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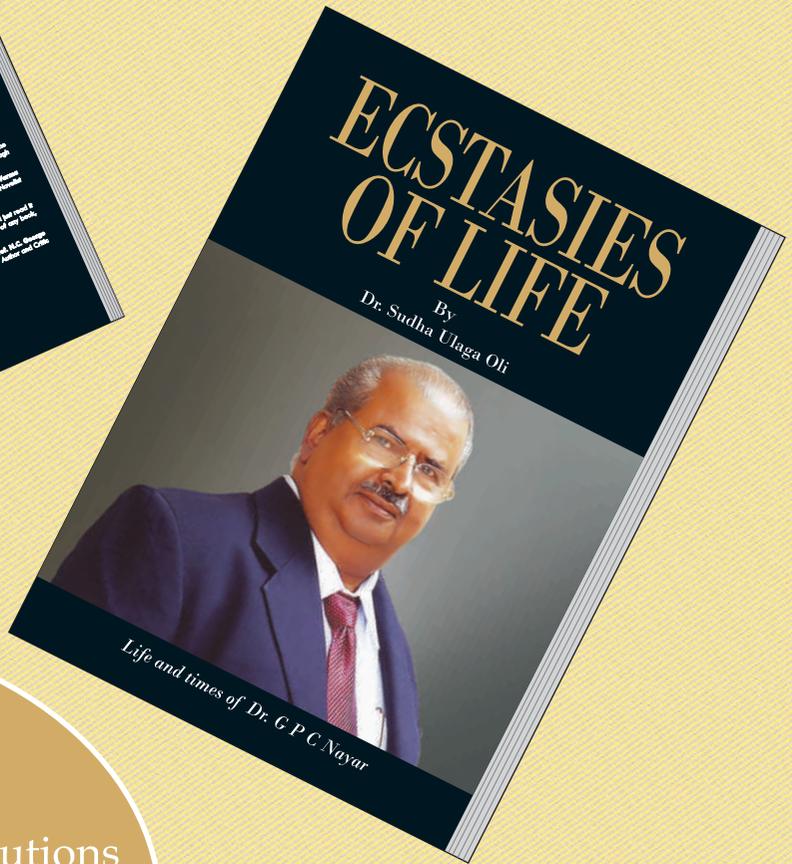
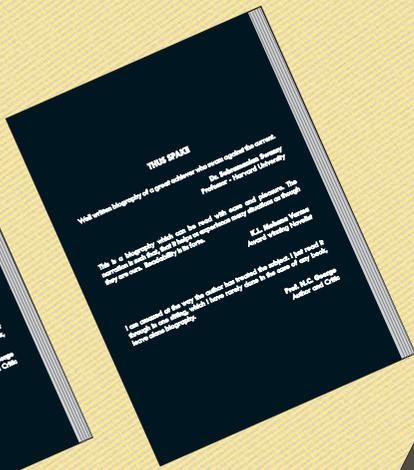
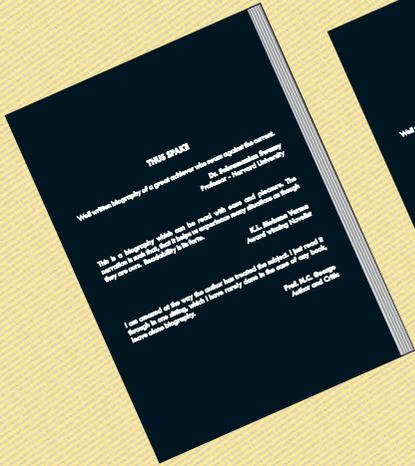
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