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FROM THE DESK OF THE EDITOR

Greetings and Best Wishes,

As Editor, I am delighted to welcome you to this renewed and revamped edition of the journal. Our goal is to make this journal your go-to-place for innovative ideas and practices in management and business. Consistent with our aspiration, we have composed diverse and high-quality Editorial Board. Our reviewers are distinguished scholars and practitioners who have an appreciation for rigor and relevance.

The ten articles presented in this issue are thought-provoking and eclectic in the topics that they address and the methodologies that they employ. *Dibyoyoti Bhattacharjee* and *Hemanta Saikia* explore to measure the performance of the bowlers of cricket team by using linear model. *Anurag's* paper talks on massively multiplayer online role playing games (MMORPGs). *Alvaro Lopez Cabrales* and his team studied the impact of HRM on innovativeness in Spanish industry. *Satish Verma* and *Moninder Kaur* empirically examine the commercial banks in India via reforms and performance. The manuscript of *Rohit Bansal* and *Ashu Khanna* explores the relationship between the dependent variables under pricing of an issue and firm's age, issues size and pricing mechanism. *Khosro S. Jahdi's* manuscript analyse CSR and TBL relationship. In light of the fact that carbon based sources of energy are limited, it is critical for us to understand the dynamics of global climate as the papers is correctively discussed by *Himani Gupta* and *Neeraj Singhal*. *Irisi Kasapi* and *Macit Koc* circle on relationship between factors affecting tourist behaviors and tourism demand in Albania. *Sunita Shukla* and her team explores in finding out difference in the level of job satisfaction at different designations, years of work experience and gender among the employees of one of leading digital commerce marketing companies in India. *Faustino Taderera* and *Sydney Chimberengwa* discussed about the economic development and entrepreneurship in Oman and how Zimbabwe can get lesson.

As the editor, I also want to thank the authors, the editorial board and the reviewers for their contributions. For more information on our editorial or the journal statistics or call for papers or any other aspects of the journal, please visit our website at www.gkvharidwar.org

Thank you for your time and consideration. Be our partners and make this journal part of your life of ideas, thoughts and practice. Happy reading.

I remain,

(V.K. Singh)

A FAIRER METRIC FOR THE PERFORMANCE MEASUREMENT OF BOWLERS IN CRICKET

Dibyoyoti Bhattacharjee*
Hemanta Saikia**

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ABSTRACT

Measuring the performance of employees in an organization is a way to understand the quality of man power employed therein. Mostly, quality of man-power being nonfigurative in itself, is difficult to quantify. However, in case of the game of cricket, performance of players is measured in numerical terms making quantification easier. The paper attempts to measure the performance of the bowlers of a cricket team at the end of a tournament using a liner model. Empirical evidence of the advantage of this measure over other existing measures is also discussed.

KEYWORDS: Performance Measurement, Decision Making, Sports.

INTRODUCTION

It is often difficult to quantify the quality of performance of employees in an organization. A person may be better than the other in file management but the other one may be more efficient in convincing the clients. Thus, it is often difficult to quantify the performance of employees in organizations, where there are multiple parameters for measuring performance. In this paper an attempt is been made to take up a similar issue but from the field of cricket. Very precisely, the paper aims at quantifying the performance of bowlers of a cricket team at the end of a tournament based on various parameters.

Cricket is a game where every ball bowled generates enormous amount of numerical information. Thus, cricket remains always a game of statistician's delight. It is probably the only game which employed statisticians from very early times. Though cricket is considered to be a batsmen's game yet without bowlers it is actually not possible to have a game of cricket. The bowler throws the ball at the batsman with an intension to get the batsman out or to restrict the batsman from scoring runs. Three very simple rates are traditionally used to measure the performance of bowlers viz. bowling average, bowlers strike rate and economy rate.

STATEMENT OF THE PROBLEM

Let r be the total number of runs conceded by a bowler, w is the total number of wickets taken by a bowler and b is the total number of balls bowled by a bowler in a particular series of matches. Then the traditional bowling statistics can be defined as:

Bowling average is the amount of runs conceded by the bowler per wicket taken. This is a measure of how frequently the bowler takes wicket with respect to the runs scored against his bowling. The less the bowling average the better is the bowler. Mathematically,

$$\text{Bowling average} = \frac{r}{w}$$

Economy rate is the amount of runs conceded by the bowler per over bowled by him. This is a measure of how expensive the bowler is. The less the economy rate better is the bowler in terms of runs scored against him. Mathematically,

$$\text{Economy rate} = \frac{r}{b/6}$$

Bowling strike average is the number of balls bowled by the bowler per wicket taken. This is a measure of how frequently the bowler takes wicket with respect to the number of balls bowled. The less

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$$\text{Bowling strike rate} = \frac{b}{w}$$

the bowling average the better is the bowler. Mathematically,

However, it may be noted that none of the measures are complete in itself. When we talk of bowling average or bowling strike rate it is about how frequently the bowler takes the wickets but not about the rate in which runs were scored against his bowling.

Economy rate is the rate in which the bowlers conceded the runs but it does not take note of the wicket taking capability of a bowler. Thus, it becomes difficult while we want to rank the bowlers. Which measure shall we consider for ranking the bowlers? Shall it be bowling average or economy rate or bowling strike rate? Each measure shall lead to a different set of ranks. In Twenty20 one may feel that economy rate shall be the most important criteria. But, soon someone else may argue that even in Twenty20 taking wickets is also important, as fall of wickets will lead to

Player	M	I	RC	B	W	ER	R ₁	BA	R ₂	BSR	R ₃
JH Kallis	17	16	324	40	15	4.82	2	21.6	5	26.87	6
YK Pathan	17	12	182	13	3	8.27	9	60.6	10	44.00	10
LR Sukla	11	2	12	12	1	6.00	6	12.0	1	12.00	1
L Balaji	8	8	180	16	11	6.67	8	16.3	4	14.73	3
SP Narine	15	15	355	32	24	6.57	7	14.7	2	13.50	2
SA Hasan	8	8	180	19	12	5.54	5	15.0	3	16.25	4
I Abdulla	9	8	132	14	4	5.50	4	33.0	8	36.00	8
R Bhatia	17	16	319	38	13	4.92	3	24.5	6	29.92	7
B Lee	10	10	228	29	7	4.58	1	32.5	7	42.71	9
M de Lange	3	3	107	60	3	10.70	10	35.6	9	20.00	5

slow scoring of runs. The table below shows the bowling statistics of players who played for Kolkata Knight Riders (KKR) in the fifth season of the Indian Premier League (IPL-V) in 2012.

Note: M-Matches played, I-Innings in which the player has bowled, RC-Runs conceded, B-Balls bowled, W-Wickets taken, ER-Economy Rate, BA-Bowling Average, BSR-Bowling Strike Rate, R1- Ranks based on economy rate, R2- Ranks based on bowling average, R3- Ranks based on bowling strike rate

Data Source: Compiled from <http://www.espnricinfo.com/indian-premier-league-2012/> From table I it is seen that if we consider 'Economy Rate' as a measure of bowling performance then B Lee is the best bowler followed by JH Kallis. But, if 'Bowling Average' is considered then LR Sukla is the best bowler followed by SP Narine and Lee now goes down to number 7. Again if someone takes 'Bowling Strike Rate' as a measure of performance then Sukla

and Narine are again among the best bowlers and Lee's position drops even further. Thus, taking a decision about the best bowler becomes more difficult.

THE COMBINED BOWLING RATE

Lemmer (2002), watched this problem about a decade earlier and defined a new measure of bowling performance, called the Combined Bowling Rate (CBR). The CBR is a harmonic mean of the bowling average, economy rate and a changed bowling strike rate.

The harmonic mean is a good measure for averaging rates. However for using the harmonic mean, the numerators of all such rates that are to be averaged shall be same. Here, the bowling average and economy rate have the same numerator but not the bowling strike rate. Therefore, in order to combine three traditional bowling statistics using harmonic mean, it is necessary to adjust bowling strike rate to have the same the

numerator as bowling average and economy rate. For that purpose, Lemmer (2002) proposed the following adjustment to the bowling strike rate.

$$\text{Bowling strike rate} = \frac{b}{w} = \frac{b}{w} \times \frac{r}{r} = \frac{rb}{rw} = \frac{r}{rw/b}$$

This bowling strike rate can now be used in the calculation of the harmonic mean to combine the three traditional bowling statistics. Thus, the combined bowling rate (CBR) defined by Lemmer (2002) was

$$CBR = \frac{3}{\frac{1}{\text{bowling average}} + \frac{1}{\text{economy rate}} + \frac{1}{\text{bowling strike rate}}} = \frac{3r}{w + b/6 + rw/b}$$

Thus, the value of CBR indicates the performance of the bowlers in a match or a series, combining the three prime measures of bowling viz. bowling average, economy rate and bowling strike rate. Since, these measures are inversely allied; therefore, lower value of CBR is an indication of good performance of the bowler while higher value of CBR indicates poor bowling performance. The CBR for the selected bowlers can be seen in Table 2.

The calculated values of CBR (cf. Table 2), again find LR Sukla as the best bowler of KKR in IPL V followed by SA Hasan of Bangladesh. A serious follower of cricket would recall that the captain hardly asked LR Sukla to bowl in IPL V. He actually bowled only two overs in the entire tournament. Out of the three basic statistics of bowling performance and Lemmer's CBR three of them have crowned LR Sukla, who was never actually considered as a serious bowling option by his captain. Oh but Statistics! Look what it has done....it picked up a vagabond and crowned him, while the actual kings are lying lower down the order. Thus, the need of some other measure of bowling performance is felt, that can involve the number of innings in which the player performed as a bowler along with other basic measures of bowling performance.

THE LINEAR BOWLING PERFORMANCE MEASURE

The above problem calls for defining a new measure for bowling performance that can also include the number of innings in which the services of the player as a bowler may be considered. The different factors that are considered while computing the performance score of bowler are number of innings in which the

player was bestowed with the responsibility of bowling, bowling average, economy rate and strike rate of the bowler. The values of these factors, for each player are normalized and then weights of these factors are calculated based on their relative importance. All the normalized scores for the considered factors are multiplied by their corresponding weights and then added together to get the fairer bowling performance measure which is termed as Linear Bowling Performance Measure (LBPM).

Normalization

The Linear Bowling Performance Measure (LBPM) is a linear combination of traditional performance measures of bowling viz. bowling average, economy rate and strike rate of the bowler along with the number of innings in which the player was bestowed with the responsibility of bowling. One issue in combining the statistics is that they are having different units of measurement. So to combine them use of normalization is essential in this model. Normalization aids to eliminate the unit of measurement and variability effect of all the traditional performance measures. Based on normalization, the traditional performance measures come within a similar range from 0 to 1. Since normalization makes the measures unit free, so they can be combined through addition.

Let X_{ij} be the observed values of the i th player for the j th factor (i.e. number of innings, economy rate, bowling average and bowling strike rate). Out of the different factors considered for performance measurement, 'number of innings' is having a positive dimension i.e. directly related to the skill of the player. While bowling average, bowling strike rate and economy rate are having negative dimension as they are inversely related to the skill of the player. Now the factor representing positive dimension it is normalized as

$$Y_{ij} = \frac{X_{ij} \cdot \min_i(X_{ij})}{\max_i(X_{ij}) \cdot \min_i(X_{ij})} \dots(2)$$

and the factors representing negative dimension is normalized by,

$$Y_{ijk} = \frac{\max_i(X_{ijk}) \cdot X_{ijk}}{\max_i(X_{ijk}) \cdot \min_i(X_{ijk})} \dots(3)$$

Determination of Weights

The next step would be determination of weights. Basically, simple averages provide equal importance to each of the variables. When variables are weighted to a composite measure, the relative importance of the variables is considered. Other than the arbitrary weighting techniques, there are different statistical methods of weighting as well. Iyenger and Sudarshan (1982) assumed that the weights vary inversely as the variation in the respective variables. This conception has been thoroughly applied in this study to determine the weights of different factors that are associated with the various bowling skills discussed earlier.

Let Y_{ij} be the normalized value of the i th players for the j th factors where i ($= 1, 2, \dots, n$) represents players; j ($= 1, 2, 3, 4$) for the four different factors considering for measuring bowling performance viz. number of innings, economy rate, bowling average and bowling strike rate. If w_j represents the weight of the j th factor then it is calculated as

$$w_j = \frac{C}{\sqrt{\text{Var}(Y_{ij})}}, \quad j = 1, 2, 3, 4 \quad \dots (4)$$

where, $\sum_{j=1}^4 w_j = 1$ and C is a normalizing constant that follows

$$C = \left[\sum_{j=1}^4 \frac{1}{\sqrt{\text{Var}(Y_{ij})}} \right]^{-1}$$

The choice of the weights in this manner would ensure that the large variation in any one of the factor would not unduly dominate the contribution of the rest of the factors (Iyenger and Sudarshan, 1982).

Computation of Performance Score

The normalized values for the four basic performance statistics and their corresponding weights are then combined together to get the linear measure of bowling performance. So, the bowling performance of the i th player is calculated by

$$LBPM_i = \sum_{j=1}^4 w_j Y_{ij} \quad j = 1, 2, 3, 4$$

The value of LBPM lies between 0 and 1. The higher the value of LBPM for a bowler better is his performance.

CALCULATION AND RESULTS

Based on the data for performance of the bowlers of KKR available in Table 1, the values of CBR and LBPM are computed and can be seen in Table 2. Since, the LBPM takes into consideration the number of innings played by the bowler, so the effect of players like LR Sukla, who dominated the ranking by playing only a single match, is neutralized to a greater extent. Based on LBPM, Sukla is now ranked at number six. Using this measure of performance the tally is topped by SP Narine, followed by JH Kallis. At the end of IPL V, SP Narine was considered to be the greatest find of the tournament which is also validated by LBPM. The comparison of ranks using CBR and LBPM can be seen in Table 2.

Table 2: The combined bowling rate of the bowlers of KKR in IPL V

Player	M	I	ER	BA	BSR	CBR	R _{CBR}	LBPM	R _{LBPM}
JH Kallis	17	16	4.82	21.60	26.87	10.32	4	0.8329	2
YK	17	12	8.27	60.67	44.00	18.74	10	0.2742	10
LR Sukla	11	2	6.00	12.00	12.00	9.00	1	0.7040	6
L Balaji	8	8	6.67	16.36	14.73	10.75	5	0.7307	5
SP Narine	15	15	6.57	14.79	13.50	10.21	3	0.8690	1
SA Hasan	8	8	5.54	15.00	16.25	9.72	2	0.7781	4
I Abdulla	9	8	5.50	33.00	36.00	12.51	8	0.5423	8
R Bhatia	17	16	4.92	24.54	29.92	10.81	6	0.7909	3
B Lee	10	10	4.58	32.57	42.71	11.00	7	0.5728	7
M de	3	3	10.70	35.67	20.00	17.49	9	0.3231	9

CONCLUSION

Measuring performance of employees in an organization is more complicated as in most cases no information is available in numerical terms. In such a case, some scales are to be developed to quantify the performance of employees. In addition to that some other descriptive information also needs to be collected. Even when numerical figures related to performance measure are available one has to be very careful in combining them to a single index, as seen in this case. The performance measure described in this work can be extended to measure the performance of batsmen,

all-rounders and even wicket keepers. Such performance measurement of cricketers can be useful in deciding an optimal playing XI from a collection of players. However, optimal player selection for a cricket team cannot be fair unless the best available performance measures are used (Lemmer, 2011).

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VIRTUAL WORLD FUN AT ONLINE LABS: AN EXPLORATION OF BUSINESS PROCESS TO DEVELOP COMPETENT HUMAN CAPITAL IN 21st CENTURY

Anurag Singh *

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- Current Trend of Learning Through Online Lab
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ABSTRACT

Have you ever watched a friend deeply engaged in a video game and performing a highly complex but completely artificial task with incredible competence? Could that focus and attention be bottled and used for something serious? Yes, it can because tomorrow's business environment could well be alien territory for today's business leaders. Important decision of the business across the globe will be made by the mixed ethnic organizational members. In that critical situation business leaders will have to enable their employees in advance to face the challenges of 21st century. Therefore it would be interesting to suggest the new way to business leaders to train their employees. It will help in planning and taking action to win against the competitors, in an unpredicted future environment through online labs. This paper is an attempt to explore the possibilities of developing employees in problem solving through engagement at online labs and identifying what can be developed in a corporate trainee through the applications of massively multiplayer online role playing games (MMORPGs) in tomorrow's business environment. The study is able to provide insights and strategy for applications of MMORPGs to train the corporate employee with regard to face the challenges of unpredicted future through virtual environment settings in 21st century.

KEYWORDS: Train, Employee, Strategy, Future Challenges, Online labs, MMORPGs.

INTRODUCTION

The present businesses environment is very competitive, continuously increasing turbulences and volatility, and corporate staff has to work in this environment (Eisenhardt & Brown, 1999, p. 77). The turbulence and rapid technological development put pressure on organizations to effectively meet the fast occurring fundamental changes (Besen, Saloner, 1994, p. 176).

Organization's strategy often is not fit to face fundamental challenges and results in employee disengagement and diversion which affects the total performance and productivity of the organization. In this situation new technique of training is required so that the employees can be enabled to solve complex and usually ill-defined problems even with limited information available, through fun of total engagement (Reeves, Read, 2009, p. 24).

However, the problems and challenges of 21st century cannot be solved by replacing theoretical studies with direct studies of informal domain knowledge. Successful performance of human capital in business management requires the combination of rich informal knowledge and formal knowledge both, so that employees can quickly analyze the complex and ill-defined situations and solve as a part of a team (Aram & Noble, 1999, p. 329; Selen, 2001, p. 112). Corporate face a critical problem of varied understanding due to language, knowledge base, culture and global locations. This is a great hindrance in training and developing the human capital as per the requirement of 21st century. From the excellence at work place perspective it is very challenging to introduce learning environments in the form of MMORPG (massively multiplayer online role-playing games) which not only develop professionals with adequate knowledge and skills to deal with complex and ill-structured problems of business, but also facilitate the development of well-structured formal and partly abstract knowledge structures which are not limited to any particular practical context and location (Michael, 2010).

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REVIEW OF LITERATURE

In year 1993, Dibbel pondered the virtual rape in Lambda-MOO. The beginning in the new era brought lots of reforms in US politics. By the time academic interest was developed in MUG's to give something interesting in the form of reforms in different field. Turkle (1995, p. 47) articulated how these environments reveals the decentralized nature of participants and a kind of learning one can have. Kolko, (2000, p. 227) have explored that online communities are very away from ethnic and language partiality. The only religion they follow is religion of gamers. The behavioral scientists started researching the area of online environments around 2003. The mother of MMORPGs i.e., video games were investigated in understanding the psychology of a user in the form of real-life aggression and addiction (Anderson and Bushman 1997, p. 34; 2000, p. 778; 2001, p. 355; Ballard and Lineberger, 1999, p. 549; Funk, 1996, p. 28; 1999, p. 209; 2002, p. 137.) and its effects on life.

There has been very little research available that has explored the social interactions, relationship formation and derived experiences of the users of MMORPGs. Researchers found that learning with well-designed MMORPGs adheres to constructivist principles (Dede, Nelson, Ketelhut, Clarke, & Bowman, 2004, p. 41; Dickey, 2005, p. 445; Schrier, 2006). Corbit (2005, p. 27) underscored the merits of a constructivist approach in a multi-user virtual world for analyzing game-like environments. Designing and developing MMORPGs/video games, rather than playing them, applies a constructionist approach to learning with games (Robertson & Good, 2005, p. 66). Halverson, Shaffer, Squire, and Steinkuehler (2006, p. 1050) asserted that situated cognition provides a meaningful framework for the learning, as games have an ability to situate learning in an authentic context and engage players in a community of practice. Dede, Nelson, Ketelhut, Clarke, and Bowman (2004, p. 41) evaluated game design and applied their findings to future need of the time.

Academic attention in MMORPGs has largely been driven by economic, legal and HRD researchers. Mary, (2007, p. 133) has reviewed the GNP of the world. Castronova, (2002), reviewed capability of male and female Avatars in promoting the sales of MMORPGs. Dave, (2003) has examined the feeling of owning virtual property and the effects of enforceable rules on avatars. Hussain and Zaheer, (2008, p. 51) found that online engagement promotes important component of

development, i.e., nonracial socialization than offline. Marco 2005 p. 36; N Yee 2006, p. 318; Reeves & Read, 2009, p. 24 focused on statistical findings and presented the psychological aspects of MMORPGs and effects on society and corporate development through cases.

OBJECTIVES OF THE STUDY

MMORPGs, in year 2008 had a US\$1.5 billion market throughout the globe, are being described by some analysts as the next wave of technology-mediated learning. As organizations intensify their efforts to engage with members of today's workforce, multiplayer online games offer a powerful, effective approach to learning and skills development. The objective of this paper is to explore the possibilities of developing employees in problem solving through engagement at online labs and identifying what can be developed in a corporate trainee through the applications of massively multiplayer online role playing games in tomorrow's business environment.

METHODOLOGY

The secondary literature used, is extensively drawn from the in-house and proprietary sources available at their websites. The other sources include, research papers published in journals, books and news agencies portals, etc. The information has been cross-checked and validated to provide the latest and unambiguous information. The data sourced from above has further been edited and categorized to make it suitable as per the objective of the study. The corporations designing MMORPGs and applying for development has been chosen by using convenient sampling. It is exploratory research in essence as this has been conducted to explore the possibilities of using MMORPGs in developing unanimity of actions and understanding in the best way among the corporate staff of varied culture. This study is able to provide insights for applications of MMORPGs to train the corporate staff facing above said great challenge of 21st century.

CURRENT TREND OF LEARNING THROUGH ONLINE LAB

The e-Learning field is an industry on growth, proceeding towards acceptance as a matured education technology. The initial excitement about the possibility of accessing content anytime and anywhere

with vast content and basic facilities was held up by simplistic e-learning systems and has become the part of internet museum (Weaver 2002, p. 47; Zemsky & Massy 2004). The modern e-learning systems are inclusive, bilateral and try to reduce the problems of by motivating and excelling enthusiasm with the effective use of web2.0. Modern virtual learning environments or Massively Multiplayer Online Role-playing Games, often labeled as Learning Management Systems (LMS), provide facilities for the interaction between instructors and learners, detailed tracking of the learners' progress, development and a simple path for the delivery of content through the web. Now the use of e-learning through MMORPGs is getting generalized in diverse fields, not only as an alternative to face-to-face learning, but also as learning with support (e.g. a few universities are using an LMS to complement and support their lectures). This approach is known as b-Learning (Osguthorpe and Graham 2003, p. 236; Garrison and Kanuka 2004, p. 99). The b-learning is not only limited to school and college education. Contents in MMORPGs are of high quality, built with solid educational principles and are able to serve the purpose of many competing platforms. A few of corporate understood the value and started searching the possibility of its implementation in training and developing their employees (Reeves, Read, 2009 24; Derryberry, 2007; O'Driscoll, 2007; Nick, 2006, p 202)

Conceptualization of J Cameron's film AVATAAR on MMORPGs

Continuously playing the game for longer period, player develops an affinity with the community members and can realize the state of mind of co-players.

"The same thing I came across in my community of World of Warcraft. One of the community members was a war vet and had lost his legs. Playing MMORPGs gave him the renewed ability to run and swim and even fly. Another community member was bedridden and she was waiting for a new kidney. She found something in online games that gave her a reason to find reasons to interact, think and feel".

Player in a game creates his own 'Avatar' very carefully, as he follows the character. Player tries to dress up and give his own look and some time voice to the character representing in game. Player is the mind behind the character, after all the real soul. Character is not the character for player but the extension of his own character, i.e., 'Avatar'. The player controls a

character represented by an Avatar, which he directs to fight monsters for experience, interact with other characters, and achieves goal, etc.

December month release Avatar has raked in more than \$2.5 billion in ticket sales and made millions of moviegoers. The word Avatar means incarnation of a god on earth; especially the incarnation of Vishnu has its origin in Hindu religion. Computer technology means controlling a body in virtual environment which is not one's own. The film Avatar is also based on both the above said concept. There are some moments in Avatar, which compels to think, "Man this seems a lot like famous MMORPGs World of Warcraft." A man controls his Avatar bodies to do things that he could never do in real life, and gets so involved with the world he experiences through the "virtual" body that he loves being there more than he loves being in his own world. Actor Jake Sully is like a passionate MMORPG player; the only difference being that the things he does through his virtual body affects the real world. The film's special effects portray a world that's years ahead of today's technology, can only be visualized and practiced in MMORPGs. If only MMORPG addicts had something similar to the spiritual tree in Avatar, one would transform himself to a MMORPGs character forever.

James Cameron, have tapped an audience that he sincerely might have not ever thought of, the people, fervent of playing MMORPGs. He has taken front-and-center of ORPG, that's why it is gaining popularity (Gorlick, 2010). During the last three years, thousands of employees are being trained at companies like IBM, Cisco, SAP, McKinsey & Company, Philips Electronics, and Johnson & Johnson Pharmaceutical Research & Development and Boeing for different purposes like train, recruitment, improve communication through MMORPG or Avatars (McConnon, 2007, Gorlick, 2010).

The Challenges and Prospects of Development: Insights from MMORPGs

In today's increasingly global business environment, companies are being forced to conduct more work virtually due to extreme location of employees at different corner of the world. Besides being more distributed, the business world has become faster and competitive due to development of information technology. For today's corporate leaders, engaging the hearts and minds of individuals who are located around the globe has proven difficult, especially in emerging economies where plentiful job

opportunities and rising wage rates make it difficult to hold onto the best and the brightest.

Where the organizations are struggling to find grip in this rapidly changing global environment, they can turn for building and developing professional skills in their spread employees. The MMORPG can make the work interesting by which work engagement habit can be developed to increase the efficiency, productivity and satisfaction (Steinkuehler, 2006, p. 43). Participation in a meeting and getting virtual experience of risky actions is also possible across continents and time zones. This leadership tool kit can offer a glimpse into the future of work. Reeves and Malone (2007) at IBM have highlighted prospects of development through below mentioned areas of online gaming and virtual setting.

- Ability to engage large numbers of participants in highly complex virtual settings.
- Facilitate players to self-organize, motivate and develop skills of future.
- Develops risk taking, iterative improvement and the ability to accept failure.
- Achievement and incentives motivates player to perform better.
- Present an opportunity for participation and leadership.
- Provide sophisticated and varied communication channels.

In MMORPGs, leaders develop and operate in environments that are highly distributed, global, hyper-competitive and virtual not unlike today's business world. In these sophisticated gaming environments, leaders recruit, organize, motivate, develop and direct large groups of players toward a common goal.

Applications of MMORPGs in Corporate

In today's high tech world, there are certain areas like military, airlines, submarines, rocket sciences, space sciences, medical etc purposively for training in some sense are applying MMORPGs. These are those sectors where, a mistake on the job can cost lives, and no one wants that. So, by utilizing the MMORPG real-time strategy games, the learners are allowed to learn, try and test out the skills that they have learned so far in their training, without the fear of real-life consequences. If the areas like military, airlines, submarines, rocket sciences, space sciences and medical can try in their respective fields then why can't corporate. Gaming is not just a hobby or time-pass. It has applications to train people in high risk jobs and keep them safe by allowing them to learn business procedures in a real-world environment instead of on the job where mistakes can lead to loss of life and money. Researcher after exploring different famous games ever designed, is giving the insight to the corporate, about the skills can be developed (what), through the process (how) of the game (MMORPGs) as presented below.

	What	How	MMORPGs
1.	Evaluating to find compliance with standards	Judgment for compliance of process with values	Diablo-2
2.	Monitoring process, material, surrounding	Review status from environment to find problems	Lord of Destructions
3.	Inspecting equipment, structures and material	Inspecting equipment to find causes of errors or defects	Age of Empires-3
4.	Drafting and specifying technical devices	Documenting to inform the process and usage to others	Star War Galaxies
5.	Effective Communication at work	Informing the seniors, peers by telephone and e-mail	Guild Wars
6.	Calculation for product /event's success	Estimating quantity, time, cost, to perform activity	Guild Wars
7.	Getting information	Observing, receiving information from all source	Company of Heroes
8.	Developing objectives and strategies	Establishing objectives and actions to achieve them	Warcrafts-3
9.	Directing and motivating	Stating weakness of others to give energy to team	Counter Strike

10.	Consulting and advising	Advising players for weapon use and team work	Counter Strike
11.	Training and teaching	Conducting practice sessions in an empty server	Counter Strike
12.	Scheduling work and activities	Scheduling events activities and work of others	Counter-Strike
13.	Organizing, planning and prioritizing work	Develop goals, plan, organize	Guild Wars
14.	Resolving conflict and negotiation	Convincing to join as a team by negotiating grievance	EVE Online
15.	External communication (Customers and Govt)	Conversing outsiders to find players to fit in a role	EVE Online
16.	Staffing organizational unit	Recruiting players by background check and necessity	EVE Online
17.	Monitoring and controlling resources	Controlling usage for the future needs in game	EVE Online
18.	Interpersonal relationship	By discussing personal issues with co-players	World of War Crafts
19.	Updating and using relevant knowledge	Keeping up-to-date technically and applying in job	World of War Crafts
20.	Selling and influencing others	Convincing for less use items can upgrade team players	World of War Crafts
21.	Building teams	Encouraging mutual trust, and respect among team	World of War Crafts
22.	Judging qualities of things and people	By observation	World of War Crafts
23.	Processing information	Compiling, coding, auditing, calculating information	World of War Crafts
24.	Making decisions and solving problems	Analyzing and evaluating to solve problems	World of War Crafts
25.	Thinking creatively	Developing ideas, building relationship, products, etc	World of War Crafts
26.	Attracting customers and clients	Publicizing the defeater's name on public website	World of War Crafts
27.	Filing information	Storing and maintaining information in electronic form	World of War Crafts

Source: *Compiled by researcher after observing different websites*

Corporate deserve to have the implementation of MMORPGs for training and development purpose because corporate staff's job is also risky in terms of money, time, morale, life and sentiment loss. It is very difficult to think that MMORPGs will be able to solve the learning needs of an employee of a fast food restaurant. McDonald's believes otherwise. Today, much of the training of McDonald's in-store personnel is conducted via MMORPGs, including customer service, store operations, and employee supervision (Derryberry, 2009). The possibilities are endless and offer a great way for game companies to help and promote the use of MMORPG games which can offer a real world in the light of the skills required by corporate in future. There is a need for corporate to identify the skills to be developed in trainees by selecting the game from the existing list of MMORPGs or to approach the game designing companies to design the games as per their requirements.

