). The bulkiness of carpet and padding not only makes disposal very costly, but carpet also takes over 50 years to begin to decompose. Landfills will no longer accept carpet. Disposal alternatives need to be found. Landfill space is diminishing. Every year in the U.S., 1.8 million tons of carpeting is sent to landfills alone representing a huge environmental burden. This problem exists in both the exporting as well as the importing countries. This problem is associated mainly with the synthetic carpets. Synthetic carpets which tend to age badly and do not de compose, are generally disposed off in landfills, where they occupy a large amount of space. Powerful latex adhesives used to bind layers of nylon, polyester and bitumen make it impossible to recycle the components of the tile. Carpet is claimed to account for approximately 2% of all waste dumped into landfill. Already, in Germany costs of landfill have tripled since 1992 to almost 400DM per tonne and further restrictions introduced in 1996 prevent dumping of any waste with calorific value greater than 11MJ/kg, which includes most carpets. In the United Kingdom, landfill taxes were only introduced for the first time in 1996 at a comparatively modest charge of £7 per tonne. The earlier this problem is diagnosed and a solution offered, the greater will be the potential savings. In fact, waste occurs at all levels of production and increases exponentially along the entire manufacturing route with post-consumer waste accounting for most of this. The carpet waste is eventually incinerated or preferably, as is the case in the UK, dumped into landfill sites at a further annual cost of £750,000.

The Growing Competition Among Carpet Exporting Countries Indian Carpets are famous the world over. With its magnificent designs and the heart winning workmanship it has been able to capture the export market and to make mark in the global carpet market. Handmade Woolen Carpets, Tufted Woolen Carpets, Chain stitch Rugs, Pure Silk Carpets, Staple/Synthetic Carpets, Handmade Woolen Dhurries, are some of the types for which there is a huge market demand in the European and American market. It is at par with its competitors like Iran, China & Pakistan. Indian carpets have substantially emerged as a major item for exports and thereby placed itself prominently in the international map. It has around 35.5% share of the world market for handmade carpets & floor coverings and 90% of the carpets produced in India are exported. Inspite of these advantages it is facing tough competition with in the world market due to its comparatively high price. So it has become very important for the Indian Carpet Industry to do something which goes with the today's norm and culture to beat the on going cut throat competition. Our rug industry can compete to a very large extent if it quickly jumps towards the environmental friendly products. Green product paradox presents quite the challenge for the marketer as the demand for environment-friendly products has altered the whole scenario of textile industry. There is the huge demand in the world market for the eco friendly products and chemicals. India and China are the biggest consumers of the eco friendly textile chemicals for application in home textiles of different varieties and hence the competition between them is increasing at the same pace. The demand for environment- friendly chemicals has increased to 2.8% and expected to reach at $19 billion by 2012. Further, of the major synthetics fibers used by the textile industry, all are based upon oil (petroleum). Polyester, nylon, acrylic, modacrylic, polypropylene, polyethylene an polyvinyl chlorie fibers are all base upon organic chemicals derived from oil and the carpet industry will face increased competition from other industries that use the same chemicals.

SUGGESTIONS TO MAKE CARPETS "GREEN AND ECO FRIENDLY"

Green business practices that maintain and sustain good environmental quality are increasingly becoming a vital component of economic competitiveness. There is a growing demand to make indoor environments as healthy and "green-friendly" as possible. Based on the latest examination conducted by the Environmental Protection Agency (EPA), the Indoor pollution is about 5 times greater than outside pollution. It is clear that we need to choose the least polluting floors. Allergies are on the rise around the world. Exposure to synthetic materials is felt to be a possible contributor. By adopting the green manufacturing process in rugs industry, we are not just giving importance to the health of our family but are also supporting to preserve the planet earth. Choosing the right materials and the right process is the critical step for the production of eco carpets. Use of renewable, natural, biodegradable fibers, dyes and eco friendly cleaners are some of the ways through which "green carpets" can be manufactured. Following are the various suggestions that can make our rug industry green and eco friendly.

Use of Natural Fibers- Natural fiber carpets are generally made from coir and rush, cotton, flax, ramie, jute, hemp, sisal, wool, sea grass, mountain grass and bamboo etc. They all represent renewable resources that could contribute to the environmental sustainability of the textile- fiber. As opposed to exhaustible synthetic resources, all of these are considered "sustainable" resources, which imply that once they are harvested, they will grow back quickly. All natural carpet used extensively by those suffering from chemical sensitivity as well as those concerned about the environment. When untreated, they are toxically benign for most people. Many natural materials are flame resistant. Organic material rugs tend to be far more reliable and strong than artificial material rugs. Rugs made of natural fibers are a much preferred option for people with allergies and chemical sensitivities as opposed to rugs made of synthetic fibers that are often treated or dyed using chemicals, which trigger off allergies. Selective breeding of suitable plants to cope with the challenges posed by global climate change may also be important.

Besides, in order to overcome the growing competition, the rug industries have to come to terms with the concept of sustainability of fiber production, and one approach that is well balanced for some fiber types is the development of so called biofibres. Biofibres are essentially regenerated or synthetic fibers derived from natural environmentally sustainable resources. The concept is not new- indeed viscose. It is a regenerated cellulosic fiber, derived from renewable resource. Manufacturing technique makes bio-floor nontoxic. An important part of the biofibre concept is that the fibers are not only produced from sustainable and renewable sources, but also are produced using an environmentally friendly production process. But bio fibers cannot be produced overnight, their development and commercialization take many years to bring to fruitation, and hence the textile- fiber manufacturing industry must continue to evaluate new biofibres for a sustainable future.

Use of natural dyes The natural dyes cuts down significantly on the amount of toxic effluent resulting from the dye process. Natural dyes are obtained from natural sources such as vegetable matter, minerals or insects. These are eco-friendly dyes that have replaced many harmful chemicals. Eco- friendly dyes are low impact dyes with no toxics. To dye the organic and non organic rugs and carpets many heavy and noxious chemicals are used, eco friendly dyes are the best option to avoid the effect of the hazardous chemicals used in the process. These dyes find use in the coloration of textiles, food, drugs and cosmetics. Small quantities of dyes are also used in coloration of paper, leather, shoe polish, wood, cane, candles, and such other products requiring coloration. Our importers demand carpets made from natural dyes, not because the quality is better or because the natural dyeing is in trend but because they want more environmentally friendly carpets.

The following properties are often considered to be the advantages of natural dyes.

- They are obtained from renewable resources.
- No health hazards, sometimes they act as health cure.
- Practically no or mild chemical reactions are involved in there preparation
- No disposal problems.
- They are unsophisticated and harmonized with nature.
- They are the nature's gift to mankind. After extraction of dyes the waste are returned to nature, which work as manure.
- Shades made from natural dyes are befitting to the Indian traditional motifs as they are mostly derived from the nature

The technology to utilize natural dyes in the modern carpet industry is relatively new and still being improved upon. The market for natural textile dyes is a newer market which requires vigorous marketing to stimulate demand. Many textile manufacturers have not yet seen an incentive to switch to natural dyes, which are more expensive than synthetics. As the popularity of natural foods and medicines grow, the demand for natural colors will increase as well. As opposed to natural foods and natural cosmetics, where retail outlets are numerous and a widespread, naturally dyed rug is not widely available to the average consumer. Making consumers aware of the environmental problems caused by synthetically dyed textiles, and making an alternative widely available, are the keys to the success of this industry. According to Hill the research effort devoted to natural dyes is negligible. If there had been significant research on the use of natural dyes, it is probable that they would have already been much more widely used than they currently are. There is a myth that the natural dyes are generally considered to be less fast as compared to synthetic dyes even though one finds many fabrics dyed with these dyes in museums. Some of these ancient textiles still show deep and brilliant colors. So it is not true to say that all natural dyes are fugitive. The materials dyed sometimes 5500 years ago with Madder found in the excavation of Mohan Jodaro and Hadappa are still in bright shades. But lot of creativity is required to use these dyes judiously

Environment friendly cleaning products and Herbal Washing

The green business owners and workers are now using environmentally friendly cleaners and herbal washing methods in their business. Harmful chemicals and other cleaning agents can negatively impact the environment, but using cleaning agents that leave little or no negative effect on the environment steers these businesses to the green side. The US Environmental Protection Agency also realizes the importance of environmentally friendly cleaning products. They have actually dedicated a portion of their website to this cause. The US Department of the Interior specifies what they believe to be characteristics that all environmentally friendly cleaning products must share. These characteristics include:

- Minimal skin, eye, and respiratory irritation.
- Biodegradability.
- Avoidance of undesirable or unnecessary dyes and fragrances.
- Recyclable containers and minimization of non recyclable waste

Carpet tiles Another way to make standard carpet greener is to use modular carpet tiles, which can be replaced one by one if damaged instead of ruining the entire piece When the carpet becomes worn or stained and needs replacement, instead of wall to wall carpeting, carpet tiles should be fitted, rather than the entire carpet. This means less carpet in landfills, and less carpet manufacturing needed.The modular system of carpet tiles allows individual pieces to be replaced when worn or soiled. Individual carpet tiles can be easily laid, removed and replaced.

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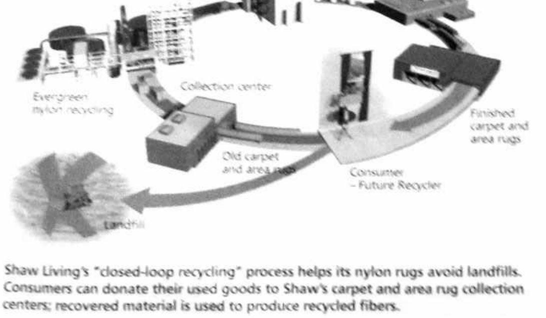
Others-However, eco-friendly alternatives to standard carpeting do exist, recycled-content carpet is beginning to make an appearance. This green carpet option also carries a variety of materials, including plastic soda bottles, nylon, or even used carpet. Some recycled-content carpet can even be reclaimed at the end of its lifecycle by the manufacturer, who will recycle it again, transforming a non-renewable substance into a renewed material. The good example of recycling of carpet is given by Shaw Living's, America's biggest carpet manufacturer.

CONCLUSION

Indian handmade Carpet industry is the magnificent art of the country.It is known across the globe for its unique colours The art of rug and carpet and designs making was introduced in India by the great Mughal Emperor Akbar in the 16th century and since than it is been treated as the royal craft.Today, the carpet industry of India is one of the largest and most consistent supplier of carpets to the world. In terms of money, global market share of India's carpet industry is 35 per cent whereas it stands at 65 per cent in terms of number.It is the vital source of our economy. The Handknotted carpet industry in India employs over 15.5lakhs of weavers in number of States including Jammu and Kashmir, Uttar Pradesh, Rajasthan, Madhya Pradesh, Bihar, Andhra Pradesh, Karnataka and Tamil Nadu. Morethan, 90% of the carpets produced in India are exported. Even China, which is the biggest competitor of Indian carpets is not able to beat our beautifully hand-woven carpets. Moreover, the diverse structure of the Indian textile industry, coupled with its ancient culture and tradition, provides it with unique capacity to produce with help of latest technological inputs and design capability a wide variety of carpet products suitable to the varying consumer tastes and preferences both within the country and overseas.

Though the industry has good reputation in the international market but still it's facing the downturn in the present era. The era which is highly sensitized due to the growing concern of the global warming. The conscious customers are fully aware of the consequences caused by the unfriendly eco products. Therefore our carpet sector should the measure which is



Shaw Living's "closed-loop recycling" process helps its nylon rugs avoid landfills. Consumers can donate their used goods to Shaw's carpet and area rug collection centers; recovered material is used to produce recycled fibers.

beneficial for them as well as for the environment. Unless and until they don't get engrossed themselves in the green business practices they won't be able to survive in the domestic as well as the international markets. "Going Green" is good for a corporation's public image and the marketability of the business. A high profit alone is insufficient to make an impact in today's business scene. Most consumers now demand that companies to develop their own green practices. Corporations proving that doing so is not are only possible, but also profitable.

The carpet producing regions should follow the strict norms and adapt the green measures to make their rugs more eco friendly and green. They should develop and invent their own ideas. The manufacturers should avail the facilities of eco test laboratories. They must go for eco auditing and eco management. They should attend the workshop and seminars especially conducted by the Textile Committee. The indian dyers should use the dyes of the reputed industries such Indian Dyestuff Industries, Jaysynth dyed Chemicals of Bombay and Atul Products Limited Bulsar The more quickly they transform their business into Green business, the more likely will be the chances of their survival. Companies that embrace sustainable practices are finding that green business is not just a better way of doing business, it is a gateway to new opportunities that could help them survive in today ' s tough markets.

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A REVIEW OF ETHIOPIAN INSTITUTIONS AND THEIR ROLE IN POVERTY REDUCTION: A CASE STUDY ON AMHARA CREDIT AND SAVING INSTITUTION (ACSI)

M. Venkata Ramanaiah*

ABSTRACT

Micro financing has become a powerful tool for financial inclusion, reaching out to a fifth of all poor households as well as many non-poor households who have yet to be reached by the formal financial sector. In this paper an earnest attempt is made to review of the need of Micro Financial Institutions (MFIs), the role of MFIs in alleviation of poverty in the country and how woman can get assistance from these institutions with a special reference to ACSI.

***Keywords**: Micro Finance, Micro Credit, Economic Development*

INTRODUCTION

In recent times the term 'Microfinance' (MF) became a buzz word in the every corner of the world as well as in the formulation of welfare programs by government. After hearing success stories in microfinance across the developing countries, particularly Bangladesh, third world nations started to give more importance to MFs. Since, banks have failed to reach the poorest of the poor of the countries population; microfinance emerged as a potential tool to fill the gap between financial institutions and needy people. Ethiopia, as a least developed country (LDC), needs huge financial recourses for rapid and sustainable development and reduce gap between haves and have-nots. Though we are in 21st century where science and technology plays a vital role in the pace of development, many countries across the Africa suffered from hunger, ill health, mass poverty and illiteracy. To curb all these awful conditions, there is a need of massive financial recourses. Private Banks and Government sector banks have many limitations in this concern. Mainly, these banks have high profit motives and they used to put many restrictions to sanctions loans to the poor. In this juncture, Microfinance is said to be an effective instrument discovered in 21st century to mitigate rural poverty in the world. Microfinance helps the poor to come out from many wicked problems. The beauty of the MF is in safeguarding a variety of interests of its members.

Research problem

Even though, micro finance is said to be an effective tool to mitigate several social and economical problems of rural mass, still there is a huge gap to bridge between the targeted objectives and reality. There is a need to study how micro finance institutions are functioning in Ethiopia towards eradication of poverty and evaluating their performance. And, it is also believed that these findings will be helpful to policy makers for better decisions.

Objectives of the study

The general objective of the present study is to analyze the role of microfinance institutions in connection to eradication of poverty in Ethiopia. Further, there are some specific objectives of the study which are exhibited below:

1. To identify the severity of the poverty in Ethiopia
2. The sketch out the present scenario of micro finance institutions in Ethiopia
3. To establish a link between woman, micro finance and poverty, and
4. To find out the challenges attributed towards the performance of micro finance institutions and to give some possible recommendations

Source of data

The present study is purely based on secondary data. The data is collected from books on the subject, various referred journals and official reports of the organizations including NGOs. Further, necessary data is collected from official websites.

Poverty in Ethiopia

Ethiopia is one of the poorest countries in the world, with an annual per capita income of US$170. The United Nations Development Programme's Human Development Report for 2007-2008 ranked Ethiopia as 169th out of 177 countries on the Human Development Index. The average life expectancy after birth is only 48 years. Infant and maternal mortality and child malnutrition rates are among the highest in the world. While access to education has increased in recent years, the overall adult literacy rate is low compared to the sub-Saharan African standards. Only about 30 per cent of the population has access to potable drinking water and about 80 per cent have no access to improved sanitation. About 47 per cent of children under the age of five are underweight and over 12 million people are currently chronically or transitorily food-

**Asst. Professor, Department of Business Management, KMMIPS, Tirupati, INDIA*
Earlier the author was Lecturer in Accounting and Finance in University of Gondar, Ethiopia.

insecure. HIV/AIDS constitutes a major threat to sustained economic growth, with about 6 per cent of adults estimated to be HIV-positive. Combined with malaria, the pandemic poses a serious challenge to achieving the MDGs .

Roughly 44 per cent of the population lives below the national poverty line. However, there are marked differences between rural and urban areas. Most rural households live on a daily per capita income of less than US$0.50. Generally, rural households have less access to most essential services. According to the latest Poverty Assessment, overall progress in reducing poverty since 1992 falls short of what is required to meet MDG1 by 2015 as a result of high variability in agricultural GDP and rapid population growth. Most rural households are finding it increasingly difficult to survive without recourse to seasonal or permanent urban migration in search of wage employment.

Microfinance in Ethiopia

Microfinance has started in Ethiopia during 1994-95. In Particular, the licensing and supervision of Institution proclamation of the government encouraged the Spread of Institutions (MFIs) in both rural and Urban areas as it authorized them among other things, to legally Accept deposits from the general public (hence diversify sources of funds), to draw and accept drafts, and to manage funds for the Micro financing business. Currently, there are 29 licensed MFIs reaching about 2.2 million active borrowers with an outstanding loan portfolio of approximately 4.6 billion birr. Considering the potential demand, particularly in rural areas, this satisfies only an insignificant proportion.

Microfinance as an Anti-poverty Strategy

The recent definition of poverty by the World Bank extended the conceptual dimension beyond the conventionally held ideas of permanent income/consumption and social income (basic needs) to a more comprehensive notion of lack of income/assets, sense of voiceless-ness and vulnerability to external shocks. Thus the anti-poverty strategies not only need to create income-earning opportunities, but also must ensure empowerment of the poor in the sphere of state/social institutions, and security against variety of shocks. Micro-finance is believed to be one important entry point to addressing many of them. But services are limited in some urban areas, neglecting the majority of the poor.

In Ethiopia, for example, the Development Bank of Ethiopia and the Commercial Bank of Ethiopia, respectively having 5 and 33 branches, provide virtually no access to the rural population since they all are located in urban and semi-urban towns. Also, private banks, though growing in number, do not engage themselves in this activity. According to an earlier study, in rural Ethiopia as a whole, less than 1% of the population has access to this source. Consequently, accessing credit for small scale and informal operators continues to pose a major constraint to growth of the sector.

The alternative is the "informal" financial sector, mainly the individual moneylenders. In this case, borrowers are required to provide guarantors and the interest rate is extremely high, varying from 50% to 120% per annum (SIDA, 2001). Recent IFAD study estimated that the Arata interest can go as high as 400% in some instances. And this exploitative interest rate of the informal sector diminishes potential return to factors of production, and is a constraint to diversify economic activities of the rural sector.

The Federal Government of Ethiopia has taken several economic reform measures to address poverty in its every aspect. Thus, while trying to fulfill the basic needs of the population, it also embarks upon economic reform measures conducive for free market competition and employment creation which includes the promotion of policies that will encourage savings, private investment, increasing income earning opportunities and promotion of small-scale industries in the informal sector among others. The five-year development program document emphasizes, among others, credit as a means to increase smallholder production (EPRDF, 1992 EC: 62). Financial markets are considered by the Regional Government as a good entry point in achieving food security objectives as this will allow rural households in both food secure and insecure areas to explore their "comparative advantages" in the market place and to create possibilities for exchange between factor markets (AEMFI, 2000a:9). Thus, in addition to promoting provision of credit through government channels, the program encourages micro-finance institutions to provide their services of credit provision and savings mobilization. However, even if policies aimed at changing the regulatory environment were expected to pave the way for increased flows of resources to the rural and informal sectors, micro financial services are very inadequate still.

Woman, Microfinance and Poverty

There is an argument that, due to a number of factors (including rapid population growth and population pressure on land, dislocation and separation of households due to war, famine, resettlement, etc), there is increasing tendency towards diversification and engagement of rural people in off-farm activities much of which is "compulsive" and survival-oriented (IFAD 2001:7). Within this process, women are considered to be the most active participants . Rural women's increasing engagement in off-farm activities is one of the factors, which is likely to put a dynamic pressure on the traditional gender division of labour.

Thus, since the 1980s, a number of projects have been initiated in rural Ethiopia (including micro-financing and saving and credit projects). Most of these schemes target women and are intended to expand income earning opportunities in traditional or new areas of women's off-farm activities to alleviate poverty and economically empower women. The impact of these programmes on rural women's lives is not known.

Generally, empowerment as a development strategy approach for women involves two levels:

intrinsic and extrinsic. The extrinsic level refers to gaining greater access and control over resources. On the other hand, the intrinsic level involves changes from within, such as the rise in **self-confidence, consciousness** and **motivation.** It recognizes women's triple roles and seeks to meet strategic gender needs through bottom-up participation on resources and development issues that concern the life of women[3].

Credit and saving programmes in particular are geared towards the promotion of off-farm activities by rural women. These programmes are implicitly or explicitly based on the **assumption** that rural women are conversant with non-farm income generating activities, have sufficient time and labour to expand traditional, or start new, income generating activities. As suggested above, one of the important issues relevant for gender-focused policy interventions is

informal sector, primarily in low paying and often menial work, piece work, vending, petty trading, agricultural labour, collecting garbage, cleaning toilets, and factory employment. In almost every country in the study, both men and women reported women's greater ability to accommodate, bury their pride and do whatever job was available to earn the money to feed the family. This sometimes includes prostitution. (World Bank Group, p.50)

See: Microfinance: Theory, Policy and Experience, proceedings of the International Workshop Held in July 2001; FBE, Mekele University. Tesfay Aregawi, p.196: Microfinance: Issues and Impact Assessment and Gender.

the question of how rural women manage to actively engage in off-farm activities on top of their demanding roles in agricultural production and domestic labour. Here lays the appropriate channel to identify the potentials and constraints that rural women face concerning gender focused rural intervention, especially those relating to saving and credit schemes. There are real practical problems in this regard.

Trends in Microfinance

Out of 29 registered MFIs across the country 14 MFIs are very active in their activities by the end of the year 2008. These 14 MFIs are contributed almost all 95 per cent of total microfinance business. These 14 MFIs are given 4.2 billion Birr to the needy during the year with 1.9 million active borrowers. Among these MFIs, ACSI occupies first rank in its activities whereas Harbu occupied the place in granting loans to needy. In concern to active member ship also the same trend follows in case of first position but Letta occupies the last place. In the year 2000, there were 3 MFIs in the country namely, ACSI, OCSSCO and Sidma respectively. These together have granted loans Birr 13,086,616 with active borrowers of 176,629 during the year. During 9 years period, there is tremendous growth rate in terms of loan granting and active borrowers. Among 14 MFIs, the first four (See Table 1) play a dominant role in the development of microfinance in the country. These four MFIs accounted for 92.33 per cent and 87.43 per cent respectively in terms of gross loans and active borrowers.

Table 1

Table 2 portrays the present condition of average deposits made in MFIs and Average loans taken from MFIs. By the end of year 2008, Average deposits were 82.71 Birr per each depositor and average loans were 174 per cent in its deposits across various MFIs. Among these MFIs, Letta is registering in collecting high range of deposits with an average of 468 birr from each depositor whereas Eshet registered a low collection of deposits with an average of 18 birr. In connection to average loans given by MFIs, the average is 174 per cent in average loan balance per borrower. Letta has registered 1st position in this concern with an average of 1364 per cent while Harbu has occupied the last position in this concern with an average loan rate of 35.4 per cent per each borrower. By observing this situation one can conclude that there is a huge gap between deposits collection and loans given to borrowers. The microfinance institutions must be more liberalize in sanctioning of loans to needy. At the same time they should take appropriate steps for collection of debts from borrowers.

Table 2

Table 3 elucidates movements in Capital asset ratio in 14 major MFIs in the country during 2005-08. Capital asset ratio is very important measure to estimate the residual value for stake holders in a particular MFI. It says the financial soundness of the organization. If you look at table 3, we can find that in every MFI there is decrease in capital asset ratio. It indicates positive signs of improvement of efficiency and surplus funds in MFIs. But most of the MFIs are having higher capital asset ratio which is not recommendable. From Table 3, DECSI has lowest capital asset ratio where as Letta has registered 88.03 per cent capital asset ratio. Still, MFIs have to concentrate more on this concern to curb capital asset ratio.

Table 3

Microfinance- A way to root out poverty

In a country where almost half of the population barely survives on less than a dollar a day, micro credit offers poor people a unique opportunity to engage in small businesses or improve their agricultural production. With the support of national and international organizations, many institutions across the country extend small loans to poor people in rural areas to help them improve their incomes and overcome poverty.