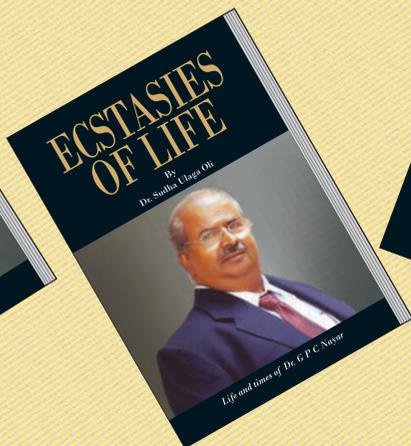
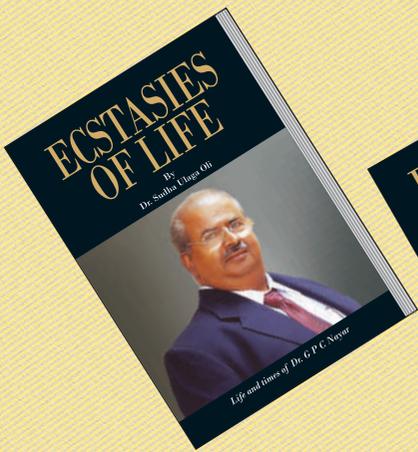
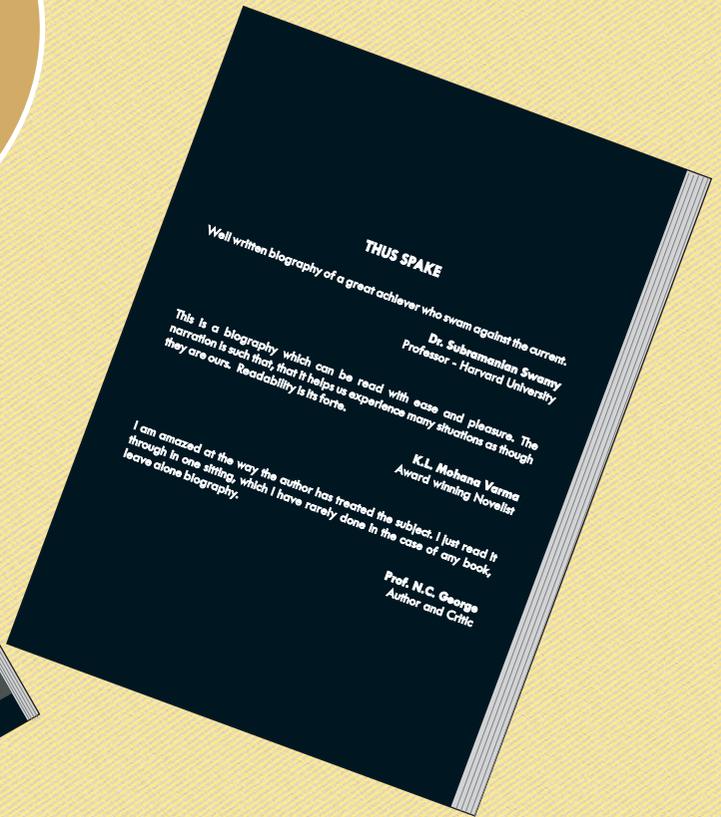
Backwater Tourism : RT Initiatives and Socio-Environmental Dynamics