Strategies for MMORPGs in Corporate Learning Environment

MMORPGs are fully functional and give the sense of virtual world. To utilize them as training and development environments requires the instructional designer to create an online portal, and control panel controlled by the instructor. MMORPGs must contain a back-story or explanation of trainee and the role he or she will play within the rules. In order to maximize the benefits, it is important to maintain the interest among the players by proper explanation of the role and by creating the consistency between the back story and the role embedded in the MMORPGs.

In addition to back-story and the roles, the instructional designer must create mission in order to motivate and develop employees that are consistent with the MMORPGs mentioned below.

1. *There is a rumor of a very rich player who is trying*

to become even richer by creating a monopoly on certain unnamed raw materials. Select ten materials and track their prices on the market for the next two weeks. Select ten raw materials that you think are being manipulated by forces beyond normal supply and demand.

2. *Your company is suffering from low productivity for last six month due to unknown reasons. Have the talk with the workers, union, staff and management to find out the reasons behind the scene and submit the report to the management with in 3 days along with recommendations.*
3. *You are a member of a marketing team and representing the portfolio of marketing manager. Through some reliable sources you come to know that one of your competitors is going to introduce new product with advance technology. Use marketing information system by tracking different sources you ever came across in your business and submit the report to your office with in a week.*
4. *Analyze the economic position of at least ten other companies. Identify maximum number of areas for cooperation with these companies in order to improve the economic position of both your own company and another company. Create a plan to do this and present it to the other company(s).*
5. *A Pharmaceutical company is interested to launch a new product, such as a cardiovascular drug. Form a guild to decide the best time to launch and figure out sales force size would be required to market the drug in specific region. Decide the marketing strategy for the survival of drug at different stages of product life cycle of 15 years.*

The instructor is free to organize the learner as he wants, by instructing the members to be a part of an existing group, new group of all members, or to join a group he likes. There are advantages of these approaches which is not available in on the job/off the job training. It is, possible in on the job/off the job training to organize learners into small groups, new group or join the group of his liking. However it is not possible in traditional way to duplicate the entire world of different ethnicity, culture and understanding populated by real people and all the countless possibilities a MMORPGs can offer.

MMORPGs as a learning environment offer different type of game experience at different levels. At the same time it takes many hundreds of hours to

reach the upper level of the game. Thus, if it is reasonably important for learners to have upper level experience, then they should be allowed to play with the characters otherwise not. MMORPGs have advantage over traditional learning environment as a learner can play different possible roles instead of being limited.

Lessons from MMORPGs: Implications for Corporate

On the basis of different insights from the studies conducted by (Reeves, Malone, 2007; Derryberry, 2007; DeMarco, Lesser and O'Driscoll, 2007, ; Nick, 2006, p. 317; Aandy, 2009) and the understanding I have generated through extensive survey about the characteristics of MMORPGs and its benefits the ten recommendations can be highlighted for leaders of corporate, looking to increase their effectiveness in a dispersed world:

Concentrating organizational scene and planning organization's direction

To work according to the vision of future with employees, employees need to understand their roles within the team and the organization. This is simple if working is taking place in insular setting, but extremely difficult while working in cosmopolitan setting. It takes some planning and effort to make everyone feel valued and part of the team. Web 2.0 enabled communication channels can help to communicate across the continents and can engage newer generations of employees as per the vision of the organization.

Develop strategic and cognitive abilities

The game at work will involve strategies, role playing, and team collaboration. Participation in 3 D environment increase spatial reasoning. By the help of games, learner's mental rotation to achieve task increases. It also provides the advantage of interpretation of information and then developing cognitive ability by correlating ability with experience.

Increase contingency approach towards unpredicted future

Interactivity creates contingency. Highly interactive experience allows people to determine what will happen at each step, regardless of what might have been scripted and planned when the interaction started. Contingency develops the ability of predicting and working capacity towards judging, recording, evaluating, processing and drafting for communication.

Greater sense of contingency can do wonder at work.

Experiencing higher level of productivity

In global business environment, decisions of giving right work to the right person turns in the productive results. By controlling MMORPGs enables instructor to understand interests, hobbies and culture etc of an employee. Giving the work of interest to an employee can improve the chemistry of project team and can ensure productivity.

Help the leader to understand formal and informal skills both.

The organization after training program wants to experience higher productivity, which is fully dependent on the knowledge of the trainee and skills developed to handle the work during session. Getting insights of the employee about formal skills and informal skills both, an employer can plan the division of work more efficiently to have better results and edge over competitors.

Share the thoughts and discuss jointly for team work and diverse experience.

Group effort among dispersed employees is the way of sharing of knowledge and ideas, enabling group meetings, brainstorming etc. It helps in getting expertise through joint knowledge management of varied culture, increases team work, flow of ideas and develops ability to judge employee.

Provide more frequent guidance and link performance to recognition.

MMORPGs are frequent in rapid feedback and make a close linkage between performance, incentives and recognition. In a proper training, where trainees may not be properly engaged with their work due to ineffective performance appraisal and recognition, it is very interesting to point that trainees at online labs receives regular input on their performance, including areas of strength and needed improvement due to controlled mechanism of feedback.

Offer effective communication among trainees through web 2.0 for better decision making.

Collaboration in a global, virtual environment requires the ability of individuals to connect with one another by the use of web 2.0 (instant messaging, white boards, videoconferencing for online and e-mail, discussion forums for offline) to have real-time

interaction. Apart from necessity of communication tools to train learners, leaders must know how to mediate into conflict and attract individuals into the discussion. This promotes faster decision making through an enhanced ability to communicate with experts in comparison to classroom training.

Capture real-time qualities of a learner, activities and development to have higher ROI.

Initiative to take risks, speedy decision making, improved forecasting capabilities and result evaluation in real-time can enhance the performance of a team and can give higher return on investment. Above said qualities of a learner could be better understood by the control panel of MMORPGs than straight way observation and evaluation of individual performance.

Formalization of a strategy for giving real life experience

Game psychology is a huge untapped resource for improving conflict management, negotiation, interpersonal relationship, engagement, collaboration, and leadership & innovation skills in employees. In a real setup it is really difficult to search the conflict or negotiation situation. If one is able to get and is interested to use it for the exposure of trainees, then they will not be permitted to take their own decision. But virtual world setup through the MMORPGs provides the opportunity to utilize in an efficient way.

Opportunities are endless, but it is difficult to pen down every thing here. Therefore it can be recommended that corporate leaders should look into the possibilities of development as per the choice detailed earlier from MMORPGs.

CONCLUSION

To be successful in a more global and faster business environment, organizations need to have perfect behavior of future leaders, and to master the techniques and strategy they will need in future. By leveraging the lessons and recommendations stated above about online gaming environments, corporation can have insights in which the present and next generation leaders will need to function in the future. Online game provides the situation and future of present and future organization. It also helps the organization to solve the complicated business problems they would have not been able to solve by the serious efforts of the company. The purposively designed MMORPGs are very useful in connecting the employees of different

ethnicity on which control of the leader is less due to distributed workplace. To make the tool as per their requirement companies will have to take lots of decision like purpose, design of development program, strategy of implementation and prioritization of future IT budgets. The journey toward globalization will not be easy in future. But I believe, by applying these recommendations to use MMORPGs as the T & D tool, the game of global business will be more amusing, leaders will get an advantage over their competitors, and will be able to improve ROI in unpredicted settings of work.

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THE IMPACT OF HUMAN RESOURCE PRACTICES ON INNOVATIVENESS: WHAT SUCCESSFUL FIRMS DID LAST WEALTHY YEARS

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ABSTRACT

The purpose of this paper is to study the development and sustainability of organizational capabilities in the Spanish industry. Specifically, we will focus on innovativeness, analyzing the extent to which this capability is favoured by some HRM activities as investments on training and compensation and whether it is also affected by the use of full time vs. temporary workers. We propose the assessment of these relationships by means of the Spanish Survey on Business Strategies. We focus data on years 2001-2005, years of economic growth in Spain. Our findings show how the most innovative firms are the most competitive ones in terms of added value and sales. Also, a significant and positive relationship between the use of temporary workers and innovativeness is demonstrated, while surprisingly, the role of full time employees is unclear. Finally, training investments and performance based compensation policies improve the level of innovativeness, although their impact is lower than expected. The paper is closed with a discussion about some lessons we may learn from these wealthy years and the role of HRM investments on firms.

KEYWORDS: HRM, Organizational Capabilities, Innovation.

INTRODUCTION

Organizations in the new economy are facing turbulent environments and strong competition. The resource based view of the firm (RBV) explains the

importance of developing valuable and scarce resources and capabilities (Prahalad & Hamel, 1990), which are said to be the source of sustainable competitive advantage (Barney, 1991; Barney & Wright, 1998; Wright et al., 1994). Anyway, the following question is still pending: What is the role of human resource management (HRM) in creating and developing capabilities and competitive advantage?

Currently, HR managers are confronted with serious difficulties for demonstrating the relationship between their role on the firm and competitive advantage and they need to develop measures that show the importance of HRM in the organization (Ulrich, 1997: 303). Some authors suggest that their future is to create a system of HRM Practices which were difficult to duplicate for competitors and avoid the obsolescence of HR skills and knowledge (Boxall, 1996; Guest, 1997; Lepak & Snell, 1999).

Many research works have analysed the role of HRM Practices on the firm performance, using ROI, profits, turnover and so on as dependent variables. They have assessed different models of HRM Practices, as "Commitment", "Internal Development" or "Make" systems, vs. "Market Based" or "Buy" systems (Arthur, 1994; Dyer & Reeves, 1995; Guest, 1997; Ichniowski et al., 1997; McDuffie, 1995). However, these papers measured the contribution of HRM practices through financial and short term metrics. They did not assess the role of HRM Practices in intangible and firm specific features, as organizational capabilities, in the way recommended by Wright et al. (1994). Innovativeness is one of these organizational capabilities (Damampour, 1991). Another limitation comes from the cross-sectional nature of the previous research, especially because of the dynamic character of innovativeness, which requires a longitudinal study design.

The purpose of this paper is to analyse whether the level of innovativeness is depending on the HRM Practices applied and we do study it by means of a longitudinal design, so causality may be

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derived from our analyses. We assess to what extent job security and investments on employee training and compensation are related to innovativeness and further performance. In doing so, we check a sample of Spanish firms depicting data from 2001-2005, years of an important rise in Global and Spanish Economy.

This paper is expected to contribute to the existent Literature in two ways. Firstly, by including dependent variables that can be considered as proxies of organizational capabilities and studying the contribution of HRM practices to them. Secondly, this paper uses a panel data (2001-2005) for assessing these relationships. This is worthy because is coherent with the idea of internal development of capabilities, instead of cross sectional data, and because we may infer causality with our study design.

The rest of the paper is as follows. In the next section, we will specify the concepts for organizational capability Innovativeness. Then, we will go on to delve deeper into the diverse HRM Practices and this enables us to verify a set of hypotheses and relationships with innovation. The third part is concerning the population and sample of firms and measurement issues. Statistic techniques applied for testing the hypotheses and the empirical results are also presented in the fourth section of this paper. Finally, we close the paper with a discussion about the main implications, limitations and future research lines from this study.

HRM PRACTICES AND INNOVATIVENESS: HYPOTHESES

The research interest for assessing the role of HRM on competitiveness is not new: many studies have analysed the contribution of Human Resources (HR) to the creation of sustainable competitive advantage (Barney & Wright, 1998; Pfeffer, 1994) but they lack either longitudinal empirical analyses or they do not use specific Organizational Capabilities as dependent variables (Lopez Cabrales et al; 2006; 2009). Therefore, as we said in the introductory section, the purpose of this paper is to test the relationships among HRM Practices and one Organizational Capability: Innovativeness.

Capabilities can enhance competitive advantage by preventing imitation (Reed & DeFillippi, 1990), and some authors suggest that they play a more important role in creating advantage than tangible

resources do. Organizational capabilities may be defined as the ability of a company to create and develop differentiating features and advantageous internal processes and structures (Lado & Wilson, 1994). Capabilities must also adapt to both internal and external change (Leonard-Barton, 1992; Ulrich & Wiersema, 1989). Capabilities that are uniformly distributed within competing companies or fail to generate value for the customer are devoid of strategic interest (Prahalad & Hamel, 1990). Therefore, valuable and unique Organizational Capabilities are a proxy variable of competitive advantage, as Lado and Wilson (1994) have suggested.

The search for a classification of organizational capabilities, which will enable us to improve our understanding of the scope and complexity of the concept itself, turns into a prior requirement to be met. Having considered the research of several authors on the subject (Lado & Wilson, 1994; Lopez Cabrales et al., 2006; Nadler & Tushman, 1999; Turner & Crawford, 1994; Ulrich & Lake, 1990), three groups of capabilities can be found, according to their orientation: managerial, technical and output-based capabilities (Turner & Crawford, 1994). It is not easy to define a hierarchy of capabilities, but some capabilities increase the level of organizational agility. It is defined as the ability of a firm to be infinitely adaptable without having to change (Dyer & Shafer, 1999: 148). Authors consider that "Innovativeness" is one of the most relevant capability for organizational agility because it is a dynamic capability enabling firms to fit changes and even to provoke them (Teece et al., 1997). Agile organizations increase their efficiency by the way of adaptability, and they look for equilibrium through a trade-off between innovation and flexibility (Dyer & Shafer, 1999; Shafer et al., 2001). Hammer and Champy (1993) and Teece et al. (1997) emphasize the necessity of "creative destruction" for gaining competitive advantage. Therefore, innovativeness is key to carrying out new combinations of resources, methods, systems, and processes to generate new products and services that fill actual and potential needs of customers. Firms with this capability can earn and sustain greater returns than those without it.

Any firm must be innovative if it wants to obtain a dynamic contextual fit. As a matter of fact, flexibility allows firms to create new ideas and processes and to reduce fixed costs. In other words, it is key to carry

out new combinations of resources, methods, systems and processes to generate new products and services that effectively fulfil actual and potential needs of customers (Dampampour, 1991). "Innovativeness" is a technical capability which refers to the technological aspects of the creation, production and development of products and services (Turner & Crawford, 1994). Furthermore, it is fully consistent with the notion of Core Competence put forward by Prahalad and Hamel (1990): They define it as the collective learning process of an organization regarding the different productive abilities or skills and technological sources (page 82). Organizational agility is improved when a firm is innovative, putting it away from the "know-how" of the rest of its competition (Dyer & Shafer, 1999).

Moreover, innovation is the result of a individual creative behaviour so then the kind of KSA of the employees is related to that organizational capability. Amabile et al., (1996) measured the Innovation Capability asking about the existence and support of creative ideas in the firm. The contribution of HRM to capabilities is associated with the kind of their KSA, specifically the Value and Uniqueness of Core Employees (Lopez Cabrerales et al., 2006; 2009). Nevertheless, any human capital advantage may decrease in the long term: Human processes advantage, on the other hand, may be understood as a set of causally ambiguous, socially complex and historically evolved HRM policies and practices (Boxall, 1996). Then, organizations must define and apply appropriate HRM Practices for managing people and drive them to the core capabilities of the firm (Purcell, 1996).

Authors have studied the best HRM practices for certain capabilities (Lado & Wilson, 1994). In the case of Innovation capability and according to the knowledge-based HRM practices, companies seek in the market and select for employment those persons who are considered capable of generating value. What is important is that recruits are selected in function of the potential learning capacity of the individual. In that case, such recruits will become more involved with and committed to the organisation the more they perceive that the organisation values their potential for bringing new knowledge to the job (Guest, 1997; Pfeffer, 1994; Shafer, et al., 2001). Hence, as recommended by Boxall (1996), companies should select and retain employees of this type since it is they who generate

what the author terms human capital advantage. More recently, this proposition has been confirmed, for it has been demonstrated empirically that human capital of the organisation becomes a strategic asset for the company when employees have a certain level of employment security, and thus they generate greater innovativeness and even higher returns (Lopez-Cabrerales et al., 2006; Subramanian and Youndt, 2005). Therefore, employment security will be positively associated with innovativeness, as we propose on the first hypothesis:

Hypothesis 1a: *A HRM Practice as employment security is positively related to "Innovativeness".*

Nevertheless, we could consider the possibility of reaching innovativeness also by means of contingent workers. Incremental innovations require the refining of the firm existing knowledge. Therefore, when innovativeness came from the exchange, combination and integration of the firm existing knowledge with related parties, then contingent work makes sense. This form of flexibility implies job rotations that facilitate knowledge transfer, as it occurs with the rotational schemes used by Toyota, for example (Dyer & Nobeoka, 2000; Kang et al., 2007). Research has also shown how personnel movement is an important mechanism for transferring knowledge among firms in such industries as accounting, biotechnology and pharmaceuticals and chemicals (Pennings et al, 1998; Song et al, 2003). However, contingent workers may not only affect positively to incremental innovations, but radical innovations too. The reason here is that this form of work favours the incorporation of new employees to the firm, with new skills and expertises and this will improve the firm ability to discover and apply new knowledge (Gupta & Shingal, 1993; Laursen & Foss, 2003). These arguments drive to the next hypothesis:

Hypothesis 1b: *A HRM Practice as temporary employment is positively related to "Innovativeness".*

Secondly, firm specific training is necessary, for it improves the technical ability for solving problems (Beatty & Schneier, 1997; Ichniowski et al., 1997). Training activities must be reorganised by the firm in ways that generate new understandings and new ideas. Thus, training in core skills is useful for product innovation. When the organisation invests in measures to increase the knowledge and skills of its employees,

the employees are assumed to respond by involving themselves more with the organisation; in this process, they are said to be seeking the maximum fit between their own personal objectives and priorities and those of the organisation (McElroy, 2001).

The investment in specific training not only improves individual performance but also encourages employees to match their knowledge and skills to the needs of the learning organization. Moreover, Minbaeva (2005) demonstrated the relevance of empowerment and the involvement in the decision taking for creating organizational learning, because these practices favour the flow of information and knowledge within the firm. In addition, through these practices, a certain degree of discretion is given to and adopted by the individual employees in testing alternative approaches and actions in meeting the needs of the organization. Therefore, we will expect that investments on specific training within firms will favour innovativeness. Then, our second hypothesis is expected.

Hypothesis 2: *A HRM Practice as firm specific training is positively related to "Innovativeness".*

Also, it is considered important that performance appraisals systems measure and recognize the acquisition of new skills and knowledge and that creativity should be rewarded, in addition to performance measured by tangible results obtained (Lepak & Snell, 1999; 2002). Regarding the appraisal processes, managers should provide feedback to overcome performance problems and foster ongoing learning from the development and assessment of new solutions (Zhou, 2000). Such competence-based appraisals motivate employees to acquire new knowledge and skills that they can apply in an organizational context of openness and experimentation, which are dimensions that also comprise the capacity for organizational learning (Kang et al., 2007).

In the same line, compensation practices must include incentives in order to reward the search for new solutions (Balkin & Montemayor, 2000; Beatty & Schneier, 1997; Munford, 2000). As the behaviours required for innovating are difficult to identify a priori, result- or output-based incentives are more useful in managing and rewarding joint contributions (Snell & Dean, 1994). In addition, incentives need to be accompanied by the acquisition of knowledge or new

ideas; for example, by paying for knowledge or reputation, which may motivate employees to develop innovations continuously. Finally, the use of group-based incentives may enhance cooperative behaviour and increase learning from interaction among individuals because they perceive that part of their compensation depends on group results (Ulrich and Lake, 1990; Lepak and Snell, 2002). Taking into account these arguments, we expect that compensation practices will only promote innovations when they assess employees' contributions and reward them. A third hypothesis is expected:

Hypothesis 3: *A HRM Practice as compensation is positively related to "Innovativeness" when it takes into account and rewards innovative contributions from the employees.*

Finally, we would like to assess whether innovative firms are the most efficient ones. According to the literature, innovation is one of the main sources of competitive advantages. From an RBV perspective, if a company develops innovations they will lead to higher levels of competitive advantages (Barney, 1991). Firms that offer products that are adapted to the needs of target customers and that market them faster and more efficiently than their competitors are in a better position to obtain higher performances and create sustainable competitive advantages (Alegre et al., 2006; Nonaka & Takeuchi, 1995; Prahalad & Hamel, 1990). Furthermore, given that organisational capabilities such as innovativeness can be seen as a "proxy" of competitive advantages (López-Cabrales et al., 2006; 2009), there is a very close link between innovative activity, competitive advantages and performance.

It has been proposed that the development of an innovation contributes to the performance of a company (Damanpour, 1991). That is, innovators have the potential to create markets, shape customer preferences, and even change the basic behaviour of consumers (Zhou, 2006), which in summary leads to higher profits. From the above, we argue that innovative activity represents an important capability that enhances the company's performance. These assumptions lead us to establish our last hypothesis. H4. Innovativeness is positively related to a higher level of performance.

METHODS

Data Collection and Measurement

The data that we employ is a longitudinal survey of Spanish manufacturing firms that comes from the Encuesta sobre Estrategia Empresarial (Survey of Industrial Strategic Behavior) (ESEE). The data is collected by the Fundación Empresa Pública (SEPI Foundation) and sponsored by the Spanish Ministry of Industry. The database covers the period 1990 to 2005. One of the characteristics of this dataset is that it is representative of manufacturing firms in the Spanish economy. The sample covers the population of Spanish manufacturing firms with 200 or more employees. Firms with at least 10 employees but less than 200 employees were selected by a random sampling scheme in the initial year. In subsequent years firms that drop out of the original sample are replaced every year by newly created firms, according to the sampling procedure used in the base year. Therefore, the data set reproduces the entry and exit process taking place in the population.

Within this sample, we selected a sample of 2418 firms that offered data about innovations, performance, temporary workers, training and

compensation during 2001-2005, years of the maximum economic development in Spain. Table 1 depicts the definition of variables being considered in this paper.

According with the variables depicted on table 1, we found objective metrics for measuring all the HRM practices and performance. Innovativeness capability was measured by proxy, taking into account the firm investments in R&D activities and the number of patents. Unfortunately, we did not find any metric for assessing employment security in the database, measuring this by means of the number of full time employees. We also include the number of temporary workers as an opposite HRM strategy to employment security. We measure the expenses on training on new technologies, languages and data processing as forms of specific training in core skills. And related to compensation, we have two measures: total compensation and a ratio of total compensation divided by added value. We used this latter as a proxy of performance based compensation.

Table 1: Variables studied (2001-2005)

Variable	Definition
<u>INNOVATIVENESS:</u>	
R&D ACT	Investments on R&D activities
PATENTS	Number of patents
<u>STAFFING</u>	
TEMP	Number of temporary workers.
FULLT	Number of full time workers
<u>TRAINING:</u>	
TRTECH	Expenses on training on new technology.
TRLANG	Expenses on training on languages.
TRDATP	Expenses on training on data processing.
<u>COMPENSATION:</u>	
CPSVA	Ratio: Total compensation divided by added value.
COP	Total compensation.
<u>PERFORMANCE:</u>	
ADDED VALUE	Added value
SALES	Sales

RESULTS

After explaining sample and variables, we tested our hypotheses by panel data regressions using Stata program. We build our panel taking into account the information about variables each year of the target period (2001-2005) and we apply regressions depending on the variables being involved. The first hypotheses related staffing strategies and innovativeness. As we have said above, we could not test hypothesis 1a purely, because we lack of measures of employment security. However, regression analysis for innovativeness as dependent variable and the number of temporary and full time workers as a predictor supported hypothesis 1.b but rejected hypothesis 1.a, although the coefficient for full time workers is almost null, but significantly negative. Results are shown on table 2.

Table 2: Regression Results for “STAFFING and INNOVATION”

Independent Variables	Dependent Variable. (R&D ACT)
Intercept	1.454641**
FULLT	-0.0000941*
TEMP	0.1397084**
Wald Chi2	17.98**
R ² overall	0.0135

+ p < 0.1 * p < 0.05 ** p < 0.01

The second hypothesis related training with innovativeness. Results are shown on table 3. We found significant and positive relationships between expenses on training on new technology and number of patents, so hypothesis 2 was supported.

Table 3: Regression Results for “TRAINING and INNOVATION”

Independent Variables	Dep. Var (PATENTS)
Intercept	0.0575
TRECH	0.0853646*
TRLANG	n.s
TRDATP	n.s
Wald Chi2	5.84*
R ² overall	0.0025

+ p < 0.1 * p < 0.05 ** p < 0.01

Third hypothesis related compensation practices and innovativeness. In that case, a positive relationship was found among compensation divided by added value and R&D activities, while the same relationship was negative with total compensation. Anyway, coefficients were close to zero. These results support hypothesis 3. They are showed on table 4.

Table 4: Regression Results for “COMPENSATION and INNOVATION”

Independent Variables	Dep. Var (PATENTS)
Intercept	0.1977066**
COP	-0.0037516***
CPSVA	0.001836**
Wald Chi2	10.09**
R ² overall	0.0044

+ p < 0.1 * p < 0.05 ** p < 0.01

Finally, we expected a positive association between innovativeness and performance on hypothesis 4. Such hypothesis was also supported as we found strong and positive relationships among variables as R&D Investments and added value and sales. Results are showed on table 5:

Table 5: Regression Results for “Innovation and Performance”

Independent Variables	Dep Var (SALES)	Dep Var (ADDED VALUE)
Intercept	5.88e+07**	1.25e+07**
R&d ACT	3161345**	1219655**
Wald Chi2	8.40**	7.32**
R ² overall	0.0170	0.0298

+ p < 0.1 * p < 0.05 ** p < 0.01

IMPLICATIONS AND CONCLUSIONS

The goal of this paper was to analyse the contribution HRM Practices to organizational capabilities which increase the agility of the firm using a longitudinal data design. Among these capabilities we focus on innovativeness as one of the most relevant feature for such purpose. Resource Based View of

the firm suggests that the kind of knowledge, skills and abilities (KSA) of the core employees is relevant for competitiveness (Barney & Wright, 1998). But employees must also be managed in the proper way to obtain the best results (Lepak & Snell, 1999; Wright et al., 1994), so we study the role of HRM Practices as staffing, training and compensation in such capability. And we conducted data panel regressions in order to infer causality from such longitudinal design. In the following lines we are discussing implications we may derive from our results.

First, we found a strong and positive relationship between added value and sales, as performance metrics, and innovativeness. That is important, because it demonstrates that innovation is on the road to economic wealth. The message here is that firms must focus on innovativeness if they want to gain positive results and run away from recessions.

Second, our analysis also demonstrated the slightly negative impact of full time workers on innovativeness. That was a surprising result, because if innovation requires the commitment of employees (Subramaniam & Youndt, 2005), it seems reasonable that full time workforce would enhance such capability. However, we found the opposite relationship. A possible explanation for this could come from the Resource Base View of the firm and the debate about core capabilities as core rigidities (Leonard Barton, 1992; Lengnick Hall and Lengnick Hall, 2002). Some researchers point out how stable and permanent resources can result on sources of inertia. As a matter of fact, a new question arises: is the number of full-time workers a good proxy of committed and permanent workers? That is, our intention was to study the role of job security on innovativeness: is it properly measured by means of "the number of full time employees"? This is a limitation of our metrics that we need to solve further.

Also, and following with this variable, our results highlighted that contingent workers can be related with innovativeness in a positive way. As a consequence, theoretical arguments related with the positive role of workers flows, new knowledge and innovations are supported. But this can be a problem, because on times of recessions firms abuse of numerical flexibility as a form of saving costs. The lesson learnt is that this strategy favours innovativeness and performance, as a consequence, but we need to know more about this. For example, it would be interesting to know the desired trade-off index between

contingent and permanent workers. Our results suggest that the number of temporary workers is positively associated with innovations, but we do not know anything about their representativeness on the global workforce.

Third, training was a HRM practice with a positive impact on innovativeness. Specifically, training on new technologies was the practice with such slightly positive impact on the capability, while other forms of training as data processing and languages lack of a significant effect. The lesson here is not new: firm training favours innovations. In other words, investments on training are producing positive returns. They are not in vain. But we can not say that "anything goes" for training. Some strategies and orientations of this practice are more efficient than others. Firms must explore and be sure of this issue.

Finally, empirical analysis demonstrated the direct effects of productivity-based rewards on innovativeness while total compensation was negatively associated with it, although both effects were lower than expected. In the light of our data, HR managers who wish to promote innovativeness must establish appraisals and rewards based on employees' productivity, while total compensations –not taking into account these features- will not favour by itself innovativeness. Here, the message is the following: the key issue is not paying too much. You must pay according with employees contributions if you want to motivate them to behave in an innovative way.

Despite the above-mentioned contributions, this study does have certain limitations that provide implications for future studies. In the first place, the weaknesses associated with some proxy variables, as in the case of the number of full-time workers as a proxy of employment security or our measure of performance based compensation are a motivation for searching new variables or even ratios among them. Second, we found that some coefficients are significantly positive or negative, but very close to zero. The reason for that is our big sample size (2418 firms). Maybe a fragmentation of sample taking into account size effects could enhance our results. Finally, we would need to increase our panel data, including early years of recessions, cleaning up missing data and exploring the change on HRM practices among years. That would be a valuable new study.

By way of summary, in conclusion, this study demonstrates the existence of two objectives that HR

managers should seek to achieve in order for individual employees to commit themselves to innovations. On one side, management should incorporate HR practices that value and reward the productivity of employees and contribute to develop the potential of individual employees and, on the other, organisations should bear in mind that these practices are in vain if they are not improving the level of firm performance, as a way of surviving in recession years.