In the mountainous sparingly populated rural people's struggle to living. Displaced by famine or by the lack of economic opportunities, most of them who have relocated into areas are as poor as the ones who left, where they have no assets and no land to cultivate. The Amhara Credit and Saving Institution (ACSI), a institution, was established in 1995 to help the most destitute but active members of rural communities invest in a better future. With support from the International Fund for Agricultural Development (IFAD), ACSI provides much-needed financial services to poor rural people, enabling them to invest small sums of money in productive activities.

4.1 The Amhara Credit and Savings Institution (ACSI)

The Amhara Credit and Saving Institution (ACSI) were established in the region aiming to bridge the gap of formal institutions to meet the need of small-scale borrowers in income generation schemes. It has its distinct vision, mission, objectives and strategies. The operation of ACSI is traced back to 1995 when it was initially initiated by the Organization for the Rehabilitation and Development in Amhara (ORDA), an indigenous NGO engaged in development activities in the Amhara region. 1996 was the year when ACSI had undertaken its pilot activities. ACSI was licensed as a microfinance share company in April 1997.

Giving priority to fill knowledge and understanding of the Complex, Diverse, and Local (CDL) realities of the poor, ACSI entertains flexibility in operation and a process of learning from practice. It fully considers rural values, economic and social settings, settlement and gender issues, with a commitment to play a key role in improving the living standard of the population through self-employment and dignity, preserving rather than charity handouts. ACSI thus essentially targets the productive poor. Those if appropriately assisted could by themselves create the activities that could enable them to get out of poverty i.e. the entrepreneurial poor. Indeed, such people do not need "direct" assistance (e.g. subsidy, etc) for themselves, but they do need help like indirect assistance (e.g. business development services, credit, etc) in setting up an activity that will eventually increase income. They are not passive recipients of money transferred from other segments of the economy in a top-down approach, rather they need to be empowered to create their own jobs and enhance private income, thus transforming the funds into large and more substantial streams of money (Garson, 1999:5). Such a strategy targets the causes of poverty, rather than the poor themselves, making anti-poverty policy cost effective.

4.1 Reaching the poorest?

ACSI started in 6 of the 140 woredas in the region and now it operates in 13 branchs, 185 sub branches and 11 micro banks and one head office to implement its plans. It reaches 1.3 million poor people and has 710,576 active borrowers .

Major qualitative benefits include one or more of the following: increased food security (66%), constructing/maintaining house (18%), ability to send children to school (39%), ability to buy additional cattle (14%), and other benefits (44%) including: experience in cash management, no disposing off assets, not having to go to the money-lender, increased acceptance in the community, etc. Overall, 89.9% reported that their life is much better than before the loan. Some 20% reported that they exhibit no change in their life-style, while the remaining 3.3% actually experienced worst life style as a result of the credit, which may include failure in business, and therefore increased debt burden, having to sell some assets to settle debt, etc[5] .

4.2 Demand for credit is large and growing

The demand for is still largely untapped. ACSI reaches just one third of the estimated 3 million people in need of services in Amhara, and most of Ethiopia's institutions face the same challenge. Because of the crucial importance of rural financial services in the fight against poverty IFAD, works with the Government of Ethiopia to provide support for 17 institutions and nearly 2,000 rural savings and credit cooperatives (RUSACCOs) through the Rural Financial

Intermediation Programme (RUFIP). The programme started in 2003 and has duration of seven years. IFAD's loan covered US$25.7 million of the total cost of US$88.7 million. The impact of on rural people's lives is so visible and impressive that the demand is growing exponentially every day. ACSI, like many other institutions, is looking for more sources of funding. There is a massive need to be able to access capital in a sustained manner. It is known fact that clients' savings are insufficient to cover credit needs.

5.1 What does ACSI do for better outcomes?

To effectively reach poor people, ACSI has to adapt to the local context. To be closer to its clients, it sets up its sub-branches deep in rural areas and creates a six-member credit and savings committee in each village. The committee composed of local leaders, respected community members and an ACSI employee, screens loan applications, giving priority to the poorest members of the community. Since most poor people do not have collateral, ACSI requires individuals to form a group of five to seven people who follow up on one another's progress and act as guarantors for one another. ACSI's staff guides them step by step in making a business plan, so that it is possible even for illiterate people to join the scheme.

An impact study conducted by the Association of Ethiopian Institutions (AEMFI) in 2007 estimated that the institution (ACSI) was responsible for substantial growth in agricultural gross domestic product (GDP) in the Amhara region. According to the study, by the eighth loan cycle clients are able to put poverty permanently behind them, but even by the fifth loan cycle they can significantly improve their living conditions. So that ACSI should work more effectively so that it could help the poor to come out from their ill-fated for centuries together.

5.2 High Operational Costs and Non-market based Interest

Now every MFIs is severely affecting by the high operational costs which directly influence the smoothness of its activities. There are, for example, those women who require loans as small as Br. 50, for such activities as spinning (used for the production of the local Gabbi). And such poor people are not necessarily the ones with no business skill, and looking only for charity hand-outs, as often assumed by many authors. They have the requisite skill for this specific task, the demand for their products is often available, they can fully repay the loan and, in fact, they are too proud to look for charity. Yet, such loan size would have required 100 clients to sell a total portfolio of just Br. 5000, the maximum allowable limit. The MFI would need more credit officers who would attend all these clients, with additional cost, when, in fact, it can dispose such a loan to just one big borrower.

Given the very poor infrastructure in the region, attending all such clients would undoubtedly increase operational costs, which cannot be covered from such operations because of the low (subsidized) interest rate. Although the National Bank regulation has allowed MFIs to fix their interest that can cover the cost of operation, many are still reluctant to do so because of a wrong perception that by so doing they might hurt the poor whom they come to support out of poverty. There is a strong belief that there is still room for improvement in terms of productivity of staff and administrative efficiency to ensure sustainability while keeping the interest rate low so that clients do not have to subsidize inefficient operations through higher interest rate. After all, some may argue, MFIs are there to help the poor improve income and not to exploit! Thus, whereas the transaction costs of providing micro credits in targeted remote and isolated areas become increasingly higher than those for providing standard commercial loans, and while it is clear that prompt, reliable access to credit is more important to clients than low interest rate as such, ACSI has still been committing itself to a low interest rate. So, there should be optimum rate of interest which can cover its operational costs. Though, MFIs are not meant for exploit the poor and needy, any MFIs should not run in longtime without recovering it costs.

5.3 The panacea for high operational costs- Group lending method?

This methodology removes the main entry barrier for those with no collateral, limited literacy, weak technical knowledge and narrow prior money management experience. It has many advantages for MFIs in terms of screening out those who are not credits worthy. Research on Grameen Bank reveals that:

"Women who are really disorganized and cannot "manage" their households, women who are considered foolish or lacking in common sense, women who are "belligerent" and cannot get along with others, women with many small children, with husbands who are "lazy" and gamble and waste money or are "bad", are generally considered "high risk". It is felt that these women will be unable to use loans "wisely"; they would be unable to save and invest and increase incomes. These women, even if provided with membership, would drop out and would have negative influence on others." (See Syed M. Hashemi (1997); p.115)

Though there are some considerable problems, the advantages of peer monitoring over traditional practices lies in its social connectedness, as local knowledge about other's assets, capabilities, and character traits is used to sort and self select. In theory, the dynamic of joint liability implies that groups screen and self-select their own members to form relatively homogeneous groups. It is assumed that social solidarity will ensure that the successful members cover for the defaulters[9] .

6. Conclusions

Some important conclusions can be drawn from the above discussion:

MFIs are playing a dynamic role to uplift the poor and downtrodden from centuries together. The efforts made by MFIs so far does not even satisfy 10 per cent of the poor, particularly rural poor. There is a huge gap between the demand and supply parameters. There is a need for awareness about microfinance and its advantages too. There is a need for conducting awareness programmes across the country. MFIs should be going in-depth the rural areas where people badly need the money. MFIs should try to implement the following suggestions.

- To be well-served by the credit delivery, important demands of the poor need to be met. Since the poor require a loan that is flexible enough in terms of repayment period and repayment frequency.
- Diversifying the lending methodology away from the current "group methodology" into others like village banking and possibly to individual lending may help, for the group lending on the one hand tends to ignore the very poor, and on the other hand, have no room for those who can borrow on individual bases.
- The poor cannot be served very well by the delivery . of credit alone. Saving services constitute an important part of the demand of the poor. Evidence in many cases indicates that most poor people want to save most of the time, while they do not want to borrow at all.
- Credit must, above all, be accompanied by some kind of marketable skill development, which the poor seriously lack. Credit alone can only increase the "scale" of existing activities rather than enabling the poor to move into new or higher value activities. Given the poor market condition in rural areas, this gives rise to easy market saturation, which diminishes potential profitability. Some kind of cultural transformation may also be called for at this particular juncture in order to change the attitudes of some otherwise very poor people who are reluctant, due to obvious cultural reasons, to engage themselves in non-traditional activities which are much more rewarding indeed.
- Women are "allocated" some portion of the credit, but a good portion of it is destined to their male counterparts, violating the institutional objective. This partly has to do with the fact that women are still highly handicapped with lack of any business skill, much more than their male counterparts. On the other hand, however, this may have also to do with the "wrong assumptions" that planners of micro-finance services had on the available time that

women have. We planners forget that women are fully engaged in domestic works through out the day, and have nothing to afford for such business activities. And this might be much more serious for the Ethiopian women.

7. Recommendations

The following are the recommendations to achieve the objectives of microfinance in connection with eradication of poverty in Ethiopia.

For Microfinance institutions:

a. MFIs should reach out to the gross root level in the rural areas where people badly need the financial support for better living conditions.
b. MFIs should come with flexible and amicable strategies to reach the un-reached.
c. MFIs should give top priority to woman in self help groups for more participation in policy related decisions. So that, woman can understands in better way of the needs of family.
d. MFIs should take appropriate policies in such away to avoid bad debts from borrowers.
e. Occupational finance should be encouraged for deserving groups who are under same occupation.

For Government of Etiopia:

f. Government should come forward to work more in collaboration with microfinance institutions.
g. Government should take appropriate steps to promote microfinance institutions with more social responsibility
h. Government should give the need based training to empower woman as entrepreneurs in collaboration with micro finance institutions.
I. Government should direct the banks to provide more finance to needy people by establishing more rural branches inform of microfinance.

In addition to the above, there should be dedication and devotion towards poor and downtrodden. MFIs should be aware of a very fundamental truth that they are not for profit making but for serving the poor. With smooth cooperation of the needy, the institutions could curb many wicked problems in society.

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Table 1: Gross Loan Portfolio and Active borrowers by the end of 2008

Name of MFIs	Gross Loan	Rank	Number of Active Borrowers	Rank
ACSI	155,668,558	1	710,576	1
DECSI	145,826,452	2	464,622	2
OCSSCO	62,639,156	3	364,584	3
ADCSI	28,795,929	4	112,259	4

Wisdom	8,479,338	5	56,735	5
Wasasa	4,431,981	6	38,331	7
PEACE	3,920,947	7	19,921	10
Eshet	3,700,900	8	27,268	8
SFPI	3,239,159	9	26,459	9
BG	3,152,628	10	38,921	6
Meklit	1,874,083	11	13,557	11
Gasha	1,580,443	12	4,224	13
Letta	1,305,128	13	434	14
Harbu	912,287	14	11,713	12
Total	425,526,989		1,889,604	

Source: Compiled by author on various basis

Table 2: Average deposits and Average loans for each Depositor and Borrower

Name of MFIs	Average Deposits (Birr)	Rank	Number of Active Borrowers	Rank
ACSI	77	4	99.58	5
ADCSI	41	8	116.6	4
BG	19	13	36.82	13
DECSI	153	2	142.66	3
Eshet	18	14	61.69	10
Gasha	41	9	170.07	2
Harbu	36	10	35.4	14
Letta	468	1	1,366.91	1
Meklit	44	7	62.84	9
OCSSCO	92	3	78.1	7
PEACE	50	5	89.47	6
SFPI	50	6	55.65	11
Wasasa	34	12	52.56	12
Wisdom	35	11	67.93	8
Average	82.7143		174.02	

Source: Compiled by author from different sources

Table 3: Trends in Capital Asset Ratio in MFIs during 2005-2008

NAME	2005	2006	2007	2008
ACSI	0.3236	0.2998	0.269	0.235
ADCSI	0.7086	—	—	0.698
BG	0.6611	0.664	0.4311	0.444
DECSI	0.2325	0.2105	0.2009	0.192
Eshet	0.2752	0.3213	0.2815	0.258
Gasha	0.4347	0.4392	0.4755	0.241
Harbu	—	0.3334	0.3161	0.338
Letta	—	—	0.915	0.88
Meklit	0.3356	0.2847	—	0.284
OCSSCO	0.4369	0.2961	—	0.253
PEACE	0.2777	0.2678	0.3139	0.336
SFPI	0.5514	0.5252	0.4562	0.457
Wasasa	0.485	0.4634	0.4253	0.33
Wisdom	0.4873	0.472	0.3613	43.64

Source: www.mixmarket.org/mfi/

NON-PERFORMING ASSETS IN BANKING SECTOR-EMERGING ISSUES AND STRATEGIES TO MITIGATE THE NPAS

R.K.Uppal *

ABSTRACT :

Banking sector reforms in India has progressed promptly on aspects like interest rate deregulation, reduction in statutory reserve requirements, prudential norms for interest rates, asset classification, income recognition and provisioning. But it could not match the pace with which it was expected to do. The accomplishment of these norms at the execution stages without restructuring the banking sector as such is creating havoc. This research paper deals with the problem of having non-performing assets, the reasons for mounting of non-performing assets and the practices present in other countries for dealing with non-performing assets.

Keywords: *Non- Performing Assets, Emerging Issues and Strategies*

INTRODUCTION

During pre-nationalization period and after independence, the banking sector remained in private hands Large industries who had their control in the management of the banks were utilizing major portion of financial resources of the banking system and as a result low priority was accorded to priority sectors. Government of India nationalized the banks to make them as an instrument of economic and social change and the mandate given to the banks was to expand their networks in rural areas and to give loans to priority sectors such as small scale industries, self-employed groups, agriculture and schemes involving women.

To a certain extent the banking sector has achieved this mandate. Lead Bank Scheme enabled the banking system to expand its network in a planned way and make available banking series to the large number of population and touch every strata of society by extending credit to their productive endeavours. This is evident from the fact that population per office of commercial bank has come down from 66,000 in the year 1969 to 11,000 in 2004. Similarly, share of advances of public sector banks to priority sector increased form 14.6% in 1969 to 44% of the net bank credit. The number of deposit accounts of the banking system increased from over 3 crores in 1969 to over 30 crores. Borrowed accounts increased from 2.50 lakhs to over 2.68 crores.

WHAT IS A NPA (NON PERFORMING ASSET)

Action for enforcement of security interest can be initiated only if the secured asset is classified as Non Performing Asset.

Non Performing Asset means an asset or account of borrower, which has been classified by a bank or financial institution as sub-standard, doubtful or loss asset, in accordance with the directions or guidelines relating to asset classification issued by RBI.

An amount due under any credit facility is treated as "past due" when it has not been paid within 30 days from the due date. Due to the improvement in the payment and settlement systems, recovery climate, upgradation of technology in the banking system, etc., it was decided to dispense with 'past due' concept, with effect from March 31, 2001. Accordingly, as from that date, a Non performing asset (NPA) shell be an advance where

I. interest and /or installment of principal remain overdue for a period of more than 180 days in respect of a Term Loan,
ii. the account remains 'out of order' for a period of more than 180 days, in respect of an overdraft/cash Credit(OD/CC),
iii. the bill remains overdue for a period of more than 180 days in the case of bills purchased and discounted,
iv. interest and/ or installment of principal remains overdue for two harvest seasons but for a period not exceeding two half years in the case of an advance granted for agricultural purpose, and v.any amount to be received remains overdue for a period of more than 180 days in respect of other accounts.

With a view to moving towards international best practices and to ensure greater transparency, it has been decided to adopt the '90 days overdue' norm for identification of NPAs, form the year ending March 31, 2004. Accordingly, with effect form March 31, 2004, a non-performing asset (NPA) shell be a loan or an advance where;

I. interest and /or installment of principal remain overdue for a period of more than 90 days in respect of a Term Loan,
ii. the account remains 'out of order' for a period of more than 90 days, inrespect of an overdraft/ cash Credit(OD/CC),
iii. the bill remains overdue for a period of more than 90 days in the case of bills purchased and discounted,
iv. interest and/ or installment of principal remains overdue for two harvest seasons but for a period not exceeding two half years in the case of an advance granted for agricultural purpose, and
v. any amount to be received remains overdue for a period of more than 90 days in respect of other accounts.

**Principal Investigator UGC sponsored MRP, D.A.V College, Malout (Punjab), India*

'Out of order'

An account should be treated as 'out of order' if the outstanding balance remains continuously in excess of the sanctioned limit/ drawing power. In case where the outstanding balance in the principal operating account is less than the sanctioned limit/ drawing power, but there are no credits continuously for six months as on the date of balance sheet or credits are not enough to cover the interest debited during the same period, these account should be treated as 'out of order'.

Overdue

Any amount due to the bank under any credit facility is 'overdue' if it is not paid on the due date fixed by the bank.

Non-performing assets, also called non-performing loans, are loans,made by a bank or finance company, on which repayments or interest payments are not being made on time.

A loan is an asset for a bank as the interest payments and the repayment of the principal create a stream of cash flows. It is from the interest payments than a bank makes its profits.

Banks usually treat assets as non-performing if they are not serviced for some time. If payments are late for a short time a loan is classified as past due. Once a payment becomes really late (usually 90 days) the loan classified as non-performing.

A high level of non-performing assets compared to similar lenders may be a sign of problems, as may an sudden increase. However this needs to be looked at in the context of the type of lending being done. Some banks lend to higher risk customers than others and therefore tend to have a higher proportion of non-performing debt, but will make up for this by charging borrowers higher interest rates, increasing spreads. A mortgage lender will almost certainly have lower non-performing assets than a credit card specialist, but the latter will have higher spreads and may well make a bigger profit on the same assets, even if it eventually has to write off the non-performing loans.

Difficulties with the non-performing assets:

1.Owners do not receive a market return on their capital. In the worst case, if the bank fails, owners lose their assets. In modern times, this may affect a broad pool of shareholders.

2. Depositors do not receive a market return on savings. In the worst case if the bank fails, depositors lose their assets or uninsured balance. Banks also redistribute losses to other borrowers by charging higher interest rates. Lower deposit rates and higher lending rates repress savings and financial markets, which hampers economic growth.

3. Non performing loans epitomize bad investment. They misallocate credit from good projects, which do not receive funding, to failed projects. Bad investment ends up in misallocation of capital and, by extension, labour and natural resources. The economy performs below its production potential.

4. Non performing loans may spill over the banking system and contract the money stock, which may lead to economic contraction. This spillover effect can channelize through illiquidity or bank insolvency;

(a) when many borrowers fail to pay interest, banks may experience liquidity shortages. These shortages can jam payments across the country,

(b) illiquidity constraints bank in paying depositors e.g. cashing their paychecks. Banking panic follows. A run on banks by depositors as part of the national money stock become inoperative. The money stock contracts and economic contraction follows

(c) undercapitalized banks exceeds the banks capital base.

Lending by banks has been highly politicized. It is common knowledge that loans are given to various industrial houses not on commercial considerations and viability of project but on political considerations; some politician would ask the bank to extend the loan to a particular corporate and the bank would oblige. In normal circumstances banks, before extending any loan, would make a thorough study of the actual need of the party concerned, the prospects of the business in which it is engaged, its track record, the quality of management and so on. Since this is not looked into, many of the loans become NPAs.

The loans for the weaker sections of the society and the waiving of the loans to farmers are another dimension of the politicization of bank lending.

Most of the depositor's money has been frittered away by the banks at the instance of politicians, while the same depositors are being made to pay through taxes to cover the losses of the bank.

Comparative Study With Other Countries.

I.China:

(a) Causes:

(i) The State Owned Enterprises(SOE's) believe that there the government will bail them out in case of trouble and so they continue to take high risks and have not really strived to achieve profitability and to improve operational efficiency.

(ii) Political and social implications of restructuring big SOE's force the government to keep them afloat,(iii) Banks are reluctant to lend to the private enterprises because while an NPA of an SOE is financially undesirable, an NPA of a private enterprise is both financially and politically undesirable,(iv) Courts are not reliable enforcement vehicles.

(b) Measures:

(i) Reducing risk by strengthening banks, raising disclosure standards and spearheading reforms of the SOE's by reducing their level of debt,

(ii) Laws were passed allowing the creation of asset management companies, foreign equity participation in securitization and asset backed securitization,

(iii) The government which bore the financial loss of debt 'discounting'. Debt/equity swaps were allowed in case a growth opportunity existed,

(iv) Incentives like tax breaks, exemption from administration fees and clear cut asset evaluation norms were implemented. The AMCs have been using leases, transfers, restructuring, debt- for-equity swaps and asset securitization, among other methods, to dispose of non-performing loans

II. Korea:

(a) Causes:

(i) Protracted periods of interest rate control and selective credit
allocations gave rise to an inefficient distribution of funds,

(ii) Lack of Monitoring ..... Banks relied on collaterals and guarantees in the allocation of credit, and little attention was paid to earnings performance and cash flows,

(b)Measurers:

(iii) The speedy containment of systemic risk and the domestic credit crunch problem with the injection of large public funds for bank recapitalization,

(iv) Corporate Restructuring Vehicles (CRVs) and Debt/Equity Swaps were used to facilitate the resolution of bad loans,

(v) Creation of the Korea Asset Management Corporation (KAMCO) and a NPA fund to fund to finance the purchase of NPAs,

(vi) Strengthening of Provision norms and loan classification standards based on forward-looking criteria (like future cash flows) were implemented;

(vii) The objective of the central bank was solely defined as maintaining price stability. The Financial Supervisory Commission (FSC) was created (1998) to ensure an effective supervisory system in line with universal banking practices.

III. Japan:

(a) Causes:

(i) Investments was made real estate at high prices during the boom. The recession caused prices to crash and turned a lot of these loans bad,

(ii) Legal mechanisms to dispose bad loans were time consuming and expensive and NPAs remained on the balance sheet,

(iii) Expansionary fiscal policy measures administered to stimulate the economy supported industrial sectors like construction and real estate, which may further exacerbated the problem,

(iv) Weak corporate governance coupled with a no-bankruptcy doctrine,

(v) Inadequate accounting systems.

(c) Measures:

(i) Amendment of foreign exchange control law (l997) and the threat of suspension of banking business in case of failure to satisfy the capital adequacy ratio prescribed,

(ii) Accounting standards–Major business groups established a private standard-setting vehicle for Japanese accounting standards (2001) in line with international standards,

(iii) Government Support - The government's committed public funds to deal with banking sector weakness.

III. Pakistan :

(a) Causes:

(i) Culture of "zero equity" projects where there was minimal due diligence was done by banks in giving loans coupled with collusive lending and poor corporate governance,

(ii) Poor entrepreneurship,

(iii) Chronic over-capacity/lack of competitive advantage,

(iv) Directed lending where the senior management of the public sector banks gave loans to political heavy weights/ military commanders.

(b) Measures:

((i) The top management of the banks was changed and appointment of independent directors in the board of directors ,

(ii) aggressive settlements were done by banks with their defaulting borrowers at values well below the actual debt outstanding and/or the amount awarded through the court process ..... i.e., large haircuts/ write offs,

(iii) setting up of Corporate and Industrial Restructuring Corporation (CIRC) to take over the non-performing loan portfolios of nationalized banks on certain agreed terms and conditions and issue government guaranteed bonds earning market rates of return,

(iv) The Banking Companies (Recovery of Loans, Advances, Credits and Finances) Act, 1997 was introduced in February 1997. Special banking courts have been established under this Act to facilitate the recovery of non-performing loans and advances from defaulted

II
REVIEW OF RELATED STUDIES

The present paper reviewed the following studies:

Chhimpa, J. (2002) proposed a view that bank credit itself is being encroached by other financial instruments and non-banks. In these competitive times, bank lending decisions require relevant and credible information architecture to control credit process and help framing future views on the activity under lending consideration, interest rates, flow of money etc. Combination of modern tools of risk management, experience of and maturity in lending banker, hopefully minimize inflow of future NPAs. Any help from external environment could be bonus on that.