Ravish Mathew, Anu Chandran R. C., and Sampada Kumar Swain





Here's an entrepreneur who has created some excellent academic institutions in an unfriendly environment. It is a saga of trials and tribulations in an extremely readable manner by a consummate writer in English.



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Chairman's Overview

One of the most significant shifts that had taken place in the business environment in the recent past is the phenomenon of globalisation. In a globalised environment, corporate governance calls for more advanced and refined approaches. Consequently, the supervisory boards of companies are required to acquire special competencies, may be, sometimes, from international sources, with a view to effectively head the governance in the interest of the owners.

The impact of globalisation is not limited to those companies who have adopted globalisation. Almost all companies are affected by the progress of globalization, whether they want it or not. Therefore, it has become important for a board to understand the implications of internationalisation and gain maximum advantage out of it. Not much research has gone into company performance as related to internationalation of supervisory boards. Our lead article is such a study in the German context.

Investments in stock market have always been built around some kind of investment strategy, some very simple, others more complex. While some investment strategies have been lucrative, others have not been so effective. Considerable research continues to be made in search of winning strategies as investors continue to yearn for higher returns. Dogs of the Dow Theory is considered to be one of the most popular investment strategies in the US. It is a very interesting strategy because it is so simple as well as convenient. You will find that our second lead article is an empirical study on this strategy in the Indian context.

Further, this issue carries a number of learned articles on topics like Impact of Dividend Policy, Investment and Herding Behavior, Post-retirement Work, Six Sigma Deployment in HR, Backwater Tourism in Kerala and so on.

I am confident that this issue will be truly informative and educative to our readers.

Dr. G. P. C. NAYAR
Chairman, SCMS Group of Educational Institutions.

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Editorial

B School and Cultural Studies



B academic course and curriculum may be incomplete if there is no academic acquaintance with current conceptions of culture, yes, of popular culture. It's the culture of the masses; the culture of everyday life of the large number of people (graffiti, comic books, mass cinema, popular music, and the open spaces of the city). The mass culture was used pejoratively in the past. The culture of the “elite,” then was the “true culture.” For b students, it is desirable to focus on the discourses of present day shopping, the organization of shopping experience, and the ideologies of consumption. Study of shopping can be learnt only in specific contexts of economy and spending.

The cultural studies argues that culture is about the meanings a society generates. Cultural Studies believes the culture of a community includes various aspects economic, spatial, ideological, erotic, and political. Culture is not a natural thing, it is something produced. Cultural Studies is interested in production and consumption of culture. The production and consumption of culture relates to matters of class (who decides on what produced), matters of economy (who can afford it) matters of representation (how is the artifact marketed/presented). The production and consumption of cultural artifacts defines one's identity. It depends on the ability to do so and the ways in which artifacts have been marketed and sold. In short, culture is a product: made, marketed, and consumed. The analysis of society and the condition of production spilled over into the analysis of culture. Culture, now, is the mode of generating meanings and ideas. The mode is the negotiation over which the meanings are valid. Meanings are governed by power relations. We do not buy product/object. Instead, we buy a lifestyle. It locates us in a class. This is a model of selling. Let us examine contemporary advertisements for consumer objects. They suggest that acquisition of an object marks certain lifestyle: nuclear family, the working woman. It is called the ideology of consumerism.

All these vindicate a conscious awareness of the tenets of cultural studies is imperative among b students.

Dr. D. Radhakrishnan Nair

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Internationality of Supervisory Boards and Firm Performance : Evidence from large listed German Companies

Thomas Steger

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Internationalization of boards and its effects on firm performance in particular has seldom been a subject of study. This study aims at resolving this deficit by drawing upon a multi-theoretical approach, quantitative as well as qualitative research methods and two samples of large listed non-financial German corporations. Personal factors generally have a positive influence on firm performance. International knowledge due to positions held on foreign boards was found to strengthen the financial performance of the companies. The interaction effect of foreign boards members and positions on foreign boards, however, must be considered differentiated. The strongest impact of supervisory board internationality on firm performance was found when the number of positions on foreign boards is high while the number of foreign members on the board is low.

Key words : *Internationalization, resource dependence theory, resource-based view, supervisory boards, foreign board members, international experience, Germany*



Dr. Thomas Steger

Full Professor

Chair of Leadership and Organization

University of Regensburg, Regensburg, Germany.

Thomas.Steger@wiwi.uni-regensburg.de

Internationalization has been widely discussed and often considered a key factor to increase firm performance (Glaum/Oesterle 2007, Lu/Beamish 2004, Ruigrok/Wagner 2004). Nevertheless, empirical studies exploring the internationality-performance link have most often focused on more general internationality aspects and variables of the firm such as foreign assets (e.g. Daniels/Bracker 1989), foreign sales (e.g. Ruigrok/Wagner 2003), listings on foreign stock exchanges (e.g. Hassel et al. 2003) or corporate governance mechanisms (e.g. Luo 2005).