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BANKING SECTOR REFORMS AND PERFORMANCE OF COMMERCIAL BANKS IN INDIA

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ABSTRACT

The present study attempts to examine the impact of reforms on the performance of Indian banking sector by covering the period 1991-92 to 2009-10. The paper looks at various performance indicators including branch expansion, non-performing assets, capital-adequacy ratio, net interest income, net profits ratio, operating expenses for the present purpose. Ratio analysis has been done and independent t-test has been employed to compare the performance of banks. It has been found that reforms have significant impact on the performance of banks by improving profitability, productivity and efficiency of banks. There has been improvement in the capital adequacy of banks, reduction in non-performing assets, decline in spreads and increase in net profits of banks.

KEYWORDS: Banking Sector Reforms, Non-Performing Assets, Total Assets Ratios.

INTRODUCTION

The banking system in India has undergone significant changes during the last fifteen years. During this period, many new banks, new instruments, new opportunities and new challenges have emerged (Sinha and Prasad, 2010). The banking sector being the lifeline of the economy, has been given an important place in the financial sector reforms initiated in India since the early 1990's.

Prior to the onset of banking and financial sector reforms in India, banks operated in an environment that was heavily regulated and characterized by prevalence of reserve requirement (i.e. cash reserve ratio and statutory liquidity ratio), interest rate controls, sufficient barriers to entry, which protected them too much against competition. The administered interest rate structure, both on the liability and the assets side, allowed banks to earn a reasonable amount of spread without much effort. Despite this, however, bank's profitability was low and the banks had accumulated large stock of non-performing loans (NPLs) reflecting lack of efficiency (Jain, 2009). The Indian banking thus was ailing badly, needing in turn mega doses of reform.

Financial sector reforms introduced in the early 1990's as a part of the structural reforms have touched upon almost all aspects of banking operations. One of the major objectives of banking sector reforms in India was to promote flexibility, operational autonomy and competition in the system, and to raise the banking standards in India to the international best practices (Agarwal, 2000). In order to achieve these objectives, several measures have been initiated since the early 1990's. As a result of these measures, together with technological development, the operating environment for banks has changed significantly.

Process of Banking Sector Reforms

The approach to banking sector reforms in India has been a very gradual one. The financial sector reforms in India began as early as 1985 itself with the implementation of the recommendations of Chakravarty Committee report (Report of the Committee to Review the Working of the Monetary System). The first phase of banking sector reforms were set in motion in the year 1992 on the recommendations of the Committee on Financial System (popularly known as Narasimham Committee -I) (Sarkar, 2004). Some of the major recommendations included reduction of reserve requirements, deregulation of interest rates, introduction of prudential norms, strengthening of bank supervision and improving the competitiveness of the system, particularly by allowing entry of private sector banks.

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The recommendations of the Narasimham Committee in 1991 provided the blueprint for the first generation reform of the financial system (Jalan, 2000; Reddy, 1999). While these reforms were being implemented, the world economy also witnessed significant changes. Against such backdrop, the Government of India appointed a so-called Narasimham Committee- II on Banking Sector Reforms which submitted its report in 1998. The main recommendations of Second Committee Report focussed on issues like strengthening of the banking system, upgrading of technology, capital adequacy and asset classification and resolution of NPA-related problems.

On the whole, the reform process provided necessary platform to the banks to operate on the basis of operational flexibility and functional autonomy, thereby enhancing efficiency, productivity and profitability (Talwar, 2005). The present study intends to study the impact of reforms on the Indian banking sector by using different financial indicators during the post-liberalization period.

The plan of the study is as follows: - After the brief introduction of the theme, section-II reviews the available literature on this subject. Data used and the methodology is described in section-III and section – IV analyses the different indicators to examine the performance of commercial banks and last section is the concluding section.

REVIEW OF LITERATURE

Considerable amount of research work has been done on efficiency and profitability of Indian banks. A brief review of the major studies is given here under:-

Bhattacharya et al (1997) studied the impact of the liberalisation on the performance of different categories of banks. They found public sector banks has highest efficiency among the three categories with the foreign and private banks having much lower efficiencies.

Das (1999) compared performance among the public sector banks for three years in the post-reform period, 1992, 1995 and 1998. He found a certain convergence in performance. RBI (1999) provided the central bank's perspective on how deregulation has impacted the bank performance. The study found a decline in spreads, a widely used measure of efficiency in banking, and tendency towards their convergence across all bank-groups except foreign banks.

The study of Edirisurya et al (2001) found that beginning with the Narasimham Committee recommendations, Indian banks have become more efficient and more competitive than in the period before deregulation. Singh (2003) further analysed profitability of banks under the deregulated environment with some financial parameters. Of the major four bank groups i.e. public sector banks, old private sector banks, new private sector banks and foreign banks, it has been found that profitability has declined in the deregulated environment.

Reddy (2004) examined the efficiency of Indian Commercial banks in the deregulated period 1996-2002. The technique of Data Envelopment Analysis has been used to obtain the measure of overall technical, pure technical and scale efficiencies. The study provides an evidence of increase in technical efficiency and scale efficiency of most of the banks, reduction in interest margins and increase in bank profitability of all banks in general and public sector banks in particular.

Nath, Pal and Mukerjee (2005) evaluated the performance of Indian banking system after liberalization process of 1992. The non-parametric DEA methodology has put in use for performance benchmarking. The results reveals that public sector banks are more efficient in India than private and foreign banks because the former have more extensive branch network, distribution powers and thus more stable whereas latter depend on less stable corporate resources and inter-bank market borrowings.

DATABASE AND METHODOLOGY

The study is based on the secondary data source mainly covering the period of the post-liberalization period. Data has been collected from various sources like Report on Trend and Progress of Banking in India, RBI bulletin, Statistical tables relating to banks in India, Handbook of statistics on Indian Economy. The methodology is very simple and straight one. Ratio analysis has been done and independent t-test has been employed to compare the average performance of banks.

Performance Indicators of Banking Sector

The performance of the commercial banks is analysed over the study period by using different indicators like branch expansion, non-performing loans, net profit, net interest margin, operating expenses, capital to risk-weighted assets ratio etc.

BRANCH EXPANSION

The Indian banking industry has made a sufficient progress during the reform period. The progress of the industry can be judged in terms of branch expansion, credit-deposit ratio etc. The banking sector has maintained a wide branch network from 60,570 in 1991 to 87,768 in 2010. It is evident from table-1 given below. This rapid increase in the number of bank offices is observed in the case of all the bank groups.

Indicator	1991	2000	2005	2008	2010a
Number of bank offices	60570	67868	68355	78666	87768
(a) Rural	35206	32734	32082	31105	32528
(b) Semi-urban	11344	14407	15403	17897	20771

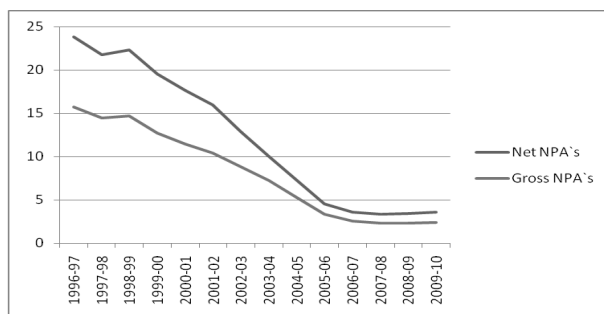
Source: Basic Statistical Returns of Scheduled Commercial Banks in India, Various issues.

NON-PERFORMING ASSETS

Another positive development over the reform period is the sharp reduction in non-performing loans. An asset is classified as NPA if either principal or interest amount or both are overdue to the bank and the interest of such assets remain past for a period of 90 days or more with effect from 31st March 2004 (Sharan,2009).

The measures of non-performing assets help us to assess the efficiency in allocation of resources made by banks to productive sectors. Non-Performing Loans (NPLs) as a ratio of both total advances and assets have declined substantially since mid 1990's. It is evident from the chart given below. Gross NPA's is the amount which is outstanding in the books regardless of any interest recorded or debited. While Net NPA's is Gross NPA less interest debited to borrowal account and not recovered or recognized as income. From the chart-1, it can be depicted that Gross NPL's as percentage of gross advances,

CHART - I



Source: Author's calculation

which were above 15 percent in the early 1990's, are now less than 3 percent. Similar is the case with net non-performing loans. This distinct improvement in asset quality may be attributed to several measures taken by Reserve Bank towards NPA reduction through enactment of the Securitisation and Reconstruction of Financial Assets and Enforcement of Security Interest (SARFAESI) Act, setting up of debt recovery tribunals, Lok Adalats etc (RBI Occasional Paper,2006).

Capital to Risk-Weighted Assets Ratio (CRAR):-

The capital to risk weighted assets ratio (CRAR) is an indicator for assessing soundness and solvency of banks. Assets are calculated on the basis of risk weights and are determined through `Basel Accord` for each balance items. Since 1995-1996, the banking sector, on the whole has been consistently maintaining CRAR well above the minimum stipulated norm as recommended by Basel-1 Committee, which was 8% in 1992 and was further raised to 9% effect from 1999-2000.

Table 2: Distribution of Commercial Banks According to the CRAR

Year	Capital Adequacy				Total
	Below 4 percent	Between 4-9 percent	Between 9-10 percent	Above 10 percent	
1995-1996	8	9	33	42	92
1999-2000	3	2	12	84	101
2004-05	1	1	8	78	88
2008-09	0	0	1	78	79

Source: Handbook of Statistics on the Indian Economy, 2008-09.

The overall capital position of the commercial sector banks had witnessed a mark improvement during the reform period. Out of 92 commercial banks, 75 banks could maintain the CRAR of more than 8% during the year 1995-96. At the end of March 2008, 78 out of 79 banks reached more than 10 per cent CRAR level. This signified that the Indian banks successfully managed to meet the increased capital requirement under the changing environment.

Operational Efficiency

The operational efficiency can be examined in terms of various financial ratios. We basically take into account three ratios:-

1. **Net Interest Income/Total Assets Ratio:**

Net Interest Income is defined as the difference between total interest earned and total expended, normalised by assets. Lower the ratio, more efficient is the banking system.

2. **Net Profit/Total Assets Ratio:**

It gives an indication as to how much profits a bank is able to generate per unit of its assets. Higher value of this ratio is indicative of higher profitability.

3. **Operating Cost/Total Assets Ratio:**

This ratio indicates the amount of operating cost expended per unit of assets. A lower ratio means greater efficiency.

The ratios are analysed for three different bank groups over the period 1991-92 to 2008-09. We compute averages for each of these ratios for the entire period for three categories of banks-public sector, private sector and foreign and compared these using independent t-test. Table-3 presents the results.

Table3: Comparison of Performance of Public, Private Sector and Foreign Banks, 1991-92 to 2008-09

Ratio	Public Sector (1)	Private Sector (2)	Foreign Sector (3)	t-statistic (1 and 2)	t-statistic (1 and 3)
NP/TA	0.4539	0.8589	1.1633	-2.561	-2.450
NII/TA	2.76	2.5267	3.7378	1.581*	-9.478
Intcost/TA	2.3811	2.1556	2.8772	1.693*	-4.034

Notes:- (1) Figure in bold indicate significance at 5 percent or 10 percent level of confidence

(2) *indicates non-significant value

(3) Figures in the first three columns are averages over the period 1991-2008

Key: NP/TA= Net Profit after taxes/total assets; NII/TA= Net Interest Income or spread/Total assets; Intcost/TA=Intermediation cost or operating cost/total assets.

Comparing the performance of public sector banks and private sector banks, the results revealed that the difference between the average net profits of these two banks is significant at 5% level. As far as net interest income is concerned, t-statistic is non-significant. Similar is the case with operating cost of public and private banks. Now if we compare net profit of public and foreign banks, they differ significantly, as value of t-statistic comes out to be significant at 5% level. Regarding net interest income and operating

costs of public and foreign banks, we found that there is a significant difference as t-statistic came out to be highly significant at both 5% and 10% level of significance. We also found that private sector banks have done better in all of these three indicators of efficiency. The only parameter on which the public sector does better is the net interest income or what is called as spread. The public sector's performance is also inferior to that of foreign banks. In this comparison, the public sector does better on ratio of intermediation cost to total assets.

Even though public sector banks continue to dominate the Indian banking system, accounting for nearly three-fourths of total assets and income, the increasing competition in the banking system has led to a falling share of public sector banks, and increasing share of the new private sector banks, which were set up around mid 1990's.

FINDINGS

1. The number of bank branches increased significantly during the reform period.
2. Across the bank groups, there has been a significant reduction in the non-performing assets.
3. Almost all the Scheduled Commercial banks operating in India have been able to maintain CRAR well above the minimum stipulated norm as recommended by Basle-1 norms. At the end March 2008, 78 out of 79 banks reached more than 10 percent of CRAR level.
4. The net interest income ratio fell for the public sector banks and scheduled commercial banks as a whole over the reform period.
5. Net profit to assets ratio improved from 0.67 per cent in 1996-1997 to 1.0 percent in 2008-09
6. As far as operational expenses ratio is concerned, public sector banks along with the entire scheduled commercial banks witnessed increasing efficiency over the years in so far as this ratio declined in their case.

CONCLUSION

With the increasing levels of globalisation of the Indian banking industry, competition is going to be very tough. Banks in India well have to benchmark themselves against the best in the world. For a strong and sound financial system, banks need to go beyond peripheral issues like improvements in profitability,

efficiency and technology. Strong capital positions and balance sheets place banks in a better position to deal with and absorb the economic shocks. These are some of the issues that need to be addressed if banks are to succeed, not just survive, in the changing scenario.

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ANALYSIS OF IPOs UNDERPRICING: A CASE AFTER INDIAN STOCK MARKET'S CRISIS

Rohit Bansal*
Ashu Khanna**

Table of Contents

- Abstract
- Keywords
- Introduction
- IPO Underpricing
- Review of Literature
- Objectives of the Study
- Research Methodology
- Discussion
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- Future Implications
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ABSTRACT

In this paper, we explain the impact of Indian stock market crisis on initial performance of IPO underpricing and to examine the changes occurs, due to the market crisis. This paper explores the relationship between the dependent variables underpricing of an issue and firm's age, issue size (total amount to be raised), market capitalization, subscription rate and number of shares offered to investor's and pricing mechanism. However, Durbin-Watson presumption (1.793) values, which indicate there is no serial autocorrelation & hetroscedasticity problem, exist within the regression model. We come upon that market capitalization; number of shares offered to investor's and issue size is significant affecting level of underpricing. Issue size & number of shares offered is found to have negative effect on underpricing. Market capitalization is found to be positive relationship with underpricing. At the same time, firm's age, subscription rate and pricing mechanism is found to have no significant association with underpricing.

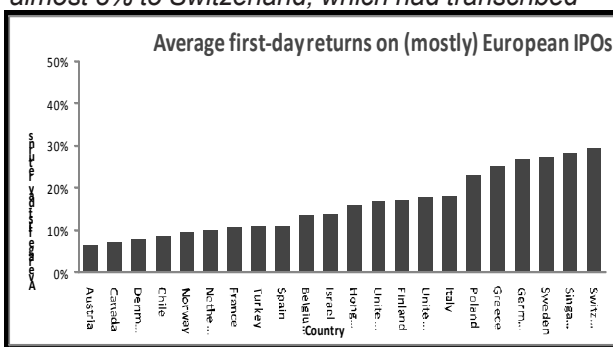
KEYWORDS: IPO, underpricing, IPOs determinants, post IPO crisis, IPOs variables, book build, Time series analysis, Indian primary market, BSE, Fixed price options, Ex- ante uncertainty.

JEL Classification: G12, G14, G32.

INTRODUCTION

The decision to go public, or make an Initial Public Offering (IPO) of equity, is an important landmark in a firm's life cycle. Investment bank acts as a partner of firms during the IPO process. They acquaint firms in structuring the offering, marketing it to investors, organize the related road shows, and perhaps most crucially help setting the offer price for the issue. In what way the issue manager arrives at the IPO price depends on the offering mechanism to a great extent. In India, the fixed price mechanism was used to price IPOs until (1999). We cannot deny the fact that during this period IPOs were underpriced substantially. The majority of the researchers are continuously exploring various facets of the pricing mechanism to find suitable explanations for the underpricing. (Rock, 1986)19), Winner curse model, information revelation theory by (Benveniste, 1989)4), price stabilization theory by (Rudd, 1993) tried to give reasons for the Underpricing phenomenon. (Rock, 1986)19), developed the 'winners curse' model based on the information asymmetry between informed and uninformed investors. To entice uninformed investors, companies underpriced new issues so that after market price exceeds the offer price.

Figure 1 extracts the first day average return on listed the original public offers at their stock exchange all around the European countries. On y axis we have taken the percentage of initial return and on x axis, all the European countries have been taken. It indicates from left to right in increasing order, i.e. Austria has recorded minimum initial percentage of underpricing almost 8% to Switzerland, which had transcribed

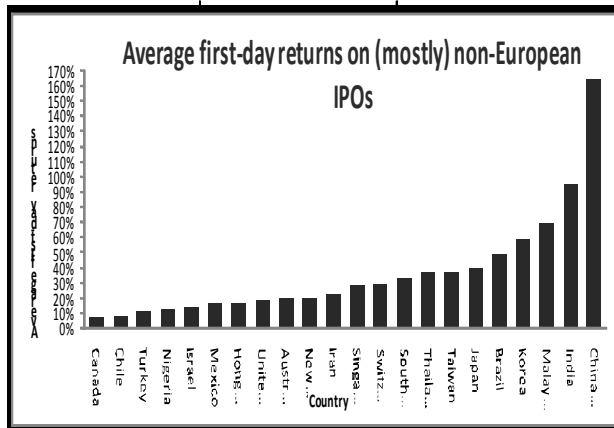


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maximum during the same period around 30%.

Figure 2 squeezes the first day average return on listed the initial public offers at their stock exchange all around the Non - European countries. On y axis we have taken the percentage of original return and on x axis, all the Non- European countries have been taken. It indicates from left to right in increasing order, i.e. Canada has inscribed minimum initial percentage of underpricing almost 8% to China, which had recorded maximum during the same period around 160%, followed by India,



which had brushed 90% level of underpricing.

Pricing Mechanisms

There are two frequent used techniques to issue shares in an initial public offering; book building and fixed price option. In India and other countries, the book building technique is the frequently used method to price shares.

Book-Building

Book Building charges a price (unknown to the investors) at which securities will be offered/ allotted is not known in advance to the investor. Only an indicative price range is known. Book building usually leads to more aggressive pricing than traditional fixed price method. Under book building, since all applicants above the cut-off points are allotted shares, ideally, there should not be any pressure of unsatisfied demand in the market, leading to a lesser possibility of market prices rising as the issue price after listing. Consequently, IPOs based on book building method may provide fair pricing.

Fixed Price Option

Price at which the securities are offered allotted is known in advance to the investor. Demand for the securities offered is known only after the closure of the issue.

Table 1: Describes the features of pricing mechanism that is followed in Indian primary market. It is including book build pricing mechanism and fixed price option pricing mechanism.

ISSUE TYPE	OFFER PRICE	DEMAND	PAYMENT	RESERVATIONS
Fixed Price Issues	Price at which the securities are offered and would be allotted is made known in advance to the investors	Demand for the securities offered is known only after the closure of the issue	100 % advance payment is required to be made by the investors at the time of application.	50 % of the shares offered are reserved for applications below Rs. 1 lakh and the balance for higher amount applications.
Book Building Issues	A 20 % price band is offered by the issuer within, which investors are allowed to bid and the final price is determined by the issuer only after closure of the bidding.	Demand for the securities is offered, and at various prices, is available on a real time basis on the BSE website during the bidding period..	10 % advance payment is required to be made by the QIBs along with the application, while other categories of investors have to pay 100 % advance along with the application.	50 % of shares offered are reserved for QIBs, 35 % for small investors and the balance for all other investors.

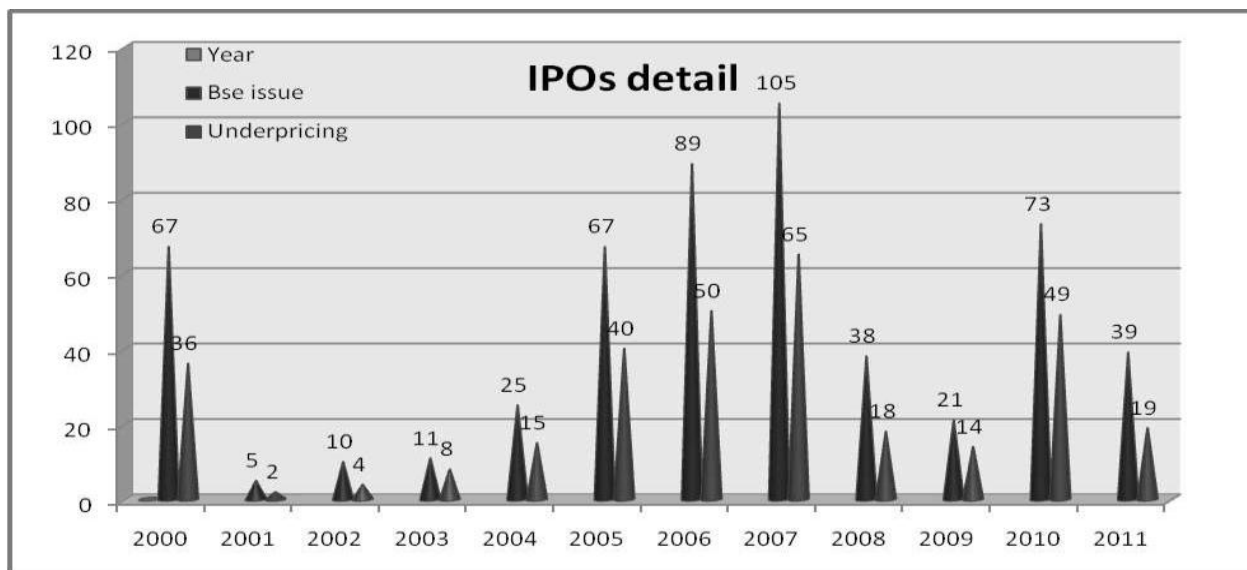
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IPO UNDERPRICING

IPOs underpricing has been considered as a prevalent phenomenon across the world. When companies go public, the equity they sell in as initial public offering tends to be underpriced, resulting in a substantial price jump on the first-day trading. Underpricing is generating additional value in the stock when it first becomes traded. It leads to significant gains for investors who have been allocated shares at offer price. However, underpricing an IPO results in “money left on the table” - lost capital that could have been raised for the company had the stock been offered at a higher price. (Keasey & McGuinness, 1995), further discusses in the further section from the paper,

and provides literature belonging to major areas of IPO underpricing in consecutive order and concepts in detail. The first part deals with the traditional meaning of the underpricing and identifies the literature deal with the measurement form of underpricing. At the same time, the measurements used in the existing empirical literature are further examined and re-evaluated. The basic measurement of underpricing is the difference between a post-offering market price (in the newly listed shares) and the initial offering price, over all divided by the original offering price in the shares. Notwithstanding, in the above definition, the critical factor which has to be considered is the timing of price considered.

Table 2: IPOs details listed at Bombay stock exchange since (2000 – 2012)



Why IPO Underpricing?

An Initial Public Offering (IPO) issue process constrains the active involvement of three key players: the issued firm, a single investment bank or group of investment banks (for underwriting & marketing the IPO), and the investors (institutional & non-institutional) intending to buy shares. The issue firm wants to obtain the maximum price per share (issue price) while the investors want to buy the shares at a minimum price. Investment banks acting as intermediaries help in matching the opposite expectation of both the parties. Investment banks also perform various other functions like certifying the economic rationale of the issue to regulatory bodies like the Securities & Exchange Board of India (SEBI), deciding the issue price, allocating shares to investors and other issue specific responsibilities.

Empirical studies documented the underpricing for IPOs of financial institutions is related to proxies for asymmetric information and Ex- ante uncertainty variables. Offer size (Megginson, 1991)13), age of the firm (Muscarella, 1989)16), (Megginson, 1991)13), (Leite, 2000)10), (McDonald, 1972)17), Recently (Bansal, 2012)2), conducted empirical tests on the relationship between pricing mechanism book building and fixed price option and underpricing using 319 initial public offerings on the Bombay Stock exchange. (Bansal & Khanna, 2012a)3) documented the impact of ownership structure at the level of underpricing, using the sample of 156 IPOs on the Indian stock exchange.

International Initial Public Offerings for 48 Countries

Table 3: Initial public offerings across 48 countries

Equally weighted average initial returns for 48 countries				
Country	Source	Sample Size	Time Period	Initial Return
Argentina	Eijgenhuijsen & van der Valk	20	1991-1994	4.4%
Australia	Lee, Taylor & Walter; Woo; Pham; Ritter	1,562	1976-2011	21.8%
Austria	Aussenegg; Ritter	102	1971-2010	6.3%
Belgium	Rogiers, Manigart & Ooghe; Manigart, DuMortier; Ritter	114	1984-2006	13.5%
Brazil	Aggarwal, Leal & Hernandez; Saito; Ushisima	275	1979-2011	33.1%
Bulgaria	Nikolov	9	2004-2007	36.5%
Canada	Jog & Riding; Jog & Srivastava; Kryzanowski, Lazrak & Rakita; Ritter	696	1971-2010	6.7%
Chile	Aggarwal, Leal & Hernandez; Celis & Maturana; Ritter	65	1982-2006	8.4%
China	Chen, Choi, & Jiang; Jia & Zhang	2,102	1990-2010	137.4%
Cyprus	Gounopoulos, Nounis, and Stylianides	51	1999-2002	23.7%
Denmark	Jakobsen & Sorensen; Ritter	164	1984-2011	7.4%
Egypt	Omran	53	1990-2000	8.4%
Finland	Keloharju	162	1971-2006	17.2%
France	Husson & Jacquillat; Leleux & Muzyka; Chahine; Ritter; Vismara	697	1983-2010	10.5%
Germany	Ljungqvist; Rocholl; Ritter; Vismara	736	1978-2011	24.2%
Greece	Nounis, Kazantzis & Thomas; Thomadakis, Gounopoulos & Nounis	373	1976-2011	50.8%
Hong Kong	McGuinness; Zhao & Wu; Ljungqvist & Yu; Fung, Gul, and Radhakrishnan; Ritter	1,259	1980-2010	15.4%
India	Marisetty and Subrahmanyam; Ritter	2,964	1990-2011	88.5%
Indonesia	Suherman	386	1990-2011	25.7%
Iran	Bagherzadeh	279	1991-2004	22.4%
Ireland	Ritter	31	1999-2006	23.7%
Israel	Kandel, Sarig & Wohl; Amihud & Hauser; Ritter	348	1990-2006	13.8%
Italy	Arosio, Giudici & Paleari; Cassia, Paleari & Redondi; Vismara	273	1985-2009	16.4%
Japan	Fukuda; Dawson & Hiraki; Hebner & Hamao, Packer, & Ritter; Kaneko & Pettway	3,100	1970-2010	40.4%
Jordan	Marmar	53	1999-2008	149.0%
Korea	Dhatt, Kim & Lim; Ihm; Choi & Heo; Mosharian & Ng; Cho; Joh; Ritter	1,593	1980-2010	61.6%
Malaysia	Isa; Isa & Yong; Yong	350	1980-2006	69.6%
Mexico	Aggarwal, Leal & Hernandez; Eijgenhuijsen & van der Valk	88	1987-1994	15.9%
Netherlands	Wessels; Eijgenhuijsen & Buijs; Jenkinson, Ljungqvist, & Wilhelm; Ritter	181	1982-2006	10.2%
New Zealand	Vos & Cheung; Camp & Munro; Ritter	214	1979-2006	20.3%

Nigeria	Ikoku; Achua	114	1989-2006	12.7%
Norway	Emilsen, Pedersen & Saettem; Liden; Ritter	153	1984-2006	9.6%
Philippines	Sullivan & Unite; Ritter	123	1987-2006	21.2%
Poland	Jelic & Briston; Ritter	224	1991-2006	22.9%
Portugal	Almeida & Duque; Ritter	28	1992-2006	11.6%
Russia	Ritter	40	1999-2006	4.2%
Saudi Arabia	Al-Anazi, Forster, & Liu	76	2003-2010	264.5%
Singapore	Lee, Taylor & Walter; Dawson; Ritter	591	1973-2011	26.1%
South Africa	Page & Reyneke; Ali, Subrahmanyam & Gleason; Ritter	285	1980-2007	18.0%
Spain	Ansotegui & Fabregat; Alvarez Otera	128	1986-2006	10.9%
Sri Lanka	Samarakoon	105	1987-2008	33.5%
Sweden	Rydqvist; Schuster; Simonov; Ritter	406	1980-2011	26.1%
Switzerland	Kunz, Drobetz, Kammermann & Walchli; Ritter	159	1983-2008	28.0%
Taiwan	Chen	1,312	1980-2006	37.2%
Thailand	Wethyavivorn & Koo-smith; Lonkani & Tirapat; Ekkayokkaya and Pengniti	459	1987-2007	36.6%
Turkey	Kiyamaz; Durukan; Ince; Kucukkocaoglu	355	1990-2011	10.3%
United Kingdom	Dimson; Levis	4,877	1959-2011	16.1%
United States	Ibbotson, Sindelar & Ritter; Ritter	12,246	1960-2011	16.8%

Source: (Loughran et. al. 1994, Updated May-2012)10)

Table 4: Money left on table by Indian companies from (2007-2011)

Year	No of IPOs	Underpriced	Issue size (cr)	Left money (cr)
2007	105	65	28396.82	11310.27
2008	38	18	4426.85	767.48
2009	21	14	16641.34	794.68
2010	73	49	58992.72	12229.5
2011	39	19	10407.92	1066.17
Total	276	165	118865.65	26168.1
	1\$= 50 INR		bn \$24	bn \$5

It reveals the complete amount of money left on the table by Indian companies from (2007-2011) due to underpriced their share value. During that period number of IPOs (276) were listed at Bombay Stock Exchange and out of that (165) were underpriced. All public deal companies left (26168 cr.) of their amount left on the table, for they could have raised more.