Gujral, N. (2003) examined that with the enactment of this landmark Securitization Act, though a giant leap forward has been taken, yet there is a still a long way to go. The Act is not a financial TADA. It is a tool and not a weapon in the hands of the bank to shoot the defaulters. It is an enabling provision, an extra right, which will be used by banks very sparingly, as a last resort to nail the hardware defaulters only. This Act is certainly not a toothless piece of legislation. But eventually it is the end result that will tell on the judgment day, otherwise NPA blues will continue to haunt bank though in a different way

Gupta, S. and Kumar, S. (2004) analyzed that redeeming feature of banking sector reforms is the continuing fall in gross and net NPAs as a proportion of total assets for all bank groups except private sector banks. Huge backlog of NPAs needs resolution of the earthiest as otherwise it can weaken the foundation of entire financial system.

Jain, J. (2000) suggests some solutions for a strong banking. He suggest that technology changes, human resource development, improvement in corporate governance, reforming legal system and rural finance will help in making banking system strong. There will be greater role for IBA in co-ordination among banks for cost reduction, use of technology, sharing of information for better risk management and in all the important strategies and solutions narrated above.

Kaveri, V.S. (2001) suggest some strategies given by RBI to prevent the NPAs. Other strategies to prevent the NPAs are stock inspection, study of ledger book transactions, scrutiny of periodicals statements and discussions with borrowers and co-bankers.

Kumar, R. (2000) concludes that if NPA recovery rate is high, further disbursement would be automatically high. However, if NPA rise beyond the manageable limits, the health of the banking system would be jeopardized and the recycling of funds which is the key element in development would be severely stilled. An effective monitoring and control, aided by proper legal reforms would change the contours of NPA in Indian banking on par with internal standards and build resilience for a stronger and vibrant financial system to realize the objectives of the reforms measures implemented so far.

Lahiri, A. and Mokashi, R. (2000) emphasis on a capital adequacy for strong banking system. They suggested that meeting regulatory capital requirement, is however, not a substitute for banks own assessment of their economic capital and all banks eventually need to arrive at and comply with their economic capital levels where they exceed the regulatory capital levels.

Prasad, M., Sinha, K.K. and Prasad, K.M. (2004) examined that NPAs has direct relation to the behaviour of the economy as a whole. The increase in quantum of NPAs should not cause a panic, since every year more than Rs. 10,000 crore is realized in NPA accounts. The government of India and the RBI has taken various steps in strengthening the functioning of Debt Recovery Tribunals (DRTs) and evolving a comprehensive settlement policy, which will certainly speed up the recovery in NPA accounts.

Samal, B. (2002) proposed a view that it is not possible to eliminate totally the non-performing assets in the banking business but can only be minimized. It is always wise to follow the proper policy appraisal, supervision and follow-up of advances to avoid NPAs. For reduction of NPAs, though there is a greater need of political threat and effective enactment of laws to recover NPAs, the banks should also take advantage of Debt Recovery Tribunals, Lok Adalat, the legislations enacted by the state government and one time settlement scheme.

Talwar, S.P. (2000) emphasis that financial stability requires appropriate action at both the micro and macro level. The micro dimensions consist of three pillars- institutions, market and infrastructure. Preventive attention by the regulators must then focus on each of the three pillars supporting both the domestic and international financial system namely, the good health of financial institutions through appropriate regulation and supervision, proper functioning of the market and establishment of a sound infrastructure, establishing transparent accounting and adequate disclosure standards

BANKING AND NON-PERFORMING ASSET MANAGEMENT

Gross and Net NPAs of Scheduled Commercial Banks

It is somewhat healthy trend that the gross NPAs and net NPAs levels of most banks has come down. Table 1 reveals that average NPAs for SCBs, representing 3.32 pc of the gross advances and 1.77 pc of total assets. On the other hand average net NPA as a percentage of gross advances are 1.30 pc and average net advances as a percentage of total assets are only .70 pc which indicates that Indian banks are becoming successful in decreasing NPAs.

The gross NPAs and net NPAs differ in bank groups. Public sector banks and old private sector banks constitute the highest NPAs among all other SCBs. This, however due to the fact that the advances of these banks are more. The position is better in 2008 as compared to 2005 because gross NPAs as a percentage to gross advances and total assets have declined from 5.5 pc to 2.2 pc and 2.7 pc to 1.3 pc respectively. This shows the improvement in the recovery pattern of NPAs of PSBs still the position of private and foreign banks is better than PSBs.

Table 1

Gross and Net NPAs of Scheduled Commercial Banks – Bank Group-Wise

Bank Group	Gross NPAs Percentage to		Net NPAs Percentage to	
	Gross Advances	Total Assets	Gross Advances	Total Assets
Scheduled Commercial Banks				
2005	5.2	2.5	2.0	0.9
2006	3.3	1.8	1.2	0.7
2007	2.5	1.5	1.0	0.6
2008	2.3	1.3	1.0	0.6
Mean	3.32	1.77	1.30	0.70
S.D	1.32	0.52	0.47	0.14
C.V (%)	39.75	29.37	36.15	20.0
Public Sector Banks				
2005	5.5	2.7	2.1	1.0
2006	3.6	2.1	1.3	0.7
2007	2.7	1.6	1.1	0.6
2008	2.2	1.3	1.0	0.6

Mean	3.50	1.92	1.37	0.72
S.D	1.45	0.61	0.49	0.18
C.V (%)	41.42	31.77	35.76	25.0
Old Private Sector Banks				
2005	6.0	3.1	2.7	1.4
2006	4.4	2.5	1.7	0.9
2007	3.1	1.8	1.0	0.6
2008	2.3	1.3	0.7	0.4
Mean	3.95	2.17	1.52	0.75
S.D	1.61	0.78	0.88	0.31
C.V (%)	40.75	35.94	57.89	41.33
New Private Sector Banks				
2005	3.6	1.6	1.9	0.8
2006	1.7	1.0	0.8	0.4
2007	1.9	1.1	1.0	0.5
2008	2.5	1.4	1.2	0.7
Mean	2.42	1.27	1.22	0.60
S.D	0.85	0.27	0.47	0.18
C.V (%)	35.12	21.25	38.52	30.0
Foreign Banks				
2005	2.8	1.4	0.8	0.4
2006	1.9	1.0	0.8	0.4
2007	1.8	0.8	0.7	0.3
2008	1.8	0.8	0.8	0.3
Mean	2.07	1.00	0.77	0.35
S.D	0.48	0.28	5.00	5.77
C.V (%)	23.18	28.0	649.3	1648.5

Source: Report on Trend and Progress of Banking in India 2005 to 2008

Sector-Wise NPAs

The important issue concerning priority sector loans is that they tend to get sticky faster than the non-priority sector loans. In table 2 consolidated statements of public and private sector bank groups with respect to sector wise NPAs shows that NPAs in all the bank groups are decreasing except new private sector bank groups still it is high in public sector banks group i.e. 80.68 pc. NPAs are high in PSBs due to high priority sector advances. Agricultural NPAs in public and new private sector bank group has increased but there is a minor increment in the new private sector bank group. Thus the overall trends shows that the private and public sector bank group are recovering their NPAs and thus becoming sound but recovery rate of NPAs in public sector bank is very slow.

Table 2

Sector-wise NPAs

Sector	Public Sector Banks		Old Private Sector Banks		New Private Sector Banks	
	2006-07	2007-08	2006-07	2007-08	2006-07	2007-08
Priority Sector	47.97	47.96	2.95	2.53	3.06	3.94
1. Agriculture	13.60	15.68	0.52	0.46	1.27	2.32
2. SSI	12.21	11.0	1.02	0.68	0.32	0.55
3. Others	22.16	21.26	1.41	1.39	1.46	1.06
Public Sector	1.02	0.56	0	0	0.006	0
Non-Priority Sector	31.68	26.86	3.25	2.31	10.04	15.82
Total	80.68	75.38	6.20	4.84	13.10	19.76

Source: Same as Table 1

Classification Loan Assets (Asset Quality)

Banks are required to classify non-performing assets based on the period for which the asset has remained non-performing. Bank classify their loan assets into four categories i.e. standard assets, sub-standard, doubtful and loss assets as indicated in table 3. Standard assets reflect the soundness of banks. If the standards assets are more soundness will also be more. It is clear from the table that average of loss assets, doubtful assets and sub-standard assets is least in all the bank groups than the average of standard assets. More standards assets average in foreign and new private sector banks show their soundness comparative to public and old private sector banks.

Table 3

Classification Loan Assets – Bank Group-Wise

Bank Group Mean S.D C.V (%)	Standard Assets	Sub-standard Assets	Doubtful Assets	Loss Assets	Total NPAs
Scheduled Commercial Banks					
2005	94.9	1.2	3.3	0.6	5.1
2006	96.7	1.0	2.0	0.4	3.3
2007	97.5	1.0	1.2	0.3	2.5
2008	97.5	1.1	1.0	1.0	2.3
Mean	96.7	1.08	1.88	0.38	3.30
S.D	1.28	9.57	1.04	0.17	1.28
C.V (%)	1.32	886.1	53.31	44.73	38.28
Public Sector Banks					
2005	94.6	1.3	3.5	0.7	5.4
2006	96.2	1.0	2.2	0.5	3.7
2007	97.3	1.0	1.4	0.3	2.7
2008	97.8	1.0	1.1	0.2	2.2
Mean	96.47	1.07	2.05	0.42	3.50
S.D	1.41	0.15	1.07	0.22	1.41
C.V (%)	1.46	14.01	52.19	52.38	40.28
Old Private Sector Banks					
2005	94.0	1.1	4.0	0.8	6.0
2006	95.6	0.8	3.0	0.6	4.4
2007	96.9	0.8	1.9	0.4	3.1
2008	97.7	0.7	1.2	0.3	2.3
Mean	96.05	0.85	2.52	0.52	3.95
S.D	1.61	0.17	1.23	0.22	1.61

C.V (%)	1.67	20.0	48.80	42.30	40.75
New Private Sector Banks					
2005	96.2	1.1	2.4	0.3	3.8
2006	98.3	0.7	0.8	0.2	1.8
2007	98.1	1.1	0.7	0.2	1.9
2008	97.5	1.6	0.8	0.2	2.5
Mean	97.52	1.12	1.17	0.22	2.50
S.D	0.94	0.37	0.81	5.00	0.92
C.V (%)	0.96	33.03	69.23	2272.7	36.8
Foreign Banks					
2005	97.0	1.0	1.3	0.7	3.0
2006	98.0	1.0	0.7	0.5	2.0
2007	98.1	1.1	0.5	0.3	1.9
2008	98.1	1.2	0.5	0.2	1.9
Mean	97.80	1.07	0.75	0.42	2.20
S.D	0.53	9.57	0.37	0.22	0.53
C.V (%)	0.54	8.94	49.33	52.38	24.09

Source: Same as Table 1

1. Prudential Standards

Although a foreign bank's operating presence in Korea is in the form of a branch and not as a subsidiary, Korean regulations require branches to be separately capitalized. This in turn impacts other regulations that are based on local branch capital, thereby constraining foreign bank activities. For example, credit limits to companies/groups are based on branch capital, as are open foreign exchange positions. Such credit limits are prudential in nature and appropriate. The recommendations below are consistent with practice elsewhere in the region. For example, Hong Kong allows the use of global capital. Singapore counts as capital net borrowing from head offices as well as the use of foreign currency units. While these recommendations would, in principle, allow foreign banks to dramatically expand lending to Korean companies, in practice, constraints imposed by banks' internal credit limits would prevent this outcome. In making these suggestions, AMCHAM acknowledges that Korean regulators are developing recommendations to address this issue and are hopeful that our concerns will be addressed shortly.

2. Credit Allocation

The Korean government has historically played an active role in allocating credit, initially through domestic bank policy loans but also through portfolio restrictions that apply to all banks operating in Korea. Foreign banks are held to strict monthly ratios for small and medium sized companies. These ratios severely constrain our operations, resulting in an inefficient allocation and pricing of credit services.

3. Local Currency Funding

Foreign banks have been able to increase capital with relative ease over the past several years (although thin "capitalization" rules are still a constraint) and negotiable CD limits have also been increased dramatically. The won inter-bank market is still dominated by Korean banks and is an unreliable and inflexible source of funding by foreign banks, particularly during periods of tight market liquidity. Furthermore, the inter-bank market does not facilitate borrowings for greater periods of time other than on an overnight basis. The government has revised regulations to allow commercial funding swaps and has offered to increase central bank funding swaps.

4. Debt Collection Agency

Effective, privately managed, third party, non-banking related loan servicing and debt collection agencies are needed in order to provide lenders and investors in Non-Performing Loans (NPLs) with quality, professional NPL restructuring, collection and resolution services. Currently Debt Collection Licenses are not available to qualified restructuring, loan service and asset management companies which are not owned by a financial institution. The law was changed in April 2000 to allow non-bank related companies to manage and collect loans under the Asset-Backed Securities (ABS) Law through the SPAMCO (Special Asset Management Companies) qualifications process; however, this ABS SPAMCO process is suited only for larger volume transactions. For small pools of non-performing loans, the ABS SPAMCO requirements are not cost effective.

5. Transparency of Local Banking Regulations

Korean regulators are moving to address transparency problems but foreign banks continue to be hampered by ambiguous and sometimes outdated regulations subject to various interpretations by different regulatory authorities. The efforts of the Financial Supervisory Service (FSS) to improve its communications to foreign banks has been considerable. Unfortunately other Korea agencies whose policies can affect the foreign banks' operations have not communicated their interpretations as effectively as the FSS.

6. Accounting Standards

Significant progress has been made during the past year in the application of accounting principles for the banking industry. This has been necessary in order to achieve the success of the restructuring taking place in the industry. As a result of the country addressing many of the transparency issues that have existed, opportunities to attract capital have been enhanced. To complete this process and provide a solid framework for the industry as it moves forward, full adherence to international accounting principles is important. This is particularly true for areas such as asset valuation, the criteria used for determining loan loss reserves and the treatment of foreign exchange gains and losses. This is critical to the process of improving the credibility of the banks' financial statements and in attracting the necessary capital to properly strengthen the industry. It is recognized that there are instances where the Korean government might find it appropriate to deviate from international accounting principles for regulatory purposes. However, these decisions should not affect the annual financial statements prepared for the banks' shareholders, which should fully comply with international accounting principles.

7. Valuation of Non-Performing Loans

Although Korea has taken many important steps to lower the level of non-performing loans on the books of its financial institutions, more could be done to facilitate the process. One impediment to the selling of Non-Performing Loans (NPLs) has been the difference between what a third party is willing to pay for the asset and the value that the bank is carrying the assets. Many banks are reluctant to sell assets because of the accounting loss the sale would create. This reluctance to sell NPLs appears to be slowing the process of improving the financial strength of the financial institutions.

STRATEGIES

NPAs are the major issue for banks. Non-performing assets have a high cost for the bank as these assets do not earn any profit. But banking is a service sector. To serve the society is the main objective of the bank. Thus, if bank will cut down advances to people, it will take away their prime objective i.e. service to humanity. Thus those banks should tolerate the NPAs which are efficient. They should find some other sources to meet these NPAs. In the liberalized and globalized era many new sources of income are available like:

• Non-interest Income

If we compare the sources of income i.e. interest income and non-interest income one fact will come before us that approximately share of interest income is 70 pc while the share of non-interest income is only 30 pc. A part of this interest income remained block in the form of NPAs which affect badly on the efficiency of banks. Thus banks should increase their non-interest income by providing services like locker service, draft service etc. to their customers.

• Income from Various e-delivery Channels

After the second banking sector reforms many e-delivery channels introduced like ATM, credit card, debit card, I-banking, M-banking, Tele-banking etc. These e-delivery channels are very convenient to customers. Customers can be attracted by providing these e-channel services. Thus if the number of customers increase the income of the bank will also increase. Thus the bank should provide e-services to their customers.

• Globalization

Globalization means sale of the product in global market. With the globalization business of the banks will expend which will increase their income. In this liberalized and globalized era Indian banks are far behind in the race of globalization. Thus the Indian banks should open their branches in the foreign countries which will prove very beneficial to their income.

In case of inefficient banks following strategies should made to meet their NPAs.

- Monitoring aspect should given due importance in the banks organizational structure by setting up monitoring/recovery cells at zonal/head office.
- Personnel trained in credit management should be placed at branches having sizable NPAs.
- Holding of periodic meeting at various levels for interaction with borrowers with relatively large dues to ascertain their true financial position.
- Decisions taken at the periodic meetings are to be properly recorded and effectively followed up for timely implementation.
- Genuine problems of borrowers are analyzed.
- Incentive scheme needs to be introduced for staff achieving exceptional results in recovery and reduction in NPAs.
- Strengthening the functioning of existing DRTs as well as setting up of DRTs in states where they are yet to be set-up.

Prompt repayment of loans by the borrowers should be recognized and rewarded by way of relief in interest, which would act as a motivation factor.

Conclusion

I would suggest 3 ways of solving this problem of NPAs.

(i) recapitalization of banks with Government aid,

(ii) disposal and write off of NPAs,

(iii) increased regulation.

Adopt one (or more) of the following alternatives:

• Base prudential limits on a bank's global equity. Include as Class B capital net borrowing from Head Office or from branches outside Korea. Allow the creation of foreign currency units within local branches for booking of foreign currency funded credits, which would not be subject to legal lending limits.Eliminate portfolio limits for all banks. Establish policies to improve foreign bank access to the won inter-bank market. Establish policies to develop the inter-bank beyond an overnight market into one which offers a variety of very short-term maturity instruments (i.e., 1 month, 3 month, 6 month funding instruments). Revise central bank swap pricing from a fixed return to cost basis. Assist in the development of professional, third party, qualified private, non-banking related loan-servicing and debt collection companies. These companies would be in addition to those qualifying under the ABS SPAMCO qualification. This change would provide buyers of non-performing debt in the secondary market a non-bank related, qualified loan servicing and debt collection facility, thus strengthening the prices in the secondary market for NPLs. Eliminate unnecessary banking regulations. Communicate the results of any further regulation interpretation to all Korean resident banks. Complete the revision of Korean Generally Accepted Accounting Practices (GAAPs) to improve the consistency and accuracy in financial reporting. Strictly follow the standards once set. Create an environment whereby financial institutions are required to write down non-performing loans to the lower of the market value or as set out by the government's asset classification standards.

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EMOTIONAL INTELLIGENCE & LEADERSHIP IN INDIAN IT INDUSTRY: AN EMPIRICAL STUDY

Abhiruchi Singh* **Ajay Prakash**** **K. R. Chaturvedi*****

ABSTRACT

This research was conducted on emotional intelligence (EI) in Indian IT industry. The objective of this study was to investigate the relationship between Leadership and Emotional Intelligence. The focus of study was employees (team leaders and team members) working in IT firms in major IT cities in India such as NOIDA, DELHI, GURGAON, PUNE and BANGALURU. A quantitative research methodology was designed for this research. This study utilized a structured questionnaire based on emotional intelligence competencies given by Daniel Goleman (1995, 1998) to assess emotional intelligence level of respondents. A sample of 272 IT employees from major IT cities in India was used for statistical analysis. Data analysis frequencies, percentages, mean scores and independent sample t –tests were computed with the help of SPSS 16.0 for Windows at alpha levels of .05. The findings in this research study do support the existence of a relationship between emotional intelligence and leadership. Difference was discovered in Emotional Intelligence of team leaders and team members however the difference between genders in Emotional Intelligence of team leaders was insignificant.

Keywords: *Emotional intelligence, gender, leadership, IT industry*

INTRODUCTION

Since the concept of 'emotional intelligence' (EI) was first introduced, it has been developed, adapted and embraced by the business world and more recently, by academics. Before it the major focus of researchers was on the importance of cognitive intelligence for gaining workplace success (Carmeli, 2003).

It is the Goleman (1995) who popularized the concept of EI with his best-selling books (1995, 1998) his main premise is that EI predicts life & work success this has attracted great interest worldwide. The construct has gained further momentum in business world as global organizations no longer being seen as "emotion-free" zones. Emotional Intelligence is now being considered to be important in organizational factors such as: organizational change (Ferres & Connell, 2004; Singh, 2003); leadership (Ashkanasy, 2002; Dearborn, 2002; Gardner & Stough, 2002; Weymes, 2002); management performance (Slaski & Cartwright, 2002); perceiving occupational stress (Nicklaou & Tsaousis, 2002; Oginska-Bulik, 2005); and life satisfaction (Palmer, Donaldson & Stough, 2002).

Emotional intelligence has always been linked with leadership. Research show that 67% of the essential competencies required for effective leadership today are emotional competencies. The most effective leaders, as Cherniss and Goleman (2001) describe, are "*those who have the ability to sense how their employees feel about their work situation and to intervene effectively when those employees begin to feel discouraged or dissatisfied and able to manage their own emotions, with the result that employees trust them and feel good about working with them*".

Literature is replete with studies on leadership and EI. So much research has been done to establish a relationship between leadership and EI such as: role of emotional intelligence in leadership (Jennifer M. George, 2000); leadership and emotional intelligence in senior level managers (Lisa Gardner & Con Stough, 2002); Emotional intelligence and effective leadership (Benjamin Palmer, Melissa Walls, Zena Burgess and Con Stough, 2001); emotional Intelligence and leadership Behavior (Punia, 2001). The above mention studies has been conducted in various sectors of business as retailing, services, hospitality, tourism, manufacturing, medical profession etc (e.g. Barling et al., 2000; Palmer et al., 2001; Gardner and Stough, 2002; Sivanathan and Fekken, 2002; Leban and Zulauf, 2004; Rosete and Ciarrochi, 2005). However relationship between leadership and emotional intelligence in the IT industry is still unexplored. One of the possible reasons for that could be that the image of IT employees had always been stereotyped. They are supposed to possess high IQ. EI has been considered as irrelevant for them. But today's projects are high performance environments; stress frustration and conflict are more than often permanent features of the daily routine of team members and team leaders in any I T organization. Moreover, Goleman (1998) has asserted that Emotional Intelligence abilities were about four times more important than IQ in determining professional success and prestige, even for those with a scientific background. Managing expectations, promoting ideas, and negotiating high-quality agreements when conflicting interests prevail are all emerging as key I.T. skills. The ability to influence, drive to achieve, and analytical abilities are main desired competencies in technical professions (Goleman, 2000).

Therefore, this study was designed to investigate the

*Sr. Lecturer, Department of Management Studies, Galgotias' Institute of Management & Technology, Greater Noida, G. B. Nagar (UP), INDIA
**Director, IILM Academy of Higher Learning, Lucknow, INDIA
***Head, KIET School of Management, Ghaziabad, INDIA

relationship between leadership position and emotional intelligence in Indian IT industry. It utilizes a sample of IT employees to examine relationship between EI and leadership and to explore if gender has any impact on EI at leadership position. As previous research on gender difference in emotional intelligence have shown that in terms of total EI score, men and women do not seem to differ such as no relationship was found between EI and female gender with managerial samples (Langhorn, 2004); while a positive relationship between male gender and emotional intelligence was reported with public sector offices (Fatt, 2002) , on other hand Bhosle (1999),King (1999), Sutarso (1999), Wing and Love (2001) and Singh (2002) found females leaders to have higher emotional intelligence than that of males in retailing.

Emotional Intelligence:

The study of emotional intelligence evolved from works of Gardner (1983); Williams and Sternberg (1988), who proposed broader approaches to understanding intelligence. Salovey and Mayer (1990) coined the term “emotional intelligence”. But it was Denial Goleman (1995) who popularized this term in his bestseller book entitled *Emotional Intelligence: Why It Can Matter More Than IQ* (1995). He describes EI in his book as "abilities such as being able to motivate oneself and persist in the face of frustrations; to control impulse and delay gratification; to regulate one's moods and keep distress from swamping the ability to think; to empathize and to hope."

Goleman (1998) further identified the five elements as the components of emotional intelligence: Self-awareness, Self-regulation, Self-motivation, Empathy, and Social Skills, to them he called as Emotional Competencies This range of skills can be divided into two key areas within an emotional competence framework, namely: Personal Competencies (how a person manages himself/herself) and Social Competencies (how a person manages relationships). These emotional intelligence competencies and attributes based on these abilities are crucial for success in personal, social and work life. A brief description of these is given in Table; 1.

Table-1; Goleman's (1998) Emotional Intelligence Competencies

EI Competencies		Definition	Attributes
Personal Competencies	Self-awareness	The ability to recognize and understand one’s moods, emotions and drives as well as the effect on others	Self-confidence; realistic; self-assessment; self-depreciating sense of humor
	Self-regulation	The ability to control and redirect impulses and moods. The propensity to suspend judgment-to think before acting	Trustworthiness and integrity; comfort with ambiguity; openness to change
	Self-motivation	A passion to work for reasons that go beyond money or status. A propensity to pursue goals with energy and enthusiasm.	Strong drive to achieve optimism; even in the face of failure; organizational commitment.
Social Competencies	Empathy	Ability in managing meaningful relationships and building networks; Skills in treating people according to their emotional reactions.	Expertise in building and retaining talent; cross-cultural sensitivity; service to clients and customers.
	Social skill	Proficiency in managing relationships and building networks. An ability to find common ground and support	Effectiveness in leading change; persuasiveness; expertise in building and leading teams

Above mentioned Emotional Intelligence Competencies has been considered for EI score in present study.