Meanwhile, personal aspects have remained somewhat under-represented (Bausch/Krist 2007) and although different aspects of diversity such as insider-outsider ratio or gender have been subject of investigation (Bhagat/Black 1998, Siciliano 1996), nationality of board members has not yet attracted much attention. Nevertheless, the few studies on this topic have supported the assumption that board internationality would positively impact on firm

performance, either on a theoretical (Hambrick/Mason 1984, Szilagyi/Schweiger 1984) or on an empirical basis (Daily et al. 2000, Elron 1997, Oxelheim/Randøy 2003). However, prior research almost exclusively dealt with the specific U.S. context and its one-tier system. To the best of our knowledge, studies on two-tier systems and board internationality are absent in existing literature. This deficit is particularly problematic taking into account the internationally wide spread of the two-tier system. Moreover, the larger detachment of the supervisory boards, compared with the boards of directors, from operational management constitutes a rather specific framework for the exploration of the internationality-performance link.

This leads us to focus on supervisory boards of large German corporations in this respect. Germany provides a particularly interesting background for at least two reasons: First, although the German economy is generally considered 'world champion in exporting,' several studies reported an obvious internationalization deficit regarding German supervisory boards (Heidrick and Struggles 2009, Schmid/Daniel 2007). This raises the question whether national diversity in supervisory boards really makes a difference. Second, the particular German two-tier board system, including a management board (Vorstand) and a supervisory board (Aufsichtsrat), combined with employee co-determination, high ownership concentration and strong interlocking directorates, contrasts the much more often observed Anglo-American one-tier system (Schilling 2001) and may also impact on the respective internationality-performance link.

In concrete terms, our paper examines the question *whether and how far the internationality of German supervisory boards affects the firms' financial performance*. By this, we contribute to a better understanding of the internationality-performance link with respect to the corporations' governing bodies. Moreover, we close the deficit of empirical studies exploring this phenomenon within the context of a two-tier board system.

The paper proceeds as follows: In the next chapter, the existing literature on board internationalization and performance will be critically reviewed both in general as well as with special respect to the German case. Then we present the findings of an explorative pilot study based on a series of qualitative interviews with supervisory board

members from large German companies. Further on, we outline the theoretical perspectives forming the basis of our analysis. It will be argued that a multi-theoretical view on boards fits best to understand the board internationality-performance link. This will be followed by a (quantitative) empirical study to test our theoretically developed hypotheses. The last section concludes our main findings and puts some consequences for both future research and practice.

Literature Review

Internationalization of boards

Scholarly interest in team diversity in general has considerably grown in recent years (for a review see Gong 2006). Those studies, however, include very different groups on all hierarchical levels of the company and a wide range of diversity aspects have been examined apart from nationality. In order to strengthen the focus of our paper this review here will exclusively concentrate on studies dealing with internationalization on the top management level of the firm, namely among top management teams (TMT) and boards, and their impact on firm performance. We hold that internationality is a fairly particular variable and should not to be treated as any other proxy of diversity. In similar terms top management teams and boards should be distinguished from other groups and work teams.

The internationality-performance link on the top management level has been weakly researched in the past which becomes clear when recent reviews of the field are regarded (e.g. Gong 2006, Ruigrok et al. 2007). This may also be due to a certain dominance of North American authors in the field of international business and corporate governance who traditionally focus rather on diversity aspects such as insider-outsider ratio (Bhagat/Black 1998), gender (Siciliano 1996) or educational background (Smith et al. 1994), while nationality only recently became an important topic among European authors (Oxelheim/Randøy 2003, Ruigrok et al. 2007).