REVIEW OF LITERATURE

(*Rock, 1986*19), is for firm commitment offerings. He revealed that those investors who are more informed (than the firm as well as other investors) about high under pricing offers crowd out uninformed investors. On the other hand, these more informed investors withdraw in issues, which are over priced leaving the uninformed investors with the winner's curse problem. Thus, the uninformed investors would not participate in over priced issues. Hence in order to attract such investors, the firm must under price its IPO.

(*Loughran, 2002*7), found that during 1990-1998 firms which went public had total earnings of \$8 billion while they left \$27 billion on the table even though they paid \$13 billion as fees to him under writers. This made Loughran and Ritter propound a prospect theory for under pricing where they state that issuers of IPOs leave a lot of money on the table because they see a prospect of higher trading price in the first few days of listing consequently offsetting their loss of wealth in under pricing the IPOs and in fact resulting in net gains their wealth levels. More importantly they found that most IPOs leave little money on the table.

(*Dolvin, 2008*6), Addressed the question of whether or not periods of high underpricing adversely affect pre-existing shareholders. They found that high levels of underpricing are associated with increased share retention, which effectively offsets much of the potential cost. Overall, the percentage of shareholder wealth lost is stable over time, unlike underpricing itself. Also many factors known to be related to underpricing are not significant determinants of the cost of going public to pre-existing owners.

(*Suzuki, 2008*) Empirically examines the relationship between the level of underwriter spread and ownership structure by using data from Japanese IPO firms that are issued during the years (1997-2002). He uses regression analysis to determine the effect of the ownership structure (board, bank, affiliated venture capital firms) on under writer spread and on the post-issue operating performance of IPO firms. He finds several results that are in contrast with previous studies. The ownership by board members is positively associated with the level of gross spread but is not associated with post-issue operating performance.

Table 5: Empirical studies regarding Indian IPO underpricing

Papers	Sample size	Sample period	Average initial Return (%)	Findings pertaining to the explanations of the IPO underpricing
(Shah, 1995)	376	1991-1995	74	The average long-run trading frequency of IPOs is 74%, which is much worse than the A group company, which had a median trading frequency of 94%. The trading frequency of IPOs is slightly higher after initial listing, and arranges down to the long-term average within the principal ten days or so.
(Pandey & Vaidyanathan, 2006)	55	2002-2006	54	In particular, it seeks to empirically explain the first day under pricing in terms of the demand generated during the book building of the issue, the listing delay between the closure of the book building and the first-day listing of the issue, and the money spent on the marketing of the IPO by the firms.
(Khursid et al, 2008)	245	1999-2008		Their result shows the presence of a winner's curse problem for the non-institutional and retail investors. They also indicate that market underpricing is primarily driven by the unmet demand of the non organized investors group.

It delineates the studies on the Indian IPO underpricing. The moving price behavior of listed companies, for Ex-ante information, Signaling hypothesis and relationship between the level of underpricing with independent variables. Among the papers listed, only findings relevant to IPO underpricing are summarized.

(Mayur & kumar, 2006)	393	1999-2005		A probit regression model is used to analyze the influence of fundamental financial data of Indian companies on their going public decision. The size, profitability, age and leverage emerged as the significant determinants of going public decision of Indian companies. The statistically insignificant relationship between the financing needs and likelihood of an IPO found in our study is similar to the (Pagano et al. 1998), and contrary to the findings of several other studies done on same issue.
(Bansal & khanna, 2012)	319	1999-2011	46.50	Results exhibit that there is a significant dissimilarity between pricing mechanisms while issuing IPOs. They found a difference between book build pricing mechanism and fixed option mechanism.
Bansal & Khanna, 2012a)	83	2008-2011		They test to determine the relationship between ownership structure, including promoters and non promoters holding with the degree of the underpricing. They collected sample of IPOs were listed at BSE after the market crisis in 2008. Regression results reveal that, negative significant association between non promoter holdings and the level of underpricing.

OBJECTIVES OF THE STUDY

- I. To measures, the IPOs initial performance on first trading day at Bombay Stock Exchange from (April, 2008 to Dec, 2011) and to distinguish the association between several factors and level of underpricing.
- II. To analysis, the relationship between various determinants such as subscription, issue size, firm's age, number of offered shares, market capitalization and pricing mechanism and the level of dependent variable i.e. underpricing.
- III. Does the Ex- ante uncertainty of IPOs, act as a form of signal at the time of the IPO, as reflected in its initial underpricing?

RESEARCH METHODOLOGY

The study is to be conducted on a data of four years (April, 2008 to Dec, 2011). In this era around 83 IPOs were under considered, which were listed in moreover of the major Indian markets i.e. BSE (Bombay Stock Exchange) Then the data on Size of organization, Hot/cold IPO, Offer size, subscription rate, period between offer date and listing variable data is collected from the IPO red herring daily returns of IPO stocks are obtained from BSE, NSE and capital line database. At the end, one IPO stock was dropped

due to non availability of complete information about the firm. We compiled firm level data from Prowess, a database provided by the Centre for Monitoring the Indian Economy (CMIE). We dropped those firms for which data were not available for all the time windows. The methodology required data from one year before IPO to three years after the IPO. Therefore, firms that went public after Dec, 2011 will be also not included within the sample as for them the data for next year would not be available. The final sample of this study consisted of 83 firms.

The data is analyzed using multiple linear regressions. All the firm-specific variables are regressed opposing the underpricing to find out which variables are important in determining the underpricing. Multiple linear regressions are done to see if there is a statistically significant difference in the underpricing and different independent variables.

Hypotheses models

Based on empirical studies, which contained constructed the underpricing for IPOs with independent variables. We evaluated several hypotheses interrelated to our research problems, research objectives and variables. One tailed hypothesis test has been soiled to determine the significant association between different variables at the 5% significance level. Notwithstanding, we formulated several alternative hypotheses.

Null hypothesis: H0: *There is no significant difference between independent variables with the dependent variable i.e. level of underpricing.*

Measure of subscription rate

The subscription measured as the quantity of shares of the total times had investors subscribe after the issue. The natural logarithm of this value is used as it is a standard practice and to remove heteroscedasticity.

H1: *There is negative statistical significant relationship between Subscription rate and level of underpricing.*

Measure of issue size

The issue size is measured as the total number of shares offered multiplied by the offer price. Again, the natural logarithm of this value is used as a standard practice and to remove heteroscedasticity.

H2: *There is negative significant relationship between issue size and level of underpricing.*

Measure of market capitalization

The market capitalization is measured as the total number of shares multiplied by the market price per share. Again, the natural logarithm of this value is used as a standard practice and to remove heteroscedasticity.

H3: *There is positive significant relationship between market capitalizations and less underpricing.*

Measure of number of shares offered

The total numbers of share that a company offered to their issuers in the market. Again, the natural logarithm of this value is used as a standard practice and to remove heteroscedasticity.

H5: *There is negative significant relationship between number of offered shares and underpricing.*

Measure of firm's age

Firm age is measured in years as the difference between the year of IPO and the year of incorporation of the firm.

H4: *There is positive significant relationship between firm's age and degree of underpricing.*

Pricing mechanism

For the pricing mechanism again a dummy variable is used to indicate the presence of book build in IPO underpricing. The presence is shown with value equal to 1 and 0 otherwise.

H6: *There is negative significant relationship between pricing mechanism and underpricing.*

Measure of underpricing

Consistent with the standard methodology, underpricing is calculated as the percentage change from the offer price to the closing price in the secondary market.

Equation 1 *Traditional underpricing = ((closing price - offer price) / offer price) * 100..... (1)*

Closing price = First day listing closing price of IPOs

Offer price = Price at which company offered their shares to their investors

Equation 2 *Log underpricing = ln (P1-P0/P0)* 100..... (2)*

Log Underpricing = ln (closing price/ offer price) is used to determine the level of underpricing and to make standard practice and to avoid heteroscedasticity. We tested marketed adjusted returns on securities (MAARO) as a benchmark to find out the degree of underpricing.

Firstly, we calculated the return on, i security, where we used $R_i = (P_1 - P_0) / P_0$ in which, R_i = return on, i security, P_1 = Price of, i security on first listing day, P_0 = offer price of, i security.

Equation 3 $R_i = (P_1 - P_0) / P_0$(3)

Secondly, we calculated index return on corresponding days, where we used $M_i = (I_i - I_0) / I_0$ in which, M_i = market return on ith day, I_i = closing index at listing day, I_0 = closing index at offer day.

Equation 4 $M_i = (I_i - I_0) / I_0$(4)

Finally, we calculated market adjusted return on security, where we have taken R_i from equation (1) and M_i from equation (2).

Equation 5 $MAARO = \{100 * [(1 + R_i) / (1 + M_i)]\}$(5)

Underpricing is used as dependent variable in this multiple regression model.

The Multiple regressions Model

The impact of the independent variables namely, subscription rate, issue size, market capitalization, firm's age, number of share offered and pricing mechanism (book build price mechanism) on the dependent variable underpricing is modeled through multiple regressions as:

Estimation Equation:

$$\text{LOGUNDER} = C(1) + C(2)*\text{LOGAGE} + C(3)*\text{LOGISSUESIZE} + C(4)*\text{LOGMKT CAP} + C(5)*\text{LOGSUBSC} + C(6)*\text{LGNOOF SHARE} + C(7) \text{ PRICING MECHANISM} + e$$

DATA COLLECTION AND ANALYSIS

The data for the study was obtained from the website of the Bombay Stock Exchange (BSE) <http://www.bse-india.com/IPO> under the heading of book building in IPOs. We also supplemented these data from (CMIE and Capital line database). The period for which the data was taken for the study was (April, 2008 to 31st dec, 2011). BSE was preferred for this study because it is the largest exchange in the country in relations of trading volumes. We compiled firm level data from Prowess, a database provided by the Centre

for Monitoring the Indian Economy (CMIE). We dropped those firms for which data were not available for all the time windows. The methodology committed data from one year before IPO to two years after the IPO. Therefore, firms that went public after (Dec, 2011) will be also not included in the sample as for them the data for next year would not be available. The final sample of this study consisted of 83 firms.

Magnitude of IPOs

Table no 2 reveals magnitudes of IPOs after the Indian stock market crisis since October 2000 to Dec., 2011. It separated into sections based on IPO that listed via book build and fixed price option. It also indicated % of underpricing and overpricing in different years. It differentiates issue that is priced between the book build, and that is price through fixed price option. Data is collected accompanied by BSE websites and Capitaline database.

Table 6: Magnitude of Initial public offering listed at Bombay stock Exchange

Year	BSE issue	BB	FPO	BB-Under	BB-Over	Fpo-Under	Fpo-over	% b bu	% BBO	% fpou	% fpo o
2000	67	11	56	6	5	30	26	21.96	-46.87	191.32	-32.3
2001	10	2	8	0	2	2	6	0.00	-62.00	47.50	-52.0
2002	5	1	4	0	1	4	0	0.00	-50.93	16.07	0.0
2003	11	4	7	3	1	5	2	90.16	-87.41	97.86	-85.3
2004	25	17	8	9	8	6	2	54.43	-45.45	74.10	-56.0
2005	67	48	19	26	21	14	5	31.47	-51.75	60.37	-63.8
2006	89	68	21	36	32	14	7	36.75	-46.33	38.91	-25.0
2007	105	91	14	58	32	7	7	51.54	-21.42	113.67	-3.3
2008	38	33	5	16	17	2	3	36.45	-26.36	18.06	-32.3
2009	21	21	0	14	7	0	0	19.09	-14.52	0.00	0.0
2010	73	71	2	47	24	2	0	22.35	-12.85	60.77	0.0
2011	39	38	1	19	19	0	1	47.36	-33.32	0.00	-70.4
Total	550	405	145	234	169	86	59	34.29	-41.6	59.88	-35

(Source. <http://www.bseindia.co.in>)

Descriptive Statistics

Table no 5 indicates about the descriptive statistics on the variables that are used as the regression model, level of underpricing, market capitalization, subscription

rate, issue size, firm's age and pricing mechanism (book-build pricing mechanism). We tested the various statistical tools for analysis, for instance, mean, median, standard deviation, skewness and kurtosis.

However, to check the normality of the given data series, we used Jarque-Bera test. We found highest mean value (16.52) & (7.07) for a number of shares

offered to public and firm's market capitalization respectively.

Table 7: Descriptive statistics of the various variables

Name	LOGUNDER	LOGMKTCAP	LOGSUBSC	LOGISSUESZ	LOGAGE	LGNOFSHRE	IPO_TYPE
Mean	2.776243	7.072710	1.940324	5.390482	2.704698	16.52876	0.024096
Median	2.793208	6.719206	1.791759	4.954065	2.708050	15.93177	0.000000
Maximum	5.033701	12.28415	4.532599	9.646987	4.644391	21.24050	1.000000
Minimum	-0.336472	4.173310	0.000000	3.146305	0.693147	14.64358	0.000000
Std. Dev.	1.248029	1.935399	1.282264	1.626777	0.826942	1.511016	0.154281
Skewness	0.388556	0.830881	0.199142	0.847335	0.114397	1.253771	6.206826
Kurtosis	2.482682	2.894409	1.728669	2.818049	3.023695	3.777342	39.52469
Jarque-Bera	3.014005	9.588578	6.138240	10.04650	0.182974	23.83493	5146.525
Probability	0.221573	0.008277	0.046462	0.006583	0.912573	0.000007	0.000000
Sum	230.4282	587.0349	161.0469	447.4100	224.4899	1371.887	2.000000
Sum Sq. Dev.	127.7214	307.1531	134.8246	217.0050	56.07435	187.2199	1.951807
Observations	83	83	83	83	83	83	83

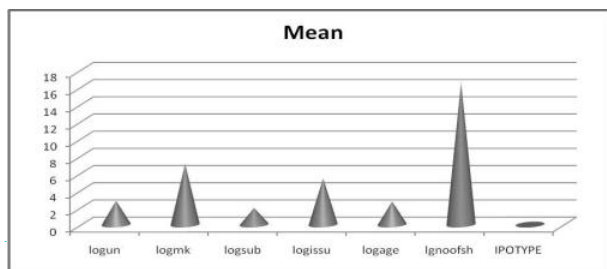


Figure 4: Mean value for the variables used in the regression model

regression models, including dependent variable and different independent variables. However, Log underpricing, Log market capitalization, Log subscription rate, Log issue size, Log firm's age, Log number of shares offered to public and pricing mechanism (book build pricing mechanism) are used to find the mean value. We determine the highest mean value is (17) for the number of share offered to public and (8) for market capitalization. It indicates that firms are issued the maximum number of share offered to public and firms with more market capitalization are more underpriced.

Jarque – Bera test for normality

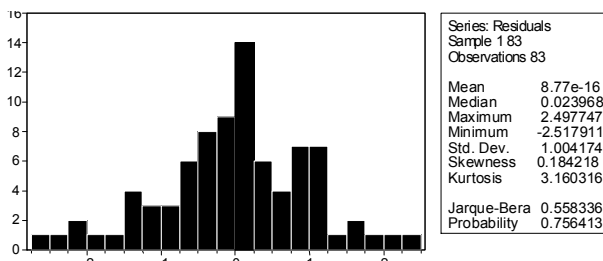


Figure 5: Normality results by Jarque Bera test

$$\text{Jarque-Bera} = \frac{N}{6} \left(S^2 + \frac{(K-3)^2}{4} \right)$$

On the based of the results that contained in graph no.3, the mean value for given dependent variable is 8.77, median .020 and standard deviation is around 1.00. As the results, Skewness and kurtosis are .18 & 3.16 respectively. Both of them are under the acceptance range of 0 & 3. Nevertheless, Jarque bera valued .55 which is validating the criteria for normality of given series.

Checking the data for stationarity of the time series: LOGUNDER

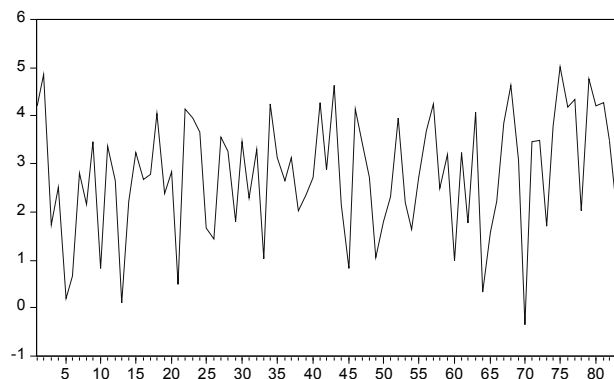


Figure 6: Degree of underpricing – firms to the extreme left in the X axis were listed in April 2008 and those to the extreme right in Dec-2011. Y axis shows the degree of underpricing in percentage terms.

Unit root test by Kwiatkowski-Phillips-Schmidt-Shin test statistic

Kwiatkowski-Phillips-Schmidt-Shin test statistic

Table 8: Kwiatkowski-Phillips-Schmidt-Shin test statistic result

		t-Statistic	LM-Stat.
Kwiatkowski-Phillips-Schmidt-Shin test statistic			0.43563
Asymptotic critical values*:		1% level	0.73900
		5% level	0.46300
		10% level	0.34700
*Kwiatkowski-Phillips-Schmidt-Shin (1992, Table 1)			
Residual variance (no correction)			1.67911
HAC corrected variance (Bartlett kernel)			2.46398
S.E. of regression	1.298001	Akaike info criterion	3.36290
Sum squared resid	497.0176	Schwarz criterion	3.37536
Durbin-Watson stat	1.761576	Hannan-Quinn criter.	3.36789

Based on results in table.6, KPSS test reveals that the test statistics of dependent variable at 1%, 5% and 10% of critical values (.739, .463 & .347) respectively. KPSS test statistics value is .435 which is acceptable at 1% and 5% significance level of critical value. Accordingly, we accept null hypothesis and given series is a stationary series and useful to forecasting and prediction.

Augmented Dickey-Fuller Test Equation

Null Hypothesis: LOGUNDER has a unit root				
Exogenous: Constant				
Lag Length: 0 (Automatic - based on SIC, maxlag=11)				
			t-Statistic	Prob.*
Augmented Dickey-Fuller test statistic			-15.20335	0.0000
Test critical values:	1% level		-3.453652	
	5% level		-2.871693	
	10% level		-2.572253	
*MacKinnon (1996) one-sided p-values.				
Variable	Coefficient	Std. Error	t-Statistic	Prob.
LOGUNDER(-1)	-0.913136	0.060061	-15.20335	0.0000
C	2.982920	0.212453	14.04040	0.0000

Based on results in table.5, ADF test reveals that the test statistics of dependent variable at 1%, 5% and 10% of critical values (-3.45, -2.87 & -2.57) respectively. ADF test statistic's value is -15.20 which is not acceptable to 1% and 5% significance level of important value. Accordingly, we reject the null hypothesis and series no subsists in unit root problem. As the result, given series is a stationary series and useful to forecasting and prediction.

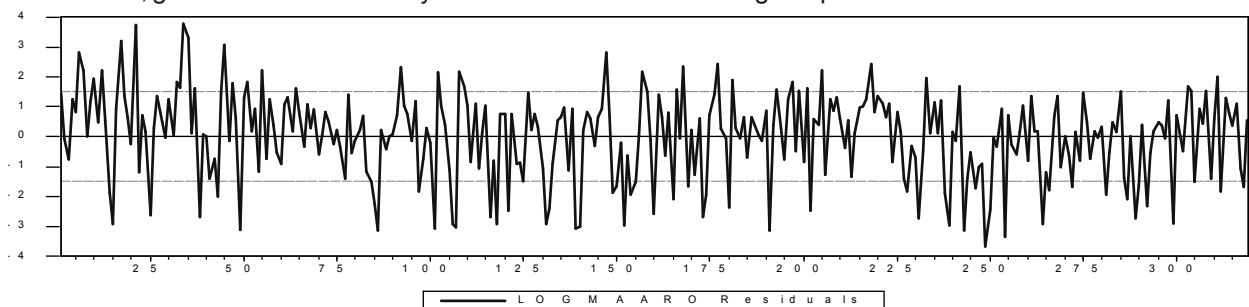


Figure 7: Detail of underpricing by LOGMAARO

Degree of underpricing – firms to the extreme left in the X axis were listed in Oct 2008 and those to the extreme right in Dec-2011. Y axis shows the degree of underpricing in percentage terms. It reveals the different initial returns of different IPOs that were listed at Bombay stock exchange India. Graph indicates moving returns for different IPOs not reveals constant.

Multiple regression equation -

Dependent Variable: LOGMAARO

Method: Least Squares

Included observations: 83

White heteroskedasticity-consistent standard errors

Table 10: Multiple linear regressions results *Sig @ 5% significance level ** sig @ 10% significance level

Variable	Coefficient	Std. Error	z-Statistic	Prob.
C	-89.45882	98.36198	-0.909486	0.3661
LOGAGE	-0.058601	0.174269	-0.336266	0.7376
LOGISSUESIZE	-1.039017	0.407646	-2.548821	*0.0129
LOGMKTCAP	0.778549	0.315763	2.465610	*0.0161
LGNOOFSHARE	-0.300833	0.163650	-2.238273	**0.0701
IPO_TYPE	0.878093	0.756550	1.160654	0.2496
LOGSUBSC	-0.118611	0.106621	-1.112450	0.2696
R-squared	0.514716	Mean dependent var		2.776243
Adjusted R-squared	0.433426	S.D. dependent var		1.248029
S.E. of regression	1.018941	Akaike info criterion		2.998290
Sum squared resid	74.75327	Schwarz criterion		3.318859
Log likelihood	-113.4290	Hannan-Quinn criter.		3.127076
F-statistic	5.101719	Durbin-Watson stat		1.793612
Prob(F-statistic)	0.000013			

Equation Coefficients:

LOGUNDER = -89.45882-0.058601*LOGAGE -1.039017* LOGISSUESIZE + 0.778549* LOGMKTCAP - 0.118611*LOGSUBSC -0.300833* LGNOOFSHARE+ 0.878093 PRICING MECHN

Multiple Regression Results and Findings

Based on the multiple linear regression result (table-10), it was found that issue size, market capitalization and number of share offered have consequential relationship to the level of underpricing at the Bombay stock exchange. Firm's age, subscription rate & pricing mechanism has no significant relationship to the level of underpricing. There is no momentous association between subscription rate and level of underpricing at 5% significance level (z = -1.11). Therefore alternative hypothesis 1 is rejected. There is an important connection between issue size and the altitude of underpricing at 5% significance level (z = -2.55) compare to z table value at 5% (z = -1.96). This designates that issue size has a negative impact on underpricing. Therefore, null hypothesis 2 is turned

down.

There is a weighty link between market capitalization and level of underpricing at 5% significance level (z = 2.46). The market capitalization has a positive significant effect of the level of underpricing. This indicates that more market capitalization effect more underpricing. Nevertheless, null hypothesis 3 is rejected. There is no significant affinity between firm's age and level of underpricing at 5% significance level (z = .33). As the result of, null hypothesis 4 is acknowledged. There is significant relationship between numbers of share and level of underpricing at 5% significance level (z = -2.23). The number of shares has negative significant relationship with underpricing. Consequently, null hypothesis 5 is declined. There is no significant relationship between pricing mechanism and level of underpricing at 5%

significance level ($z = 1.16$). For that reason, alternative hypothesis 6 is rejected. The pricing mechanism has no significant effect of the level of underpricing.

Table 11: Results of multiple regression @ 5% significance level ($z = \pm 1.96$)

<i>S.No.</i>	<i>Variables</i>	<i>z-Statistic</i>	<i>Z- value @ 5% z = (±1.96)</i>	<i>Prob.</i>	<i>Null hypothesis H0</i>
1	IPOBB	0.901203	1.96	0.3706	Accepted
2	LGNOOFSHARE	-2.003478	1.96	0.0929	Rejected
3	LOG OFFER TIMING	-0.664541	-1.96	0.5085	Accepted
4	LOGAGE	-0.414333	-1.96	0.6799	Accepted
5	LOGFORGP	0.913204	-1.96	0.3643	Accepted
6	LOGNONINST NONP	-0.314552	1.96	0.7540	Accepted
7	LOGINTNONP	2.113677	-1.96	0.0381	Rejected
8	LOGINDP	-0.142584	1.96	0.8870	Accepted
9	LOGISSUESIZE	-2.246238	-1.96	0.0278	Rejected
10	LOGMKT CAP	2.134478	-1.96	0.0363	Rejected
11	PVTCODE	-1.988844	1.96	0.0780	Rejected

DISCUSSION

Our study also delivers similar results regarding issue size. Issue size is having pessimistic relationship to the level of underpricing. The result indicating the negative relationship of issue size in the contemporary study is in confirmation of the result found by (Deb, 2010)5). Market capitalization is having positive relationship with underpricing in the present study. A finding of the present study is not agreement with findings by (Richard, 2006)22). Subscription rate & firm's age are having no significant relationship at the level of underpricing in the present study. A finding of the present study is not agreement with findings of (Rock, 1986)20). Number of shares is having negative relationship to the level of underpricing in the present study. A finding of the present study is not agreement with findings of (Leite, 2000)10). Pricing mechanism is having no meaningful relationship to the level of underpricing. A finding of the present study is in confirmation of the result found by (Bansal, 2012).

CONCLUSION

This paper investigates the analysis of underpricing in the Indian stock market and determines the factors are consequential in affecting the underpricing. Among the variables, issue size, market

capitalization and number of share offered were found to be significant in affecting the underpricing. There is negative association between issue sizes & number of offered share with the level of underpricing on one side. Other sides there are positive relation with market capitalization and level of underpricing. There is no significant relationship between subscription, firm's age and pricing mechanism at the level of underpricing. On the base of results, we can say that Indian stock market crisis has affected the level of underpricing and their related variables.

The results obtained from this study disclose that inexperienced issues on the BSE are subject to underpricing, consistent with developed and other emerging markets. In this respect, prospective investors should practice the strategy of buying the fresh issues at the offer and selling them immediately on the first day of trading. On the other hand, the study also reveals that investors should not hold new issues very long as the highest component of the introductory returns is found on the initial day of trading. We determine that IPO underpricing is positively related to post-IPO growth, but is not significantly related to growth in earnings. Our evidence suggests that accrual reversals or earning's management may cause this inconsistency. We elucidate the more issue size, maximum market capitalization as measures of firm

quality, and conclude that our evidence supports the notion that IPO firms with greater underpricing are of better quality. Our tests on analysts pricing mechanism errors indicate that, book building is negative association for IPO firms, in results that have been lesser underpricing.

FUTURE IMPLICATIONS

Taking into account all firms which have consumed public on the official market of the Stock Exchange of Bombay for the period (April, 2008 to Dec, 2011), this study examines the evidence on the short-run under-pricing of IPOs. In particular, an average underpricing level within the range 50% is found based on first day. Using a regression approach, the degree of underpricing is explained by the ex-ante uncertainty hypothesis, and the signaling hypothesis. Assortment there is limited support for the signaling hypothesis. In particular, the results show that the Issue size, market capitalization, book build pricing mechanism have an important impact on the initial returns while the ownership structure and firms age to have no weighty effect on short-run underpricing. Conversely, the results disclose that there is no statistically significant relationship with other explanatory factors such as Promoter's holdings, IPOs year and private government IPOs and the level of underpricing.

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CSR AND THE TRIPLE BOTTOM LINE: THE ROLE OF NGOs

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ABSTRACT

The field of Corporate Social Responsibility (CSR) is peppered with theories, models, and concepts all of which endeavour to explain CSR and make sense of it from different perspectives. Amongst those is the Triple Bottom Line (TBL) concept. It has received a wide variety of attention ranging from praise for its ability to conceptualise CSR as well as criticism, perhaps for lacking currency and/or applicability. However, the concept is invariably cited in CSR literature and here it will be employed to assess the extent to which it can be applied by NGOs for CSR purposes. The paper will begin by providing definitions of NGOs, their historic backgrounds, etc., as well as their evolution over the years. It then intends to evaluate the concept of TBL by utilising available literature from a variety of sources. It will also use information provided by a major NGO operating in the United Kingdom vis-à-vis its role in CSR strategy formulation and implementation, be it in partnership with companies or otherwise. With respect to such alliances McIntosh et al. (2003, 45) write "evidence suggests that while conflict is still commonplace, there is increasingly room for manoeuvre that is building on an imperative for participatory outcomes. As the potential of NGOs evolve, so too does the scope of their activities. Significant is the ability of organisations to harness new technologies for communication and to achieve progressive change through a collective voice".

KEYWORDS: Corporate Social Responsibility (CSR), The Triple Bottom Line (TBL) concept, NGOs, Strategic Alliances.

NGOs : DEFINITIONS AND FUNCTIONS

Teegan, et al. (2004, 466) quoting the United

Nations (2003), define an NGO as: "any non-profit, voluntary citizens group which is organised on a local, national or international level. Task orientated and driven by people with a common interest, NGOs perform a variety of services and humanitarian functions, bring citizens' concerns to governments, monitor policies and encourage political participation at the community level. They provide analysis and expertise, serve as early warning mechanisms and help monitor and implement international agreement. Some are organised around specific issues, such as human rights, the or health". Similarly, Edwards (2000, 7 - 8) offers the following definition: "a subset of civic organisation, defined by the fact that they are formally registered with government, receive a significant proportion of their income from voluntary contributions (usually alongside grants from government) and are governed by a board of trustees rather than the selected representatives of a constituency. If civil society were an iceberg, then NGOs would be among the more noticeable of the peaks above the waterline, leaving the great bulk of humanity groups, informal associations, political parties and social networks sitting silently (but not passively) below".