Hypothesis:

Past research has demonstrated that leader score more on EI in comparison to their subordinates (Barling et al., 2000; Palmer et al., 2001; Gardner and Stough, 2002; Sivanathan and Fekken, 2002). On other hand it was reported that women are generally more aware of their emotions, show more empathy, and are more adept interpersonally though both males and females generally have equivalent abilities to develop their emotional intelligence (Fatt, 2002). Consequently, this led to following hypothesis (null) to be explored.

(1) H_o: There is no difference in Emotional Intelligence of Team Leaders and Team Members.

(2) H_o: There is no difference in Emotional Intelligence of Male and Female Team Leaders.

Methodology

1. Sample

Sample consists of 272 professionals working in different IT companies in India, mainly in the cities of Bangaluru, Pune and National Capital Region (Delhi, Noida and Gurgaon). A structured questionnaire was employed to 350 respondents to generate data, out of which 290 responded back and 272 were found usable*. Out of 272 respondents 224 had no leadership responsibility while 48 respondents were leading their teams. The demographical representation of respondents is given below:

TABLE -2; Demographic Representation of Data (All Respondents)

Sample Characteristics	Number(Percentage)
Team Leaders	48 (17.65%)
Team Members	224 (82.35%)
Total	272 (100%)

Out of 48 team leaders respondents 30 were male while 18 were female. The demographic representation of team leaders is given in table 2.1.

TABLE -2.1; Demographic Representation of Data (Team Leaders)

Sample Characteristics	Number(Percentage)
Male Team leader	30 (62.5%)
Female Team leader	18 (37.5%)
Total	48 (100%)

Stratified random sampling method was used to collect these responses first IT firms were divided into strata, based on geographical location of IT firms cluster in India then individual IT firm within strata was randomly sampled.

II. Data collection:

The data for the current study was collected by a well defined structured questionnaire on site from both the employees and their team leaders .The Questionnaire was drafted on the basis of Daniel Goleman's (1995, 1998) parameters of Emotional Intelligence, keeping in view the major questions of the research work.

The main items included were ***Self Awareness, Self Regulation, Self Motivation, Empathy*** and ***Social Skills***. The questionnaire was divided into two sections, section one aimed to cover specific socio-demographic variables such as gender, designation, work experience* etc while section two aimed to check emotional intelligence level of respondent. This section of questionnaire had 40 items related to emotional intelligence, rated at five point Likert scale, having 1 = strongly disagree up to 5 = strongly agree and 3= undecided. The higher score represented higher emotional intelligence.

The reliability of scales was assessed using Cronbach's Alpha. It may be mentioned that its value varies from 0 to 1 but, satisfactory value is required to be more than 0.6 for the scale to be reliable (Malhotra, 2002; Cronbach, 1951). In the present study the Cronbach's alpha reliability coefficient has been checked of overall as well as of subscales too. The scores of Cronbach's Alpha for subscales are given below:

Table-3: Reliability Statistics for Subscales

Name of Subscale	Reliability Statistics (Cronbach's Alpha)	N of Items
Self –Awareness	.851	8
Self-Regulation	.740	8
Self-Motivation	.629	8
Empathy	.745	8
Social Skills	.848	8

And the questionnaire had an overall score of ***Cronbach's Alpha (0.801)*** and its 5 sub-scales range from ***0.629 to 0.851***. These results indicate that the instrument has a high internal consistency and reliable for further use.

**only those employees were considered for study, who had at least one year of work experience in current organizations under same team leader.*

Data Analysis & Results:

The data was collected with the help of the questionnaire as mentioned earlier. All the data was put into and processed through SPSS 16.0 for Windows at alpha levels of .05. Different types of tests such as frequencies, Std. Deviation, mean scores and t –tests were used to analyze the data. Emotional Intelligence (EI) played the role of dependent variable whereas leadership position and gender played the role of independent variables. In SPSS both were considered as dichotomous variable such as gender (1 for male; 2 for female), leadership position (1 for team leader; 2 for team member) and EI (3 for low; 4 for high) for analysis.

Table 4 shows the mean, minimum, maximum, and standard deviation values of the respondents used in present study.

Table -4; Descriptive Statistics

Descriptive Statistics					
Frequency Distribution	N	Minimum	Maximum	Mean	Std. Deviation
Team Leader	48	98.00	154.00	1.3365E2	13.76163
Team Member	224	91.00	162.00	1.2771E2	12.53474

To find out the influence of leadership on EI score of respondents independent sample 't' test was applied to measure the mean difference between the scores of team leaders and members. Tables 5 gives the results of t-tests used to show the effect of leadership position on EI.

Table 5: Independent sample t-test to Show the Effect of leadership position on EI

Variable	Category	Mean	Std. Deviation	t-value	p-value
EI	Team Leaders (N=48)	3.8125	.39444	2.062	.043
	Team Members (N=224)	3.6786	.46807		

It is clear from result that Levene's Test for Equality of Variances has a significance of 0.043 (p value is 0.043 < 0.050). So, there is a definite difference in mean of EI scores of team leaders and team members.

Results further explain that Independent sample t-test reveal a statistically reliable difference between the mean EI score of team leaders (M = 133.65, s = 13.76163) and team members (M = 127.71, s = 12.53474), t = 2.062, p = .043, α=.05. These test results support the rejection of null hypothesis.

Hypothesis Test Summary			
Null Hypothesis	**Test**	**Sig.**	**Decision**
(1)Ho: There is no difference in Emotional Intelligence of Team Leaders and Team Members.	Independent sample t-test	.043	Reject the null hypothesis
α = .05.			

The findings explain that there is a significant difference with respect to the Leadership position in the emotional intelligence of IT employees in India. As leaders score more on EI (M=133.65) compared to their subordinates (M=127.71).

The results also show that there are no significant differences in EI with respect to gender at leadership position. Table 6 represents the mean, minimum, maximum, and standard deviation values team leaders.

TABLE -6; Descriptive Statistics (Emotional Intelligence and Gender; Team Leaders)

Descriptive Statistics					
Frequency Distribution	**N**	**Minimum**	**Maximum**	**Mean**	**Std. Deviation**
Male	30	98.00	152.00	1.2787E2	11.92139
Female	18	116.00	154.00	1.4328E2	11.13450

Again independent sample t-test (alpha levels 0.05) was applied to measure the mean difference with respect to gender at supervisory level. Table 7 shows the result of the same.

Table 7: T-Tests to Show the Effect of Gender on EI at Leadership position (Independent sample t – test)

Variable	Category	Mean	Std. Deviation	t-value	p-value
EI	Male (Team Leader) (N=30)	3.7667	.43018	-1.040	.304
	Female (Team Leader) (N=18)	3.8889	.32338		

These test result supports the acceptance of null hypothesis (p value is 0.304> 0.05), it has failed to reveal a statistically reliable difference between at leadership position.

Hypothesis Test Summary			
Null Hypothesis	**Test**	**Sig.**	**Decision**
(1)Ho: There is no significant difference between the emotional intelligence of male and female team leaders.	Independent sample t-test	.304	Retain the null hypothesis
α = .05.			

Discussion & Conclusion:

The present study was an attempt to investigate the relationship between EI and leadership in IT industry in Indian context. The results establish a difference in EI, favoring leaders as a significant difference (p < .05) was found in the EI scores of team leaders and team members. This difference agrees very well with findings of previous work (Barling et al., 2000; Palmer et al., 2001; Gardner and Stough, 2002 and Sivanathan and Fekken, 2002). They all found leaders to have higher emotional intelligence than that of subordinates.

The possible explanation of this finding could be the leadership is an emotional process, where leaders recognize followers' emotional states, attempt to evoke emotions in followers, and then seek to manage followers' emotional states accordingly (Humphrey, 2002). The studies conducted worldwide have reported consistently a strong connection between one's emotional intelligence and ability to lead (Goleman, 1998, 2000; Higgs, 2002; Higgs and Rowland, 2002).

The findings of this study support the results from other sectors such as hospitality, retailing, tourism and medical profession where leaders has been reported with higher EI in comparison to their subordinates. It could be concluded that even in IT industry too leaders are more emotionally intelligent then their subordinates.

However the present study fails to establish a link between gender and EI at leadership position as no significant difference (p > .05) was found in the EI scores of male and female leaders. The findings are consistent with prior findings (Bar-On, 2000; Manning, 2002; Eagly et al, 2003) which found that no significant differences in EI between male and female managers. The research concerning gender difference in leadership performance has also found no evidence to suggest that males and females differ in their leadership effectiveness. (Landau, 1996; Eagly, Karau, & Makhijani, 1992, 1995; Ragins, 1991) It has also been noted that no gender difference in overall EI score but slight difference could be in certain domains of EI because of their leadership style and role.

Directions for Future Research:

The study of emotional intelligence in IT sector is still in its infancy. The present study has considered the total score of EI for analysis, whereas some research has reported that assessing the difference in every single competency of EI, score has not been same; leaders score high on certain EI such as social skills while subordinates score high on self-regulation (Eagly et al, 2003; Bradberry & Su, 2006). The possibility of the same can not be ruled out. It could be explored in Indian context. Certain demographic characteristics (such as gender, age, marital status, education and work experience etc) that traditionally have been deemed potential predictors of emotional intelligence; their effect and impact on EI could also be explored in IT sector.

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A STUDY ON THE PROMOTION OF HEALTHCARE SERVICES IN INDIA WITH SPECIAL REFERENCE TO SPECIALTY HOSPITALS

Rajinder Singh*

ABSTRACT

In recent years, the healthcare sector has become very competitive and is changing rapidly. Today's healthcare market has become consumer-driven. Patients are better informed and they know more about health and medical services. The healthcare industry is moving from monopolistic position to a competitive position. In this competitive scenario, marketing has assumed an important role to highlight the healthcare organization to the end users and intermediaries. Promotion adds significance to healthcare services it also adds tangibility and helps the customer make a better assessment of the service offer. Private & charitable hospitals have given more importance to the marketing. To create awareness about services, build good image of hospital, compete with other hospitals are among the major reasons for advertisement of the services. The maximum expenditure for marketing and advertising is incurred by the private hospitals.

Key words: *Healthcare services, Specialty hospitals, Promotion, Advertisement, Media, Marketing research, Patients, Administrator.*

INTRODUCTION

Health is fundamental to the quality of life. Health is that state of the human being that makes feasible the relishment of the maximum enjoyment of life (Raman and Prasad, 2005). Health is a common theme in nearly all cultures. Among definitions still used, perhaps the oldest is that the health is the "absence of disease" (Park, 1994). Health is one of the most vital factors for improving the functional system and attaining the superior standard of living in society (Agnihotri, 1995). The health care system in India is as old as Indian civilization. The existence of Ayurveda in India most likely dates back to the period of the Indus Valley Civilization (Parsad, 1992).

Today, a hospital is a place for treatment of human ills and restoration of health and well-beings of those temporarily deprived of these (Khan, 2005). Hospitals may vary in size, funding, type of patients, and conditions of treatment. But fundamental job of hospitals is the treating of and caring for patients (Kurtz & Chalfant, 1984). Hospitals are key health care delivery institutions of our country, as in most of the developing countries of the world. The hospitals offer primary, secondary and tertiary health care services (Sahni, 1985). Specialty hospitals focus their services on specific kinds of health conditions of patients for instance, mental illness, cancer, cardiac, and disease of women (Kurtz & Chalfant, 1984).

In the last five years hospitals have been equipped with world class infrastructure, latest sophisticated technology and world class surgeons to undertake high end procedures in India. India has a population of over 1.15 billion where the healthcare sector is organized and managed by the government sector, charitable missionaries and non government sector. We are now witnessing a new dimension that is emerging of the private or corporate sector established and managed by specialized healthcare centers. Major characteristics of these specialty hospitals are availability of super specialist doctors, providing a higher level of patient care and hospitals are managed professionally. Now healthcare is an emerging field in the services sector in India.

In recent years, the healthcare sector has become very competitive and is changing rapidly. Today's healthcare market has become consumer-driven. Patients are better informed and they know more about health and medical services (PG Ramanujam, 2009). The healthcare industry is moving from monopolistic position to a competitive position. In this competitive scenario, marketing has assumed an important role to highlight the healthcare organization to the end users and intermediaries (Karanjekar, 2007).

Hospital marketing is a specialized field that deals with connecting patients, physicians, and hospitals in a mutual relationship (Dharmendra Nagar, 2007). Promotion is the means by which we create an image in the public mind to think about the products or services. Promotion adds significance to healthcare services it also adds tangibility and helps the customer make a better assessment of the service offer. (Mishra, 2004). Promotion includes all the ways to tell customers about products or services and how to market and sell to them (Radulescu, Cetina and Orzan, 2009). Healthcare services cannot be advertised as such, but special promotional activities with social service and new techniques and news of new facilities can definitely help in

**Associate Professor, Accurate Institute of Management & Technology, Greater Noida (U.P.) India*

promotion of the service (Mishra, 2004). Under these circumstances, the research on this topic is very significant and the researcher's role has become crucial to come out with quality research.

Review of Literature

Jailly (1987) discussed we can no longer accept that the health system operates efficiently. There is nothing to make sure that the available resources are put to the best possible use. Medical profession has to concentrate on defining criteria for the allocation of resources and the various ways of organizing the healthcare services.

Smith and Leiserson (1987) brought out that spending more on health services does not essentially buy better health. The aim of health policy is to improve health not just to provide health services. Main concern should be given to health improvement of those with the lowest health status as part of a unified plan to improve the quality of life. Development planners have in the past attached little significance to health services.

Hannay (1988) pointed out that several studies have shown that patients would like to have more information about their illness and its treatment, whether in hospital or in the community. There is also the factor of patient's diffidence, perhaps especially in a national health service, and the problem of patients not remembering what they have been told. It may be due to anxiety, to medical jargon, or to an excess of information being given in the wrong context. Certainly improved communication results in better compliance.

Chandra (2002) narrated that the National health policy has also chalked out a special role for the private sector for providing healthcare considering the economic restructuring under way in the country. The private sector contributes significantly to secondary-level care and some tertiary care. It is a widespread perception that private health services are very uneven in quality, sometimes even substandard. Private health services are also perceived to be financially exploitative.

Shrinate (2004) pinpointed that the number of believers in India's medical capabilities is increasing, most of the patients come through word-of-mouth publicity, to increase the flow of patients the top hospitals are beefing up their marketing. The leading hospitals are even considering tying up with hotel chains.

Sukhpreet and Tiwari (2004) described that the healthcare networks bring together end-users and resources for better delivery of healthcare. They have been especially useful in the areas of telemedicine, patient billing information, data access, especially as wireless handheld devices become more popular and computer-aided learning.

Shanker (2004) mentioned that as the specialized hospitals are growing in number, each is trying to create a distinct positioning for itself. There are hospitals specializing in cardiac surgery, cancer care, spinal injury, eye hospitals, abortion clinics, maternity homes, etc. All are trying to create a unique identity and wants to cater to a specific segment of the market. Most hospitals established by the government are less subject to market forces.

Choudhury (2004) written about Indian healthcare federation the apex body of healthcare services providers in the country is planning to introduce an accreditation system for healthcare institutions soon. IHCF is working closely with the US-based accreditation organization, joint commission international to set the parameters of the system. The accreditation will set standards for infection control, continuity and quality of care, adhering to standard procedures of drug delivery, hospital safety infrastructure, design of patient facilities and other set of similar parameters.

Shahi (2004) felt that Indian healthcare industry would do well if it focuses world–class care at affordable cost and is creative and innovative in meeting the needs and expectation of patients. Indian players should motivated to be recognized domestically and internationally as operating with best practice standards. There has been inclination in India's domestic industry to emphasize 'low cost' and aggressively drive prices down in fierce competition.

Porter and Teisberg (2004) emphasized that the healthcare system can achieve spectacular gains in quality and efficiency. And employers, being the major purchaser of healthcare services, could lead the transformation. In any industry, competition is supposed to drive up value for customer over time as quality improves and costs fall. It is often argued that healthcare is different because it is complex, services are highly customized and consumers have limited information. Healthcare services have definitely these distinctiveness.

Seth and Mathew (2005) written that Indian healthcare industry is set to go global. In overseas expansion plans of hospital majors, like Apollo, Max, Wockhardt and Fortis, they are planning to add more facilities at their domestic units to woo patients in large numbers. The major healthcare groups in India are planning something like their counterparts in IT are doing. They are planning to deliver quality and affordable healthcare delivery services to overseas patients at their door steps. The long term plan is to come out as a leading global player in providing quality healthcare at affordable costs.

Madduri (2005) pointed out that over 75 percent of the U.S.'s $10 trillion economy is in service sector, amongst which healthcare rides high in the ladder. India has become the centre of health tourism because of the technologically advanced healthcare facilities, medical specialists, a large proportion of them are trained in countries like the U.S. and the U.K., and the main thing is cost advantage. A heart surgery in the U.S. costs $30,000 while the same could be performed in $6,000 in India. Indian healthcare facilities are

Bisserbe (2005) thought that competition on costs could make healthcare affordable for more people in India. The price of certain high-end procedures is already coming down. A heart bypass surgery for instance costs 3.5 to 4 lakh five years ago, and costs today not more than Rs 2 lakh.

Singh (2005) presented that despite the impressive public health infrastructure, it is a cause of concern that only about 20 percent services are being provided by the public health sector, while the private sector provides almost 80 percent of the healthcare services. Studies demonstrate that curative services largely favour the rich over the poor.

Research Gap: It is evident from the review of literature that majority of the work undertaken in healthcare sector is related to socio medical aspects and conceptual issues. Most of the researchers have talked about status of medical services in India, public health policy, contribution of private healthcare sector, increasing medical capabilities, growing specialized hospitals, Introducing accreditation system for healthcare institutions, study on rural health center, new health policy, government healthcare infrastructure in rural area, financing of health services in India, scenario of health services in Western countries, increasing competition in healthcare sector, growing medical tourism in India etc.

A couple of studies are also carried out on marketing of healthcare services. The review of literature reveals that there is hardly an in-depth study regarding the promotion of healthcare services in India with special reference to specialty hospitals. So this study is an attempt to study the promotion of healthcare services of specialty hospitals.

Objective of the Study

The objective of the study is to examine promotion mix of healthcare services of specialty hospitals in India.

Hypotheses

The null hypotheses framed for this study are:

Ho_1: There is no difference in the perception of administrators regarding need of marketing for growing competition on the basis of gender, age and type of organization.

Ho_2: There is no difference in the perception of administrators regarding growing competition and provision of fund for advertising and marketing on the basis of gender, age and type of organization.

Research Methodology

Research design

The present study is exploratory as well as descriptive.

Sampling

Healthcare service providers of north India constitute the universe of the study. Stratified random sampling technique has been adopted. The study covers 25 hospitals (government, private and charitable) in all of north India from the states of Delhi, Haryana, Himachal Pradesh, J&K, Punjab, Uttrakhand, U.P. and Union territory Chandigarh. The sample size for primary data includes one administrator from each hospital.

Research Instrument

The present study is based on primary data, which has been collected through a multiple-choice structured questionnaire that contain some open-ended questions too. Questionnaires have been framed for Administrators of specialty hospitals. Questionnaires have been filled through personal contact with the respondents.

Tools of Data Analysis

The different types of statistical techniques have been used to analyze the data in this study. Apart from average and percentage method some other statistical methods like t-test and F-test have been used for analysis. Statistical calculations have been made, making extensive use of SPSS Software Package on the computer. Version 13 of SPSS is used.

Scope of the Study

The scope of the study is restricted to North India including the states of Delhi, Haryana, Himachal Pradesh, J&K, Punjab, Uttrakhand, U.P. and union territory Chandigarh.

Limitation of the Study

The main limitation of the study is time and money. Therefore, 25 specialty hospitals have been chosen for the study and North India has been taken as the scope of the study, which may not be true representative of the healthcare industry. Another limitation can be the biasness at the respondents' level.

Analysis of the study

The results obtained through analysis have been presented in the following tables in this section.

Provision of advertisement for the services: Mostly healthcare services provider advertise the services as is shown in table 1.

Table 1: Provision of advertisement for the services of hospital

Statements	Frequency	Percentage
Yes	18	72.0
No	7	28.0
Total	25	100

Source: Primary data

Table 1 shows that 72 percent hospitals have provision for the advertisement for the services of hospital, 28 percent don't have provision of advertisement for the services of hospital.

Reasons for advertisement of the services: Hospitals have specific reasons for the advertisement of the services as mentioned in the table 2.

Table 2: Reasons for advertisement of the services

Statements	Frequency	Percentage
Build good image of your hospital.	6	24.0
Attract maximum number of patients.	5	20.0
Compete with other hospital.	6	24.0
Create awareness about services	8	32.0
Total	25	100

Source: Primary data.

Table 2 exhibits that 24 percent hospital advertise for their services for to build good image of their hospitals, 20 percent hospital advertise for to attract maximum number of patients for their services, 24 percent hospital advertise for to compete with other hospital, 32 percent hospital advertise for to create awareness about services.

It is clear from the above table that create awareness about services, build good image of hospital, compete with other hospital and attract maximum number of patients are among the major reasons for advertisement of the services.

Media used by hospital for the advertisement: Hospital uses various types of media for the advertisement of their services as it is shown in the table 3.

Table 3: Media being use for the advertisement of services

Statements	Frequency	Percentage
Newspaper	8	32.0
Journals and magazines	4	16.0
Television	4	16.0
Medical camps and Exhibitions.	6	24.0
Internet	3	12.0
Total	25	100

Source: Primary data.

Table 3 shows that 32 percent hospital use Newspaper as media for the advertisement of services, 24 percent use Medical camps and Exhibitions as a media, 16 percent use Journals and magazines, 16 percent use Television as a media, 12 percent uses Internet as media for the advertisement of services of their hospital.

The above table clearly shows that majority of hospitals use Newspaper, some hospital organize medical camps and Exhibitions, small number of hospital use Journals and magazines, Television, and a few hospital uses internet as a media for the advertisement of services.

Through these advertising media hospitals create awareness regarding their star facility and availability of specialized quality treatment with modern technology at an affordable cost. While government hospitals do not advertise for their services, time to time government provide fund for special campaign for awareness and eradication of like 'Polio, laprosy, Kust Rog etc.

Provision of feedback regarding services: In spite of these promotional efforts specialty hospital usually have provision to know the public opinion about hospital and services and they try to identify the need of the patients the marketer of specialty hospital now-a-days are carrying out marketing research activity to identify the need of the patient as it is shown in tables 4 and 5.

Table 4: Provision to know the public opinion about your hospital and services

Statements	Frequency	Percentage
Yes	25	100.0
No	0	0
Total	25	100

Source: Primary data.

Table 4 exhibit that all the specialty hospital wants to know the public opinion about their services.

Marketing research: Hospital try to know public opinion about their services, they ask the patients regarding any sort of problem and during their departure feedback form is given to fill up, few hospital organize talk shows for to collect information regarding their facility, many hospitals try to collect information from patients suggestions and complaints.

Table 5: Marketing research to identify the need of the patient

Statements	Frequency	Percentage
Strongly agree	15	60.0
Agree	4	16.0
Neither agree nor disagree	6	24.0
Disagreed	0	0
Strongly Disagreed	0	0
Total	25	100

Source: Primary data.

Table 6 depicts that 60 percent administrator of specialty hospital were strongly agree, 16 percent were agree and 24 percent were neither agree nor disagree that words of mouth advertises more than any other type of media.

It is clear from the above table that majority of hospitals are either strongly agree or agree believe that words of mouth advertise more than any other type of media, a few were neither agree nor disagree.

Provision of concession on medicines for promotion of services: As promotional efforts some hospitals are offering concession on the medicine dispensed by them as shown in table 7.

Table 7: Provision of concession on the medicines dispensed by hospital

Statements	Frequency	Percentage
Yes	8	32
No	17	68
Total	25	100

Source: Primary data.

Table 7 exhibits that 68 percent hospitals do not provide concession on the medicine dispensed by the hospital, while 32 percent hospitals have provision of concession on the medicine dispensed by the hospital.

The table clearly shows that majority of hospitals do not provide concession on the medicines dispensed by them. A small number of hospitals provide concession on medicines for to woo patients towards their services. They provide upto 10 percent discount on medicine dispensed by them.