Interestingly, the few studies available most often report a positive impact of TMT internationality and performance. Gong (2006) found that TMT nationality heterogeneity was positively related with labor productivity. This effect was even increasing in time. Elron (1997) indicated that cultural heterogeneity based on different nationalities within the

TMT of international subsidiaries of US multinationals is positively related to TMT performance and the subsidiary's performance. Oxelheim and Randøy (2003) explored that particularly the adoption of Anglo-American board members significantly increased firm value. Similar results were found in studies about ethnic diversity. Although this variable should not be considered synonymous with internationality it usually included some non-nationals. Ethnic diversity on boards of directors of US firms was found to have a positive impact on firm performance (Erhardt et al. 2003) as well as on firm value (Carter et al. 2003). However, Richard and colleagues (2004) identified a U-shaped curvilinear relationship between racial diversity in management and performance in high-innovation companies.

Besides focusing on non-national board members, some scholars also engaged in exploring the impact of board members' international experience. Daily, Certo and Dalton (2000) found that international experience of CEOs was positively related to firm performance while moderated by firm internationalization. In more specific terms it was reported that CEOs with international assignment experience had a positive impact on firm performance as well (Carpenter et al. 2001).

It is to note, moreover, that several business practitioners reported some case based evidence supporting a positive internationality-performance link recently (Buzbee 2007, Mandl 2004). Although not based on distinctively scientific data it can be considered a (weak) indicator for a change in awareness regarding this topic even among the management of top level US companies.

However, some researchers observed opposing effects with respect to the internationality-performance link. Although Vance (1978) considered multinational focus (e.g. foreign board members, board members with considerable foreign experience) as gaining in importance, the identified effect remained negligible. Kilduff and colleagues (2000) as well as Kaczmarek (2008) supported this view finding no significant influence of national heterogeneity of TMT and board of directors, respectively, on firm performance.

Summarizing, it can be stated that a majority of scholars claim a positive impact of internationality of boards and TMT on firm financial performance although this standpoint is not undisputed. Since most studies focused on

US firms, alternative samples are still rare which encourages further research work in other countries, particularly with a different institutional, political and cultural framework.

Internationalization of German supervisory boards

Stating that we do only know little about the internationality-performance link particularly holds true for the case of German supervisory boards. Although the German economy is strongly globalizing and German companies are among the key players of the world economy, the internationalization of German supervisory boards still shows a remarkable deficit compared to the situation in other economically leading European countries (e.g. UK, Netherlands, Switzerland) (Heidrick and Struggles 2009, Schmid/Daniel 2007, Van Veen/Elbertsen 2008).

The German two-tier board system comprises a management board (Vorstand), with the chief task to direct the company, and a supervisory board (Aufsichtsrat) assigned to appoint and control the management board (Schilling 2001). Cross-memberships and CEO duality are excluded by law. Moreover, mandatory co-determination, which was created in the early 1950s and enacted in its current form in 1976, reserves half of the seats of the supervisory board of large corporations for employee representatives elected by the domestic company workforce (Von Werder/Talaulicar 2006). To avoid impasses, the chairman of the supervisory board, who is elected by shareholders, is granted a double vote.

Besides of some recent controversies about the state and prospects of the German board system (Steger/Hartz 2005, Vitols 2007), Van Veen and Elbertsen (2008) generally argue that the particular institutional characteristics would considerably impact on board internationalization. With respect to the German case they point out that the influence of employee co-determination, high stock ownership concentration as well as widespread personal networks limit the adoption of foreign members on German supervisory boards.

We need to note here that the influence and impact of the supervisory board on key indicators of company performance have been controversially discussed. On the one hand, due to the two-tier system's strict separation of supervisory board and management board, several authors still question the need to observe the connection between supervisory boards and company performance or in

minimum neglect it (Deloitte 2004, Theisen 2005, Von Brauchitsch 2003). On the other hand, however, several studies have discussed and highlighted the supervisory board's particular impact on important corporate governance aspects such as strategy formulation (Aldenhoff et al. 2009, Jungmann 2006, Steger/Jahn 2008) or key personnel decisions (Bresser et al. 2005). Moreover, there are several initiatives by the German legislator (Gesetz zur Angemessenheit der Vorstandsvergütung – VorstAG), by the Commission of the German Corporate Governance Code (2009) as well as by the wider public (e.g. Börsig 2006) to even strengthen the responsibility and accountability of the German supervisory board in the future.