Friends of the Earth (FOE), the Background and History of an NGO

It was decided to select FOE as a major NGO that operates in the UK, as well as in numerous other countries throughout the globe. As a long time member the author is familiar with their activities and is kept in touch by means of its regular communications. According to Murphy and Bendell (1997), FOE was founded in the USA in 1969 as an off-shoot of the Sierra Club. Friends of the Earth (FOE), was established in the UK in 1971. The organisation states that it is:

- *The UK's most influential environmental campaigning organisation*
- *The most extensive Environmental network in the world, with almost 2 million supporters across 5 of Greenpeace, Friends of the Earth (FOE), Microsoft and Apple.*

Blood (2004, 123) believes that "*perhaps NGOs and capitalism benefited alike from an anti-establishment, 'clean slate' mood of the educated young people, post*

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1968”

NGOs can be contradictory, for instance, while some condone wind energy, others condemn it as windmills may spoil the landscape similarly some NGOs demand stricter safety tests on chemicals while others ask for no testing as it is seen as cruelty to animals. However, one major difference between an NGO and a political party is that, since many campaign for a single or related issues, the marketing of their policies is ‘cost free’ without any concern about the consequences of other policies, writes Blood (2004). There have been calls for NGOs to have an expanded role which would also mean a deemphasis on the state as a service provider and a commensurate expansion in the private business sector, argues Henderson (1997, 356). He further writes: “NGOs are frequently envisioned as a means to supplant the state in the delivery of basic welfare, health, education and other services. Co-opting them into overall externally imposed reform designs is occurring.” Jan Pronk (as quoted in Stephen Hellinger, et al. 1998) had predicted that NGOs would inevitably be corrupted in the years to come as they have too much at stake to avoid co-operating with governments of the day. Henderson (1997) even refers to some NGOs becoming unwitting accomplices in order to achieve their immediate tasks and warns of the possibility of bribery and other inducements being used to accomplish humanitarian ends. However, on a more positive note, Clark (1991) writes that NGOs may sometimes avoid the worst aspects of national and local politics by carefully selecting their bureaucratic sponsors. He suggests that even ‘bad’ governments have ‘good’ departments with which NGOs can co-operate. He cites the example of Ethiopia where it is difficult to work with the mainstream Ministry of Agriculture, however, the Peasant Association department and the Village Water Supply department both work well with NGOs.

In terms of the potential power and influence of NGOs, Beaudoin (2004, 366) writes: “...management can... no longer ignore the ‘opinion factor’ in decision making, nor should they disregard opinion trends which NGOs represent. On the contrary, effective management decisions must include NGOs as actors in the markets—whether this market be of products, services, shares or labour and consider opinions when shaping decisions.” Gray et al. (2006, 319) refer to the current political struggle between civil society and capital in relation to appropriate means of accountability. Companies, they write, try to avoid being held accountable while civil society organisations are invariably accountable in a number of ways. They warn that: “ill-considered calls from capital

for more oppressive NGO accountability are typically, therefore, hypocritical and inappropriate.”

A CRITICAL EVALUATION OF THE TRIPLE BOTTOM LINE (TBL) CONCEPT

John Elkington was the originator of the above term in 1994. As well as TBL it has occasionally been referred to as the 3Ps: Profit, People and Planet (incidentally, used as the title of Shell’s first environmental and social report in 1996) and 3BL. In short the TBL agenda examines companies’ economic contributions as well as their positive and negative impact on society and the environment. Elkington (1998) also believed there to be a paradigm shift coinciding with a global cultural revolution. This would herald a much larger role for business and NGOs as opposed to that traditionally played by governments. This, shift according to Elkington, does not make the proposed transition from status quo to TBL for businesses. He does, however, offer the so called 7 sustainability revolutions as essential for the application of TBL:

	Old Paradigm		New Paradigm
1. Markets	Compliance	→	Competition
2. Values	Hard	→	Soft
3. Transparency	Closed	→	Open
4. Life-cycle technology	Product	→	Function
5. Partnerships	Subversion	→	Symbiosis
6. Time	Wider	→	Longer
7. Corporate governance	Exclusive	→	Inclusive

(Elkington, 1998)

Elkington further introduces the four main types of companies along the evolutionary path to a chrysalis economy. These are: butterflies (low impact, regenerative), honeybees (high impact, regenerative), caterpillars (low impact, degenerative), and locusts (high impact, degenerative). In order to move towards a sustainable world, governments should treat the first two categories with more respect than the last two, the locusts being the worst to harm the environment and society. He refers to some parts of Africa, Asia, Latin America and the ex-Soviet Union controlled regions containing large numbers of such companies.

Norman and MacDonald (2003) are not completely overwhelmed by TBL. The overall fulfilment of companies’ duties to various stakeholders should be measured, calculated, audited and reported, they comment. However, they see “if you can’t measure it, you can’t manage it” as yet another modern day management cliché. They acknowledge a need for

developing the required tools and welcome attempts to provide them for managers. Furthermore, they do not doubt the desirability of CSR practices for companies. However, they state that all major companies at least pay lip-service to it or in certain cases use TBL as a smokescreen behind which to hide. They cite a PriceWaterhouse Coopers' employee, Hella Bank Jorgensen, who views TBL as a valuable management tool, an early warning device enabling companies to react faster to changes in the stakeholders' behaviour, preparing appropriate strategies to address those changes before they hit the [real?] bottom line. Norman and MacDonald (2003) further write that claims on TBL tend to be rather lukewarm claiming it to be "an important milestone in our journey towards sustainability", or an approach that "places emphasis" (Respini, date?) on social and environmental aspects of the company along with economic issues, and that "should move to the top of executives' agenda" Panchack (2002). However, perhaps Norman and MacDonald (2003, 11-13) try very hard not to apply the term 'woolly' to this concept.

The outcome of their research into the concept, however, is largely critical of this "paradigm" and the rhetoric associated with it. Although they support its good intentions, they write: *"we cannot help but conclude that there is no meaningful sense in which 3BL (their name for TBL) advocates can claim there is a social bottom line....this part of jargon is, in short, inherently misleading: the very term itself promises or implies something it cannot deliver...the concept of a Triple Bottom Line...in fact turns out to be a 'Good old-fashioned Single Bottom Line plus Vague commitments to Social and Environmental Concerns'."*

The Chartered Institute of Marketing (CIM) in its 'Shape the Agenda' (2007, 5) writes: *"by supporting and fostering the Triple Bottom Line agenda, marketers can ensure that they are working towards a viable business future as well as a healthy environmental and social one"*. They see some value in TBL as well as an effective role for marketing in relation to its application, etc.

Do Companies Apply the TBL Concept?

When Elkington was asked in 2008 (www.motherjones.com) the question whether he could name projects or companies that use the TBL he cited Shell as an early example. The company had approached him in the aftermath of the Brent Spar oil rig disposal controversy in Europe and the execution of Ken Saro-Wiwa and his colleagues in Nigeria. He

refused to work with them for two years, perhaps questioning their real motives. He also mentions Wal-Mart (despite his intense dislike of the corporation) due to the way they manage their supply chain. Nevertheless, he believes there are numerous companies, (such as Ben and Jerry's perhaps) that practice the TBL concept without realising it.

Amongst organisations that actually publicise their TBL efforts is e3bank. The name, apparently, is shorthand for the company's focus on the triple bottom line. Their website explains their 'guiding principles' as:

- *build prosperous and sustainable enterprise through sound investments in people and our planet.*
- *protect the health of our planet's environment, which supports life and our economy.*
- *increase social equity by being fair to all people affected by our decisions and by the quality of life in the communities we serve. www.e3bank.com*

Sadly the organisation does not specify exactly how these principles are implemented and measured for effectiveness and so forth. However, amongst financial institutions the Co-operative Bank of the UK is perhaps one corporation that does genuinely apply ethical/environmental policies to its activities, operations etc. The Co-op Bank when interviewed (Jahdi, 2006) made no clear refer to the TBL concept and its use. Indeed, some ethically known organisations, such as Suma Wholefoods in the UK, expressed their dislike of such management jargon.

Norman and MacDonald (2003) refer to AT&T, Dow Chemicals, Shell, and British Telecom (BT) that have employed TBL terminology in their publications, annual reports and so forth. Most of the accounting firms, they state, not only use TBL approvingly but also offer assistance to companies seeking to measure, report and audit their own so called additional bottom lines. Governments, their departments, political parties alike advocate the TBL 'principles'. Many NGOs apparently accept TBL as an article of faith, they assert.

THE TBL, NGOS & COMPANIES - A PARTNERSHIP?

Beaudoin (2004, 366) writes: "NGOs have reached a point where they can exert a direct impact on the financial performance of companies. This

influence on corporate economics is entirely based on opinion phenomena. Either directly, because NGOs could mobilise enough public opinion for this to affect a management decision, even when this decision is made in conformity with existing laws and regulations, or indirectly, because NGOs would successfully lobby government on rules applying to business decision”.

The above quote highlights the potential power and influence of NGOs and how it is in the interest of companies not only to co-operate with but ideally enter into an alliance with them. Needless to say, implementing good intentions and putting them into practice by companies might prove to be far more difficult than envisaged. In fact at times it might even be an impossible task or one that could be detrimental to an organisation’s survival/future. Public perception of companies and the value of public opinions are extremely important factors for any company worth its salt. These are usually located in balance sheets amongst intangible assets and invariably called ‘brand value’ and ‘goodwill’. A company with an attractive brand can afford to charge a premium for its products and/or services. This is a clear reflection of a company’s position in the marketplace. Unlike company tangible assets, intangibles such as brand attractiveness, reputation and goodwill are entirely detained in the minds of customers, i.e. the company has no ownership or possession, as suggested by Beaudoin (2004).

Meanwhile Helm (2007) in her investigation arrived at the conclusion (amongst others) that company investment in reputation management has positive effects on the emotional predisposition of its individual investors. Vis-a-vis corporate reputation’s role on financial markets, she also suggests three research streams. The first supported by Sobol and Farrelly (1988); Hammond and Slocum (1996) refer to the link between financial performance and the company reputation. The second is backed by Brown (1998, 279) who states: “*poor reputation signals to investors that disaster lurks, and that when it strikes, those companies will not have the necessary public support they need to weather the storm*”. Hunt (1952), over half a century ago saw corporate reputation not only as a performance indicator but also a choice criterion for investors who did not merely seek high dividends or indeed share appreciation. The final stream focuses on research on the impact of corporate image or reputation on customer attitudes and behaviour in financial markets especially banking services (for ref. see Bloemer and de Ruyter 1998 and Martensen et al. 2000).

It can be argued that corporate reputation has an ethical/CSR dimension to it which is gaining further prominence. This has become more pronounced especially in the aftermath of Enron (interestingly, Enron’s code of ethics of July 2000 runs to over 60 pages, according to Norman and MacDonald, 2003), WorldCom and the more recent financial institutions’ disasters emanating mainly from unethical behaviour. Campbell and Atkinson (2008,10) substantiate this increased interest in matters ethical when they write: “*...the behaviour of businesses and other organisations is increasingly under scrutiny. There has been a significant growth in interest in corporate social responsibility during the last 10 years and the emergence of a range of indices for measuring social responsibility as the basis for investment in companies’ shares as well as the growth of international standards for social responsibility auditing*”.

Beaudoin (2004) has noticed a shift in NGOs from a position of opposition to companies, to a competitive stance and partnership with them for the purpose of defending common values. Companies can offer economic support, while NGOs bring public approval to the alliance. Amongst such partnerships are those offered to companies by NGOs such as the Forest Stewardship Council (FSC) and the Soil Association, the former provide firms with FSC certification that indicates wood used by them is from a sustainable source, while the latter provides it seal of approval for organic foods offered by some firms. Greenpeace upon being approached stated that it was not their policy to endorse an organisation for its ethical/green initiatives and offer their seal of approval. This is done deliberately to maintain its campaigning independence. It did, however, said in the past it had supported the Juice green energy scheme with npower, and worked with companies to launch green products and non-HFC fridges and freezers by Iceland Frozen Foods. However, it was emphasised that those had occurred years ago. (Greenpeace suggested the author contact organisations such as the Worldwide Fund for Nature who endorse products).

FOE, when contacted said that it does not offer corporate membership, nor accept money from any source that could be perceived as finding influence with the organisation, although it is not entirely ruled out by this NGO. The organisation states that it is very cautious in its approach to any possible alliance with companies as this might (as in the case of Greenpeace) undermine their campaigning independence. That said, FOE stated that since its

formation, it has campaigned to change corporate behaviour. The organisation, however, says that: “we have previously or currently had some relationships with Good Energy, Natural Collection, The Co-operative Bank and Eurostar” (Personal communication with FOE, 12/08/2009).

However, Sustainability, (Elkington’s old organisation), offers its consultancy services to businesses in order to ‘create long term values’. The website further states: “we enable clients to anticipate emerging risk, build trust with key stakeholders and maximise business opportunity. We develop and deliver strategies that transform profound social and environmental challenges into unprecedented opportunities for corporate innovation and long term value creation”. www.sustainability.com

It is encouraging to note an organisation such as this to offer its expertise to enable firms to behave in a socially responsible and environmentally concerned manner, in a sense putting TBL into practice. However, a glance at the client list of SustainAbility reveals the names of some corporations that are not really well known for their CSR activities. The list includes: BP, Coca-Cola, Mars, McDonald’s, and Shell Group amongst others.

CONCLUSION

This paper set out to define NGOs and explain their roles, while using FOE as an example (amongst others) for this purpose. The concept of the Triple Bottom Line (TBL) was critically evaluated. Its potential to improve companies’ operations, activities and so forth vis-à-vis social and environmental issues was analysed. In addition its application by corporations was then discussed, citing examples of companies that appear to apply TBL. It was acknowledged that concepts such as this certainly highlight and emphasise the duty of companies to treat society and the environment with respect and care (while simultaneously looking after profits and shareholder value). There is, however, a danger that many corporations may use TBL as a device for either mere marketing and publicity purposes, or simply because every other firm seems to be doing it. The absence of clear metrics for calculating the social and environmental bottom lines causes serious concern.

Furthermore, there is a danger that the TBL may be simply viewed as yet another management fad, or a CSR bandwagon for companies to jump on with no genuine desire to save the environment or serve the society. That said there is every reason really for

NGO and company co-operation and partnership in CSR initiatives.

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GLOBAL CLIMATE CHANGE AND INDIAN CARBON MARKET

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- Keywords
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- International Climate Policies
- Emergence of Carbon Market: Demand & Supply Side
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ABSTRACT

Carbon Credits have the potential to be the next great currency. It might be almost mandatory to have Carbon Credits one day and there seems to be no alternative world currency that escapes local political intervention that we can all trust. Carbon Credits are going to hold the same value wherever you are because CO2 has a global impact. World carbon market grew by 37% in Q1 2009 compared to the previous quarter to reach 1,927 Mt. This was 128% higher than the first quarter in 2008. The carbon market has touch \$12 bn in 2009. Carbon market is forecasted to touch \$408bn by 2012 and \$2.1 trillion by 2020. India and China are the two major contributors in terms of carbon credit through Clean Development Mechanism. India currently hosts a total of 1,158 CDM projects, which take up 26.5% of the CDM project market share worldwide (Fenhann, 2007). However, the prospective revenue of certified emission reductions (CERs) in terms of kCERs generated by the CDM projects are expected to amount to 447,158 kCERs in 2012, averaging 15.5% of the kCERs in 2012 globally. In the Asian context, India currently hosts about 35% of the CDM projects, which will generate only 19% of the expected accumulated CERs in 2012. This paper discusses the contribution of Indian Carbon Market with reference to global carbon market scenario.

KEYWORDS: Carbon Market, Market Classification, Carbon Credit.

CLIMATE CHANGE: A BUSINESS PERSPECTIVE

Climate Change and Global Warming is a

natural process, discovered in early 19th century that keeps the earth habitable. Earth's atmosphere absorbs some of the heat radiation from sunlight that is carried back into space after it hits the earth's surface and thus functions as a blanket. Oxygen and Nitrogen are transparent and do not absorb heat radiation, there are few gases called greenhouse gases (carbon dioxide, Chlorofluorocarbons, methane, nitrates) that are opaque and do not let heat radiation pass. Out of all the greenhouse gases CO2 becomes issue of serious concern for all the party as corporate, society, government and other stakeholder.

Keeling and Whrof (2005) develop Keeling's Curve that shows rising level of CO2 concentration. The increase in CO2 is due to industrial revolution and human activities. The Intergovernmental Panel on Climate Change (IPCC) reports 2007a concludes that global warming is due to human activities. According to Andresen and Agrawala (2002), Boehmer-Christiansen (1996), Paterson (2002), Rowlands (1992), climate change becomes political agenda and also policy issue.

Hot Airs create new business agenda for industry, society and government across the globe. The emergence of concern about global warming in the international policy setting was in the early 1990. The business attention on the same issue was developed around 1990 while public and policy interest had already started in 1980. A proactive response was after the adoption of Kyoto Protocol in 1997.

Impact of Climate change on external as well as internal business scenario has forced the corporate to use climate change as new strategic weapon in corporate battle. The public and policy interest has laid down strong foundation for corporate to develop the future path. The interest of corporate enhanced according to their peer group, country of origin, shareholders concern, customer concern, government concern.

Today all sectors as automobile, telecommunication, information technology, finance,

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oil, light and heavy engineering industry, real-estate, insurance, aviation and other sectors changing pathways according to present scenario.

INTERNATIONAL CLIMATE POLICIES

The developments and progressive research in climate change has forced the globe to develop policies at international, regional and national level to help corporate, society and government. Traditional approach for climate change is command and control, in which government sets legally binding standards for emission cuts or the specific technology to be used. In climate change policies command and control is much less important than market based instruments in 1990.

According to Hahn and Stavins (1992), Tietenberg (1990) market based instruments are most cost effective than traditional regulation. The main market based instrument for climate change is emission trading through a cap and trade system. Under the Kyoto Protocol participating countries are allowed to exchange part of their obligation with another party Grubb et al (1999). The intergovernmental emission trading enables countries to transfer greenhouse gas emission, has led to the creation of domestic systems to trade emissions at a company level. Framework Convention on climate change adopted at United Nations Conference on Environment and Development in 1992, expression of intent by industrialized countries to stabilize emission at 1990 levels by the year 2000, no mandatory emission curbs.

Kyoto Protocol Agreement (1997) on reduction targets for greenhouse gases compared to 1990 levels, to be reached in 2008-12. Different target per country /region, e.g. Australia +8%; Canada -6%; Japan -6%; Russia 0%; US -7%; EU -8%. EU overall target translated into specific ones for member countries, e.g. Germany -21%, France 0%, Italy -6.5%, Spain +15%, UK -12.5%. Conference of Parties 1998 provides the path for confirmation of the Kyoto agreement and adoption of a plan of action to implement the protocol.

In 2001 Bonn Agreement on Kyoto, implementation by the EU, Japan, Canada, Australia, Russia and a number of developing countries on the rules for the reduction of greenhouse gas emission laid down in Kyoto Protocol. Proposal by European Emission in 2001 to setup an emission trading scheme

come into effect from 2005. Kyoto Protocol ratification in 2002.

Chicago Climate Exchange (CCX) start voluntary trading scheme in 2003 (which is legally binding for member organizations to meet reduction targets of 6% by 2010 compared to average 1998-2001 greenhouse gas emission). At the same time Regional Greenhouse Gas Initiative (RGGI) in US by Northeast and Mid Atlantic States to discuss a regional cap and trade program that will initially cover CO₂ emission from power plants but can be extended later.

European Union Emission Trading Scheme (EU ETS) started on Jan 1 2005. On 16 February 2005, the Kyoto Protocol entered into force with the official ratification by Russia. During first meeting of the parties to the Kyoto Protocol, Marrakesh Accords were adopted and a four track path was initiated to discuss future action on climate change beyond 2010.

European Union launched new targets in 2007 to prevent warming of more than 2° C before 2020 including 20% reduction in greenhouse gases. Fourth report by Intergovernmental Panel on Climate Change released in February 2007 reaffirmed findings that global temperature are rising and that this development is very likely to have been induced by human caused greenhouse gas emission. Establishment of Bali Action Plan during Conference of Parties (COP) at Bali 2007, an agreement to start negotiating a post 2012 international framework for climate change policy as a follow up to the Kyoto Protocol.

Copenhagen 2009, it was, of course, nice that world leaders could agree that it would be bad to risk the devastation that could be wrought by an increase in global temperatures of more than 2° C. At least they paid some attention to the mounting scientific evidence. The failure of Copenhagen was not the absence of a legally binding agreement. The real failure was that there was no agreement about how to achieve the lofty goal of saving the planet, no agreement about reduction in carbon emission, no agreement on how to share the burden, and no agreement on help for developing countries. Even the commitment of the accord to provide amounts approaching \$ 30 billion for the period 2010-12 for adaptation and mitigation appears paltry next to the hundreds of billions of dollars that have been doled out to the banks in the bailouts of 2008-09. If we can afford that much to save banks, we can afford

something more to save the planet.

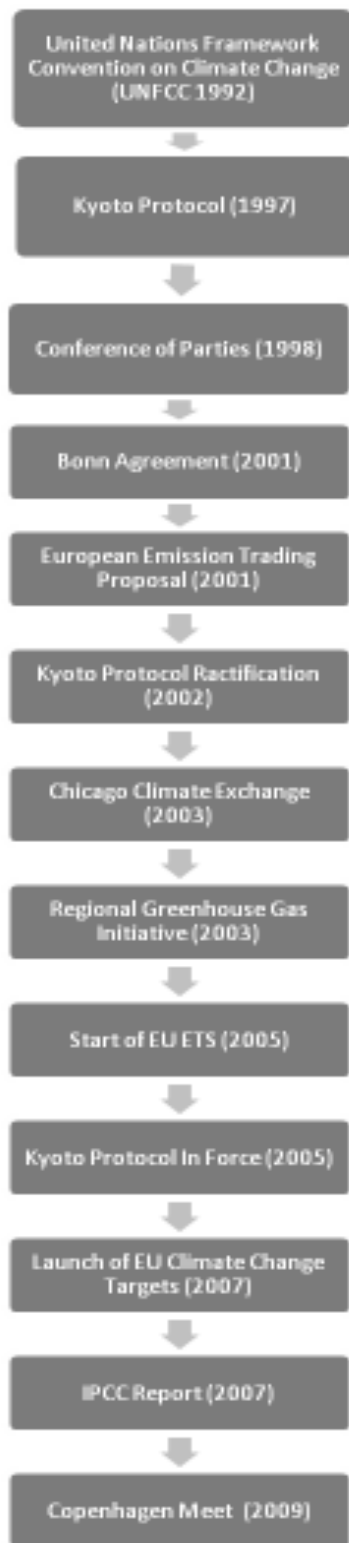


Figure 1: International Climate Policies

ENVIRONMENTAL GOVERNANCE IN INDIA

Climate change problem in developing and emerging economies such as India have to date not been adequately addressed Gupta (1997) due to following reasons, first climate change so far not been a major item on policy agendas. Besides that not only policy makers but also business actors, civil society, and local people are insufficiently aware of climate causes and effect. Second environmental issues in general gain little attention due to failure of policy implementation. Srinivasan (2006), for the past years Indian government has put efforts into enhancing the status of environmental and climate issues on the policy agenda. As regards climate politics, India has to date initiated a number of policies and measures that concern the mitigation and adaptation to climate change.

On the international level, India has signed the United Nations Framework Convention on Climate Change (UNFCC) on June 10, 1992, rectifying it on November 1, 2003. Acceding to Kyoto protocol on August 26, 2002, India hosted the conference of parties (COP 8) in October 2002 in Delhi. India has argued in the international negotiating forum that the developed country parties must take actions in accordance with the principle of equity and common but differentiated responsibilities and respective capabilities in order to achieve the objectives of the convention. India has stated that the actions of the developing countries will depend on the support in terms of finance and technology provided by the developed countries.

India being vulnerable to adverse effects of climate change is very conscious of its global responsibilities towards climate as also the need to minimize adverse effects of climate change on its large population. Although India's total CO₂ emission are about 4% of total global emissions. India's per capita emission is likely to be well below developed country averages. India has announced that it will Endeavour to reduce 20 to 25 percent by 2020 in comparison to the 2005 level. Current government expenditure in India on adaptation to climate variability exceeds 2.6 percent of the GDP, with agriculture, water resources, health and sanitation, forests, coastal zone infrastructure and extreme events, being specific areas of concern and action.

In pursuance of its voluntary actions to address climate change related concerns, India released its National Action Plan on Climate Change

(NAPCC) on 30th June, 2008. NAPCC advocates a strategy that promotes the adaptation to climate change, enhancement of the ecological sustainability of India's development path. Eight National Missions e.g. National Solar Mission, National Mission on Enhanced Energy Efficiency, National Mission on Sustainable Habitat, National Water Mission, National Mission for Sustaining the Himalayan Ecosystem, National Mission for Green India, National Mission for Sustainable Agriculture, National Mission on Strategic Knowledge for Climate Change. India's 11th five year plan includes an indicative target of increasing energy efficiency by 20% by 2016-17.

EMERGENCE OF CARBON MARKET: DEMAND & SUPPLY SIDE

Global GHG emissions from all sources amounted to 47 GtCO₂eq in 2005, and are expected to increase to 53 GtCO₂eq by 2020 under a business-as-usual scenario (OECD, 2008). Global energy-related CO₂ emissions are expected to constitute the main share, reaching 36.4 GtCO₂eq in 2020, and are driven by the power sector (44%) and industry (16%) IEA(2008). Almost half of the 2020 energy-related CO₂ emissions are expected to be emitted by the major emerging economies, where the power sector (51%) and industry (21%) play an even larger role. In addition to electricity and industry, forestry is both a major source and sink.

Estimates of 2013-2020 supply and demand of credits are highly uncertain as there are a number of unanswered questions at this stage:

- How fast will developing countries, and specifically the sectors in consideration, grow in the near future? How will energy prices evolve, and how will they drive efficiency improvements?
- How will international climate policy develop, i.e. what are possible commitments by countries and attitudes towards crediting?
- How will mitigation policies affect GHG emissions? How will they influence the demand for electricity and other commodities?
- Which sectors would be covered by a sectoral crediting mechanism (SCM) or sectoral trading, and which countries would participate? How quickly could countries become eligible to participate in such mechanisms?
- How ambitious would baselines (in the case of

intensity-based targets) or fixed targets be?

Currently two major carbon markets co-exist: one carbon market established for compliance of governments with the Kyoto Protocol, and a second carbon market, essentially the EU ETS, with restricted access to the international market. In essence, governments and non-EU entities have the right to access all Kyoto units, while the EU ETS entities do not.

The Carbon Trust (2009) first estimates the supply and demand situation until 2012, and projects a total supply of 2,050- 4,000 MtCO₂ from international carbon mechanisms, largely in excess of the potential demand of 890- 1,830 MtCO₂ by governments and companies in the EU ETS. The analysis assumes that governments would use to a certain extent AAUs through Green Investment Schemes (GIS) but that most AAUs would be banked for use post-2012. This, together with an extrapolation of today's inflow of CDM and JI projects, and the existence of surplus AAUs in the Russian Federation and Ukraine in particular, leads to an estimated supply of 19.5 GtCO₂ in the period 2013-20. These calculations extrapolate existing mechanisms, i.e. do not consider possible sector-based market mechanisms.

EXISTING CARBON MARKET

In addition to emission trading Kyoto Protocol also established project based instrument instruments Joint Implementation (JI) and the Clean Development Mechanism (CDM). They allow countries to reduce emission resulting from cross border investments Grubb et al (1999). According to Lecocq and Ambrosi (2007) the goal of CDM is not only to enable developed countries to engage in projects in developing and thus lower their mitigation costs, but also to use these projects for promoting sustainable development and transferring emission trading technologies to developing countries. Streck (2004) discuss CDM became operational before the Kyoto protocol came into force. Governments across the globe have implemented a variety of instruments as part of their domestic climate policy, many of which are aimed at companies but may also promote emission reductions from household, transportation and agriculture. Egenhofer (2007), Haar and Haar (2006), European Union Emission Trading Scheme (EU ETS) started in 2005 and is particularly aimed at energy intensive activities as it only covers CO₂ emission. A comprehensive outline of EU climate policy was presented in 2007 when the EU launched new targets

to prevent warming of more than 2° C before 2020.