Efforts to attract patients from abroad: Hospitals have intensified their marketing efforts eying patients from international healthcare market by providing world class treatment. Hospitals are tying up with healthcare institution overseas to widen the scope of marketing, interest to cater more patients from abroad, and special apartments for foreign patients etc. as shown in the tables 8, 9 and 10.

Table 8: Hospitals tie up with healthcare institution overseas

Statements	Frequency	Percentage
Yes	1	4
No	11	44
Under consideration	13	52
Total	25	100

Source: Primary data.

Table 8 shows that only 4 percent hospitals have tie up with other hospital/healthcare institution overseas, 44 percent do not have any tie up overseas, 52 percent hospital are under consideration tie up healthcare institution overseas.

It is clear from the table that a small number of hospital already have tie up with healthcare institution overseas while a majority of hospital's tie up with healthcare institution overseas is under consideration.

Table 9: Hospital interested in having more patients from overseas

Statements	Frequency	Percentage
Strongly agree	10	40
Agree	5	20
Neither agree nor disagree	2	8
Disagree	2	8
Strongly Disagree	6	24
Total	25	100

Source: Primary data.

Table 9 shows that 40 percent administrators of specialty hospitals were interested in having more patients from overseas, 20 percent were agree, 8 percent were neither agree nor disagree, 8 percent were disagree and 24 percent were strongly disagree for having more patient from overseas.

The above table clearly shows that majority of hospital/institution are either strongly agree or agree in having more patients from overseas, some hospital are disagree or strongly disagree, a few are neither agree nor disagree.

Table 10: Special apartment for foreign patients

Statements	Frequency	Percentage
Yes	2	8
No	23	92
Total	25	100

Source: Primary data.

Table 10 shows that 92 percent hospitals do not have special apartment for foreign patients, while only 8 percent hospitals have special apartment for foreign patients.

It is clear from the above table that majority of specialty hospitals do not have special apartment for foreign patients while a few hospitals have special apartment for foreign patients. However, to promote patients from overseas they have special arrangement like deluxe suite, deluxe room, super deluxe room etc.

Special arrangements for VIP, celebrities and affluent class of society: To promote patients from affluent class of society, VIP, and celebrities, there are special arrangements like deluxe suite, deluxe room, super deluxe room etc. as shown in table 11.

Table 11: Types of arrangement for VIPs, celebrities and affluent class of society

Statements	Frequency	Percentage
Yes	25	100
No	0	0
Total	25	100

Source: Primary data.

Table 11 shows exhibits that all the specialty hospitals have arrangement for VIP's, celebrities and affluent class of society.

Tying up with hospitality services providers: In order to facilitate patients coming from distant places in India and abroad, hospitals are tying up with hospitality industry like hotels and Airlines etc. as is shown in the table 12.

Table 12: Tying up with services provider like hotel industry, Airlines etc

SAARANSH
RKG JOURNAL OF MANAGEMENT
Vol. 3 ● No. 1 ● JULY 2011

Statements	Frequency	Percentage
Yes	17	68
No	8	32
Total	25	100

Source: Primary data.

Table 12 depicts that 68 percent hospitals are tying up with allied services provider like hospitality Inc. like hotel industry, 32 percent hospital were not tying up with allied service providers.

Suggestion and complaints popularize the services:

For effective promotion and satisfaction of their patients, hospitals entertain suggestion and complaints regarding their services and try speedy removal of complaints as shown in tables 13 and 14.

Table 13: Whether suggestions and complaints regarding services of hospital are entertained

Statements	Frequency	Percentage
Yes	25	100
No	0	0
Total	25	100

Source: Primary data.

Table 13 clearly shows that all the hospitals entertain complaints and suggestions regarding services of hospital.

Table 14: In case patient have complaint regarding services

Statements	Frequency	Percentage
Take action on the complaint and remove immediately	25	100
Ignore them	0	0
Total	25	100

Source: Primary data.

Table 14 shows that all the hospitals take action on the complaint and remove/solve the problem immediately if patient have any complaint.

It is clear from the tables that as far as complaint regarding services is concerned all the hospital takes action on the complaint and remove immediately.

Public relation policy: Hospital follows the public relation policy to maintain relation with their patients during their treatment in hospital and even after the discharge of services and they leave the hospital, for this purpose they appoint the person from management/social science qualification as shown in the tables 15 and 16.

Table 15: Follow up of public relation policy

Statements	Frequency	Percentage
Yes	25	100
No	0	0
Total	25	100

Source: Primary data.

Table 15 shows that all hospitals follow public relation policy.

Table 16: Appointment of persons in public relation department with management/social science qualification

Statements	Frequency	Percentage
Yes	16	64
No	9	36
Total	25	100

Source: Primary data.

Table 16 exhibits that 64 percent hospitals appoint persons in public relation department with management/social science qualification while 36 percent hospital do not appoint persons in public relation department with management/ social science qualification.

Need of marketing of healthcare services: With the entry of big business houses in the healthcare sector the competition in healthcare services is increasing, so need of marketing is realized as shown in table 17.

Table 17: Summary of test statistics for the statement 'Since competition is growing in healthcare service industry, a great need of marketing is recognized

Factors	Categories	Mean Scores	Std. Deviation	Test statistic (t / F value)	Sig.
Gender	Male Female	4.05 4.20	.999 .837	t = -0.344	0.741
Age (in years)	20-40 40-60 60 & above	5.00 3.71 4.80	.000 .920 .447	F= 5.766	0.010
Types of Hospital	Private Government Charitable	4.43 3.00 4.75	.852 .000 .500	F= 12.603	0.000

Source: Primary data Significance at 5% level.

The table 17 presents, the result based on test statistic and mean scores for the statement regarding need of marketing for growing competition. The perusal of t-test for measuring gender effect is -.344 which is statistically not significant at 0.05 level of confidence. So the null hypothesis is accepted. The minor difference in the mean score of male (4.05) and female (4.20) also confirm that they do not differ, both have recognized the need of marketing because competition is growing in health sector. The value of t statistics indicate as far as sex of the administrators is concerned their views do not vary on the statement growing competition requires need of marketing. So genders do not have an impact on the statement.

The wide differences in the mean score of different age group of administrator clarify that the young administrator age (20-40) recognized the importance of marketing more in comparison to administrators of age 60 & above because of growing competition. While the administrators of middle age group (40-60) gave less importance to marketing. Further the statistical value of F-test for measuring age effect is -5.766 which is statistically significant at 0.05 level of confidence. Hence the null hypothesis is rejected. This reveals that there is a significant difference in the views of administrators of different age groups on the statement. So ages have an impact on the statement.

The statistical value of F-test for measuring impact of types of hospitals is 12.603 which is significant at 0.05 level of significance. Hence the null hypothesis is rejected. It implies that there is difference in the views of administrator of different types of hospital on the statement. The mean score of administrator of private and charitable hospital shows they recognized the need of marketing since competition is growing in healthcare services while the administrator of government hospital do not give importance to marketing. So types of hospital vary on the statement.

Provision of separate fund for advertising and marketing: In growing competition there is a need of provision of separate fund for advertising and marketing as shown in table 18.

Table 18: Summary of test statistics for the statement 'There is a provision of separate fund for advertising and marketing'

Factors	Categories	Mean Scores	Std. Deviation	Test statistic (t / F value)	Sig.
Gender	Male Female	3.55 4.00	1.317 1.225	t = -0.724	0.494
Age (in years)	20-40 40-60 60 & above	5.00 3.71 4.80	.000 .920 .447	F = 5.766	0.010
Types of Hospital	Private Government Charitable	4.14 2.00 4.75	.949 .000 .500	F = 24.089	0.000

Source: Primary data Significance at 5% level.

The table 18 highlights the result based on test statistic and mean scores for the statement regarding 'there is a provision of separate fund for advertising and marketing'. The t-test value for measuring gender effect is -.724 which is statistically not significant at 0.05 level of confidence. So the null hypothesis is accepted. The mean score of female shows that female is highly supportive in views that there is a provision of separate fund for advertising and marketing. Although male is also supportive to the statement. Hence genders do not have impact on the statement.

The F-ratio on age effect is 5.766 which is significant at 0.05 level of significance. Hence the null hypothesis is rejected. This reveals that there is significant difference in the views of administrator of different age group. The mean score of young administrator (20-40) and old aged administrator shows they are highly favourable that there is a provision of separate fund for advertising and marketing where as administrator of middle aged group (40-60) are not so supportive to the statement. So ages have an impact on the statement.

The mean score of private and charitable hospital depicts that they want to have provision of fund for advertising and marketing while the government hospitals administrators are quite averse to the statement, they are not in favour of provision of separate fund for advertising and marketing. The F-statistic for measuring impact of types of hospitals is 24.089 which is significant at 0.05 level of significance. Hence the null hypothesis is rejected. It implies that there is significant difference between the views of administrator of different types of hospital. So it constitute that types of hospital have an impact on the statement. The mean score of three types of hospital again confirm the outcome of hypothesis.

Conclusion

The study has helped in reaching certain conclusions. Main points of conclusions are as follows:

- It is observed from the study that private & charitable hospitals have given more importance to the marketing, while government hospitals are on the back burner from marketing point of view. Private and charitable hospitals have provision of advertisement for the services they provide, while government hospitals do not have such provision. The study depicts that to create awareness about services, build good image of hospital, compete with other hospitals and attract maximum number of patients, are the major reasons for advertisement of the services. Majority of hospitals use newspaper, some hospital organizes medical camps and exhibitions, small number of hospital use television, journals & magazines, and a few hospital uses internet as a media for the advertisement of services.
- The study highlights that the maximum expenditure for marketing and advertising is incurred by the private hospital followed by the charitable hospital; they want to have provision of fund for advertising and marketing. However the administrations of government hospitals claim that they do not have separate fund for such type of programme. The study reveals that majority of hospitals are either strongly agree or agree that words of mouth advertise more than any other type of media, a few were neutral. The study depicts that majority of private specialty hospitals have provision to know the public opinion about their hospital and services. They also undertake marketing research activities to identify the need of the patients.
- The study highlights that majority of hospital/institution are either strongly agree or agree in having more patients from overseas. A small number of hospital already have tie up with healthcare institution overseas while a majority of hospital's tie up with healthcare institution overseas is under consideration, few hospitals have established their branches overseas. The study highlights that majority of hospitals have tie up with hospitality industry like hotel,

airliners etc. A small number of hospitals provide concession on medicines for to woo patients towards their services. Majority of specialty hospitals do not have special apartment for foreign patient.

- The study mentions that majority of hospital follows public relation policy and appoints person in public relation department with management/social science qualification. Majority hospitals entertain suggestions and complaints regarding their services and all the hospital take action on the complaint.

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ENTRY OF ORGANIZED RETAIL: IMPACT ON SMALL RETAILERS

Pooja Jain

ABSTRACT

Retail trade is the oldest business of the world which started even in ancient age with barter system of exchange providing last point of contact with the consumer for the sale of merchandise used in everyday life. Retail is the world's largest industry. The retail sector in India is witnessing an upheaval with the introduction of new formats like supermarkets, departmental stores, hypermarkets and specialty stores. Considering the size of the industry and the tremendous growth potential, almost every major Indian business house is either getting into retail space or consolidating and expanding their presence. The turbulence and the competition are enhanced by a number of environmental challenges such as customer demographics, personalized procurement and changing regulatory focus. This is posing a great challenge to the traditional retail industry. Even though the modern retail industry is expanding at a rapid pace, India's traditional local store known as "kirana" is the dominant player accounting for more than 80% of FMCG sales. They will continue to grow alongside organized retail, albeit at a slower rate, and it might be a decade before such store owners lose business to the big retailers. The purpose of this research paper is to understand how the traditional retailers perceive the challenges and their response to the changes that are taking place. Will they be able to find an innovative way to compete with the highly sophisticated and organized retail formats or will they surrender and finally disappear. The study is exploratory in nature and reports the findings of the survey in midsized city.

Key Words: *Retailing, Marketing.*

INTRODUCTION

Retail is one of the most exciting businesses and employment opportunities in India. This opportunity will continue to grow in scale and importance over the next 10 to 15 years Accounting for nearly 10% of India's GDP and 8% of the employment, Retail is India's largest industry. It is also one of the fastest growing industry, growing at a compounded rate 5% annually (Divya and Venkatrama, 2010). With only 5% of retail falling under the organized platform with an existing landscape of 14 million retail outlets, there is significant growth and profit opportunities in various formats, segments, and locations in different parts of India catering to different consumer groups. Various stakeholders can profit from this opportunity like Mall developers, brand owners with small and medium formats, big box retailers, back end vendors, partners in all facets of supply chain and sourcing, recruitment partners etc. Retail is currently the booming sector of the Indian economy. This trend is expected to continue for at least the next two-three decades, attracting huge attention from all quarters of the economy—entrepreneurs, business heads, investors as well as real estate owners and builders.

Historically, retailing in India has been through a large number of small and medium sized stores known as 'Kiranas'. However, with the advent of supermarkets and self-service stores, large players have also entered the field leading to what is now called organized retailing. The retail industry can now be broadly classified as Organized and Unorganized. From a definitional point of view, organized retailing means large-scale chain stores, which are corporatized, apply modern management techniques and are very likely to be self-service in nature. (Anirban, 2008). Organized retail in India presently accounts for around 2% of the industry, but is expected to grow at 25%-30% annually (FICCI, 2005) and become a USD 23 billion sector. Major industrial houses like Reliance, Bharti Group, Aditya Birla Group and RPG group are aggressively making forays into this sector trying to establish a national footprint. This in turn has resulted in the introduction of new formats such as hypermarkets, discount stores, etc.

The term Unorganized retailing refers to the traditional form of retailing comprising of neighborhood food and grocery retailers - small privately owned shops and hawkers (Anuradha, 2007). These are largely owner run with very little or no hired help. Modern retail formats, such as hypermarkets, superstores, supermarkets, discount and convenience stores are widely present in the developed world, whereas such forms of retail outlets have only just begun to spread to India in recent years. In India, the retailing business continues to be dominated by family-run neighborhood shops and open markets.

During the last 10 years, the retail sector in India has undergone a significant transformation in form and size and this is perceived as the result of increasing urbanization, growing middle class, fast changing life style and eating habits of consumers. Consumers are the major beneficiaries of the retail boom and the impact of growth in organized retail can clearly be seen on the buying behavior of Indian consumers. They now have a choice in products, quality and price. Organized retail has changed the concept of shopping which is reflected in consumer buying behavior (Vipul and

Associate Professor, Jagan Institute of Management Studies, Rohini, Delhi, India

Mahendra, 2009). Shopping is no longer a chore. It can be a pleasurable experience. Unlike the counter shops which most of us are used to, today, in the self-service stores, one gets to go around, touch and feel the products before buying. Influenced by exposure to the standard of living and shopping culture of the west, the Indian is spending like never before. But organized retail in midsize cities in India is in a developing stage and the kirana stores still account for nearly 80% of the FMCG sales (Mala & Moris, 2007).

Experiences in China and Indonesia suggest that both kirana stores and organized retail outlets can coexist, although they will grow at varying rates. "However, structural changes in retail will surely start affecting large numbers of small retailers at some stage, be it after one or two decades, especially when the overall share of organised retail in food reaches about 25-30%," (Reardon and Gulati)

Several large retailers, including Wal-Mart Stores Inc, Reliance Industries Ltd and the Aditya Birla Group have big plans for selling everything from food items to furniture here. During the last few years, the entry of large corporate houses in this industry has met some resistance. Meanwhile, there have been increasingly strident protests against big retail. India has more than 12 million small retail outlets making it hard for the government to ignore any threat to the livelihood of this large base.

According to Ramakrishnan (2010), there have been widespread agitations against organized retail in many parts of India leading to closure of chain retailers. He is also of the view that there are concerted social and political movements aimed at arresting the spread of organized retail. There is growing concern that organized retail would adversely affect the small retailer. A survey report by ICRIER (Mathew et al, 2008) discusses the impact of the entry of large scale retailers on the small retailers in the unorganized sector A number of studies on small retailers have studied the functional and organizational strategies of small retailers (Jeffrey et al, 1993, Ramakrishnan, 2010). In this scenario it will be worthwhile to understand if small retailers feel threatened by organized retail, and their coping strategies if any. A larger question would be whether the kirana store, as we know it would survive this onslaught from organized retail or become extinct. However, traditional retail is typically in need of modernization and the Indian government needs to invest in this the way governments in Singapore, Hong Kong and Taiwan have done to overhaul the system, say in the case of modern wet markets. Organized retail is a growing source of taxes to the government, which can be ploughed back to modernize traditional retail and build infrastructure to modernize the food supply chain. (Reardon and Gulati). This paper is an attempt to answer the above questions considering both the shop owners and consumers perception.

Challenges in organized Retailing

The industry is facing a severe shortage of talented professionals, especially at the middle-management level. Most Indian retail players are under serious pressure to make their supply chains more efficient in order to deliver the levels of quality and service that consumers are demanding. Long intermediation chains would increase the costs by 15 per cent. Lack of adequate infrastructure with respect to roads, electricity, cold chains and ports has further led to the impediment of a pan-India network of suppliers. Due to these constraints, retail chains have to resort to multiple vendors for their requirements, thereby, raising costs and prices. The available talent pool does not back retail sector as the sector has only recently emerged from its nascent phase. Further, retailing is yet to become a preferred career option for most of India's educated class that has chosen sectors like IT, BPO and financial services.

Even though the Government is attempting to implement a uniform value-added tax across states, the system is currently plagued with differential tax rates for various states leading to increased costs and complexities in establishing an effective distribution network. Stringent labor laws govern the number of hours worked and minimum wages to be paid leading to limited flexibility of operations and employment of part-time employees. Further, multiple clearances are required by the same company for opening new outlets adding to the costs incurred and time taken to expand presence in the country. The retail sector does not have 'industry' status yet making it difficult for retailers to raise finance from banks to fund their expansion plans. Government restrictions on the FDI are leading to an absence of foreign players resulting into limited exposure to best practices. Corporate Catalyst India A report on Indian Retail Industry

Non-availability of Government land and zonal restrictions has made it difficult to find a good real estate in terms of location and size. Also lack of clear ownership titles and high stamp duty has resulted in disorganized nature of transaction.

Objective

- To study the threat perception of small retailers from organized retailing sector in a midsize city.
- To study the strategic responses, if any, of small retailers from organized retailing sector in a midsize city.
- To study consumer's perception about small retailers and organized retailing in a midsize city.

Research Methodology

The study is exploratory in nature and uses the survey method to collect data. Questionnaires were developed to

collect response from small retailers (small grocery shop owners) and consumers. The questionnaire developed to measure the threat perception and strategic response of small retailers was semi structured. A structured questionnaire seeking demographic data and having a fixed format in the form of Likert scale was developed to measure the consumer preference and their perception about threat faced by small retailers from organized retail. It was decided to use convenience sampling as the study is exploratory and the objective is to understand the issues on which a more detailed study could be conducted. The questionnaire was pre tested with ten respondents (5- small retail stores and 5- consumers) and modified for use in the survey. The survey data was analyzed using Microsoft Office Excel – 2007 and SPSS Statistics 17.0

Sampling and Data Collection

It was decided to collect data from a midsized city having some organized retailers and is representative of the cities / towns in India. Sonepat was chosen for the study. Sonepat is a medium sized town of Haryana located close to Delhi. District Sonepat comprises of 3 sub-divisions namely Ganaur, Sonepat and Gohana and seven blocks (Ganaur, Sonipat, Rai, Kharkhoda, Gohana, Kathura and Mundlana) has been carved out of Rohtak and made a full fledged district on 22 December 1972. Sonepat has seen a tremendous growth in the retail sector over the years and many corporate players like Easy Day, Adidas, Reebok ,Levis, Lee, Gini & Jony have made substantial investments. Sonepat is therefore considered representative of a developing midsize city.

Sampling was done on the basis of convenience. The city was divided into five zones – north, south, east, west and central. Care was taken that each zone contributed roughly 7 small retail stores and 14 consumers as respondents. A total of 35 small retailers and 65 consumers were surveyed. The retails stores chosen were grocery shops that sell items such as rice, flour, pulses, spices and fast moving consumer goods (FMCG). Shops stocking only FMCG items but not food items like rice, flour, pulses etc. were not considered. Only small independent retail stores having store size equal to or less than 500 Sq Ft. were included in the sample. Shops that had branches were not included. Only the owner or the main person manning the shop was interviewed. Consumers between the ages of 25-55 years were included in the sample. Only one member of the family was interviewed.

Survey instrument and measures:

The survey instrument used to collect data from small retail stores was a semi-structured questionnaire. It had a total of thirty questions on demographics and the perceptions of the retailer. Open-ended questions were included to collect data on some parameters and the others were in the Likert format.

The questionnaire for consumers did not contain any open ended questions and in addition to collecting demographic data, had questions on their perceptions for which responses were sought on a Likert scale. The questionnaire was personally administered.

Hypotheses

The Indian economy has been growing at a rapid pace. This has resulted in a growing middle class and an increase in the per capita income. With more money in their hands, the Indian consumer is now shopping more than before. There has been a remarkable change in consumer taste and preferences over a last few years since the opening up of the market, entry of foreign brands and their products. With increasing disposable income and exposure to global products and the media the preference for the relatively expensive but quality-guaranteed branded products has increased. Urban population today is increasingly becoming fashion conscious and hence brand names are more important to them more than the utility aspect of the products.

Exposure to the internet and privatization of the television channels also contributed immensely to shifts in consumer demands leading to the need for more sophisticated retail chains to cater to their varied and specialized demands. The huge proportion of young population in India implies a demographic dividend for the retail sector since this portion of the population is more brand conscious and ready for spending more on consumer goods.

Further exposure to the trends in the advanced economies through the media has increased the expectations of the consumer. The introduction of new formats in retail has made the consumer realize that shopping can be fun and an enjoyable experience. Indian retail has caught the attention of the corporate sector both in India and abroad. The size of the market and its growth rate is something they find difficult to ignore. Each time a large corporate house announces its entry into retail, it captures media attention and this in turn raises apprehensions in the minds of the small players about the future. The media coverage of the protests indicates that some small retailers are concerned about the entry of corporate giants in retail and its impact on their livelihood. The question is how widespread is the apprehension and what are the small retailers doing about it. Does it vary with the size of the store? Is it a serious threat or only knee jerk reaction? In this rapidly changing scenario what are the consumers' preferences and perceptions on the organized retail sector. Do they consider the emergence of organized retail sector a serious threat to small retailers? To answer some of the above questions the following hypotheses were framed.

H1: Small retailers believe that the entry of organized retail sector is a serious threat to them.

H2: The threat perception would increase with store size.

H3: Small retailers offering special services would not feel threatened by organized retail.

H4: Consumers prefer to purchase from organized retail as compared to unorganized retail.

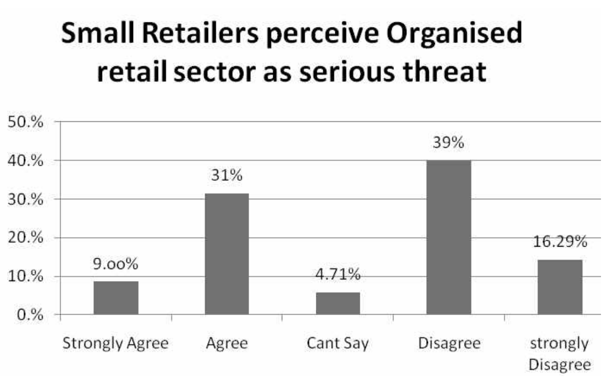
H5: Consumers feel that organized retail will replace unorganized retail.

Data Analysis:

Data collected through semi-structured questionnaire from small retail stores was analyzed using simple statistics like percentages and correlation. The percentage of retailers at different levels of threat perception was analyzed. The facility offered by the retailers and the frequency distribution was analyzed. Correlation analyses were carried out to determine the intensity of relationship between small retailers and variables such as store size, daily sales and special services. Statistics like correlation and percentages were used to analyze consumer responses.

Results and their implications:

H1: Small retailers believe that the entry of organized retail sector is a serious threat to them.



A total of 40% (9% plus 31%) of small retailers feel that organized retail is a threat, whereas 56.29% (40%plus 14.29%) do not. Interestingly very few of the respondents 4.71% said they "can't say'. The results clearly show that the retailers are divided on the question whether organized retail is a serious threat to small retailers. While there is no evidence to support the hypothesis that a substantial portion of them (40%) feel that there is a threat.

H2: The threat perception would increase with store size.

The correlation between size of retail store and the level of threat perception is not significant (R=0.14, and significance is 0.40).