Given the discordant findings regarding the board internationality-performance link in the German two-tier system as well as the limited transferability of the results found in the Anglo-American context, the question arises whether national diversity of German supervisory board is really worth to be explored in more depth.

Pilot Study

In order to get an initial impression of the internationality-performance link in practice we undertook a qualitative pilot study. For this purpose we collected a series of 36 in-depth interviews with supervisory board members between 2006 and 2009. All but two interviewees hold in minimum one (often even several) positions on supervisory boards of major German companies. They comprised chairmen, shareholder representatives, employee representatives as well as unionists. One interviewee served as a supervisory board secretary, one interviewee served as firm-internal consultant for employee representatives. Almost all interviews were based on face-to-face communication; just a few of them were done by phone calls. The average duration of the interviews was 74 minutes. During the interviews a broad variety of topics were addressed such as board roles, board functioning, board conflicts etc. All interviews were tape-recorded and fully transcribed. In terms of analysis all accounts dealing with board internationalization were selected from the interview transcripts and content analyzed.

In general, 53% of the interviewees identified a deficit regarding the internationalization of German supervisory boards, while 17% explicitly denied such a deficit.

Obviously, the value and need of board internationality is not undisputed. This is also stressed by the fact that 33% of the interviews refer to positive experiences with board internationalization, while 36% also refer to negative ones. 19% of the interviewees mention both, positive and negative aspects of board internationalization.

Going deeper into the data, we could identify six patterns of attitudes towards supervisory board internationalization to which most interviewees could be distinctively allocated: *Pattern 1* takes a generally positive view on board internationalization. Although critical aspects are also mentioned from time to time, the interviewees belonging to this pattern consider the advantages of foreign members clearly outweighing the disadvantages.

“It is of great value to exchange with each other and to transfer experiences and to test. And this is best feasible in a supervisory board like this – one member coming from New York, one from Amsterdam, one from Paris, one from Berlin, and two from Munich.”
(Interview 17, Chairman)

Pattern 2 takes a positive view too, although it is rather normative. Internationalization is predominantly considered as something that would be good to have. Indeed, several persons belonging to this pattern are stemming from supervisory boards without foreign members.

“This could really be enrichment as it would also force some colleagues not only to demand anything for his/her plant but to take a more holistic perspective. This indeed would not be bad.”
(Interview 15, Employee representative)

Pattern 3 takes a critical-pragmatic perspective on board internationalization. Consisting of chairmen only, those interviewees doubt about the possibility to realize a fruitful internationalization. The particularities of the German corporate governance system, they argue, would prevent foreigners from accepting nominations.

“German supervisory boards are not attractive. First, since they are so formalistic. (...) Moreover, it is a particular burden always to travel abroad to participate in that. Also the liability problems... Also the board size... A German supervisory board is not attractive for foreigners.” (Interview 11, Chairman)

The interviewees of *Pattern 4* are not really against board internationalization. However, they consider it rather a kind of façade building and, therefore, deny a positive impact.

“At the moment we rather speak about a kind of symbolism than about a necessity to adopt foreigners on German supervisory boards.” (Interview 10, Union representative)

Pattern 5 is even slightly more radical. Those interviewees explicitly deny any need for board internationalization. Most often they also stem from supervisory boards without foreign members. So, they deserve of limited experiences in this respect.

“As far as I can see, the degree of board internationality in other EU member states is not significantly higher than it is in Germany. This is

always a kind of home game for the domestic managers.” (Interview 21, Shareholder representative)

Finally, *Pattern 6* explicitly refers to problematic or even negative experiences with board internationalization. Opposite to pattern 1, these interviewees see a clear overweight of negative consequences regarding foreign members on German supervisory boards.