Table 1: Carbon Permits

Permit Type	Framework	Issuing/Accrediting Party	Start date	Valid Toward	Value Jun 2008
Assigned Amount Unit (AAU)	Emission Trading (Kyoto)	Annex I national government with UN oversight	2008	Kyoto targets	n/a
Emission Reduction Units (ERU)	Joint Implementation	Independent agencies certified by UN joint implementation	2008	Kyoto targets and ETS commitments	\$ 11.52
Primary Certified Emission Reduction (CER)	Clean Development Mechanism (CDM)	Independent agencies certified by UN executive board	2000**	Kyoto targets and ETS commitments*	\$ 12.8
Secondary CER	CDM	Independent agencies certified by UN executive board	2005	Kyoto targets and ETS commitments	\$ 25.59
EU Emission Allocation (EUA)	EU emission trading scheme	EU member state governments with European commission oversight	2005	ETS commitments	\$39.39
Carbon Financial Instruments (CFI)	private	Chicago Climate Exchange (CCX)	2003	Voluntary emission targets	\$ 5.6***
RGGI Allowance	RGGI	Regional Greenhouse gas initiative	2009	RGGI requirements	\$ 8.25

* Based on 2004 EU linking directive ** Certified retroactively *** Forward contracts all vintage

Source: Point Carbon, www.pointcarbon.com, www.chicagoclimate.com

Carbon market valued \$ 1 billion in 2004 that reached to \$ 11 billion during 2005 with \$ 8 billion from EUETS and \$ 3 billion by primary CDM projects. The market touched \$ 31 billion in 2006 and reached to \$ 64 billion in 2007 with \$ 50 billion from EUETS, \$ 7 billion Primary CDM market, \$ 5 billion secondary CDM, \$ 2 billion other market. Market touches \$ 120 billion in 2008 that is 120 times in comparison to 2004 figure of \$ 1

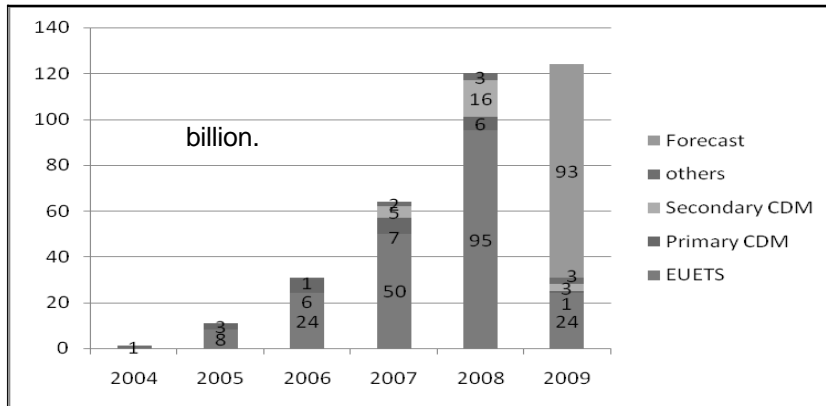


Figure 2: Carbon Market Classifications

Source: New Carbon Finance

European Union Emission Trading Scheme (EU ETS)

The European Union launched the EU ETS the first government mandated greenhouse gas cap and trade system in 2005. Emission trading (ET) allowed Annex I signatories to buy or sell permits to emit GHG. Under this scheme Annex I countries were issued permits called Assigned Amount Units (AAU) that corresponded to their Kyoto emission commitments. Each AAU equaled one mtCO₂.

The goal of the EU ETS is to reduce emission to 20% below 1990 levels by the end of 2020 a decline of 1.74% annually starting in 2012. Phase I of the EU ETS (2005-08) was a pre Kyoto trial phase. Phase II tracks the Kyoto commitment period of 2008-12. Phase III (2013-2020) represents a unilateral commitment by the EU to reduce GHG emission and was not negotiated into the Kyoto protocol. European Union Allowances (EUA) was allocated yearly and covered installations could trade with any other installations or private individuals in order to meet their individual targets. A 2004 EU linking directive allowed private installation to use credit from CDM and JI projects toward their EUA. The ETS did not allow offsets for carbon sinks.

Project Based Carbon Market

Emissions trading, as set out in Article 17 of the Kyoto Protocol, allows countries that have emission units to spare emissions permitted them but not "used" to sell this excess capacity to countries that are over

their targets.

An emission trading is an administrative approach used to control pollution by providing economic incentives for achieving reductions in the emissions of pollutants. It is sometimes called cap and trade. A central authority (usually a government or international body) sets a limit or cap on the amount of a pollutant that can be emitted. Companies or other groups are issued emission permits and are required to hold an equivalent number of allowances (or credits) which represent the right to emit a specific amount. The total amount of allowances and credits cannot exceed the cap, limiting total emissions to that level. Companies that need to increase their emission allowance must buy credits from those who pollute less. The transfer of allowances is referred to as a trade. In effect, the buyer is paying a charge for polluting, while the seller is being rewarded for having reduced emissions by more than was needed.

The European emission trading market rise in terms of value during 2008 touch the figure 94,971.7 million US\$ the 2007 figure was 50,097 million US\$.

Clean Development Mechanism (CDM)

The Clean Development Mechanism (CDM), defined in Article 12 of the Protocol, allows a country with an emission-reduction or emission-limitation commitment under the Kyoto Protocol (Annex I) to implement an emission-reduction project in developing countries. Developed countries can implement projects that reduce emissions or remove carbon from the atmosphere in other developing countries in the lieu of

Table 2: Carbon Market Growth (Volume/Value)

Markets	Volume(Mtco2e)		Value(US \$ million)	
	2007	2008	2007	2008
Voluntary OTC	43.1	54.0	262.9	396.7
CCX	22.9	69.2	72.4	306.7
Other exchanges	0.0	0.2	0.0	1.3
Total Voluntary Markets	66.0	123.4	335.3	704.8
EU ETS	2,061.0	2,982.0	50,097.0	94,971.7
Primary CDM	551.0	400.3	7,426.0	6,118.2
Secondary CDM	240.0	622.4	5,451.0	15,584.5
Joint Implementation	41.0	8.0	499.0	2,339.8
Kyoto (AAU)	0.0	16.0	0.0	177.1
New South Wales	25.0	30.6	224.0	151.9
RGGI	-	27.4	-	108.9
Alberta's SGER	1.5	3.3	13.7	31.3
Total Regulated Markets	2,919.5	4,090.0	63,710.7	1,19483.4
Total Global Markets	2,985.5	4,213.5	64046.0	120,188.2

Source: Ecosystem Marketplace, New Carbon Finance

CERs (Certified Emission Reductions). These CERs can be used to meet the emission targets. Protocol stresses that such projects are to assist the developing countries host parties in achieving sustainable development. Further the protocol refrains developed countries from using CERs generated out of nuclear facilities to meet the targets. The figure shows decline in volume during 2008 in comparison to 2007 related to primary CDM market. 3 fold rise in value and volume in secondary CDM market during 2008 over 2007 figure.

Joint Implementation (JI)

The mechanism known as "joint implementation," defined in Article 6 of the Kyoto Protocol, allows a country with an emission reduction or limitation commitment under the Kyoto Protocol (Annex I) to earn emission reduction units (ERUs) from an emission-reduction or emission removal project in another Annex I Party, each equivalent to one tone of CO₂, which can be counted towards meeting its Kyoto target.

Developed countries can implement projects that

reduce emissions or remove carbon from the atmosphere in other developed countries in lieu of ERUs (Emission Reduction Units). These ERUs can be used to meet the emission reduction targets. JI projects must have the approval of all parties involved and must lead to emission reductions or removals that are additional to any that would have occurred without the project. ERUs can only be issued from 2008 onwards, although JI projects can be started from year 2000 onwards. Joint implementation offers Parties a flexible and cost-efficient means of fulfilling a part of their Kyoto commitments, while the host Party benefits from foreign investment and technology transfer.

Regional Greenhouse Gas Initiative (RGGI)

Regional Greenhouse gas initiative in the US by Northeast and Mid Atlantic states to discuss a regional cap and trade program that will be cover CO₂ emission from power plants. This market covers 27.4 Mtco₂e in terms of volume and 108.9 million US\$ in value during 2008.

Table 3: Historic Volume Growth in the Voluntary Carbon Markets (Mtco₂)

Year	OTC	CCX	Other Exchange
Pre 2002	42	-	-
2002	10	-	-
2003	05	-	-
2004	09	02	-
2005	10	01	-
2006	10	15	-
2007	43	23	0.1
2008	54	69	0.2

Source: Ecosystem Marketplace, New Carbon Finance. (1) Based on 137 survey respondents

Table 4: Historic Value Growth in the Voluntary Carbon Markets (million USD)

Year	OTC	CCX	Other Exchange
Pre 2002	171	-	-
2002	43	-	-
2003	23	-	-
2004	35	02	-
2005	39	03	-
2006	61	38	-
2007	262	72	01
008	393	307	01

Source: Ecosystem Marketplace, New Carbon Finance. (1) Based on 137 survey respondents

Voluntary Market

Some of the more optimistic estimates for the size of the voluntary market by 2010 are as high as 400 MtCO_{2e}. Earlier this year, U.S. analyst estimated that US demand alone for offsets under the voluntary market could almost double annually from today to 250 MtCO_{2e} by 2011. Considering, for example, that per capita, every American emits 20 tCO_{2e} annually¹. More than 100 million Americans have one or more credit cards. If it would be possible to reach 1% of American credit card holders a year every year for the next five years, one could imagine a customer base addition of one million customers a year. Assuming each customer offsets his or her own per capita share gives a potential demand of five million customers offsetting 50 million tons annually by 2012. Double that rate of market penetration and one could see demand for 100 million tons annually.

The growth of the voluntary markets is a welcome indicator of the appetite that ordinary individuals and companies across the world need to take personal responsibility for the problem of climate change. Also governments need to participate in the effort to spur innovation towards a low-carbon future by taking various steps to reduce their emissions.

LINKAGE BETWEEN REGIONAL AND INTERNATIONAL MARKET

Market linkage occurs when one system recognizes the financial instrument operating within another market and allows its use to meet compliance obligations of the first system. The key purpose of linking carbon markets is to establish a common carbon costs and to facilitate the lowest cost abatement opportunities. In order to support a global solution to climate change and continue to reduce costs through expanding the market, the US carbon market may eventually link to other international trading regimes tied to binding commitments of other countries. The following factors may affect the ability to link carbon markets environmental integrity, price caps, penalties, fungibility of third party credit, verification and monitoring.

INDIAN CARBON MARKET

Developing carbon market that motivates true reduction in carbon emission must address all carbon pools and their greenhouse gas emissions. To be effective in this area, the Indian management community has to take initiative in defining market and policies, in the best interest of business, society and

other stakeholder.

Characteristics of Indian Carbon Market

India accounts for 3% of global greenhouse gas emissions (Asian Development Bank [ADB]/Global Environmental Facility/United Nations Development Programme [UNDP], 1998) and was involved in the development of the CDM early on hosting three projects in the AIJ pilot phase. Up to date, India has developed the highest number of methodologies for CDM projects. India currently hosts a total of 1,158 CDM projects, which take up 26.5% of the CDM project market share worldwide (Fenhann, 2007). However, the prospective revenue of certified emission reductions (CERs) in terms of kCERs generated by the CDM projects are expected to amount to 447,158 kCERs in 2012, averaging 15.5% of the kCERs in 2012 globally.

In the Asian context, India currently hosts about 35% of the CDM projects, which will generate only 19% of the expected accumulated CERs in 2012. Out of a total number of 1,158 Indian CDM projects, 379 CDM projects are registered with the CDM Executive Board (EB), whereas the majority of the 735 projects are at validation stage, 44 projects requesting registration. The Indian CDM projects currently generate 94,019 kCERs of the total 596,743 kCERs Remarkably, these statistics describe that the current CDM CER revenue outweighs the amount of CERs expected to be generated by the CDM projects that are still at validation stage.

Actors in Indian Carbon Market

The main constituents of the Indian carbon market are private actors among which project developers and consultancies are the most prominent stakeholders. Even though civil society actors participate in the Indian carbon market, their engagement is surprisingly limited and often resembles business activities. Finally, the state represented by the Indian Designated National Authority (DNA) governs the local carbon market following the objective to accommodate business interests with the concern for national prosperity and welfare.

International actors engage mainly in capacity building, carbon market promotion, diversification, and expansion to establish demand–supply linkages in the carbon market. The most significant buyers of emission reductions from India are the United Kingdom, Sweden, and the Netherlands. However, also Japan and Germany with KfW Carbon Fund activities gain ground on the Indian carbon market. In summary, out of 379

registered CDM projects in India, 176 projects, which is about 46%, do have a buyer, that is, are not unilateral.

Carbon Market Uncertainty

Two main uncertainties are slowing down CDM market growth. First, the commitment period of the Kyoto Protocol will end in 2012. No international agreement has been negotiated beyond this timeframe. The uncertainty over the future framework and price makes market players hesitant to develop projects that reach beyond 2012. New project registration takes a long time. The transaction costs can reach \$200,000. The uncertainty of the post-2012 CDM market makes companies worry about the financial flow they can expect after 2012.

Second, the majority of the CDM contracts are done through a “pay on delivery” system. Projects will not receive payments until carbon credits are “fully validated, certified, registered, and transferred.” The lag in cash flow is problematic for projects that involve new technologies, due to the high risk of returns. These factors have shifted buyers’ interests into projects with short finish times and quick returns. As the number of “low hanging fruit” projects is decreasing, new project developments will face more difficulties.

Prospective of Indian Carbon Market (Post 2012)

A post 2012 commitment regime has an impact on CDM projects approved and implemented prior to 2012. The crediting period of CDM projects can be as many as 21 years. CDM programmes can credit even longer. Since there is no agreement to follow the first commitment period of the Kyoto protocol, which expires on 31 December 2012, at present there is uncertainty on the value of CERs beyond 2012. It is generally believed that there will be a market for CERs or something equivalent, since the European Union is very likely to recognize such credits issued under the Kyoto protocol (HR, 2998, 2009).

CONCLUSION

The carbon market has shown that it can drive significant emission reductions including in developing countries CDM could generate between 1.3 and 1.6 GtCO₂-eq of issued CERs by 2013; the CDM pipeline indicates a 7.6 GtCO₂-eq. of cumulative CERs by 2020 (UNFCCC, 2009; PointCarbon, 2009). Domestic and regional carbon markets have led to the formation of a carbon price that plays a vital role in driving investment in abatement. As such, the carbon market in general has a role to play in guiding further mitigation actions

towards least-cost potentials.

Under the rubric of sectoral approaches, options for introducing sector-wide market mechanisms in developing countries could expand the carbon price signal, and reward investments in less GHG-intensive technologies and practices. These market mechanisms could be divided into two main categories: sectoral crediting mechanisms, where emissions below a baseline in a particular sector would generate ex post emission credits; or sectoral trading, where allowances are allocated on an ex ante basis.

At the end of 2009 India has a profile of 1551 approved host country projects in the sectors of energy efficiency, fuel switching, industrial processes, municipal solid waste and renewable energy. Out of these, 478 projects (against total number of 2011 globally registered projects) are registered by the CDM executive Board and have the potential of generating 74.22 million CERs out of total 366.17 million registered CERs. If all the approved projects get registered, the projects can attract an overall inflow of approximately US \$ 6.27 billion by the year 2012 at a conservative price of US \$ 10 per CER.

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CHANGING TOURISM CONSUMER BEHAVIOUR: THE IMPACTS ON TOURISM DEMAND IN ALBANIA

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Macit Koc**

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ABSTRACT

*Exploring the nature of tourism demand from a consumer perspective has traditionally been very complex. Adding to it the fast pace changing environment, the study becomes even more complicated. The purpose of this research is to shed light on the relationship between factors affecting tourist behaviour and tourism demand in Albania. Tourism demand has generally been measured in terms of 'number of people entering and exiting the borders of a country'. In order to ensure the feasibility of this study, the 'willingness to purchase' tourism products or 'tourism demand' is measured in terms of 'frequency of travels'. To accomplish these objectives, an online survey questionnaire was developed and administered across the population of Tir-*****+ana and Durres, the largest cities in Albania, which also represented the population (N) upon which the sample size was drawn. Scientifically, the research aims at testing the relationship between the sample's monthly income levels, denoted as the independent variable and 'frequency of travel', denoted as the dependent variable. The results of the research show that there is a significant association between these two constructs. That is, with $\chi^2(1, N = 133) = 102,581$; $p = .000 < 0.01$, the Null Hypothesis is rejected, and the Alternative Hypothesis is accepted. Therefore, it appears evident from the study that the higher the Monthly Income level of the Albanian tourists, the*

higher the frequency of travels. Nevertheless, like in every other study there are also limitations involved with this particular study, as well. The lack of reliable quantitative data concerning the Albanian domestic tourism is one among the most crucial ones.

KEYWORDS: Tourist, Consumer Behaviour, Tourism Demand, Determinants of Tourism Demand, Change.

INTRODUCTION

Living in a world where the only constant is change, understanding, to then predicting consumer behaviour has become a focal point to the large body of researchers, and tourism marketers. In this respect, it is crucial to be able to understand the individuals' behaviour, around which revolves everything; how the tourism consumer thinks and decides about the consumption of tourism products, which in turn affects the demand for tourism. Tourism in our days is increasingly being considered more as a social phenomenon. Further, the nature of the society has shifted from that of a traditional economy focused on production to that focused on providing mostly service related products (Page, 2009, p.10). Over time, and especially during the post-war era, the labor started to experience an increase in the "leisure time and paid holiday entitlement"; in this way they had more possibilities to engage in different types of consumption, such as tourism. Being testimonials of this fast-pace changing environment, it is necessary to explore and study the tourist, being that he is the most essential ingredient of tourism demand. As a matter of fact, there are a bundle of researches and studies in the field of tourism in Albania, but just a few of them attempt to account for changes in tourism consumer behaviour.

Robert Nesbit (as cited in Crompton, 1979, p. 408) distinguishes four different subdivisions in the travel market, "personal business travel, government or corporate business travel, visiting friends and relatives, and pleasure vacation travel". This study will be concentrating mostly on the latter. In other

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words, this study investigates the impact of Albanian people monthly income level as an influential determinant of tourism demand on tendency to travel.

REVIEW OF LITERATURE

Before one can study tourist behaviour and its impact on tourism demand, it is important to reach into some agreement as to what is meant by a few of the most widely cited terms in the tourism research field. Nevertheless, defining tourism and tourism-related terms is a far from easy task.

Various attempts have been made by large organizations and individual researchers to continuously improve and further narrow the definitions of these key terms. As such, according to the World Tourism Organization (WTO), tourism is defined as the "social, cultural and economic phenomenon which entails the movement of people to countries or places outside their usual environment for personal or business/professional purposes" (UNWTO, 2012, para. 1). The definition of 'tourism' has however created high waves of debate among researchers of this field, who have continuously attempted to point to the differences between a 'visitor' and a 'tourist', 'domestic tourists' and 'international tourists', 'tourism' and 'travel', and many other constructs of this type (Page, 2009, p. 15).

Two other major concepts worth defining prior to starting this journey through the study are 'tourist consumer behaviour' and 'tourism demand'. Because what is being studied is the demand side of tourism, it is essential to get an understanding of what its main component, the tourist, is, and what drives their tendency to demand tourism products. Tourist behaviour has traditionally been viewed as a complex area of research; as such different definitions are derived from the fundamental topic of consumer behaviour, in order to construct that of tourist behaviour. Researchers have differently defined consumer behaviour in tourism.

John Swarbrooke and Susan Horner, in their account 'Consumer Behaviour in Tourism', have provided the following definition, "Consumer behaviour is the study of why people buy the product they do, and how they make their decision". Another definition adapted for tourism consumer behaviour, is the one developed by Michael R. Solomon, Ph.D., Professor of Marketing and Director of the Center for Consumer Research, who incorporates the concepts of needs and wants into his definition, "Consumer behaviour is

the process involved when individuals or groups select, purchase, use or dispose of products, services, ideas or experiences to satisfy needs and wants" (as cited in Swarbrooke & Horner, 2007, p. 6). Janet McColl-Kennedy, professor of Marketing and Director of Research in Business, on the other hand, defines tourist behaviour as "the actions a person takes towards purchasing and using products and services, including the decision-making process that precedes and determines the actions" (as cited in Gulid, Lertwannawit, Saengchan, 2010, p. 645).

Getting back to tourism demand, various definitions have been developed in this respect, as well. Nevertheless, two are the main definitions that will lead this study. One of them is proposed by Douglas Pearce, professor of Tourism Management, according to whom tourism demand is "the relationship between individuals' motivation [to travel] and their ability to do so" (as cited in Page, 2009, p. 84). In contrast, a more economic-oriented definition is proposed by Chris Cooper. According to the Marketing Professor with an outstanding career in T-research and T- education, tourism demand is "the schedule of the amount of any product or service which people are willing and able to buy at each specific price in a set of possible prices during specified period of time" (as cited in 2009, pp. 84).

CONCEPTUAL FRAMEWORK AND HYPOTHESIS

Scope of the study

The purpose of this research is to study the relationship between the independent variables, which are several factors we will be talking later that affect tourism consumer behaviour and the dependent variable, which is tourism demand (measured in terms of the 'frequency of travel'. In simple words, the main aim of this research is to study how the Albanian tourist, surrounded by an everlasting changing environment reacts to them through their demand for domestic and international tourism offered inside the country.

Indeed, this study attempts to elucidate the relationship between factors affecting tourist behaviour and tourism demand in Albania; that is, it attempts to shed light on tourism as a multidisciplinary industry from the demand perspective. In this way, by better understanding what influences tourist's travel behaviour, tourism managers and marketers will design more effective strategies to better serve the needs and wants of these potential tourism consumers.

Research Question

The primary objective of this study is to answer to its main question:

Q.1: What is the relationship between the determinants of the Albanian tourist's demand and tendency to travel?

Hypothesis

Theory indicates that the factors that influence consumer's buying behaviour are divided into motivators and determinants (Swarbrooke and Horner, 2007). The studies on holiday motivation are rather large and complex, and as such in order to provide a thorough and meaningful research it needs to be addressed in a separate study. It has been generally accepted in the literature of econometric models of tourism demand that tourist's personal income level influences their overall buying behaviour and as a consequence their willingness to purchase tourism products. Based on various scholars' theory arguments for the scope of this intended study, the following hypothesis is constructed to then be tested, using data from Albanian tourism consumers.

H0: *Monthly Income levels of Albanian tourists and tendency to travel (measured in terms of frequency of travel) are statistically independent.*

H1: *The higher the Monthly Income levels of Albanian tourists, the higher the tendency to travel (measured in terms of frequency of travel).*

RESEARCH DESIGN

Methodology

In realizing this study, a combination of primary and secondary sources was adopted. Looking at the bigger picture, this study is considered to be part of what are called intentional studies, and more specifically it is a pre-travel study on the Albanian tourist's intended travel preferences, habits and patterns. In addition, from the objectives perspective, overall the research attempts to discover the relationship between monthly income (as a determinant of tourism demand and tendency to travel (measured in terms of frequency of travel)). In this respect, this research can be considered a correlation research.

Justification for the Methodology Used

In choosing this methodology, it was

considered the fact that a relatively large and well structured survey was employed as an information gathering technique. For this reason it was thought that a research with the above characteristics would have been more appropriate, if compared to other types of research such as qualitative and observational ones.

Population and Sample Size

The study was carried out in Albania. Because random sampling is used to select the sample size, in principle every individual within the two major cities in Albania, Durres and Tirana have an equal chance of being selected, because once again in principle everyone engages in tourism activities, and the selection is completely based on chance. Knowing from secondary sources that the population of Tirana and Durres is 374,801 and 122,034 respectively, we say that our population (N) to be studied is 496,835 Albanian consumers. However, it is worth mentioning that in this case because population size is by common knowledge and understanding large and not well defined (because tourism consumer is being studied), the population size does not represent a big concern. However attempts are made to clarify the margin of error or confidence interval for the sample size of this study. As a matter of fact, the amount of error to be tolerated, considering a sample size ($n=141$), a response distribution of 50 per cent and a confidence level of 95 per cent, representing the amount of uncertainty that I can tolerate, is that of ± 8.3 per cent.

Questionnaire Design

The questionnaire is designed as an online survey instrument to collect data on the sample of interest, attempting to shed light on the hypothesis constructed. It is composed of 25 items that have been extracted from a review of the various literatures. More specifically, the survey is composed of 6 demographic questions, which include items such as gender, age, occupation, monthly income, education level, and the respondent's self-description as a tourist. In addition, two other items are employed to understand the consumer's motivation to travel with 13 attributes extracted from prior studies (Crompton, 1979; Page, 2009). The next 16 items measure the determinants of tourism consumer buying behaviour (Swarbrooke and Horner, 2007; Uysal, 1998). Finally, the survey contains one dependent variable which measures tendency to travel of the average Albanian tourist in terms of frequency of travel, the relationship

of which will be further tested against the independent variables.

The online survey was left out for a collection period of one month, from April 29th until May 30th 2012, and 141 responses were collected as a consequence.

Data Analysis

When it comes to the method chosen to analyze the data gathered from the survey, a quantitative method has been employed. The data is processed through SPSS 20.0, the most commonly used statistical package. Data analysis includes various statistical tools such as factor analysis, and chi-square testing, for which will be talking in more details during the presentation of the results.

As far as the answers attained from the questionnaires is concerned, they were measured based on three different types of scales: nominal, ratio, ordinal (likert) scale. Facing time constraints, on the other hand, in order to get back responses in the shortest possible amount of time, they were sent by e-mail. As such, the questionnaires were sent by e-mail in the form of a Web link and the response was directly received on the survey's online platform. Once the collection phase has terminated on May 30th, the data was directly exported to the SPSS 20.0 software, removing in this way any incorrectness accompanying the data entering process.

Respondent's Demographic Profile

The respondents' demographic profile is depicted based on six different dimensions. The first characteristic is gender. The gender composition of the respondents is 34 per cent male and 66 per cent female, showing a significant difference between them when it comes to the participation on the survey. Results from the age variable, on the other hand, indicate that the majority of the respondents, around 57 per cent of them belong to the age group 21 to 31

years old. As such, the second most populated age group of the respondents is that from 20 years old and under, accounting for 14 per cent of the responses.

Furthermore, about 50 per cent of them had a Bachelor Degree as their highest level of education, 1.4 per cent had a Ph.D (about 2 persons out of 141 who actually responded to this question), and none of them had less than a high school degree, providing us with good reasons to suspect that we have to deal with well educated and sophisticated tourism consumers.

When it comes to the occupation of the respondents, about 40 per cent of them are students, 21 per cent are in the Professional/Technical category, while the other ones populate the other categories. This relatively large percentage of student participant is mainly due to the fact that the survey was distributed online.

Because of its intangible nature, the purchase of a tourism product involves a complex decision making process, a process which sometimes because of the lack of resources (time, money etc.) results into what is known as 'suppressed' demand, or even into 'no demand' at all. For this reason it is being closely considered the respondent's monthly income level, as an important indicator of the consumer's purchasing power. As it can be seen on Table 1 below, around 31 per cent of the respondents have a monthly income of from ALL20, 000 to ALL 40,000, while 30 per cent of them populate the second category, from ALL41, 000 to ALL60, 000.

The final characteristic for which the sample under study was asked about was a set of items based on which they would have to classify themselves as tourists. On a gender perspective, around 26 per cent of females describe themselves as 'Single Income, No Kids' tourists, while 52.1 per cent of males describe themselves as 'Backpackers'.

Table 1: Socio-Demographic Characteristics of the Respondents

Variables	Categories	Frequency (n=141)	Valid Percent (n=100%)
Gender	Female	93	66.0%
	Male	48	34.0%
	Total	141	100

Age	20 and Under	20	14.2%
	21-30	81	57.4%
	31-40	14	9.9%
	41-50	12	8.5%
	51-60	10	7.1%
	60 and Over	4	2.8%
	Total	141	100%
Degree	High school degree or equivalent	13	9.2%
	3-years college	19	13.5%
	Bachelor degree (4 years)	71	50.4%
	Masters degree	36	25.5%
	PhD. degree	2	1.4%
	Total	141	100%
Occupation	Professional/Technical	30	21.3%
	Executive Administrator	7	5.0%
	Middle Management	14	9.9%
	Sales/Marketing	14	9.9%
	Self-employed/Business Owner	6	4.3%
	Clerical or Service	5	3.5%
	Student	56	39.7%
	Unemployed	6	4.3%
	Retired	3	2.1%
	Total	141	100.0%
<i>Valid</i>		<i>131</i>	<i>92.9%</i>
	Asst. Specialist	1	0.7%
	Auditor	1	0.7%
	Banker (Credit Officer)	1	0.7%
	History Teacher	1	0.7%
	Lawyer / Internal Audit	1	0.7%
	specialist, banking	1	0.7%
	Teacher	3	2.1%
	Total	141	100%
Monthly Income	ALL20000-40000	44	31.20%
	41000-60000	43	30.50%
	61000-80000	24	17.00%
	81000-100000	12	8.50%
	110000-200000	7	5.00%
	200000-500000	10	7.10%
	over 500000	1	0.70%
	Total	141	100%
Tourist Self-Description	Backpackers	55	39.30%
	Empty Nesters	11	7.90%
	DINKS	15	10.70%
	SINKS	33	23.60%
	Double. Kids	22	15.70%
	Early/Active Retirees	2	1.40%
	Youth	2	1.40%
	Total	140	100%
<i>Missing</i>	<i>System</i>	<i>1</i>	

EMPIRICAL RESULTS

Factor Analysis

The primary objective of conducting a factor analysis in this study is to funnel the determinants of tourism demand in Albania (variables that measure them) into the respective component that best describes each, or more simply, to group together items with similar characteristics. Before conducting a factor analysis, however, a reliability test is carried out, to see whether a factor analysis is reliable and meaningful to be conducted.

From the scale reliability analysis, it was found out that the content validity of the survey instrument is adequate and acceptable. A Cronbach α of 0.73 indicates an acceptable level of reliability between the scores of the survey data. In the social sciences and especially when conducting basic research the benchmark for the reliability is 0.70 or better (Cronbach, 1951, as cited in Grau, n.d., p.3104) Table 2 summarizes the result. In this respect it can be concluded that this indicator is high enough for us to conduct a reliable and meaningful factor analysis that will generate several components among the sets of items within the questionnaire.

Table 2: Scale Reliability Statistics

Reliability Statistics		
Cronbach's Alpha	Cronbach's Alpha Based on Standardized Items	No. of Items
730	712	9

Moreover, a Kaiser-Meyer-Olkin measure of sampling adequacy of 0.75 and a significance of .000 are indications that a meaningful factor analysis may be conducted. Table 3 summarizes the results.

Table 3: KMO Measure of Sampling adequacy and Bartlett's Test

KMO & Bartlett's Test		
Kaiser-Meyer-Olkin Measure of Sampling Adequacy.		725
Bartlett's Test of Sphericity	Approx. Chi-Square	237,264
	df	36
	Sig.	.000

As mentioned earlier, the determinants of tourism consumer buying behaviour are measured using a nine-

item scale. By employing the principal components factor analysis, four factors with an eigenvalue greater than one explained 69.139 per cent of the variance of determinants of tourism consumer behaviour. For a more detailed outlay of the variances for each component refer to Appendix A: Total Variance Explained. Moreover, 5 variables with factor loading less than 0.5 were removed.