H3: Small retailers offering special services would not feel threatened by organized retail.

The correlation between the number of special services (like credit facility, free home delivery, telephone order, return and exchange facilities) offered by the retailer and the level of threat perception is R= 0.19 (significance 0.916). The correlation is not significant.

H4: Consumers prefer to purchase from organized retail as compared to unorganized retail.

The graph clearly shows that the consumers are equally divided on their preference where to shop. 46.15% of consumers prefer to purchase from organized retail store and 52.31% consumers prefer to purchase from small retail stores whereas 1.54% consumers do not have any specific preference.

Hence there is no evidence to support the hypothesis that consumers prefer to purchase from organized retail as compared to unorganized retail sector. Here again, as 46.15% of consumers have indicated that they prefer organized retail to small retail stores, it could be suggestive of a trend.

H5: Consumers feel that organized retail will replace unorganized retail.

On the question if organized retail will replace the kirana store, it is clearly evident that most customers do not see this happening, with only 4.61% supporting the argument.

Discussions and Conclusion:

The entry of big names into the organized retail sector and the widespread protests has raised questions on the future of the small retailer. The results of the study however shows that more than 50% of the retailers surveyed did not feel threatened by organized retail. Even among those who did feel threatened by organized retail, only 8.57% strongly agreed with the view that organized retail is a serious threat. The remaining 31.43%, who saw organized retail as a threat but not a serious threat, probably are reacting as any incumbent would react to the entry of a new player in the industry. It is also possible that small retailers do not see organized retail as a serious threat because of the buying behavior of the Indian consumer. Indian consumers do not buy in bulk for a number of reasons. The large portion of the population are daily or weekly wage earners and the question of buying in bulk and storing grocery and FMCG products does not arise. Further unlike the developed economies, a major portion of the earnings of the lower and lower middle class go towards food and related items. They just do not have the money to buy in bulk. Secondly they also lack the space and facilities to store the groceries. For example refrigerators are still a product seen only in the middle class and upper class homes. This means the street corner kirana is not only convenient but also a source of fresh groceries. It does not make sense to travel some distance to an organized retail shop when the purchase is small.

Reasons for purchase from Kirana Shop

Special services: credit facility; free home delivery, telephone orders, exchange and return of goods are some of the services provided by small retailers. These facilities are very important to all consumers. Credit facility is another important feature of the local kirana store particularly towards the weekend for weekly wage earners and towards the month end for monthly wage earners. It is the kirana store, which provides the credit (in most cases on a interest free basis) to the customer. This not only builds customer loyalty but also locks in the customer.

Proximity leading to Convenience: proximity of the small retail store is perhaps the biggest advantage. Many small retail stores are located in residential areas, they are open from early morning hours to late nights in a day which means that even after you start cooking, you can run to the local kirana store for something you don't have. Many small retailers make home deliveries of small items in an emergency to regular customers.

Personal Contact: The shops owners have developed a personal rapport with consumers The small retailer is located in all residential areas and is just around the corner. It has been there for a number of years and regular contact and association makes it a part of the community. They know their consumers by name and their tastes and preferences. This helps small retailers to not only serve their consumer better but also develop long-term relationship with consumers and customer loyalty. The greatest advantage though, is their roots in the community. Kirana stores inherently possess warmth; customization and empowerment of support staff to take one-off decisions i.e. an extension of customer service which is a huge challenge in retailing industry. (Seth, 2005).

Low costs

The Kiranas also operate on an extremely low-cost model where they pay little or no taxes on family owned properties, with most of the family members working in the store itself. The overhead costs of Kiranas are therefore so low

Responsive

An analysis of the responses of the small retailers indicates that among those who perceive a threat from organized retail have started considering responses to counter the threat. Some of them are as follows,

Increase in efficiency: Small Retailers have become more consumer oriented and have improved the display in their stores. They have also started pre-packaging goods to speed up service and attract consumers. They have started increasing the variety and numbers of stock keeping units in response to consumer needs. They have also introduced electronic weighing machines and debit/credit card machine to meet consumer demands.

However, it is not just those who feel threatened who are introducing the new measures. Some of those who are not threatened have also introduced the above facilities. The introduction of facilities could be a standard response to increasing competition and changing environment. It is not clear if the facilities were introduced due to a perception of threat or if the introduction of these facilities reduced the threat perception. A long-term strategic response may be necessary like adoption of a focused strategy and focus on innovative methods and processes to deal with the competition from organized retail.

Limitation and Scope for future research:

Like every research this research also contains limitations. These limitations should be taken into account when the results of this study are interpreted. The study has been conducted in Sonepat, a city of Haryana. The results, if conducted in other part of the country may vary. The sample size is small and the results may differ if a larger sample across diverse regions is used. This study identifies the threat perception of small retailers and their strategic response to organized retail sector in midsize city. The same study if conducted in rural or a metro may produce different results.

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SAARANSH
RKG JOURNAL OF MANAGEMENT
Vol. 3 • No. 1 • JULY 2011

AN ASSESSMENT OF COMPETENCY MAPPING FOR MANAGING PERFORMANCE OF EMPLOYEES

Vijay Laxmi* **S. K. Sharma****

ABSTRACT

This study explores the relationship between competency mapping and performance management. The present study tries to assess the factor responsible for building competency and mapping the status for the officer and non officer employees of the concern organization. During this research it has been found that competency is based on factor like managing ability, behavioral & functional, responsibility performed and potential in selected company (IOCL). Present study reveals indirectly that competency mapping is responsible in managing and evaluating the performance of the employees. Competency can be defined as a group of skills taken together to achieve a desired task Competency mapping is a process of identifying key competencies for a particular position in an organisation, and then using it for job-evaluation, recruitment, training and development, performance management, succession planning, etc. "The competency framework serves as the bedrock for all HR applications. As a result of competency mapping, all the HR processes like talent induction, management development, appraisals and training yield much better results,"

Key Words: *Competency Mapping, Managing Ability, Responsibility Performed, Behavioral & Functional and Potential*

INTRODUCTION

Competency mapping is the process of identification of the competencies required to perform successfully a given job or role or a set of tasks at a given point of time. It consists of breaking a given role or job into its constituent tasks or activities and identifying the competencies (technical, managerial, behavioral, conceptual knowledge, an attitudes, skills, etc.) needed to perform the same successfully.

A competency dictionary of a firm gives detailed descriptions of the competency language used by that co. It contains detailed explanations of the combinations of competencies (technical, managerial, human and conceptual knowledge, attitudes and skills) using their own language. For example Team work or Team Management competency can be defined in terms of organization specific and level specific behaviors for a given origination. At top levels it might mean in the case of one organization ability identify utilize and synergize the contributions of a project team and at another level it might mean ability to inspire and carry along the top management team including diversity management. In competency mapping all details of the behaviors (observable, specific, measurable etc.) to be shown by the person occupying that role are specified.

What is Competency?

Any underlying characteristic required performing a given task, activity, or role successfully can be considered as competency. Competency may take the following forms: Knowledge, Attitude, Skill, Other characteristics of an individual including: Motives, Values, Self concept etc.

Who Identifies competencies?

Competencies can be identified by one of more of the following category of people: Experts, HR Specialists, Job analysts, Psychologists, Industrial Engineers etc. in consultation with: Line Managers, Current & Past Role holders, Supervising Seniors, Reporting and Reviewing Officers, Internal Customers, Subordinates of the role holders and Other role set members of the role (those who have expectations from the role holder and who interact with him/her).

What Methodology is used?

The various methods used in combination for competency mapping : Interviews, Group work, Task Forces, Task Analysis workshops, Questionnaire, Use of Job descriptions, Performance Appraisal Formats etc

USAGE OF COMPETENCY MAPPING

Competency mapping comes in very useful in the following situations:

job-evaluation, recruitment performance management and performance diagnostics, Succession planning, Employee potential appraisal for promotion; Training need dentification; training and development and Self-development initiatives.

Objectives of the Study:

1. To study the Study the status of competency level among officers and non officers of IOCL Co.
2. To assess the factors responsible for building Competency amongst the employees of IOCL.

Research Methodology:

Data has been collected from 264 employee's of IOCL (Respondents) out of which 152 belongs to officer grade while, 112 belongs to non- officer grade. Data has been collected in the form of well structured Questionnaire consisting 12 statements directly or indirectly related to the competency mapping of the employees. The respondents were asked to make their perception on a five point scale.

*Asst. Professor , Vishveshwarya School of Business Management, G.Noida, Gautam Budh Nagar,India
**Professor, Dayalbagh Educational Institute, Deemed University, Agra, India

Hypothesis:

HO- There is insignificance difference in the Competencies Level of Officers and Non - Officers

Ha– There is significance difference in the Competencies Level of Officers and Non Officer.

Analysis of the objectives:

This part of analysis gives the outlook about the competency

Table: 1 Statements which are supported most by the employees of IOCL regarding competency level.

S. No	STATEMENTS	TOTAL EMPLOYEES			OFFICERS			NON- OFFICERS			t value	H0 *
		MEAN	RA-NK	S.D	MEAN	RA-NK	S.D	MEAN	RA-NK	S.D		A** / R***
1	Your organization conducting time-to-time training programme for enhancing the knowledge /skill/experience.	4.008	II	0.909	4.197	I	0.726	3.750	V	1.056	4.100	(R)***
2	According to you parameters give direction to appraisal system.	3.784	V	0.872	3.770	V	0.892	3.804	III	0.843	0.326	(A)**
3	You are willingly able to come up with new ideas and alternatives for solving job related problems as well as improvement in the system.	3.822	IV	1.156	3.855	IV	1.016	3.777	IV	1.321	0.541	(A)**
4	You are maintaining consistency in achieving task assigned to you.	3.462	XI	1.224	3.461	XII	1.197	3.464	VIII	1.260	0.019	(A)**
5	There is well communication of decision and operational work between superior and subordinate in your organization.	3.595	VII	1.202	3.645	X	1.126	3.527	VII	1.295	0.797	(A)**
6	You generally think over complex and difficult problems by analyzing all factors before coming to decisions.	3.530	X	1.294	3.697	VIII	1.230	3.304	XI	1.342	2.487	(R)***
7	You plays initiative role in handling operational functions.	3.451	XII	1.308	3.605	XI	1.252	3.241	XII	1.351	2.260	(R)***
8	Your appraiser considered the parameter while he appraising you.	4.015	I	0.807	4.033	III	0.782	3.991	I	0.840	0.42	(A)**
9	You are able to start and complete the task independently.	3.583	VIII	1.337	3.730	VII	1.219	3.384	X	1.495	0.083	(A)**
10	The employees in your organization willing to handle continuous updating of plans, strategies and system based understanding of economics, social, and technological changes.	3.576	IX	1.165	3.671	IX	1.081	3.446	IX	1.260	1.562	(A)**
11	You are willing to take responsibility and held accountable for result.	4.000	III	0.892	4.059	II	0.797	3.920	II	1.001	1.275	(A)**
12	You have new ways of attacking problems and initiates new ideas.	3.682	VI	1.221	3.750	VI	1.114	3.589	VI	1.347	1.045	(A)**

* Hypothesis A** -Accepted R*** -Rejected

TABLE: 2 Test of Significance regarding view of officers and non officers in respect of competency level

EMPLOYEES GRADE	MEAN	S.D	N-(264)	t value
OFFICERS	3.789	0.203	152	(6.837)
NON- OFFICERS	3.600	0.235	112	t value > 1.96* Ho is Rejected

* Level of significance tested at 5 % (0.05)
At 5 % level of significance value is 1.96

Table: 2 depicts that the mean value of officers (3.759) is higher than non officers (3.600). This analysis is supported by the calculated t- value (6.837) which is higher than the table value (1.96). Thus it can conclude that there is significant difference in the competency level of officers and non-officers. Further the researcher calculates the correlation between officers and non officers regarding Competency Level.

Table: 2.1 Correlation between officers and non- officers in reference to over all competency level

Objective-3	Rank Correlation (r)	Interpretation
Overall Competency Level of Officers and Non- Officers	0.762	High Positive Correlation

In relation to overall competency level of employees in IOCL (Panipat Refinery), the research study reveals that there is a higher positive correlation among the views of officers and non officers as the r = .762. This correlation value clearly shows their agreement on variables contains under table: 1.

TEST OF COMPENTENCY OF OFFICERS AND NON-OFFICERS ON THE BASIS OF MANAGERIAL ABILITY & SKILLS (PARAMETER NO.1)

There is also important to compare the employees' performance on the various parameters of competency. For this particular hypothesis is framed i.e..

H_o- There is insignificance difference between the Managing Ability and Skills of Officers and Non- Officers

SAARANSH
RKG JOURNAL OF MANAGEMENT
Vol. 3 • No. 1 • JULY 2011

H_a- There is significant difference between the Managing Ability and Skills of Officer and Non-Officer Employees.

Table: 3 Test of significance of competency level on the basis of Managing Ability between officers and non- officers

PARAMETER	MANAGERIAL ABILITY		t value
TOOLS	OFFICERS	NON-OFFICERS	
MEANS	3.919	3.658	(4.423)
S.D	0.203	0.248	t value>1.96*
N-264	152	112	Ho is Rejected

* Level of significances tested at 5 % (0.05)

At 5 % level of significance value is 1.96

Table 3 shows that, the mean score of non officer (3.658) is less than the mean score of officers (3.919) in relation to Managing Ability & Skills. This statement is supported by the test of significance, where calculated t value (4.423) has been found greater than the table value (1.96). Hence the researcher's interpretation reveals that the competency level in relation to Managing Ability & Skills is higher in officers as compared to non officers.

TEST OF COMPENTENCY OF OFFICERS AND NON-OFFICERS ON THE BASIS OF BEHAVIOURAL & FUNCTIONAL COMPENTENCY (PARAMETER NO.2)

This part of analysis related with knowing the competency level of employees (officers / non-officer) on the basis of Behavioral and Functional Competency.

Ho- There is insignificance difference between the Behavioural and Functional Competency of Officers and Non-Officers.

Ha- There is significance difference between the Behavioural and Functional Competency of Officers and Non- Officers.

Table: 4. Test of significance of competency level on the basis of Behavioural and Functional Competency of Officers and Non- Officers.)

PARAMETER TOOLS	BEHAVIOURAL & FUNCTIONAL COMPENTENCY		t value
	OFFICERS	NON-OFFICERS	
MEANS	3.707	3.665	(1.076)
S.D	0.054	0.137	t value<1.96*
N-264	152	112	$H_o$is accepted

*Level of significances tested at 5 % (0.05)

At 5 % level of significance value is 1.96

Table 4. shows that, the mean score of non officer (3.665) is less than the mean score of officers (3.707) in relation to Behavioural and Functional Competency. This statement is supported by the test of significance, where calculated t value (1.076) has been found less than the table value (1.96). Hence the researcher's interpretation reveals that the competency level in relation to Behavioural and Functional Competency is higher in officers as compared to non officers.

TEST OF COMPENTENCY OF OFFICERS AND NON-OFFICERS ON THE BASIS OF RESPONSIBILITY PERFORMED (PARAMETER NO.3)

This part of analysis provides the competency level of employees on the basis of Responsibility Performed.

Ho- there is insignificance difference between the Responsibility Performed by the Officers and Non- Officers.

Ha- there is significance difference between the Responsibility Performed by the Officers and Non-Officers.

Table: 5 Test of significance of competency level on the basis of Responsibility Performed by officers and non-officers.

PARAMETER	RESPONSIBILITY PERFORMED		t value
TOOLS	OFFICERS	NON-OFFICERS	
MEANS	3.708	3.541	(2.609)
S.D	0.258	0.281	t value>1.96*
N-264	152	112	Ho is Rejected

*Level of significances tested at 5 % (0.05)

At 5 % level of significance value is 1.96

The above table 5 shows the mean score of officers (3.752) and non officers (3.535) supported by calculated t value (4.931) which is greater than table value (1.96). Here, after interpretation of data the researcher can say that there is significant difference in the competency level in relation responsibility performed by the officers and non officers.

TEST OF COMPENTENCY OF OFFICERS AND NON-OFFICERS ON THE BASIS OF POTENCIAL (PARAMETER No.4).

This part of analysis provides the competency level of employees on the basis of Potential.

Ho- There is insignificance difference between the Potential of Officers and Non- Officers.

Ha-there is significant difference between the Potential of Officers by and Non- Officers.

Table: 7 Overall Outlook of Competency Level of Employees (Officers & Non-Officers)

PARAMETERS	MANAGING ABILITY				BEHAVIOURAL & FUNCTIONAL COMPETENCY				RESPONSIBILITIES PERFORMED				POENTIAL			
EMPLOYEES	MEAN	S.D	N	t value	MEAN	S.D	N	t value	MEAN	S.D	N	t value	MEAN	S.D	N	t value
OFFICERS	3.919	0.203	152	4.423	3.707	0.054	152	1.076	3.708	0.258	152	2.609	3.752	0.073	152	4.931
NON- OFFICERS	3.658	0.248	112	4.423 >1.96* Ho is rejected	3.665	0.137	112	1.076 >1.96* Ho is rejected	3.541	0.281	112	2.609 >1.96* Ho is rejected	3.535	0.170	112	4.931 >1.96* Ho is rejected

* Table value

FINDINGS REGARDING COMPENTENCY LEVEL

From the analysis regarding overall competency level of officer and non officers, the researcher frames the following findings.

Overall Mean Score of Officers = 3.789, Mean Score of Non Officers = 3.600 with calculated t value = 6.837 (1.96 at 0.05 level of significance). Thus, Hypothesis (Ho) is rejected because calculated t value (6.8370) > 1.96 as per table.2 which shows that there is significant difference in the competency level of officers and non officers. The factor behind the significance difference may be that, non officers are not capable enough to initiate and complete their task independently.

Further, researcher found the Rank Correlation (r = 0.762) between the officers and non officers. The result reveals (as per table 2.1) that, there is high positive correlation exist between the officers and non officers, regarding the competency level. Which clearly indicate their agreement on variables contain under table :1 regarding competency level.

Table: 6 Test of significant of competency level on the basis of Potential of the officers and non- officers

PARAMETER	POTENTIAL		t value
TOOLS	OFFICERS	NON-OFFICERS	
MEANS	3.752	3.535	(4.931)
S.D	0.073	0.175	t value>1.96*
N-264	152	112	Ho is Rejected

* Level of significances tested at 5 % (0.05)

At 5 % level of significance value is 1.96 (0.4750)

Table 6 shows that, the mean score of non officers (3.535) is less than the mean score of officers (3.752) in relation to potential. This statement is supported by the test of significance, where calculated t value (4.931) has been found greater than the table value (1.96). Hence the researcher's interpretation reveals that the competency level in relation to Potential is higher in officers as compared to non officers.

FINDINGS REGARDING PARAMETERS OF COMPETENCY LEVEL

Findings regarding competency level of officers and non officers on the basis of (parameters) Managing Ability & Skills, Behavioural & Functional Competency, Responsibility Performed and Potential give the clear picture of inferences given by the researcher as follows:

- Overall Mean Score of Officers = 3.919, Mean Score of Non Officers = 3.658 with calculated t value = 4.423 (1.96 at 0.05 level of significance). Hypothesis (Ho) is rejected as calculated t value (4.423) > 1.96 as per table 4.8. This shows that there is significance difference between the competency level of officers and non officers on the basis of parameter-1. Thus, officers possess more Managing Ability and Skills as compared to non officers.
- Overall Means of Mean Score of Officers = 3.707, Mean Score of Non Officers = 3.665 with calculated t value = 1.076 (1.96 at 0.05 level of significance). Hypothesis (Ho) is accepted as calculated t value (1.076) < 1.96 as per table 4.9. This shows that there is difference between the competencies level of officers and non officers but not significant on the basis of parameter-2. Here behind the insignificant difference, may be because of good communication between superior and subordinate regarding decision taking and operational work. Thus, officers and non officers both possess almost same level of competency on the basis of Behavioural & Functional Competency.
- Overall Mean Score of Officers = 3.708, Mean Score of Non Officers = 3.541 with calculated t value = 2.609 (1.96 at 0.05 level of significance). Hypothesis (Ho) rejected as calculated t value (2.609) > 1.96 as per table 4.10. This shows that there is significant difference between the competency level of officers and non officers on the basis of (parameter-3). Here, when it comes to responsibility, the lower competency found in non officers, it is due to lack of willingness in them to be responsible and accountable for result as well as inconsistency in achieving the assigned task. Thus, officers are more responsible than non officers on the basis of Responsibility Performed.
- Overall Mean Score of Officers = 3.752, Mean Score of Non Officers = 3.535 with calculated t value = 4.931 (1.96 at 0.05 level of significance). So, Hypothesis (Ho) is rejected as calculated t value (4.931) > 1.96. As per table 4.11. There is significant difference between the competency level of officers and non officers on the basis of parameter-4. the reasons behind the significance difference between the officers and non officer's potential may be that , subordinate don't seems to take initiative for solving the problems nor they are willing to come with innovative ideas for improvement in their own potential and organisation as a whole. Thus, officers possess more potential than non officers on the basis of Potential.

Conclusion:

In the present study reveals that, application of t- test brought out significance difference in Managerial Ability, Behavioural & Functional Competency, Responsibility Performed and Potential which are considered to be effective determinants of the employee's efficiency level. As study shows that there is low level of competency in non officers regarding responsibility performed. So, the organization should provide them some responsibility for which only they are responsible and accountable. Competency and management of performance are closely related with each other, so each aspect of it should focus. Competency mapping is important and is an essential exercise. Every well managed firm should: have well defined roles and list of competencies required to perform each role effectively. Such list should be used for recruitment, performance management, promotions, placement and training needs identification.

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FINANCIAL MARKETS AND DERIVATIVES

Arvind Kumar* **Pushpendra Misra****

ABSTRACT

With the rapid growth of business activities across the world, the need of specialized market for the financial instruments came into the scenario and later on the structured arrangement made for this purpose is termed as Financial Market. Financial market refers to a market in which various financial instruments, long term and short term, are traded to give a pace to the whole economy

A derivative security is a financial contract whose value is derived from the value of something else, such as a stock price, a commodity price, an exchange rate, an interest rate, or even an index of prices.

The global economic order that emerged after World War II was a system where many less developed countries administered prices and centrally allocated resources. Even the developed economies operated under the Bretton Woods system of fixed exchange rates. The system of fixed prices came under stress from the 1970s onwards. High inflation and unemployment rates made interest rates more volatile.

The Bretton Woods system was dismantled in 1971, freeing exchange rates to fluctuate. Less developed countries like India began opening up their economies and allowing prices to vary with market conditions. Price fluctuations make it hard for businesses to estimate their future production costs and revenues. Derivative securities provide them a valuable set of tools for managing this risk.

Keywords : *Financial Markets, Derivatives, Capital Market*

FINANCIAL MARKET

Financial Markets are the transmission mechanism between saver-lenders and Borrower-Spenders. Ultimate lenders supply funds to ultimate borrowers either directly by buying primary securities or indirectly by buying the liabilities of specialized financial institutions, which in turn buy the primary securities.

Financial markets play a central role in promoting economic well-being by bringing buyers and sellers together. Market prices which result from this interaction, promote economic efficiency by providing signals to both producers and consumers about the size of demand and supply of the traded commodity.

Financial Markets are channels through which funds flow from one market participant to another. An organized financial market is a place where, or a system through which, securities are created and transferred.

The Indian financial markets have undergone substantial changes after globalization and liberalization reforms started implementation in India. The financial markets have witnessed variations in the nature of transactions, the type of participants, the magnitude of operations etc.

TYPES OF FINANCIAL MARKET PARTICIPANTS

There are three types of market participants:

- Ultimate Investors: Investors attempt to accumulate wealth, to alter or smooth their pattern of consumption or portfolios of assets.
- Ultimate Borrowers: Borrowers transact to gain investable funds, to consume or to alter the risks attached to their liabilities.
- Financial Intermediaries: These intermediaries earn a return by packaging financial assets to borrowers or lenders – increasing the variety of securities directly available in the market. They can also act as brokers by arranging deals between borrowers and lenders.

INTERMEDIATION IN FINANCIAL MARKET

Financial intermediation involves financial acquiring funds from the public by issuing their own liabilities and then using the funds to buy primary securities.

Financial Intermediation – It is a sort of indirect financing in which savers deposit funds with financial institutions rather then directly buying bonds or mortgages and the financial institutions, in turn, lend to the ultimate borrowers.

Financial intermediaries are in a better position than individuals to bear and spread the risks of primary security ownership. Because of their large size, intermediaries can diversify their portfolios and minimize the risk involved in holding any one security. They employ skilled portfolio managers, possess expertise in evaluation of borrower credit characteristics and take advantage of economies in large scale buying and selling.