“This was a key event for me as he [the newly elected foreign board member – the authors] said: When I had some conflicts with the unions in America, I engaged a rocker gang. And when I came to Germany, I asked myself, where do I get the rocker gang from?” (Interview 27, Union representative)

Table 1. The six patterns of attitudes towards supervisory board internationalization

Pattern	Motto	Personal characteristics	Size
1	Foreigners have a positive impact!	Chairmen and employee representatives	6 persons
2	It would be good to have (more) foreigners on the boards!	Whole range of functions, 1/3 women	9 persons
3	We will not get any good foreigners!	Only chairmen of Dax-companies	4 persons
4	Foreigners on the board are just symbolic!	Only members from the employee side	2 persons
5	We do not have any, we do not need any!	Majority of shareholder representatives	6 persons
6	Foreigners have a negative impact!	Only union representatives	2 persons

Note:

N = 36

7 persons could not be exactly allocated to one specific pattern

Summing up, the pilot study has demonstrated that besides of a majority of rather positive views on board internationalization we should not neglect some fairly critical and even negative views. The latter are not, as one

could assume, only allocated on the employee side of the supervisory boards but can be found across the entire sample. In order to deepen our understanding of board internationalization we develop a more differentiated

theoretical framework that links two types of board internationality with firm performance. We elaborate on these ideas next.

Theoretical Framework and Hypothesis Development

From a theoretical point of view, upper echelon theory has clearly pointed out that the demographic characteristics of the organization's key decision-makers impact on the firm's financial performance (Hambrick/Mason 1984). This view was also shared by other theorists (Gupta 1984, Hillman/Dalziel 2003, Zahra/Pearce 1989). In order to further conceptualize this relationship we do not choose one single theoretical focus but aim to take a multi-theoretical view on the complex topic. Thus, we draw upon two approaches, namely the resource dependence theory and the resource-based view of the firm.

Resource dependence theory scholars (e.g. Pfeffer/Salancik 1978) conceive boards as an important strategic resource of the company linking it to its external environment, namely to a nation's business elite, to financial capital and to competitors (Geletkanycz et al. 2001, Nicholson/Kiel 2007). In this respect, it was argued that directors would bring four benefits to organizations: (a) information in the form of advice and counsel, (b) access to channels of information between the firm and environmental contingencies, (c) preferential access to resources, and (d) legitimacy (Hillman et al. 2009, Pfeffer/Salancik 1978).

Consequently, national and cultural diversity can be considered a substantial factor of the board's intellectual resources (Ruigrok et al. 2007) and, thus, enhances board effectiveness (Nicholson/Kiel 2004). Of particular interest is that board diversity should also improve the representation of determining shareholders and stakeholders of the firm (Freeman/Reed 1983, Hillman 2005, van der Walt/Ingleby 2004) and, thus, enhances the company's public reputation and legitimacy (Bonini et al. 2009, Oxelheim/Randøy 2003). Both must be considered relational capital that is important to secure critical external resources (Hillman/Dalziel 2003).

The effect of displaying legitimate behavior to the environment was also recently found in a prominent business case: Although Toyota denied to have appointed non-Japanese Jim Press to the company board, it was

explicitly perceived by the media a sign for Toyota's increasing international mindedness (Greimel/Ciferri 2007). Having a board member of the same nationality as the market the company wants to enter may contribute to the creation of a certain level of trust and pays a positive effect to the whole process. Consequently, we expect that the presence of non-national members on the company board should have a positive impact on performance.

Hypothesis 1: The amount of foreign board members positively affects the firm's financial performance.

Among foreign board members those coming from Anglo-American countries are of particular interest. Oxelheim and Randøy (2003) found that the adoption of Anglo-Americans on boards of Scandinavian corporations significantly increased firm value. Moreover, Hermes and Schulenburg (2009) report significant influences of Anglo-American board members on compensation of German, French and Dutch boards. Consequently, we expect that Anglo-American board members exert a positive impact on performance too.