Equally, if we take a look at our descriptive statistics on these variables (see Table 4), it can be easily observed from the item's means that 'Social Networks', such as Facebook and Twitter are overall the most important variable that influences Albanian tourist to buy tourism products. It has the highest mean among all other variables, 3.1926.

Table 4: Descriptive Statistics

Descriptive Statistics			
	Mean	Std. Deviation	Analysis N
Personal_Experience	1,6815	0,7693	135
Friends_Colleagues	2,2741	0,90956	135
Guidebooks and Magazines	3,0593	1,07733	135
Official websites of the hotels & destinations	2,4667	1,16414	135
Social Network (Facebook, Twitter, etc)	3,1926	1,15575	135
TravelTour_Operators	2,3704	1,15086	135
Media	3,1185	1,09988	135
Information_Technology	2,9481	1,03893	135
Tour_Operators	2,5556	0,85227	135
Personal_Experience	1,6815	0,7693	135

Table 5 summarizes the results of the loadings of the nine variables on the four components identified. As it can be understood by the factor loadings of each of the variables, the first factor includes items such as, 'Guidebooks and Magazines', 'Official Websites of the Hotels and Destinations', 'Social Networks', 'Travel and Tour Operators' and 'Media'. The high values of the factor loadings in the first component tell that these variables are the ones which take the most attention for the respondents during their decision making process. Within this factor, however, the variables with the highest loading are 'Guidebooks and Magazines' (0.709) and 'Social Networks' (0.709). This clearly shows that for Albanian tourists' the power of social media in influencing their tourism product purchases is considerably higher if compared to the traditional marketing channels.

'Information Technology', on the other hand, has a higher factor loading on the second component. A high factor loading (0.727) on this item tells us that the respondents consider it as a very important determinant for the decision making process when it comes to buying tourism products. The third component (factor)

displays high loadings on the ‘Friends & Colleagues’ and ‘Tour Operators’ items, 0.676 and 0.517 respectively. And last, the ‘Personal Experience’ item is highly loaded (0.915) on factor 4.

Overall, it can be concluded that, based on the factor loadings of each of the items, ‘Guidebooks and Magazines’, ‘Social Networks’, ‘Information Technology’ and ‘Personal Experience’ are the determinants of tourism demand which influence the most the Albanian tourist’s decision making process.

Table 5: Component (Factor) Matrix showing the loadings of the nine variables on the four factors extracted

Component Matrix ^a				
	Component			
	1	2	3	4
Personal_Experience	0.224	0.012	0.161	0.915
Friends_Colleagues	0.388	-0.014	0.676	-0.315
Guidebooks and Magazines	0.709	-0.157	0.356	-0.106
Official websites of the hotels & destinations	0.699	0.225	-0.129	0.024
Social Network (Facebook, Twitter, etc)	0.709	0.461	0.068	0.09
TravelTour_Operators	0.692	-0.407	-0.299	0.062
Media	0.696	-0.243	0.042	-0.032
Information_Technology	0.324	0.727	-0.325	-0.153
Tour_Operators	0.434	-0.36	0.517	-0.137

Extraction Method: Principal Component Analysis.^a
a. 4 components extracted.

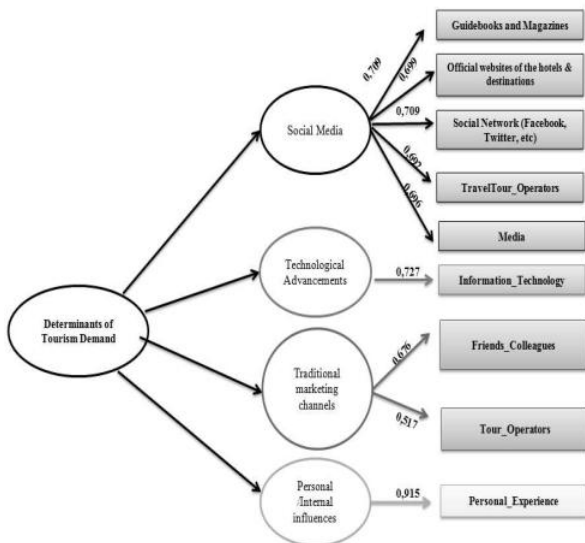


Figure 1: Simple structure of the factor model for the determinants of tourism demand based on a 9 item scale

Furthermore, based on the results extracted from the factor analysis, it can also be determined the nature of the factors itself. The item within the factor which happens to have the higher factor loading on that component determines the nature of the factor. As such, a simple factor model is shown in Figure 1, attempting to shed light on these relationships.

Hypothesis Testing

Before testing the hypothesis and describing details about the analysis technique used, let’s recall our null and alternative hypothesis from the first chapter of the report.

H0: Monthly Income levels of Albanian tourists and tendency to travel (measured in terms of frequency of travel) are statistically independent.

H1: The higher the Monthly Income levels of Albanian tourists, the higher the tendency to travel (measured in terms of frequency of travel).

A chi-square analysis is conducted to test the hypothesis against the null hypothesis. This statistical test will enable us to find out whether there is an association between the two variables stated above; whether a higher level of the respondents’ income level will result into a higher frequency of travel, or whether there is no difference. As it can be observed from Table 6, there is about 94.3 per cent of the sample involved in the analysis, whereas 5.7 per cent of them just didn’t answer to the question, so they were excluded from the analysis itself.

Table 6: Chi-square Test Processing Summary

	Cases					
	Valid		Missing		Total	
	N	Percent	N	Percent	N	Percent
Monthly Income * Frequency of Travel 2011	133	94.30%	8	5.70%	141	100.00%

Prior to reporting the results of the test, it is important to see at the cross tabulation of these two variables. A table summarizing the entire cross tabulations in terms of Observed and Expected counts is shown in Appendix A. As it can be clearly observed from the table, there seems to be an association between the ‘monthly income’ and the ‘frequency of travel’ variables. As such, the higher the income level, the higher the difference between the observed and expected counts on the frequencies of travel. Now we can statistically check how probable that difference is due to chance,

by using Pearson Chi-Square statistical value and the statistical significance of the difference observed. As it can be observed from Table 7, which summarizes the results of the test, the difference that it is observed is statistically significant. The significance value displayed (Sig. = .000) shows that it is statistically improbable that the difference has occurred by chance or due to sampling; there is less than .001 probability that the difference has occurred by chance in a sample of 133 people. So, it seems like in the actual population, respondents with a higher level of Monthly Income are more likely to travel more than those with lower levels of monthly income.

Table 7: Chi-Square Test

Chi-Square Tests			
	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	102.581 ^a	36	.000
Likelihood Ratio	101.064	36	0
Linear-by-Linear Association	33.937	1	0
<i>No. of Valid Cases</i>	133		

To conclude, based on the following results, $\chi^2(1, N = 133) = 102,581, p = .000 < 0.01$, the Null Hypothesis is rejected, and the Alternative Hypothesis is accepted (see Table 8). That is, it has been proven that the higher the Monthly Income level of the Albanian tourists, the higher the frequency of travel.

Table 8: Summary of Hypothesis Testing Results

Null Hypothesis	Test	Sig.	Decision
Monthly Income levels of Albanian tourists and tendency to travel (measured in terms of frequency of travel) are statistically independent.	Chi-square	.000	Reject the Null hypothesis

DISCUSSIONS AND RECOMMENDATIONS

Being a very complex and wide field, the recommendations for tourism managers would be rather addressed at a business, rather than at a governmental level. They will be directed from three different perspectives based on the results aforementioned, and especially from those drawn from the Factor Analysis.

Overall what tourism managers should do is to not forget to market their companies in any most innovative and creative way possible. Because from the survey was observed that 'social networks' and

'information technology' accrued to be two among the most influential determinants of tourism buying behaviour; I would recommend some key points on how tourism managers might turn this information into effective use.

One very innovative way to do this is to first make sure that the format of their company's webpage fits well on a screen of a mobile phone, because trends show that Albanian people, especially the target group we have under study uses internet on the phone at a considerable degree. Living in an era where information technology prevails, it would be very disappointing and the company will probably lose a lot if someone checks the company's website and finds out it is impossible to access it through the mobile.

Another very original way of turning your company's website into a real selling platform, and yet not automated, is by implementing a live chat, where customers can actually write and get back instantaneous responses for their questions. This is a very innovative and affordable way of responding to the customer's needs and wants through the use of technology.

Moreover, tourism managers might want to be close to their potential customers with 24 hours to 7 online booking platforms. Although it might look like a considerably high budget investment at the beginning, the ROMI will pay back in a relatively short time. By providing to people this kind of user-friendly way to check for tourism products and pay for them at any time, it is more likely that it is going to influence the consumer's decision making process in the desired direction.

In addition to enhancing the role of information technology and the social media as part of their marketing strategies, tourism managers should also be very careful in designing the tourism products they offer, being in harmony with the demographic profile of their target market. As such, if we relate this back to the findings, tourism managers should most probably offer tourism products for young people which are not lengthy, while approaching older people with longer holidays. One of the most important objectives of marketers is to serve different segments with products that match each segment's needs and wants. The same thing happens with tourism products, the tourism managers might want to have a tourism package for any age group, income level, education and travel career level.

And last, because tourism is a very wide and complex system, I would like to end the recommendations session with a 'one recommendation fits all' quote by Professor Philip Kotler, which states, "Within five years, if you run your business in the same way as you do now, you're going to be out of business" (Kotler, 2010). So, keep up with changes!

CONCLUSION

In this paper were presented results of a quantitative study conducted on the determinants of the Albanian tourist behaviour, and how this last affected the demand for tourism products. The results showed that there is a significant relationship between the monthly income level of Albanian people and their tendency to travel, otherwise measured in terms of 'frequency of travels'.

In this regard, it was conducted a hypothesis testing using chi-square test. The Null hypothesis stated that the Monthly Income levels of Albanian tourists and tendency to travel (measured in terms of frequency of travel) are statistically independent. The significance value displayed from the test (Sig. = .000) shows that it is statistically improbable that the difference has occurred by chance or due to sampling; there is less than .001 probability that the difference has occurred by chance in a sample of 133 people. As a consequence the Null hypothesis is rejected and the Alternative hypothesis is accepted. Therefore, the higher is the Income level of the average Albanian tourist, the more they travel.

Furthermore, based on the research results, it has been concluded that 'Guidebooks and

Magazines', 'Social Networks', 'Information Technology' and 'Personal Experience' are the determinants of which influence the most the Albanian tourists during their decision making process when it comes to purchasing tourism products.

Having studied the determinants of tourism demand from a quantitative perspective, because consumer behaviour is a multidisciplinary field, it would have been of great interest to study tourism consumer behaviour and tourism demand from a qualitative perspective. As such, perhaps something of interest would be to study consumer behaviour as a cognitive and social phenomenon, and try to go inside what is called the 'big black box', the consumer's mind.

Furthermore, because this study is more related to Albanian tourists in relation to domestic and international tourism products, perhaps further studies should target foreign tourists visiting Albania. Results from this particular study might help tourism planners, especially at the government level, to design appropriate tourism strategies which will further help the sustainability of the development of Albania as a tourism destination.

To conclude, because this study started with the word 'change', I would also like to end it with it. In this context, I would suggest that in order to get a more comprehensive understanding of tourism consumer behaviour, and how it evolves through time it is of particular value to study the same sample and variables over time. Only in this way, with a longitudinal study, 'change' in tourism consumer behaviour could be properly studied and documented.

Appendix A: Total Variance Explained

Component	Total Variance Explained					
	Initial Eigenvalues			Extraction Sums of Squared Loadings		
	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %
1	2.952	32.799	32.799	2.952	32.799	32.799
2	1.171	13.015	45.813	1.171	13.015	45.813
3	1.095	12.168	57.981	1.095	12.168	57.981
4	1.004	11.158	69.139	1.004	11.158	69.139
5	.827	9.194	78.333			
6	.642	7.139	85.472			
7	.507	5.632	91.105			
8	.451	5.010	96.115			
9	.350	3.885	100.000			

Appendix B: Cross tabulation Frequency of Travel – Monthly Income

		Frequency_of_Travel_2011							Total	
		0	1	2	3	4	5	More than 5		
Monthly Income	over 500000	Count	0	0	0	0	0	0	1	1
		Expected Count	0	0.2	0.3	0.1	0.1	0.1	0.1	1
		%within Monthly Income	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	100.00%	100.00%
		%within Frequency of Travel 2011	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	5.90%	0.80%
	200000-500000	Count	0	1	0	2	0	0	6	9
		Expected Count	0.3	2.2	2.8	1.1	0.9	0.5	1.2	9
		%within Monthly Income	0.00%	11.10%	0.00%	22.20%	0.00%	0.00%	66.70%	100.00%
		%within Frequency of Travel 2011	0.00%	3.10%	0.00%	12.50%	0.00%	0.00%	35.30%	6.80%
	110000-200000	Count	0	0	4	0	2	1	0	7
		Expected Count	0.2	1.7	2.2	0.8	0.7	0.4	0.9	7
		%within Monthly Income	0.00%	0.00%	57.10%	0.00%	28.60%	14.30%	0.00%	100.00%
		%within Frequency of Travel 2011	0.00%	0.00%	9.50%	0.00%	14.30%	12.50%	0.00%	5.30%
	81000-100000	Count	0	1	3	0	1	1	5	11
		Expected Count	0.3	2.6	3.5	1.3	1.2	0.7	1.4	11
		%within Monthly Income	0.00%	9.10%	27.30%	0.00%	9.10%	9.10%	45.50%	100.00%
		%within Frequency of Travel 2011	0.00%	3.10%	7.10%	0.00%	7.10%	12.50%	29.40%	8.30%
	61000-80000	Count	2	2	7	2	6	3	0	22
		Expected Count	0.7	5.3	6.9	2.6	2.3	1.3	2.8	22
		%within Monthly Income	9.10%	9.10%	31.80%	9.10%	27.30%	13.60%	0.00%	100.00%
		%within Frequency of Travel 2011	50.00%	6.30%	16.70%	12.50%	42.90%	37.50%	0.00%	16.50%
41000-60000	Count	1	7	9	10	5	3	4	39	
	Expected Count	1.2	9.4	12.3	4.7	4.1	2.3	5	39	
	%within Monthly Income	2.60%	17.90%	23.10%	25.60%	12.80%	7.70%	10.30%	100.00%	
	%within Frequency of Travel 2011	25.00%	21.90%	21.40%	62.50%	35.70%	37.50%	23.50%	29.30%	
20000-40000	Count	1	21	19	2	0	0	1	44	
	Expected Count	1.3	10.6	13.9	5.3	4.6	2.6	5.6	44	
	%within Monthly Income	2.30%	47.70%	43.20%	4.50%	0.00%	0.00%	2.30%	100.00%	
	%within Frequency of Travel 2011	25.00%	65.60%	45.20%	12.50%	0.00%	0.00%	5.90%	33.10%	
Total		Count	4	32	42	16	14	8	17	133
		Expected Count	4	32	42	16	14	8	17	133
		%within Monthly Income	3.00%	24.10%	31.60%	12.00%	10.50%	6.00%	12.80%	100.00%
		%within Frequency of Travel 2011	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%

Notes : The online platform used to design the survey and then launch it for data gathering is called Survey Monkey

The formula for calculating Chi-Square is: $X^2 = \sum (O-E)^2/E$, where O=Observed frequencies; E=Expected frequencies.

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JOB SATISFACTION: A BIG CHALLENGE FOR INDIAN SERVICE SECTOR INDUSTRY

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ABSTRACT

Employees are considered to be the life line of the organization. Every activity is directly and indirectly backed by the efforts made by most important asset/resource of the organization i.e. employees of the organization. It is important for the organizations to make their employees satisfied in order to achieve high productivity and growth. Present research has been conducted in order to determine the level of job satisfaction of employees. The study also aims at finding out difference in the level of job satisfaction at different designations, years of work experience and gender among the employees of one of leading digital commerce marketing companies in India . The primary data for this study was compiled through questionnaire filled in on a one-to-one basis by 66 respondents of the company in 2012. The results have shown that level of job satisfaction of employees was very high and there was no significant difference in the level of job satisfaction of employees of different designations, gender and experiences. The study was faced by certain limitations and those limitations include time constraints and low response.

KEYWORDS: Job Satisfaction, Productivity, Employees.

INTRODUCTION

Job satisfaction has been the focal point of innumerable studies. Job Satisfaction means different things to different people, and job satisfaction is a complex concept that is influenced by, and influences other variables. Job satisfaction refers to a person's inner feeling of satisfaction on the job, which acts as a source of motivation to work. It is not the self satisfaction, happiness or self contentment but the satisfaction on the job. This term defines the total relationship between an individual and the employer for which he is paid. Satisfaction does mean the simple feeling-state accompanying the attainment of individual/organizational goal.

Job satisfaction is defined as a collection of positive and/or negative feelings that an individual holds toward his or her job. It is all about how one feels about one's job. An employee who expresses satisfaction is said to have positive attitude towards the job, unlike a dissatisfied employee who has a negative attitude towards a job.

Job satisfaction has a variety of positive and negative impacts on individual and organizational health. These impacts can be easily seen in the context of an individual's physical and mental health, productivity, absenteeism, and turnover. High degree of job satisfaction has certainly positive implications on organizational health in terms of high productivity and growth, low absenteeism and low employee turnover whereas low degree of job satisfaction leads to serious threats in terms of low morale, poor mental and physical health of the employee, low productivity, high absenteeism and high employee turnover. Regular hiring and firing is a continuous feature of the organizations which do not consider employee dissatisfaction as a serious issue.

REVIEW OF LITERATURE

Wikipedia (2010) notes that job satisfaction describes how content an individual is with his or her job. The happier people are within their job, the more

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satisfied they are said to be. Job satisfaction is not the same as motivation, although it is clearly linked. According to Paul Spector (1985) "Job Satisfaction is liking of one's job and finding fulfillment in what you do. It combines an individual's feeling and emotion about their job and how their job effect their personal lines." Locke (1976) specified that job satisfaction is 'a pleasurable or positive emotional state resulting from the appraisal of one's job or job experiences' Lindorff (2011) used the 2008 State of the Service survey data to compare job satisfaction and attitudes toward work of men and women in the Australian Public Service (APS). He found that that up to and including Executive Level (EL) women are significantly more positive than men about their work and the organisation. At Senior Executive Service (SES) level men were more satisfied. He looked at the predictors of job satisfaction separately for men and women at each level, and found that career progression, support for work-life balance, agency leadership, role clarity and authority and good immediate management are significant contributors for most employees. Judge and Bono (2001) found that the average correlation between job satisfaction and job performance is a high 0.30 and the relationship between job satisfaction and performance was found to be even higher for complex (e.g., professional) jobs than for less complex jobs.

Rotenberry & Moberg (2007) found that employees that were more involved in their job were good performers as compared to the employees whose attitude towards work is not good. This indicated that better attitude towards work resulted in enhanced performance. Mbah and Ikemefuna (2012) examined job satisfaction and employees' turnover intentions in Total Nigeria PLC in Lagos State. It was found that specifically job satisfaction reduces employees' turnover intention and that Total Nigeria PLC adopts standard pay structure, conducive nature of work and efficient supervision not only as strategies to reduce employees' turnover but also as the company retention strategy.

OBJECTIVES OF THE STUDY

The aim of this study was to study the concept of job satisfaction by determining the level of job satisfaction of the employees and understanding if there exists a significant difference in the level of job satisfaction based on various parameters like different designations, years of work experience and gender among the employees under study.

HYPOTHESES

Ho1: *There exists no significant difference in level of job satisfaction between employees of various designations.*

Ho2: *There exists no significant difference in level of job satisfaction between employees with different work experience in the organization.*

Ho3: *There exists no significant difference in level of job satisfaction between male and female employees.*

RESEARCH METHODOLOGY

The population of this study consists of 150 employees of one of leading digital commerce marketing companies in India. The rationale behind selecting a single organization was to minimize the impact of variables other than those considered in the study (like organization culture, general working conditions, management policies etc). Convenience sampling method was used to gather data from the respondents. 80 employees were asked to participate in the survey and the questionnaire was handed over to them manually. From the target sample, 66 (N= 66) of them responded and returned the questionnaire. The questionnaire was suitably well- designed and self administered. The questionnaire consisted of 26 questions excluding demographic details such as gender, age, qualification, designation, experience. Some of the questions were: "I am satisfied with the amount of training offered for advancement.", "I feel that I can voice my opinion without fear", "My superior promotes an atmosphere of team work", "The company recognizes the accomplishment of employees" etc. Five point Likert scale was used with the options such as strongly agree, agree, neither agree nor disagree, disagree and strongly disagree. Weightage assigned by the researcher were 1 for strongly agree, 2 for agree, 3 for neither agree nor disagree, 4 for disagree and 5 for strongly disagree.

To know the reliability and validity of collected data Split Half Test was applied with the help of Statistical Package for Social Science (SPSS). After dividing the data into two equal halves. It was observed that Mean of both the halves were not different. It implies that data are random and it is reliable and validated for the further research.

First data was analysed based on mean weighted scores to assess the job satisfaction level of employees. To test the various hypotheses

independent sample t -test was used. Independent sample t-test is used to compare the mean score, on some continuous variable.

ANALYSIS

Our first objective of the study was to determine the level of job satisfaction of the employees. Weighted mean was calculated based on the weights assigned to the responses (as discussed previously).

The weighted mean was 1.76 which indicates a high level of job satisfaction. To understand the reasons behind this high level of job satisfaction of the workforce the researchers interviewed 25 of the employees and compiled the factors which could be possible contributors. These included Team leaders motivation and the culture of openness, trust and team spirit.

Ho1: *There exists no significant difference in level of job satisfaction between employees of various designations.*

In order to test the above hypothesis i.e. to examine whether there exists any significant difference in level of job satisfaction between employees of various designations t test was used For simplicity only two levels were considered viz the managerial level (N=12) and the executive level (N=54). For the managerial level the weighted mean was 1.75 and for the executive level it was 1.91. On applying t test the following statistics were reported :

$$t(64, N=66)=1.584, p=.118>.05.$$

Thus our hypothesis is accepted indicating that employees of executive and managerial level do not differ in terms of job satisfaction level and employees at both levels are satisfied with their jobs as is evident from the mean weighted scores.

Ho2: *There exists no significant difference in level of job satisfaction between employees with different work experience in the organization.*

In order to test the above hypothesis i.e. to examine whether there exists any significant difference in level of job satisfaction between employees with different work experience in the organization t test was used. Most of the employees were having 0-1 years experience in the company that's why only two categories of work experience were considered viz 0-6 months work experience (N=15) and 6-12 months work experience (N=51). For 0-6 months work

experience the weighted mean was 2.01 and for 6-12 months work experience it was 1.85. On applying t test the statistics reported were : $t(64, N=66)=1.738, p=.087 >.05$. Thus our hypothesis is accepted indicating that employees with different work experiences do not differ in terms of job satisfaction level and employees with both kind of work experiences are satisfied with their jobs as is evident from the mean weighted scores.

Ho3: *There exists no significant difference in level of job satisfaction between male and female employees.*

In order to test the above hypothesis i.e. to examine whether there exists any significant difference in level of job satisfaction between male and female employees t test was used . For the male employees (N=42) the weighted mean was 1.86 and for the female employees (N=24) it was 1.91. On applying t test the following statistics were reported:

$$t(64, N=66)= -.622 , p=.536 >.05.$$

Thus our hypothesis is accepted indicating that male and female employees also do not differ in terms of job satisfaction level and both male and female employees are satisfied with their jobs as is evident from the mean weighted scores. This is also supported by the earlier researches. Various studies have shown that there is no significant relationship between employees' gender and job satisfaction (Rast & Tourani,2012; Narayanan & Zafar,2011 ; Donohue & Heywood , 2004 and Oshagbemi, 2000).

CONCLUSION

It is crucial for employees to have an overall positive feeling of job satisfaction and motivation which is imperative for the organizational growth. On the basis of analysis of findings it was concluded that overall job satisfaction of employees of the company was very high which is a very good sign. It was also found that the employees of executive and managerial level do not differ in terms of job satisfaction level. Employees at both levels are satisfied with their jobs. Also the employees of the company with different experience do not differ in terms of job satisfaction level. Employees with different experience are satisfied with their jobs. The same conclusion was drawn for the employees with different gender i.e. male and female. With the help of observations researcher found that Team leaders motivation and the culture of openness, trust and team spirit are the probable factors of job satisfaction in the company. The high job satisfaction

may be one the good reason which made the organization one of the leading company in India within the time period of 14 years. But it is highly recommended that organization should take necessary measures to maintain the same level of job satisfaction in future also.

LIMITATIONS OF THE STUDY

However present study tried to collect the relevant information, yet there are always some problems faced by the researcher. The prime difficulties faced during collection of information are short time period, lack of resources, small number of respondents and unwillingness of respondents.

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AN ANALYSIS OF ENTREPRENEURSHIP DEVELOPMENT PLANNING AND MANAGEMENT FOR INTERNATIONAL COMPETITIVENESS IN OMAN WITH FOCUS ON EXPORTS: LESSONS FOR ZIMBABWE

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ABSTRACT

This paper sets to discuss about the economic development and entrepreneurship in Oman (with focus on exports and international business), a country that has done extremely well with not much in terms of natural resources compared to its gigantic neighbours (UAE, Saudi Arabia) but has managed to do an economic miracle which is talk of the world throughout the four corners of the world. Case studies and archival sources will be used to discuss and analyse issues. Face to face interactions were also used as the authors interacted with a wide spectrum of Oman society, business, academia and industrialists in discussing issues raised in this paper.

KEYWORDS: Entrepreneurship, HRM Strategies, Supply Chain Management.

INTRODUCTION

This paper sets to discuss about the economic development and entrepreneurship in Oman (with focus on exports and international business), a country that has done extremely well with not much in terms of natural resources compared to its gigantic neighbours (UAE, Saudi Arabia) but has managed to do an economic miracle which is talk of the world throughout the four corners of the world. Case studies and archival sources will be used to discuss and analyse issues. Face to face interactions were also used as the authors interacted with a wide spectrum of Oman society, business, academia and industrialists in discussing issues raised in this paper. The research question is why did Oman succeed and what does the future hold for Oman? This research will be underpinned by literature review and case studies in Oman. The reason for the research is to analyse the history of Oman's success and what the country can do for the future given dwindling oil and gas reserves to run out in twenty five years.

Success did not just come about and a lot of home work created the economic monster that we call Oman; it's a whole intricate system created over many years led by an exceptionally wise charismatic leadership which is respected in the whole world. The past forty plus years since 1970 have seen Oman image from a stone age secluded village based Arab country to become a modern industrial country premised on a knowledge society, e-government and digitalization. Oman's phenomenal success has been underpinned by high quality education, industrialization and serious value addition, urban planning, transparent corporate governance, good and accountable government, political stability and strong government, setting and exploitation of trade agreements with the rest of the world and protection of property rights. What puts Oman apart is their ability to create an atmosphere attractive to FDI – fast tracking of

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investment and divestment applications, infrastructure development, strategic location for sea and air routes, liberal exchange controls, a study of Oman economic history to create patriotism, openness and tolerance, embracing the world, a low crime rate and rule of law and finally interacting with the community of nations. Pinho JC and Martins L (2010:254 – 272) concluded that results from their extensive study revealed that non-exporters consider the lack of knowledge of potential markets, lack of qualified export personnel, lack of technical suitability, degree of competition in the sector, lack of financial assistance (governmental and financial institutions), and lack of qualified human resources as the main export barriers. Besides this there is also the aspect of quality of life that one has to look at. Oman offers the best in terms of real estate, education, health, hospitality and tourism, entertainment, sports and outdoor life.

The industries where it has a competitive advantage are manufacturing, electronics, biomedical sciences, tourism, education, health, shipping, insurance, banking and financial services. Oman's secret has been value addition and running knowledge based industries driven by high-technology and supported by world class universities, research institutes, and industrial clusters and finally engaging in maximum cooperation with the rest of the world whilst benchmarking all practices, including e-government. Good public management and strong transparent corporate governance has characterized Oman to become the admiration of the whole world. A vast state on the Arabian Peninsula, Oman has turned into a mysterious economic monster and juggernaut. My analysis will be based on Porter's Five Forces Model of Competitive advantage to clearly show how Oman has managed to exploit this and the hurdles it has faced in doing this and what the future holds for this country. Archival sources and case studies were used for data collection as well as focus interviews with industrialists and other relevant people.

REVIEW OF LITERATURE

The purpose of the literature review is to gain from already published research on this topic. It also helps in illuminating issues and helping to proffer possible solutions. Literature review helps analyzing issues and in creating checks and balances before conclusions and decisions are made. One of the most important purposes of a literature review is getting a

cross section of ideas from different perspectives on a given topic and by people or organizations that are respected in a discipline and have done a lot of in-depth research. A literature review is an account of what has been published on a topic by accredited scholars and researchers. A literature review is a body of text that aims to review the critical points of current knowledge and or methodological approaches on a particular topic. Its ultimate goal is to bring the reader up to date with current literature on a topic and forms the basis for another goal, such as future research that may be needed in the area. I will use this literature review to guide the flow of ideas as I discuss the secret of Oman's industrial success and economic miracle.

A substantial number of quotations from journals follow, which help to illuminate the key issues in this discussion. This literature review has got three classes or angles i.e. – Firm level issues, Market place issues and finally Government Policy issues in order to do justice to dissection of issues. In fact the degree of research in every country determines the degree of economic, political and social progress.