Competition among financial intermediaries forces interest rate to the lowest level compatible with the intermediaries evaluation of the risks of security ownership. The Commercial Banks, Financial institutions, Finance and Investment companies, Insurance companies, Unit trusts, Pension funds etc., are the examples for financial intermediation.

Financial Dis-intermediation – It is the reverse take their funds out of financial institutions and buy the primary securities themselves.

**Professor& Head, Department of Commerce,University of Lucknow, Lucknow, U.P., India*
***Asstt. Professor, Department of Commerce,University of Lucknow, Lucknow, U.P., India*

SEGMENTS OF FINANCIAL MARKET

The main segments of the organized financial markets are as follows:

Money Market – The money markets refer to the market for short-term securities (one year or less in original maturity) such as Treasury bills, Certificates of deposits, Commercial paper etc. Money market instruments are more liquid in nature.

The money market is a market where money and highly liquid marketable securities are bought and sold. It is not a place like the stock market but an activity and all the trading is done through telephones. One of the important features of the money market is honour of commitment and creditworthiness. The main players involved being Governments, Banks, Financial Institutions, Mutual Funds, Business Firms etc. Individuals play an insignificant role in this market.

The money market is restricted to instruments of the short-term nature i.e. limited to time periods of less than one year. Almost every economic unit, be it a financial institution, business firm, a corporation or a government body, has a recurring problem of liquidity management, mainly because the timing of the expenditures rarely synchronies with that of the receipts.

The most important function of the money market is to bridge this liquidity gap. Thus, economic units can tide over the mismatches of cash receipts and cash expenditures by purchasing (or selling) the shortfall (or surplus) of funds in the money market.

In simple words, the money market is an avenue for borrowing and lending for the short-term. While on one hand the money market helps in shifting vast sums of money between banks, on the other hand, it provides a means by which the surplus of funds of the cash rich corporations and other institutions can be used (at a cost) by banks, corporations and other institutions which need short-term money. A supplier of funds to the money market can be virtually anyone with a temporary excess of funds.

Foreign Exchange Market – The foreign exchange market is a decentralized world-wide market, the participants in the market include Central Banks, Commercial Banks, Brokers, Corporations and Individuals. The Central Banks both monitor market movements and sentiment and intervene according to government policy and prevailing situation. The function of sale and purchase of foreign exchange in India is performed by the authorized dealers/money changers appointed by RBI.

The Foreign Exchange departments of International Commercial Banks are linked across the world on a 24 hour basis, through a sophisticated network of communication system. Major commercial centres are London, Amsterdam, Frankfurt, Milan Pairs, New York, Toronto, Bahrain, Tokyo, Hong Kong and Singapore are particularly active in this market.

Derivatives Market – The derivatives are most modern financial instruments in hedging the risk. The individuals and firms who wish to avoid or reduce risk can deal with other who are willing to accept the risk for a price. The common place where such transactions take place is called the 'derivative market'. Forwards, Futures, Options, Swaps, Caps and Floor are some of the commonly traded derivatives in the derivatives market.

Capital Market – The capital market is a market in which the securities with maturities of more than one year are bought and sold. The capital market refers to the market for long term securities, such as corporate stocks and bonds, for financing long term assets. The capital market is further classified as follows:

(a) Primary Capital Market

The primary capital market is one is which new issues of common stock, bonds and preferred stock are sold by companies. the proceeds raised in the market is the new capital funds.

(b) Secondary Capital Market

The secondary capital markets are also called 'stock markets'. In the secondary markets, the outstanding issues are permitted to trade. In this market, a stock or bond issue which has already been sold to the public and it is traded between current and potential owners. The proceeds from a sale in the secondary market do not go to the issuing organization but to the current owner of the security. The stock markets are classified as follows:

(i) Stock Exchanges

The Stock Exchanges will have a physical location where stocks buying and selling transactions take place in the stock exchange floor.

(ii) Over the Counter Exchange

Where shares, bonds, and money market instruments are traded using a system of computer screen and telephones is called 'Over the Counter Exchange'.

Capital market is the barometer of the economy and represents the macro economic affairs of the country. It is an index of economic and industrial development o the country. Capital market discounts the future and it is reflection of future of the economy. It the long run it is a true measure of the health of any economy.

In the capitalistic economy, the capitals markets play a pivotal role by bring the common investor to invest in corporate securities. The global trend is that even socialist countries like China and Russia are moving towards capitalistic economy by inviting the private investments into the industry.

Financial disintermediation along with diversification of financial sector is one of the important developments in the era of liberalization world over. The term “financial disintermediation” refers to the transformation of a financial system from institution based to market based.

In an institution based financial system, the role of financial intermediaries like Bank is prominent in mobilization and allocation of financial resources. In the current capital market system, the role of banks as intermediaries is diluted in the market based system where that investor and user of funds are expected to come into direct contact with the borrowers i.e. the corporate.

A tendency was developed among the corporate houses to access savings directly through public deposits, commercial paper, Equity and Debenture issues etc. this process of transformation has been further facilitated by the introduction of a set of new financial instruments with varied degrees of liquidity, risk and returns.

Among the instruments, mutual funds, bonds and derivative instruments are more active which have grasped a substantial share in resource mobilization giving a challenge to traditional monetary assets such as bank deposit. Similarly, instruments like deep discount bonds, zero coupon bounds and other bonds with very long maturity period compete with traditional term saving instruments. The nature, extent, and efficiency of disintermediation varies from country to country. The USA and UK have a market based system while economies like Germany and Japan are dominated by bank based financial system.

Table 1: SEBI Registered Market Intermediaries

As on 31st March	2002	2003	2004	2005	2006
Stock Exchanges (Cash Market)	23	23	23	22	22
Stock Exchanges (Derivatives Market)	2	2	2	2	2
Brokers (Cash Segment)	9687	9519	9368	9128	9335
Corporate Brokers - (Cash Segment)	3862	3835	3746	3733	3961
Sub-brokers – (Cash Segment)	12208	13291	12815	13684	23479
Brokers (Derivative)	705	795	829	994	1120
FII	490	502	540	685	882
Custodians	12	11	11	11	11
Depositories	2	2	2	2	2
Depository Participants.	380	438	431	477	526
Merchant Bankers	145	124	123	128	130
Bankers to an Issue	68	67	55	59	60
Underwriters	54	43	47	59	57
Debenture Trustees	40	35	34	35	32
Credit Rating Agencies	4	4	4	4	4
Venture Capital Funds	34	43	45	50	80
Share Transfer Agents	161	143	78	83	83
Portfolio Managers	47	54	60	84	132
Mutual Funds -	38	38	37	39	38
Approved Intermediaries	10	4	3	3	3

Source SEBI

From the table 1, it could be clearly analysed that still there is huge need to develop the derivatives stock exchanges in India though there has been significant rise in number of derivative brokers.

During the period of 2002 to 2006 there is not much change in mutual funds but a large rise of around 80% can be seen in FIIs and because of modern internet era number of share transfer agents has been reduced to a great extent.

Table 2 : International Comparison: December, 2000

Particulars

No. of listed Companies	7524	1904	2.561	1022	418	779	1086	9922
Market Capitalization ($bn.)	15104	2577	3.157	1270	153	623	581	166
Market Capitalization Ratio (%)	358.8	130.7	66.4	50.8	95.9	228.8	73.6	54.5
Turnover($ bn.)	31862	1835	2694	1069	91	378	722	621
Turnover Ratio (%)	200.8	66.6	69.9	79.1	52.1	61.3	158.3	374.7

Estimated for the financial year ending March 2001.

Source: S & P Emerging Stock Market Factbook 2001.

As may be seen from the Table 2, there are very few countries, which have higher turnover ratio than India, Market capitalization as a percentage of GNP compares favourably even with advanced countries and is much better than emerging markets. India has highest number of companies listed on stock exchanges. NSE stood fifth and sixth in terms of number of transactions and the quantity of securities traded, respectively, among the stock exchanges in the world in 2000. At the end of 2000, the Standard & Poor's (S & P) ranked India as 23rd in terms of market capitalization, and 14th in terms of total value traded in stock exchanges. 131 Indian stocks, which accounted for 59.2% market capitalization and 65.8% of total value traded, had a 6.5% weight in International Finance Corporation (IFC) Global Composite Index of emerging market stocks. In the case of IFC investable Composite Indices, which include emerging market stocks that are determined by the IFC to be legally and practically available to foreign portfolio investors, India's share was only 2.7% with 84 stocks.

CAPITAL MARKET IN INDIA

Progress on developing India's capital market, which is already more competitive, deep and developed by international markets standards, continued. Business in the country's oldest stock exchange, namely the Bombay Stock Exchange (BSE) dating back to 1875, which is also one of the oldest stock exchanges in the world, continued to thrive. the National Stock Exchange (NSE), which emerged in the mid-1990s and catalyzed improvements in trading systems to provide the necessary depth and choice to investors, made sustained progress. With the BSE and NSE emerging as the two apex institutions of the country's capital market, restructuring of other stock exchanges went apace. Overseen by Securities and Exchange Board of India (SEBI), and independent statutory regulatory authority, the country's capital market dealt in scrips of a large number of listed companies with a wide geographical outreach, providing a world class trading and settlement system, a wide range of product availability with a fast growing derivatives market, and well laid down corporate governance and investor protection measures.

SAARANSH
RKG JOURNAL OF MANAGEMENT
Vol. 3 • No. 1 • JULY 2011

Table 3 : Names of Share Price Indices Changed

Names of Share Price Indices Changed On July 28, 1998, main Share price indices have been renamed as follows:

Old Name	New Name
NSE – 50	S & PCNX Nifty
CRISIL 500	S & PCNX – 500

DERIVATIVES MARKET IN INDIA

The most notable development concerning the secondary segment of Indian capital market is the introduction of derivatives trading in June 2000. SEBI approved derivatives trading based on Futures Contracts at both BSE and NSE in accordance with the rules/ by laws and regulations of the stock Exchanges. A beginning with equity derivatives has been made the Introduction of stock index futures by BSE and NSE.

Stock Index Futures contract allows for the buying and selling of the particular stock index for a specified price at a specified future date. Stock Index Futures, inter alia, help in overcoming the problem of asymmetries in information. Information asymmetry is mainly a problem in individual stocks as it is unlikely that a trader has market-wide private information. As such the asymmetric information component is not likely to be present in a basket of stocks. This provides another rationale for trading in stock Index Futures.

Trading in index derivatives involves low transaction cost in comparison with trading in underlying individual stocks comprising the index .While the BSE introduced Stock Index Futures for S & P CNX Nifty comprising 50 scrips. Stock Index futures in India are available with one month and three month maturities.

Table 4 : Turnover in the Equity Derivatives Market

(Rupees crore)

Year	Bombay Stock Exchange Limited (BSE)			
	Index futures	Index options	Stock futures	Stock options
2007-08				
Apr	14385.04	0.00	1200.24	0.00
May	15764.01	0.00	1251.87	0.07
Jun	16565.99	28.32	1161.11	0.00
Jul	18211.10	0.04	2234.15	0.02
Aug	18784.00	0.04	1226.84	0.03
Sep	21430.73	0.00	72.21	0.00
Oct	23962.09	0.04	22.74	0.00
Nov	21960.32	0.00	307.35	0.00
Dec	20293.47	0.00	20.33	0.23
Jan	22235.42	0.00	47.21	0.00
Feb	22514.96	0.00	49.50	0.00
Mar	18552.61	10.22	15.69	0.00
Total	234659.74	38.66	7609.24	0.35
2008-09				
Apr	4051.16	9.12	2.33	0.00
May	4556.57	0.00	1.42	0.00
Jun	1358.69	0.00	1.75	0.00
Jul	764.75	0.00	1.32	0.00
Aug	371.81	0.00	0.75	0.00
Sep	370.40	0.00	0.66	0.00
Oct	182.46	0.00	0.26	0.00
Nov	49.06	0.00	0.00	0.00
Dec	30.08	0.00	0.00	0.00
Jan	11.97	0.00	0.00	0.00
Feb	6.24	0.00	0.00	0.00
Mar	4.03	0.00	4.03	0.00
Total	11757.22	9.12	12.52	0.00
2009-10				
Apr	1.85	0.00	0.00	0.00
May	0.75	7.07	0.12	0.00
Jun	0.02	0.00	0.12	0.00
Jul	0.09	0.00	0.00	0.00
Aug	0.02	0.00	0.00	0.00
Sep	0.03	0.00	0.00	0.00
Oct	0.00	0.00	0.00	0.00
Nov	0.00	0.00	0.03	0.00
Dec	0.69	3.14	0.00	0.00
Jan	82.13	127.55	0.03	0.00
Feb	9.67	0.00	0.00	0.00
Mar	0.75	0.00	0.00	0.00
Total	96.00	137.76	0.30	0.00

Source: Bombay Stock Exchange Limited (BSE) .

Note: Index futures were introduced in June 2000, index options in June 2001, stock options in July 2001 and stock futures in November 2001, in the BSE

The Table 4, clearly shows the fall in equity derivative market transactions particularly in index futures.

In 2008 there was a fall in index options but in 2009-10 again it has gone up to 138 crores approx.

In case of stock futures and stock options there is also a big decline,infact the stock options have come to zero in BSE.

FORWARD CONTRACTS VS. FUTURE CONTRACTS

A forward contract is an agreement between two parties to buy or sell an asset (which can be of any kind) at a pre-agreed future point in time. Therefore, the trade date and delivery date are separated. It is used to control and hedge risk, for example currency exposure risk (e.g. forward contracts on

USD or EUR) or commodity prices (e.g. forward contracts on oil). Allaz and Vila (1993) suggest that there is also a strategic reason (in a imperfect competitive environment) for the existence of forward trading, that is, forward trading can be used even in a world without uncertainty. One party agrees to buy, the other to sell, for a forward price agreed in advance. In a forward transaction, no actual cash changes hands. If the transaction is collaterised, exchange of margin will take place according to a pre-agreed rule or schedule. Otherwise no asset of any kind actually changes hands, until the maturity of the contract. In finance, a futures contract is a standardized contract, traded on a futures exchange, to buy or sell a certain underlying instrument at a certain date in the future, at a pre-set price. The future date is called the delivery date or final settlement date. The pre-set price is called the futures price. A futures contract gives the holder the right and the obligation to buy or sell, which differs from an options contract, which gives the buyer the right, but not the obligation, and the option writer (seller) the obligation, but not the right. In other words, the owner of an options contract can exercise (to buy or sell) on or prior to the pre-determined settlement/expiration date. Both parties of a "futures contract" must exercise the contract (buy or sell) on the settlement date. To exit the commitment, the holder of a futures position has to sell his long position or buy back his short position, effectively closing out the futures position and its contract obligations.

USES OF FORWARD AND FUTURES CONTRACTING

Hedging:

Investors use these forwards & futures contracts to hedge against foreign exchange risk. If an investor will receive a cashflow denominated in a foreign currency on some future date, that investor can lock in the current exchange rate by entering into an offsetting currency futures position that expires on the date of the cashflow.

For example, Jane is a US-based investor who will receive €1,000,000 on December 1. The current exchange rate implied by the futures is $1.2/€. She can lock in this exchange rate by selling €1,000,000 worth of futures contracts expiring on December 1. That way, she is guaranteed an exchange rate of $1.2/€ regardless of exchange rate fluctuations in the meantime.

Speculations:

Currency futures can also be used to speculate and, by incurring a risk, attempt to profit from rising or falling exchange rates.

For example, Peter buys 10 September CME Euro FX Futures, at $1.2713/€. At the end of the day, the futures close at $1.2784/€. The change in price is $0.0071/€. As each contract is over €125,000, and he has 10 contracts, his profit is $8,875. As with any future, this is paid to him immediately.

More generally, each change of $0.0001/€ (the minimum commodity tick size), is a profit or loss of $12.50 per contract.

Price discovery:

Price discovery is the general process used in determining spot prices. These prices are dependent upon market conditions affecting supply and demand. For example, if the demand for a particular commodity is higher than its supply, the price will typically increase (and vice versa).

CONCLUSION AND SUGGESTIONS

After going through the above analysis it can be summarized that Indian financial market is full of opportunities especially for the individual investors as well as for the entrepreneurs but still Indian financial market is not as developed as the financial market of some western countries. Therefore efforts must be made to increase the trading volume of stock and derivatives market because it is the need of the hour.

To ensure the best utilization of growth opportunities and for the swift economic development of the nation, there must be reasonable amount of coordination among all the key regulators of Indian financial market whether it SEBI, RBI, ICAI or The Chamber Of Commerce.

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INDIAN SOFTWARE INDUSTRY – GOING UP THE VALUE CHAIN – 2010 PERSPECTIVE

Shubhra Garg* **Sudhir Deva****

ABSTRACT

This article is positioned at the aspirants and entrepreneurs of the software industry in India. It looks at the past and present and suggests the opportunities for the future. An attempt has been made to keep it simple for the readers though it is meant to be a suggestion of a strategy initiative which when adopted can lead to success for its practitioners.

Keywords: *Software Industry, Entrepreneurs, Strategy*

INTRODUCTION

Software Development in India has catered to the needs of the country since the very early days of the availability of computer hardware technology in the world. Some of the early occurrences have been reported from early 1960s from some research institutes in India, with installations from IBM, DataGeneral, ICL and Burroughs. A few organizations implemented these computers which were large; occupying rooms sizes and with storage of data in external medium like punch cards. In order to sustain the cost of the purchase as well the cost of upkeep and maintenance, these companies took on the task of data punching, storage, processing and printing from other user organizations. These were the first indications of outsourcing of applications like exam results, employee pay-slips, policy premium payment reminders, vendor payment and subscription receipts.

Historical EDP Department

The knowledge skills with the personnel associated with these computers were in Binary language, Assembly language, Key punching skills and Formatting of text for print jobs. This implied that the personnel required high levels of qualifications to take up these assignments.

Introductions of technology in the 1970s and 1980s reduced the size and cost of the computer hardware and allowed for implementation of larger number of applications with 3GL and 4GL interfaces. One now needed skills in BASIC, COBOL, FORTRAN, and PASCAL along with knowledge of applications that run in the organizations. Wider applications in organizations began to be computerized including Projection Planning and Forecasting. This implied that the personnel interacting with the computers were at the user departments rather than being of the computer department only.

Laying the Foundation

In India, entry of microcomputers in the late 1980s and specifically the entry of the Personal Computer (PC) and compatibles changed the scenario totally. People with elementary typing skills in English language could now work on the computer. Specialists and those with higher qualifications were required to handle the System Analysis level functions for the automation of the complete enterprise. Equally, more number of organizations became buyers of the hardware to integrate their operations for inventory, finance and accounts, Payroll, Purchase, and Vendor Management in wide range of industries hereto not using computers. Simultaneously, tools were now Designing, Analysis, Modeling and Forecasting. Computer hardware and peripherals were also capable of handling Graphics at better resolutions of rendering and viewing quality.

Need for Outsourcing

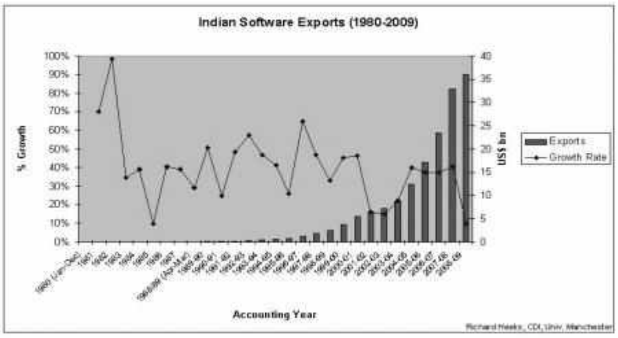
This change in scenario also resulted in clear distinctions between users and of personnel who wrote the software for these applications. As the applications grew in number as well as in their depth and penetration, so did the need for personnel to write them. Software was now available as products off-the-shelf for wider range of buyers. The need for Enterprise-level software had to be fulfilled by larger teams. These teams included analysts, designers, coding specialists, quality control personnel, documentation staff and customization experts. Initially, enterprises could have a skeletal staff of these members. However, over time they realized that the cost of these teams had a high impact on their bottom line. This resulted in outsourcing of these functions and operations to teams outside the enterprise, which had been established only for this purpose. Tasks were now being done faster, at lesser cost and at a comparable or better quality than when undertaken in-house. It is a matter of pride that a large number of such teams were located in India and hence it became a destination for outsourced software development. The size of these teams varied based on qualifications, skills, awareness of business and applications, and experiences of the members. They created Onshore and Offshore working business models where the task was accomplished at the contract site or far away from the client at Centers of Excellence in India.

The Evolution

Talent of the software developers was supplemented by certifications viz. CMM Level 5 and listing at NYSE and

*Faculty of Commerce, MMH (PG) College, Ghaziabad, India
**Faculty of Commerce, MMH (PG) College, Ghaziabad, India

NASDAQ stock exchanges, since US were the largest market for this activity and Fortune 500 companies in the US were outsourcing their software needs to India. Paul Davies, the author of What's This India Business, has written about the software development outsourcing evolution. He defined the complete cycle which began from the identification of the need to the final testing and implementation. The complete gamut of services was on offer after having proven their skills in maintenance of the software, coding and providing the support after sale. Indian software companies began to establish their sales offices abroad after 1991, due to liberalization of the Indian economy and in anticipation of a higher demand for their services.



There is no dearth of talent and expertise in India and the software sector has the cost advantage, since the services are carried out at a fraction of the cost at which the companies in the US are able to achieve the same with in-house teams. Intel set up its center in Bangalore and this team designed the Xeon 7400 series processor – a merger of the Intel patents and the Indian knowledge base. Innovations of this nature have been happening at other similar locations and Team within India.

Embedded systems in consumer electronics, communication products, high-end industrial products and the defence market are all possible due to the rapid growth of semiconductor chips. These chips have become faster, lesser in price and consume lesser power. All this has been possible from Indian design services as they become higher contributors to product innovation rather than being known only as provider of simple labor cost advantages. Some projections from NASSCOM and Frost & Sullivan have put the size of business in India in 2010 at US$ 14 billion to US$40 billion in 2015. As cell-phones and other handheld devices as growing rapidly, India is expected to emerge as a hub for embedded software market. India Semiconductor Association (ISA) estimates that this sector employs more than 100,000 engineers and can grow at a fast pace by spurring India-specific product lines. The cost of training and boosting productivity is a deterrent.

Audio and video capabilities of digital multimedia and communication products is visibly enhanced with Digital Signal Processors (DSP), which have been developed by Indian companies who have taken up one of three roles – optimizer, enabler and co-innovator. It is at the co-innovator level that the highest rung of consulting is achieved. In the initial role, the task was limited to support work and sustenance engineering.

Success Stories

A few examples of successes are – design of HD videoconferencing system by Tata Elxsi for an American Startup; a reference design for the Freescale iMX27 platform by iWave, a generic handheld targeted at OEMs for PDA, media players and test equipment; design of a System-on-Chip (SOC) by KPIT Cummins for a Japanese consumer electronics company; development of Payezee wireless module by Innovoti for being retro-fit to existing Point-of-Sale terminals to give them wireless capabilities; Insilica India team worked with their European counterparts to implement power efficient algorithms for automatic camera functions.

Some of the other industries which would see an increased deployment of embedded technologies are medical sciences, automobiles, education and agriculture with products like portable ultrasound machines, car collision avoidance systems, remote holographic educational tools and satellite sensing based farming techniques.

Concerns for the future

More examples are those of companies which are home-grown rather than being the development centers for the giants from outside. The business model for these Indian companies has been to establish the engineering ownership of the code-base for the product and this assures them repeat business over the next 5 or more years. However, while one looks around at the current software products like office applications, email clients, internet browsers, CAD software, databases and other popular desktop applications, one realizes that most of these products are in their version 5 or more, implying that the code-bases of these products are elder than 10 years, hence at maturity and therefore the Indian company involved with the support and sustenance will have to find other opportunities to establish their integrity. Though there are a million plus users for these

applications who continue to require support and tweaking of features or learning, it is not a set of activity that requires the larger groups and team of personnel as in the past. Arrival of functionally better and more fleet-footed competitors would further enhance the end-of-life for this range of business. The existing software industry may takeover the ownership of the desktop software products and thereby extends the outsourcing as in the case of many manufacturing companies. Software testing can be undertaken at the large base of users through smaller teams at dispersed smaller companies. This quality engineering would still be at a 20-25% of the cost incurred by the giants from overseas. The expertise our IT firms would gain from this product management during these projects can be used to architect and implement our own products. Many organizations across the world have pointed out that what India lacks so far and what restricts India from moving into products is that there is no history of creating world-class, complex software products.

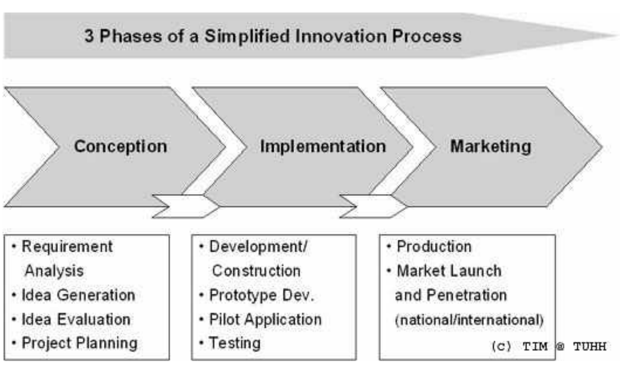
Many sectors like automobiles and pharmaceuticals have successfully implemented outsourcing of manufacturing centers for international companies. These have been as joint ventures and 100% subsidiaries and also by becoming the Centers for R&D. Since the largest quantum of task originates from the US, the companies from there open subsidiaries in India and move substantial portions of their R&D here. This has been favored by many. Another possibility is for the Indian IT players to negotiate R&D responsibility. This could be taken up completely for the product or that of a substantial portion while the core team in the US provides guidance, marketing, technical feedback with the transfer of their book of knowledge. Expenses on either approach is far higher that the services model or of the human-capital model.

Some observers and analysts have seen the increase in share of high margin high end services such as package implementation and system integration, in the revenues of IT companies in India. These services attract better pricing for most IT majors. Consulting remains the area where the share of revenues of Indian companies has been either stagnant or is falling. The expertise, skills and experience of industry verticals is difficult to build, while attempting to penetrate into this high end service level, which remains the domain of global firms.

Key Issues

During discussions with Heads at IT companies, it is regularly made apparent that while there are thousands of software developers, the number of software architects is very small. These are people having a level of maturity to understand the life-cycle of systems. They have a broader vision of the systems and long-term association with the later stages and tools of the specific software. It is a combination of coding skills, domain knowledge, management expertise and project coordination skills. Additionally, the management expertise has to include knowledge of business processes, optimizing workflows, rationalization, and their tools. Organisations looking to be up the value chain will also be required to pick out focus areas and these practice lines should have frameworks which will allow companies to scale up and then subsequently pass the modules downstream to those parts of their organization consistently, where the other functions are being implemented. Academia should equally be involved with the organizations to bring in knowledge.

There have been studies that suggest that India-based IT firms (both with Indian or foreign ownership) are indulging in innovation activities in a remarkable manner. This is confirmed by studies such as those by Bhattacharya et al [2006] and Ernst [2005 and 2006]. This is the typical requirement in the innovation process and finds merit with all those who would want to be part of the Consulting business.



While one could look at the services being offered, it could also be the key solution areas. BPOs and KPOs; CRM, supply chain; financial transaction management; strategy consulting; quality control; distribution; human capital solutions and e-business solutions are some of the services offerings in verticals like BFSI (Banking, Finance Services & Insurance), Automotive, Oil & Gas, Consumer Goods, pharma, retail, telecom, life sciences, utilities, and healthcare.

It has taken companies like TCS more than a decade to plan and implement its consulting strategy. It combined its strength of domain capabilities with industrial practices while building service practices. Pricing was a key area and various models were experimented and dynamically they worked with value-based pricing, ASP based pricing and Risk participation. Internal accounting policies were also amended to handle these pricing models with enablers to make the strategy work to its conclusions. Technology roadmaps, hardware and software selections and facilities management were implemented within the Tata Group companies and in state sector as well as Public sector in India.

Wipro InfoTech is the other Indian IT giant who has been active with its consulting services. Their strategies revolve around their expertise of business transformation services and technology and have positioned themselves on revenue growth using Six Sigma and PCMM practices. Each project is therefore of longer time duration with contracts for 5 to 7 years. A core team leverages the rest of the organization to form a 150 plus member team for the implementation of the contracts. Another group company – Wipro Technologies has attached consulting services to each vertical. Their strategy team can therefore discover the real issues facing the organization – whether technology or process or policy and implement solutions appropriately. Other IT organizations that have entered the consulting business cross-sell to their existing customer base to ensure that their large clients stay with them for a longer term. Downstream revenues for their IT services side also continue to come in for a longer duration. Infosys, iFlex and Cognizant have revolved their consulting business around their expertise financial services domain.

One concern voiced by many is that product development outsourcing in India has led to Intellectual Property (IP) theft and credibility loss. Indian IT companies will therefore have to make more effort to be dependable.

Going up the Value Chain

The cost leadership that Indian companies have enjoyed over the years has begun to threaten further by MNCs who have replicated the outsourcing model when they setup their bases in India. In the process, Indian companies suffer from attrition. The commoditization of the sector is eminent due to entry barriers raised because of size of company and its scalability. Costs towards acquiring new customers and to improve market share have also led to additional pressures on margins. Investor reports of the two previous quarters by the listed IT majors have indicated this and may become a trend in the subsequent quarters, even though the US economy has relatively speaking, improved. Bargaining power of customers is high due to intense competition among vendors.

Most Indian companies have not been able to demonstrate capabilities, scale and resources to execute huge billion dollar deals, which are available to IBM, Accenture and EDS the Tier-I global companies, though lately this gap was narrowing. This has been made possible by gaining mindshare of key decision makers in global corporations. Although in their thousands here in India, only 5 Indian companies are ranked within the top 200 for their mindshare in IT services. Rupee's volatility against the US dollar and other major currencies will be a concern, coupled with high employee costs.

Case in Point

A technology development company in the US wanted to build a unique email client with a powerful search engine. The customer wanted a strong technology edge, complete product realization support, and end-to-end responsibility for product lifecycle from the outsourcing vendor.

Project

The vendor had to work as part of the customer team not only on the overall architecture, but on everything else too, including algorithm development, development of a Java-based front-end and search engine, development of a C++ based GUI, integrated with the back end, besides implementation and testing, including validation tests. The end customer also had to be provided with after-sales email support.

Communication

Both the parties communicated through teleconference, email and messaging on a periodic basis updating each other on the schedule and the status. Besides, the whole team visited the customer for a few weeks to participate in the overall architecture discussions.

Team

The team had 25 members dedicated exclusively to the project, which, since it also demanded a strong research team, had three very competent technical staff, each with more than 15 years of experience. Though the project started with just two members, it soon had a much larger team.

In the ITeS space also a shift is visible in their service offering, where some of the BPO companies are engaged in activity beyond being a voice enabled call center. Market Research aimed at financial service firms, provides analysis of investment opportunities and business plans. A few companies provide background information on Intellectual Property Rights, Legal assessments and evaluation of commercial potential of Assets for Law Firms and other Entrepreneurs. Training of employees in language skills is also imparted by these organizations for their customers. Higher-end functions leading to critical decision making are also performed at offshore locations and include information research, financial portfolio analysis, customer data mining, statutory reporting, inbound insurance sales and hospital administration.

It would be important to mention that the debate about outsourcing is a temporary drag. Moving jobs across national boundaries is a natural part of long term globalization and an important aspect of remaining competitive. English language advantage that India enjoys at the moment can face competition from Philippines, Mexico, Hungary and South Africa. However, labor arbitrage between India and US is significant and would take a while to catch up. Improvements in technology and infrastructure have also reduced telecommunication and communication costs between users in the two countries.

Not When, How?

At a research study conducted at Wharton, it was attempted to measure the quality or quantity of the output from the agency or division conducting the task. Equally difficult would then be to be able to measure the output at the outsourced entity. This study was in itself based on the situation that - "When confronted with operational costs that spiral out of control and processes that seemingly do not seem to deliver to the satisfaction of senior management, CFOs and CTOs often ponder the outsourcing option". The benefits of outsourcing are recognized by all – the gains from specialization, volume of scale from the vendors, and the conversion of fixed costs plus overheads plus variable costs into a pure variable cost. However, the concern is that the outsourcing relationship can only work and continue when there are clear guidelines and specifications to the Service Level Agreements and Quality of Process Executions. Risks as given above weigh more strongly on organizations and advocates of outsourcing at the global customers. This gives rise to the idea of a knowledge continuum which has a data end and a knowledge end. Information workers at the data end perform routine tasks of data transformation which does not require high levels of expertise nor judgment, while at the knowledge end, the information workers extract knowledge to support decision making implying the requirement of interpretation based on expertise, training and experience. It is this thought process amongst the CTO that would allow them to open out and outsource the task to Indian companies.

As expected with the completion of the Doha Round of the WTO, the services sector would open up and there is already a pressure to rationalize internal cost structures, more and more companies in various locations around the world would be confronted with the choice or threat to offshore their IT and R&D efforts.

Conclusions & Recommendations:

The software industry in India is at a critical phase in their lifecycle. It only remains to be seen whether the Indian companies are able to generate enough resources and reputation of seamless execution, to ensure stable and sustained innovation capacity and ensure global competitiveness. Certain perceptions have to be eliminated and reduced over time that Indian companies are process-led rather than value-added chains. They have to understand the markets and their applications better including the culture. It has been well accepted that this industry has created many millionaires and given the opportunity to many Indians to travel the world and be located there. Since the interdependence among nations is not a choice but an imperative, the Indian IT companies will have to move up the value chain else could face survival issues. Not having cognizance of this, they could get bogged down and face elimination from the market space. Some of the aspects raised above will have to be inculcated by its members and aspirants to take the next step forward.

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INCLUSIVE FINANCIAL GROWTH THROUGH FINANCIAL INCLUSION:

A Critical Review of strategy After Ten Years of its implementation

Pradeep Saxena* **Sanjay Rastogi****

ABSTRACT

Financial inclusion is the availability of banking services at an affordable cost to disadvantaged and low-income groups particularly in rural and semi-urban areas. In India the basic concept of financial inclusion is having a saving or current account with any bank. But In reality it is a wider concept that includes loans, Insurance Products and much more. The Reserve Bank of India has taken a variety of steps to include financially excluded people since 1991-92. This process got fuel in the new millennium 2000, through deregulation, increased competition and strengthening the banking sector through recapitalization and adoption of prudential measures. But the steps were proved insufficient as after the completion of ten years there are a total of 31 crore (Rs 310 million) savings bank accounts, out Of the 6,34,321 villages in India, only 9,000 villages have more than one bank branch. This is despite the fact that there are 32,494 rural branches and they account of about 45 per cent of the total branch network. Close to 50 per cent of rural households do not have a bank account and only 21 per cent have access to credit from a formal source.

***Key words:** inclusive growth, financial inclusion, financial exclusion, social exclusion, social infrastructure.*

INTRODUCTION

Growth is inclusive when it creates economic opportunities along with ensuring equal access to poor and vulnerable sections of the society. The inclusive growth approach takes a longer term perspective as the focus is on productive employment rather than on direct income redistribution, as a means of increasing incomes for financially excluded groups. Indian economy is growing very fast with fast developing and globalized financial market. But the benefit of this growth is not shared by the poor and vulnerable sections of the society. The inclusive growth strategy is meant to share the growth with equality, to get rid of poverty by enabling them to access to formal financial services including insurance cover, entrepreneurial loans, payment and settlement facility. Moreover, it is to boost up the business opportunity for all the segment of population.

The Inclusive Growth involves four dimensions;

1. **Providing Opportunity:** by generating supplementary and wide-ranging ways for people to earn livelihood and increase their incomes and wealth.
2. **Creating Capability:** by providing the various means to the people to create their capabilities in order to take advantage of available opportunities.
3. **Reach to opportunity:** by developing various means to bring opportunities to the deprived people.
4. **Providing Security:** by providing means to people feel secure against a loss of opportunity.

Thus inclusive growth focuses on ex-ante analysis of sources, and constraints to sustained, high growth, and not only on one group that is the poor.

Financial Inclusion:

The term "financial inclusion" has gained importance since the early 2000s, and is a result of findings about financial exclusion and its direct correlation with inclusive growth.

Financial Inclusion can be analyzed in two ways. One is exclusion from the basic banking services that is remittance and payments system, access to low cost credit and insurance services. Financial inclusion is now a common objective for many central banks among the developing nations. It denotes delivery of credit and other financial services at an affordable cost to the vast sections of the disadvantaged and low-income groups. It will be wrong to classify all those who are not borrowing from the organized financial system as excluded. The objective of financial inclusion is to extend the scope of activities of the organized financial system to include within its ambit people with low incomes. Through graduated credit, attempts must be to lift the poor from one level to another so that they can come out of poverty. The Indian Government has a long history of working to expand financial inclusion. Nationalization of the major private sector banks in 1969 was a big step. In 1975 GOI established RRBs with the same aim. It encouraged expansion of bank branches especially in rural areas. The RBI guidelines to banks show that 40% of their net bank credit should be lent to the priority sector. This mainly consists of agriculture, small scale industries, retail trade etc. More than 80% of our population depends directly or indirectly on agriculture. So 18% of net bank credit should go to agriculture lending. Recent simplification of KYC norms are another milestone.

The second type of exclusion is exclusion from formal equity and credit markets. This requires the excluded to approach informal and exploitative financial markets (Capital and Money market) to share the rapid growth.

But as of now the government's focus is on first type of financial inclusion that is to establish the basic right of every person to have access to affordable basic banking services.

**Associate Prof. ISDC, University of Allahabad, Allahabad. India*
***Assistant Prof. JK Padampat Singhania Institute of Management & Technology, Gurgaon. India*

The Degree of Financial Exclusion;

The financially excluded sections largely comprise of Marginal farmers, Landless labourers, lessees, Self employed, Unorganized sector enterprises, Urban slum dwellers, Migrants, Ethnic minorities, Socially excluded groups, Senior citizens and Women. The North East, Eastern and Central regions contain most of the financially excluded population.

The main reason for financial exclusion is the lack of a regular or substantial income. In most of the cases people with low income do not qualify for a loan. NSSO data reveal that 45.9 million farmer households in the country (51.4%), out of a total of 89.3 million households do not access credit, either from institutional or non-institutional sources. Most of the excluded consumers are not aware of the bank's products, like Transaction Accounts, Time Deposits, Financial Advice, Appropriate small credit, Mortgage Loans etc. Despite the vast network of bank branches, only 27% of total farm households are indebted to formal sources getting money from a local money lender is easier than getting a loan from the bank. Most of the banks need collateral for their loans. It is very difficult for a low income individual to find collateral for a bank loan. Moreover, banks give more importance to meeting their financial targets. So they focus on larger accounts and not on small credits.

Table : Getting Finance Indicators for India, 2001-08

Indicator	2001	2002	2003	2004	2005	2006	2007	2008	Bench-mark (OECD)
Branches per 1,00,000 people	6.42	6.33	6.25	6.26	6.33	6.37	6.35	6.6	10-69
ATMs per 1,00,000 people	-	-	-	-	1.63	1.93	2.4	3.28	47-167
Deposit accounts per 1000 people	416.77	421	418.7	426.1	432.1	443	459.5	467.4	976-1671
Loan accounts per 1000 people	50.99	53.9	55.84	61.88	71.42	78	83.59	89.03	248-513
Branches per 1000 km2	22.18	22.3	22.41	22.57	22.99	23.5	24.13	25.49	1-159
ATMs per 1000 km2	-	-	-	-	5.93	7.11	9.11	12.68	1-437

(Source: Getting Finance in South Asia 2010, Kiatchai Sophastienphong , Anoma Kulathunga, The World Bank)

Note: The Benchmark Indicator ranges are for selected high-income OECD member countries (Australia, Canada, France, Germany, Italy, Japan, the republic of Korea, New Zealand and the United States)

By comparing the situation of bank branches with OECD bench mark India is far behind to it as the bench mark is 10 – 69 branches on per 1 lac people but we have 6.6 only in year 2008. Similarly in case of deposit accounts per 1000 people we have not touched the minimum level that is 47 percent as compared to 97 percent OECD Bench-mark. The worst situation is in case of loan accounts per 1000 people that is just 9 percent as compare to benchmark minimum 25 percent.

If we consider the above landmark of having minimum one bank branch at per 10,000 people, we have just covered 45 percent of our adult rural population.

There are 120 Crore people in India. Out of which about 70 percent are in rural areas. Thus the figure come to 84 crore. Out of this 84 crore of total population about 70 per cent is adult. Thus the adult rural population figure comes to about 58.8 crore. As per the requirement of minimum one bank branch at every 10,000 adult people, total 58,800 branches should be existed in rural area to cover whole adult rural population. However, from table one at the end of year 2010 only 32,000 branches is currently in existence in rural areas. Which means about 54 percent of adult rural population is covered with banking facility and about 46 percent is still unbanked. The above picture focus on alarming situation of banking facilities in rural India and RBI is far behind to its target.

However, the picture is very rosy in case of semi urban, urban and metropolitan areas. If we calculate the number of required branches taking the land mark of one bank branch at every 10,000 adult people it comes to 25,000. But at the end of year 2010 there were more than 52,000 bank branches existing in aforesaid areas. This means we have more than double branches than required in semi urban, urban and metropolitan areas. Or every adult people have more than one account.

Factors Affecting Access to Financial Services in Rural Area:

There are a variety of reasons for financial exclusion. This can be understood in two ways. Demand side and Supply Side.

The Demand Side:

- **Legal identity :** Lack of legal identity like voter Id , driving license , birth certificates ,employment identity card etc
- **Limited literacy:** Particularly financial literacy and lack of basic education prevent people to have access from financial services. Due to lack of financial literacy and basic education, it is very difficult for those people who lack both to read terms and conditions and account filling forms.
- **Level of income:** Level of income decides to have financial access. Low income people generally have the attitude of thinking that banks are only for rich.
- **Place of living:** commercial banks operate only in commercially profitable areas and they set up branches and main offices only in those areas .People who lived in under developed areas find it very difficult to go to areas in which banks are generally reside.
- **Lack of awareness:** people who lack basic education do not know the importance of the financial products like Insurance, Finance, Bank Accounts, cheque facility, etc.

The Supply Side;

- Distance from Branch: rural population avoid going to bank as they are located at a huge distance from their living places and poor transportation facility adds fuel to it.
- Bulky documentation procedure; still banks follows a bulky documentation procedure which takes at least 8 to 15 working days to open an account and about one month to disburse the loan.
- Branch Timing; most of daily wage workers of

unorganized sector find it difficult to visit bank as the working time of bank and workers are same. Even in 90 percent cases they have to work for 7 days to earn their livelihood.

- Staff Attitude; because of illiteracy or low education of rural population bank staff does not behave properly.

The Other Half of Story:

Suppose all the adult population is covered with banking products. Every people have at least one bank account and they can access to loan also. But half of population does not have sufficient income to deposit with bank as they have seasonal employment. They do not have transportation facility to reach to bank. They are not educated enough to use ATMs or other technology based services of banks. Let us look at some other parameters of current status of social infrastructure as reveled by NSSO.

- One-third of the villages do not have pre-primary schools and 28 per cent do not have primary schools.
- 54 per cent of the villages are more than five km away from the nearest primary health centre and 27 per cent are more than 10 km away from it.
- Only 10 per cent of the villages have a medicine shop and 20 per cent a private clinic or doctor.
- One-fourth of the villages do not have access to electricity;
- Non-conventional forms of energy are available in less than 12 per cent of villages;
- Tap water is used for drinking in about 18 per cent of villages and 55 per cent of them get their drinking water mainly from tube-wells or hand-pumps.

If the situation is like this we can not say that government has achieved the objective of inclusive growth. Actually, the financial inclusion is not a wholesome in itself to provide inclusive growth. It is one of the tools only. It is not a magic stick for the rural masses that can provide opportunity to enjoy the economic growth, until social exclusion is taken care of.

Strategy for New Decade:

- Providing autonomy to banks up to some extent by liberalizing in regulation so that each bank is able to build its own strategy in line with its business model and comparative competitive advantage to view Financial Inclusion as a viable Business Model.
- To provide low cost services and effective implementation of the Financial Inclusion strategies, banks must update all their branches with technology aspects like completion of Core Banking Solution (CBS).
- The areas where bank branches are not possible banks can use mobile vans or can appoint business correspondents which have to be visiting in that particular village regularly or at a regular interval. The selection of use of mobile vans or business correspondence can be fixed on the basis of number of population living in that village.
- Banks must introduce innovative banking products to suite with requirement of rural population. Like they can introduce a single account system which can be used for both saving and credit purpose. Apart from this, banks must offer other products like insurance, mutual funds, etc. to the bank account holders. This will help them to reduce operating cost and increasing bottom line.
- The objective can not be achieved with the efforts of banks only. It is an integrated effort of other institutions. It should involve the active participation of all the economy stakeholders in this process like Sate Governments, NGOs, Corporate Associations, Insurance and Mutual Fund companies etc.
- Last but not least, the governments, central and state, must focus and work towards the development of social infrastructure so as to insure the utility of financial inclusion to the rural population.

Conclusion:

The problem is not associated with proper policy but the lacuna is in its proper execution. Government has announced many policies but on the ground level all are proved insufficient. Moreover, this may the result of lack of dedication. However the objective can not be achieved until the socio economic development variables like income inequality, literacy, physical infrastructure and information technology is taken care of. As it is also found by Mandira Sarma in his research paper 'Financial Inclusion and Development: A Cross Country Analysis' in 2008 that socio economic variables are positively correlated with financial inclusion while banking variables like NPA, CAR were found relatively low correlated. Therefore, to achieve the objective of inclusive growth government should also simultaneously, speed up the process of elimination of social exclusion with opening of new bank branches and network. Or else rural population will have to wait for one more decade to be equipped with the use of banking services, even if they have been provided with a bank account.

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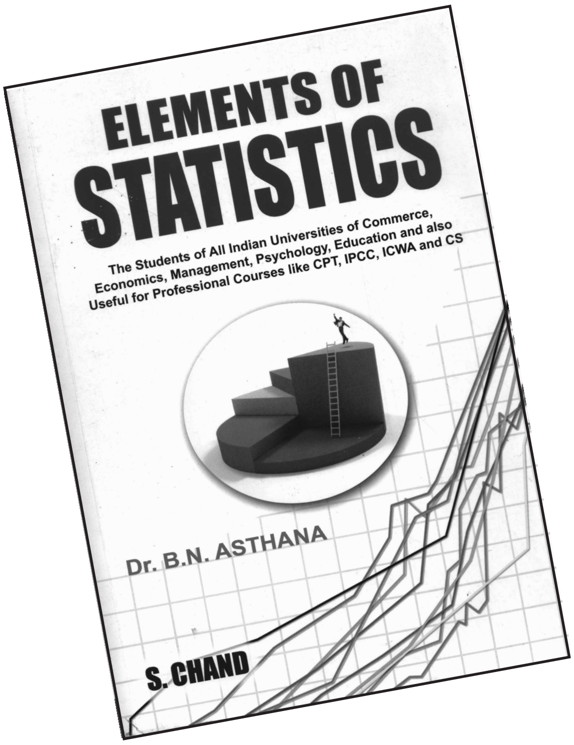

BOOK REVIEW

Elements of Statistics by Dr. B. N. Asthana

Publisher –S Chand Publishing, New Delhi, India
Edition 1st 2011, Price – Rs 270
ISBN 81-219-3853-8
Reviewer: Vinay K. Srivastava

Statistics is the the mathematics of the collection, organization, and interpretation of numerical data, especially the analysis of population characteristics by inference from sampling. It deals with all aspects of this, including the planning of data collection in terms of the design of surveys and experiments.

The book deals, quite comprehensively with the latest tools and techniques used and current trends in management, commerce, economics, education and psychology. The book is result of the author's long term experience of teaching statistics. The treatment of subject is very comprehensive. Various new issues, in this area, have emerged which have been duly covered in the book. They have been discussed, with the help of examples and illustrations, quite clearly in a simple, concise, lucid and logical manner. Emphasis has been laid in providing practical use of various information, keeping in mind the business environment of India

There are 21 chapters in the book. They cover the introduction and meaning of statistics, presentation of data, measure of central tendency, correlation, regression, analysis of time series, index numbers, frequency distribution, theory of probability, analysis of variance, interpolation, quality control and the last chapter provide a detail information about Indian official statistics, explaining the application of theory to practice.

This book has been written for professional courses like CA, ICWAI, Company Secretary, MBA and Engineering students of Indian Universities and Management institutions. The book has been written with the needs of even those in mind that are not comfortable with mathematics. It would be quite useful to those who are appearing in various professional examinations. It would also prove to be useful for the researchers, academicians and practicing managers, who want reliable and valid information to form future management policies. It will provide them with tools of analysis and interpretation of a wide diversity.

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