The USA is what it is today, an economic juggernaut and mega economy, because of higher research capabilities than other countries. China is an unstoppable economic and political monster for the same reasons. Navarro A et al (2010:41-61) came to the conclusion that resources linked to experience and informational knowledge about foreign markets foster the development of capabilities (i.e., specific export capabilities and/or Export Marketing Orientation - EMO) and that the results indicate that specific export capabilities influence EMO. Anold Raphael (2010:51-74) argued that firms need to focus on processes and organizational structures in transportation management with special focus on the integration of existing commercial Transportation Management Systems (TMS) so as to make huge savings and remain competitive in the current cut throat competition environment. Regner T, et al (2010:161-174) contented that the realm of digital media is undergoing fundamental changes as it moves from mass media to an era of mass participation. This means the aim is maximum outreach of target markets for better payback on promotion budgets. Research by Seborá T C and Theerapatvong T (2009:331-350) concluded that managerial proactiveness is associated only with the scope of firms' competition, firm size, organizational entrepreneurial climate and support for personal entrepreneurship and suggest that firm context can

influence the basis for corporate entrepreneurship. Smith J & Benjamin C (2010:567-585) concluded in their research that in business a retrospective explanation mitigates anger, whereas a prospective explanation mitigates helplessness as far as customers and stakeholders are concerned. Beugré C D (2010:533-541) found out that the fundamental premise of the deontic model of organizational corruption is that newcomers with strong deontic principles would be more likely to resist socialization into corruption and take actions to reduce the corrupt nature of their organization than those with weak deontic principles. This is problematic for firms when dealing with China and other highly corrupt countries where corruption is entrenched. Rajagopal and Amritanshu R (2007:25) found out that brand architecture is concerned with the pedigree of brands of a firm, role of specific brands and the relationship between sub-brands and in particular, brand architecture may be considered as the way a company organizes, manages, and markets their brands. They further said different business strategies require different brand architectures for success. Li X and Liu L (2009:341-359) said in the Chinese business environment as an enterprise grows in size and age, the impact of embedded guanxi network on enterprise performance remains significant, while the impact of market guanxi network keeps increasing. Oman does a lot of export/import business with China and needs to learn about this. He also revealed that top-performing Chinese private firms tend to adopt a high-commitment model of human resource management which emphasizes training and development, promotion by competence, extensive employee welfare provision, and enterprise culture development and management. Louis K F, et al (2005:65-75) said E-Commerce is about building relationships and making money and conclude that the website must satisfy the customer's wants and needs, living up to promises, and giving someone a reason to come back and that a good website should leave the user with a positive impression about the organization and convey the impression that they care about them but that many organisations do not understand correct website strategy.

Lambert-Pandraud R and Laurent G (2010:104-121) concluded that mature consumers are attractive targets because they likely remain attached to a brand longer, that long-established products may still attract new consumers, and that the success of a new brand among young consumers may be ephemeral. Angerer

M et al (2010:15) said when agents have the option of not delivering on their promises, a high enough penalties for non-delivery is necessary to ensure an efficient market and that a lower penalty leads to inefficient, even collapsing markets due to moral hazard. Rule of law observance becomes important to ensure enforcement. John Smith (2009:141-153) said the advertising process can reach selectively each segment and proposed the use of Pontryagin's Maximum Principle conditions, where the optimal control problems can be managed in which goodwill productivity of advertising is concave and good production cost is convex.

A paper by Rasiah and Rajahargues (2009:619-637) argues that unless the institutional and firm-level technological capabilities of Cambodia, Laos and Burma are developed further, all three countries will find it difficult to retain a significant presence in global garment export markets. Behar Alberto B and Phil M (2006:1056-1074) find evidence of positive neighborhood effects through exports, but say sub-Saharan African countries benefit less from growth in their own region than this typical relationship indicates. Given the small share of exports destined to their neighbors, low-income countries in sub-Saharan Africa experience relatively modest export growth from growth in the region. These factors imply that African countries are unlikely to pull each other out of poverty and a regional focus may be less effective than a focus on countries outside of the region. This shows the value of regional trade agreements but GCC countries have massive economies due to oil and can lift each other out of poverty but without ignoring world markets.

Findings by Aron O & Debra G (2004:241-254) indicated that advertising has a significant effect on consumption-aroused feelings and service brand attitudes. Aron O & Jay W (2009:24) found out that SMEs pursuing international market entry undertake organisational innovation, which in turn enables such firms to achieve higher marketplace performance and that innovative firms are better equipped to exploit international market opportunities and perform better in such markets. Claire H, et al (2007:109) concluded that business tourism is a highly lucrative but competitive sector of the tourism industry which has led many destinations to implement strategies and invest in infrastructure and human resource developments. They say national and regional capital city status gives additional kudos to a destination and that the critical success factors for business tourism

destinations include: leadership; networking; branding; skills; ambassadors; infrastructure; and bidding. Robert G & Stephen P (2006:327-353) in their research conclude that corporate brand values often serve mutually contradictory goals of capital accumulation and legitimation. They further argue that competitive branding aims at distinguishing firms from one another, in the overall landscape of branding, the semiotics of branding contributes to tightly, condensed, yet overarching, capitalist metanarratives of boosting brand values. Chris D in his research paper entitled, "Whats in a Name," concludes that a strong brand offers a customer consistence, certainty and a promise of quality and that a brand name contributes one 3rd of shareholder value and cannot be replicated, unlike physical products which can be copied. He further says market leadership is linked to brand performance and that branding is a very sophisticated and complex exercise employing advanced social sciences. John G (1999:27-29) explains that in E-Commerce drawing customers to an unseen storefront is challenging - timing, innovation, and deep pockets help and that guerilla tactics such as viral marketing and revenue-sharing affiliate programs can help firms gain needed distribution and exposure at a potentially low cost. He further says second-stage brand building has become extremely expensive for firms.

Mullin R (2006:38-39) says a brand is ownership of a piece of the mind of the customer which gives instant recall when the brain is triggered by a connection between a need and a solution and that the power of a brand, the name and any associated logo, helps the mind with pre-purchase decision-taking and conjures up a range of values of your offer. He concludes that the strongest brands in the world own a positioning in the consumer's mind that is unique to that brand and can be remembered by almost everyone. In researching about the modern challenges of branding Douglas B H (2000:307-338) contented that the old political battles that have consumed humankind during most of the twentieth century—black versus white, Left versus Right, male versus female—will fade into the background and that the only battle worth fighting and winning, the only one that can set us free, is The People versus The Corporate Cool Machine or corporate brands and national brands. Marc J. Melitz M J, et al (2008:295-316) concluded that market size and trade affect the toughness of competition, which then feeds back into the selection of heterogeneous producers and exporters in that market and also affects pricing strategies.

This literature review confirms the following key points in successful national entrepreneurship and industrial development:- world class R & D and marketing research, TQM, national and corporate branding, exports and related languages, learning English and key international languages, good world class salaries and conditions of service, reliable supply chain, technological benchmarking, trade agreements, an international business culture and investment incentives, customer relations, solutions based product portfolio, value for money transactions, anti-corruption, good international relations, property rights sanctity, peace and stability, patriotism, developing key institutions and rewarding and facilitating entrepreneurship. Furthermore a clean and wise leadership like Oman's is also an asset for any country.

RESEARCH AND DEVELOPMENT

Exports cannot succeed in Oman without world class R & D. Innovation cannot succeed without systematic and well-funded Research & Development in both the public and private sectors. A country has to develop top scientists, technologists and engineers if it is to ever realize the benefits of world class R & D. This is only possible through the setting up of credible colleges, universities and research institutes. Oman as a country may need to think about setting up the Oman Institute of Strategic Studies and Research, a research organization which would work hand in hand with leading universities and industries in Oman, the GCC and the world at large. It would naturally have its core staff of eminent economists, sociologists, engineers, anthropologists, technologists and scientists.

In his paper on, "Competition and strategy of Chinese firms," Cooke F L (2008:29-56) concluded that the key success factors of these firms appear to be associated with firm growth through business diversification, development of international market, strong emphasis on product innovation and quality enhancement, strategic marketing, product and corporate branding, and importantly, entrepreneurship of owner managers/CEOs and reform of corporate governance. This maximizes benefit either way. The USA, UK, Australia, UAE and other leading economies have these kinds of institutions which have proved to be very useful in public policy formulation, development and international competitiveness.

Techno Parks could also be established by leading universities in collaboration with industry, local

authorities and the government. These are the hotbeds of new ideas, new products, experiments and finally handover market tested products for commercialization by firms. They also participate in many research projects to test new materials and new systems to improve processes and have been the source of breakthrough new products in many developed countries which has helped those countries pioneer new products and enjoy associated benefits in terms of price skimming and monopoly pricing. They can also take measures to block the market by patenting their technology and engaging in contract purchasing and exclusive distribution. With the massive oil revenues in Oman this route would be very viable as large sums of money can be invested in diversification projects to create new industries and add value to oil and related products as well as other natural resources like fish, minerals and agricultural products. Techno Parks could be run in conjunction with the newly established engineering degrees at CAS and other leading universities in the Sultanate. Research by Parys S V and James S (2009:400-429) discovered that increasing the number of legal guarantees for foreign investors and reducing the complexity of the tax system helps to attract investment and this naturally increases national export performance. The kind of freedom and liberalization one finds in the United Arab Emirates has helped that country to make a Switzerland, Singapore and Monaco of its own in the Middle East and that has been excellent branding and has attracted billions of investments funds unimpeded by public bureaucracy. That has helped that country create many jobs, new businesses and record the lowest jobless rate in the GCC and the highest investment rates too.

HRM STRATEGIES IN OMAN

Schmidt A, et al (2010: 161-174) was of the opinion that in most countries there is the problem of access to capital as well as price of capital which differs from country to country. He said the other key issue is development and retention of adequate skilled labour to run the system which he said is quite problematic for developing countries which continue to lose skilled labour to the developed world. Oman is no exception as it loses a lot of skilled labour to its neighbors who pay better and the developed world. Some of its own citizens do not come back after doing PhDs on government scholarships in the USA, Europe, Canada, New Zealand or in Australia but choose to remain in the 1st world where conditions are much better, but this compounds the problem of skills shortage and

Omanisation and localization of skills.

One of the most important strategies in international competitiveness is the ability to retain staff as people are the single most important resource. A country's ability to recruit and retain skilled staff is a very strong indicator of its ability to compete regionally and internationally. What is the reality about Oman in general in this area? Any labour turnover rate above 20% is an indicator of a danger zone, strategic instability and a lack of continuity and must be addressed by any employer or business with a view to remove the factors creating the labour turnover. Failure to do that is an indictment of the organization that sets it on a sure road to failure and instability. Recruitment costs would sour and continuity is compromised. New people make many mistakes, take long to fit in (if they do make it), and settle down and their productivity only peaks after at least one year, especially in many skilled jobs.

In the GCC what has always been the cause of high labour turnover has been mainly salaries and to a lesser extent other benefits and lastly the environment. GCC countries themselves compete with each other with Qatar, Kuwait and UAE as the pace setters. Then comes Europe, USA and Asia where some private universities pay well over US\$25000 per month plus a portfolio of benefits. Galagedera D.U.A.'s research reveals that equity market performance may be positively related to the size of the market and friendliness of the business environment in the form of market size, networks, government regulations, easy of doing business, infrastructure and sophistication of clients as well as positive attitude and work ethic (2010:245-269).

The GCC has always been fighting for skills on the basis of salaries/benefits and the UAE, Kuwait, Bahrain and Qatar have been the market leaders with Oman and Saudi Arabia trailing behind. As these countries literally live on expatriate labour there has always been a tendency for Oman to lose skills to its neighbours rather than vice-versa and this has been quite disruptive, especially in higher education. Benchmarking conditions of service 100% could help Oman stem the brain drain once and for all and guarantee continuity. Entrepreneurship only succeeds when the right skills are there to make things move. Studying and understanding the culture of any country also takes time for one to fit in.

THE EDUCATION INDUSTRY

We will focus on the tertiary or university sector, although other levels of education are also equally important but these feed into universities in most cases. The education sector has been one of the major success stories and reasons why Singapore made such phenomenal success and is also a major source of income as well as research output which feeds into improving industrial and national competitiveness. Various factors explain this. Firstly Oman set up a first class education system benchmarked on the best Western standards.

The country has a high standard of living, low crime rate, political stability and a well developed tourism and hospitality industry. Research funds are readily available thus making it a haven for the best brains from the rest of the world to come and thrive. The question is why and how did Oman managed to attract top academics into its system from the rest of the world? Crow R T (2010:17-24) said adherence to the principles that made the USA the world's largest economy is the surest path to continued economic growth and stability over the long run. He said of particular importance are policies that allow flexibility in labor markets; free movement of capital, unimpeded by excessive regulation; tax rates that minimize disincentives for the development of human and physical capital; and liberalization of international flows of goods, services, and capital. Oman will need the same strategies for exceptional growth in its exports and investment just like any country aspiring to excel on the globalization front. Academics are psychological animals like all of us and they wanted:-

- Quality of life and quality education for their families
- High salaries and effective labour laws
- Recreation and good outdoor life
- Clear career progression which comes with research funding
- Freedom of expression and academic freedom
- Making names for themselves
- International travel and interaction
- Protection of intellectual and property rights
- An atmosphere of accountability and transparency

- Political stability and predictability
- Supportive institutions and system
- Tolerance, respect and human rights
- Informative and free media
- Low crime environment
- An anti-corruption culture chlorinated by media freedom and effective judicial systems

That is exactly what Oman could offer. It was gaining a lot from the world in terms of manpower with very little loss of its own experts to other countries. A lot of academics and other experts had good reason to run away from economic problems and underpayment in Asia, Africa and South America to go to Oman. For the first time they would enjoy most of the above. 3rd world countries are very good at training but they cannot compete with developed countries and NICs on salaries and other conditions. In their native countries some of these people feel abused and leave to go for a dream job. People in Europe, America, Australia and India are tired of painful taxes, pollution and a high crime rate (and poverty in India, Africa and South America) and would be better off in a clean, more conducive hideout like Oman. Oman provided a dream job and home and hideout for international academics.

If one looks at the simple fact that in 3rd world countries and Zimbabwe in particular, one finds that 90% of academic staff as well as administrators cannot afford to buy cars of their own and have to use public transport, which is very frustrating and denigrating. Of the 10% who have their own cars, (whether institutionally issued or self-purchased), about half of these are battered old cars that are always breaking down and embarrassing even on the road.

The same applies to housing – 90% of staff in universities and colleges are renting somebody's property which goes with the already explained embarrassing, denigrating and dehumanizing experience; some property owners/landlords can be a real menace and a nuisance to tenants. The act of ownership itself is a dignifying, fulfilling and a very satisfying experience in life, whether it is a house or car or both. Being rich is everybody's dream. Worse still most university employees in 3rd world countries cannot afford to send their children to world class universities abroad where they get degrees that are

more internationally acceptable for employment. This is the reason why politicians and the well to do send their children to Europe, USA, China, Australia, South Africa, Singapore, Hong Kong and other Western and developed countries.

In Oman even cleaners and messengers drive brand new cars, straight from the box, which is unheard of in Zimbabwe and the 3rd world. When people in these 3rd world environments get job offers in high income countries to taste luxury and a decent life, they will not even think twice to accept and move on. Sometimes even professors, Ph.D holders and lecturers cannot afford just a holiday with their families at holiday resorts in their own countries let alone overseas. Having a decent life is sometimes a pipedream. Being able to afford the bare basics of life is quite difficult for these highly qualified people. Sometimes even a newspaper is considered a luxury by a university graduate.

Many professionals work for many years to buy a battered old car or modest house, if ever they manage to do that during their lifetimes. Life in the 3rd world can be hell on earth. What is even worse and more frustrating for 3rd world academics is sometimes the degree of abuse that they witness from their kitchen cabinet (top brass), who will be enjoying unbelievable trappings of power and opulence in the midst of grinding poverty and shortages of almost everything in the institution from books, computers, internet access, teaching space/rooms, money and research funding. University bosses will be living typical Monaco and Swiss kingly/princely lives of their own or lives typical of English and European league super stars and Hollywood stars. The worst thing is that academics will normally be getting lifts from their ex-students on the road as they struggle to get public transport which may not be there after all, whilst their bosses monopolise two to three cars on campus – that's the kind of abuse one sees every day in the 3rd world. This is what the biggest frustrating factor in universities in Africa is. The corruption is so deep rooted and institutionalized like a religion and the corrupt people are not accountable and are untouchable.

The energies of academics that got jobs in Oman are now directed at developing Oman rather than fight hide and seek battles with unrewarding/thankless systems in their countries of origin – that benefited Oman and improved its industrial performance. Research support in South America, India and Africa is very low and support facilities and infrastructure is

in some places poor and working is really frustrating (electricity blackouts, fuel shortages, water shortages, dangerous potholed roads, unreliable old airlines, understaffing and being overworked, underfunding, sometimes corrupt administrations like the strikes we see on TV in India and Greece, high taxes, bureaucracy, political instability/violence, etc).

Oman provided a solution to all this and attracted thousands of experts from all over the world for a dream life. Concentration of the best brains in Oman unleashed brilliant ideas which created breakthrough products and systems and leapfrogged Oman to where it is; the process continues. The positive country of origin effect, goodwill, international fame and concentration advantage continued to attract industrialists, investors and other sectors of society to join the Oman miracle and the multiplier effect continued. But Oman is now beginning to lose large numbers of skilled people to its neighbours mainly for reasons of better salaries and conditions and this is one area that the country needs to urgently correct by revising the remuneration structures substantially to continue with the economic revolution unimpeded.

The Sultanate of Oman is also failing to attract back some of its own citizens sponsored to do Ph.D degrees in western universities who are opting to remain in western countries due to better salaries and conditions there as well as massive opportunities for rapid advancement. This is stifling the Omanisation drive in key institutions, especially in education. This is not a problem for Oman only but the GCC region as a whole. A study by Wong H Y & Bill M (2008:293-305) found that international marketers need to have resources input, such as human and financial, to drive international marketing communications.

Brand adaptation also needs to be performed in order to achieve a better international marketing communications. Political stability and a supportive and booming region were also factors in influencing development in Oman. Another factor was the positive work ethic of most people in Oman, very friendly and hospitable people, the best people in the GCC and the Middle East. They are honest, hard working, time conscious, dependable and forthcoming; qualities required for any successful business and nation.

This phenomenal success was not without negative side effects. Global warming, redundant workers created by advanced technology, cultural contamination and erosion of local values naturally set

in with the oncoming of many foreigners in Oman. This was the price to pay.

But ultimately home is home, we have to develop our own countries to be better places to live in. Employment in foreign countries is always a temporary sojourn. Every sensible person must love and like their own country where they have their roots. We were born there and we will die there. The younger generation must fight for a complete change in behavior and practice for the better. Europe, the USA, Asia and the Middle East have better standards of living because of what their peoples have done to make those countries better, whether partly through hooks and crooks as well as creativity and innovation. The 3rd world and Africa must work hard and transform their lives for the better. Africa needs to move away from being an efficiency driven economy to being an innovation driven economy.

ACCESS TO FDI AND STRATEGIC LOCATION

Oman is strategically located and has globalised to attract FDI to support her industrialization efforts. This has been very successful looking at the massive injections of foreign investment in various sectors in the country. Rajah R (2004:587-623) said that in Malaysia, Thailand and Philippines only process technology, human resources, and R & D (indirectly through links with process technology) were linked with exports success and that use of cutting edge human resource and process technologies in order to export are necessary. Weak high-tech infrastructure seems to have restricted firms' participation in high value added activities such as R & D, but sufficient network cohesion in export processing zones has facilitated expansion in low value added exports. Availability of support industries has been a major factor for making Oman an attractive location for international MNCs. This makes it easy to operate as support industries provide inputs and skilled labour would be readily available. Colleges and universities have provided much needed skilled labour and world class researchers. The tourism industry has provided much needed entertainment and leisure exits.

DEVELOPMENTS IN SUPPLY CHAIN MANAGEMENT IN OMAN

Oman has taken advantage in exploiting current developments in supply chain to further improve its competitive position. Six major movements can be observed in the evolution of supply chain management

studies and Oman has been heavily involved in all these: Creation, Integration, Globalization, Specialization Phases One and Two, and SCM 2.0.

The key supply chain processes are:

- Customer relationship management
- Customer service management
- Demand management
- Order fulfillment
- Manufacturing flow management
- Supplier relationship management
- Product development and commercialization
- Returns management

Oman now needs to introduce a world class International Logistics & Supply Chain Management degree at the Colleges of Applied Sciences to stop reliance on expatriate labour and localize this critical support function in all organizations. Degrees in International Marketing & Applied Exports and Trade Policy must also be considered seriously to support the booming economy and the internationalization efforts.

CLEAN AND STABLE GOVERNMENT

Oman has an effective, wise, astute, stable and transparent government which has a zero tolerance to corruption. The existence of Sharia Law has helped to serve as a deterrent to check unacceptable behavior – it has been very effective indeed. This has helped to build investor confidence across the board and created the country into an international brand. It is also one of the major reasons why most big GCC economies have thrived. The work ethic is also very supportive of development as Omanis are workaholics, a quality shared by all GCC nations. Religion has created national identity and patriotism. State control of most of the media has prevented unnecessary negativity and falsehoods thus further building the national and international image of Oman. Fraud is not tolerated as well as other economic crimes which harm business. This way investor funds are protected and it also creates price stability.

ECONOMIC DIVERSIFICATION

The other and most reliable way of is to make an international drive to attract multiple private players

to establish world class private hotels, resorts, schools, clinics, hospitals, colleges, universities and recreation centres, this is especially good for Oman. Education is one of the biggest sectors in many developed and developing countries. India is the biggest exporter of human capital in the world and one sees Indian experts in every corner of the world earning the country billions of US\$. This has been possible through the establishment of countless high quality general and specialized schools, colleges and universities in India as well as in most strategic high value centres of the world.

The services sector is the biggest sector of any progressive nation. Moreover it is easy to create these kinds of industries than other primary and secondary industries. This has been successfully done by most Arab countries like the UAE, Chacar AS (2010:1119-1140) are of the view that unskilled labor market flexibility, a labor market institution that reduces legal constraints imposed on residual claimants (managers and owners) to take necessary actions to maintain or enhance profitability, is associated with increases in performance persistence and that financial and labor market institutions, public equity market development (respectively skilled labor market availability) have a positive (respectively negative) impact for domestic firms only. The spirit of adventure and discovery 500 years ago changed the pace of European development completely; while China, India, the Middle East and the rest of Asia stagnated for some 500 years, Europe's economy frog-leaped, overtook Asia, and increased its GDP seven times from 600 to 4,500 dollars per capita. This shows clearly that embracing globalization can improve GDP, sophistication, quality of life and product choice for any country and Oman is no exception Wolfgang Schüssel (2010:24-30). He says for a learning innovative and cooperative continent, the future will always be bright.

Saudi Arabia, Qatar, Jordan and Kuwait who have used that to diversify their economies from full dependency on oil which is a finite resource. Oil now accounts for only 4% of the total revenue of Dubai. Dubai is now a world centre attracting large numbers of health tourists coming for specialist treatment there. The same applies to its tourism industry. If one checks the profile of the UAE, Saudi Arabia and Qatar, one can clearly see that most leading universities in the world do have powerful and vibrant campuses operating there (from the UK, USA, France, Germany, Australia, Canada, Switzerland, Ireland). These universities bring

experts. Moreover leading first world academics have confidence in their own institutions and are better prepared to come to NICs on the invitation of their own kith and kin.

Once in the country they develop locals and do much needed capacity building in government, colleges, universities, firms and the community. Universities are known the world over of being the best catalysts for development and investment. One only needs to look at China, South Africa, Egypt, United Arab Emirates, Saudi Arabia, Malaysia, Oman, Hong Kong and Singapore which have attracted world class private schools, clinics, hospitals, colleges, universities, hotels, airlines, etc. Their regions as well as the international community come to them for education, holidays, entertainment and treatment.

A new innovative industry has been developed in the United Arab Emirates, health tourism. The whole world is going to the Middle East for a new life time experience in hospitality and tourism as well as world class education and treatment, the so called health tourism. This is part of economic diversification by the UAE to prepare for life after oil. Oman could learn a few lessons on health tourism from the UAE.

In March 2011 an American panel of eminent economists, business and government strategists was on a CNN television programme debating some of the major reasons why America is now facing cut throat competition from China which is decimating and threatening the existence of American firms. They said the biggest mistake that the USA ever made was to terminate the contracts of 60 000 expatriate professors between 1990 and 2010, most of them in the hard sciences and business, as these are the same people who joined Chinese companies/government and helped develop new breakthrough products and processes which have helped to destroy and decimate American companies unto this day. If they had remained in America their ideas would have been used to develop American companies and curtail transfer of their expertise to these countries. They said it would have been better had they given them American citizenship altogether as a competitive strategy as had been their strategy since World War 11. A good example is the aviation industry. But it is now too late. They have now turned their muzzles against their former masters with fatal consequences for the American economy and American prestige. Food for thought for the whole world.

STRATEGY FOR EMBASSIES

Oman also needs to open up embassies in high value world centres manned by the right people with business qualifications and business experience, especially trade attaches and trade promotion officers, if it is to benefit anything out of the embassies. The establishment of embassies must be guided by the principle of potential business to be generated in a country, besides the usual political objectives. This is what has generally guided most NICs and they have reaped huge rewards in the form of increased business in home countries generated from the Embassies.

Embassies also need to be given serious business and economic targets to meet like investment, exports, imports, tourist arrivals and national public relations, besides the standard political considerations and targets. These become the Key Result Areas or the reason or justification for their establishment or existence. Kiss AN and Wade M. Danis W M (2010:273-287) argued that strong national ties and weak international ties, accessible through brokers, contributed to speedier new venture internationalization in contexts characterized by fundamental institutional upheaval and that the value of various structural aspects of an entrepreneur's network changes as transition progresses.

Adequate resources also need to be pumped into embassies so that they can carry their mandates with reasonable ease. The same goes with key national Trade Promotion Organizations (TPOs); they need national support in order for them to do justice to countries in their international trade efforts. More interaction is necessary with the rest of the world and is not an option. These financial and economic innovations are going to be some of the key strategic economic drivers which can make or break any country – there is no alternative. The USA has an embassy with a staff complement of seven hundred people in China – the largest embassy in the world; the reason for this big embassy was to take advantage of the big business potential in China and pre-empt the rest of the world. They have established many Chinese Language Centres in the USA and English Language Centres in China as the quickest way and strategy to close the language barrier and accelerate business between these two economic giants. Language can make or break nations in the business front, especially key international languages like English.

CONCLUSION

The way forward is to go back to basics:- benchmark, revamp, revise, restore and strengthen the investment drive and investor incentive system. The environmental protection thrust must be part of any development agenda including putting green issues at the centre stage. For Oman there is a need for an English revolution – establishment of English degrees at most colleges and universities as part of a wider strategy of Omanisation to localize the thousands of expatriate English teachers and save on remittances and to have these English degrees act as service degrees for the rest of the economy to upgrade English competence and excellence and push Oman's business frontiers ahead of its regional competitors. PPP must be strengthened and must envelop the whole country and look at a future where all standards in Oman are judged against world best practice be they schools, colleges, universities, SMEs, research, businesses, government ministries, local authorities, TPOs (Trade Promotion Organisations), conditions of service, innovations, R & D, TQM. We are competing in a global village for investment, businesses, markets, skilled labour, perception and image and QOL (Quality Of Life).

The reward structure and environment alone determines where in the world all these factors of production will settle – food for thought for Oman. Competition is the name of the game and the market does not wait for good policies and good management; the market always rewards only the best all the time without exception and heavily penalises failure and misconception. Zimbabwe, as a developing country, can learn a lot from Oman and fine tune its own exporting development plans. Oman must be commended for having a very disciplined, foresighted leadership which has its priorities right. Zimbabwe is partly its own enemy with endless political squabbles tearing apart the small Southern African nation – envied for its natural resources, industry, minerals and wild animal rich fertile land and now a target for sanctions by rich, angry and unfair Western nations who wanted to continue fleecing the country at the expense of its own citizens of which she rightly refused. Taking back its farms from white farmers to give to the black majority has been very costly for Zimbabwe but was the right thing to do but should have been done correctly and transparently. It is in the education sector where Oman can learn a lot from Zimbabwe, which has made great advances in science, technology and international

business supported by many colleges and universities. Techno Parks have also been set up in Zimbabwe and operationalised with excellent results.

RECOMMENDATIONS

Our recommendations are that:-

1. Applied exports and supply chain degrees need to be developed and introduced to support the exports effort without ignoring consolidating development in other areas of the twelve pillars of national competitiveness.
2. A National Exports Strategy is required for Oman as well as giving English language prominence and teaching other key languages like Germany, Mandarin and French.
3. A number of Trade Promotion Organisations (TPO) need to be introduced in Oman to drive exports and create a strong exports culture (there is no Export Council (OCIPED is doubling doing investment and export promotion but focus and specialization is required), no Transporters Association, no Shipping & Forwarding Agents Association, no independent Export Credit Insurance Guarantee Company to insure exports among others (off course the Central Bank of Oman is doing this for now) – it is better to have two firms doing this to create health competition).
4. And incentives like performance based export bonus need to be introduced to stimulate exports and bring on board non-exporters. The incentives need to be very attractive to attract as many firms as possible in order to grow exports business. Duty drawbacks and incremental bonuses on exports also need to be introduced urgently as part of wider strategies and policies to seriously make exports the most profitable venture in Oman.
5. Some countries like Egypt have gone further and created a Ministry of Foreign Trade to focus on exports and supply chain (for raw materials, inputs and capital equipment). Oman can keep this at the back of her mind for the future.
6. Oman must now lead the GCC and the Middle East and demand that major car manufacturers must now set up car assembly plants in Oman to create jobs, transfer technology and become the hub for supplying the GCC and Middle East market rather than to continue supplying finished cars.

This is unacceptable exportation of much needed jobs.

7. There is a need to set up Techno Parks at universities or industrial parks to promote new product development in Oman as a partnership between universities, local authorities and industry. The USA and other developed countries have well established Techno Parks which have always been the bedrocks of innovation and breakthrough products.
8. Zimbabwe could learn a lot of useful lessons from Oman which enjoys excellent relations with the rest of the world and has a booming economy, while Zimbabwe is economically and politically isolated and under sanctions. Mending relations is a sure way of improving economic performance as well as export performance. The GDP of Oman is much higher than that of Zimbabwe right now. Zimbabwe has got room for improvement.

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