Hypothesis 2: The more Anglo-Americans are on the board the better higher is the firm's financial performance.

The *resource-based view of the firm* (e.g. Barney 1991) conceives the board as a potentially important strategic resource that can provide a sustainable competitive advantage to the company. Human resources resulting from external inputs, such as knowledge of markets, technologies or consumer needs and attitudes, contribute to the productive operations of the firm (Penrose 1959).

According to Barney (1991), in order for a resource to provide a sustainable competitive advantage, three criteria must be satisfied: The resource must be valuable, rare and difficult to imitate by a firm's competitors. It has been argued (Gadhoun 1998, Myloni et al. 2007) that certain qualities of boards can indeed meet these three conditions. First, the board's role achievement (e.g. monitoring, providing strategic advice) is likely to create economic value for a firm (Hendry/Kiel 2004, Zahra/Pearce 1989). Second, companies' governance practices vary from one another, e.g. in terms of knowledge, reputation, behavior and values as well as regarding the broader institutional context in which

the company operates. Therefore, board human resources can be considered individually embedded and constituting tacit knowledge (Myloni et al. 2007). Third, board practices rooted in long-term experience of international business and foreign markets as well as long-standing connections with foreign partners cultivating strong ties and mutual trust and reputation can create significant barriers to imitation (Erakovic/Goel 2008).

In more concrete terms, it is argued that internationality would constitute an important factor of the board's intellectual capital (Kor/Sundaramurthy 2009, Kutschker et al. 1997, Nonaka 1994). Thus, board internationality may enhance board effectiveness (Richard 2000), particularly improving the provision of advice and counsel to the management (Carver 2002) and strengthening the board's impact on firm strategy formulation (Geletkanycz/Hambrick 1997, Ravasi/Zattoni 2006). Some authors also found empirical evidence that the international business experience of board members exert a positive impact on the company's operations (Athanasidou/Nigh 2002, Carpenter et al. 2001, Reuber/Fischer 1997). Moreover, it can be expected to enforce the company's market orientation in foreign markets (Armario et al. 2008). Consequently, we expect that the international resources aggregated by the members of the board should have a positive impact on firm performance.

Hypothesis 3: The amount of foreign board positions held by board members positively affects the firm's financial performance.

Considering the general trend of the two theoretical streams they follow a fairly similar line of reasoning. Several examples of recent corporate governance studies have demonstrated that the two may well go hand in hand (e.g. Erakovic/Goel 2008, Geletkanycz et al. 2001, Kaczmarek 2008). Consequently, we can expect that foreign board members on the one hand and positions on foreign boards on the other hand do not conflict but in contrary will positively complement each other.

Hypothesis 4: The highest impact of board internationality on the firm's financial performance occurs when both the amount of foreign board members and the amount of foreign board positions are high.

Methods

We basically drew data from all companies listed in the four main indices of the Frankfurt Stock Exchange, namely Dax (30 companies), MDax (50), TecDax (30) and SDax (50), constituting 160 company datasets. The sample then had to be reduced with respect to several critical aspects. First, 15 financial companies were excluded regarding their particular financial structure. Second, ten companies constituting special cases (e.g. no German style supervisory board available) were omitted. Third, six companies had to be eliminated because of the lack of key data. This finally resulted in a sample of 129 companies (24 Dax, 41 MDax, 22 TecDax, and 42 SDax). Our analysis is based on figures mainly taken from corporate websites (especially annual reports) and in parts from internet banking providers.

We conceptualized the degree of internationality as consisting of internal and external internationality. Internal internationality means that the board consists of members from foreign countries who bring their knowledge and experiences from different countries in (F-M). External internationality means that supervisory board's members hold positions in boards of other companies outside Germany (F-P). This conceptualization is consistent with prior research (e.g. Vance 1978).

We measured F-M as the share of foreign board members relative to the total number of board members. The decision whether a board member was considered a foreigner or not is based on his/her country of residence and his/her main geographical field of activity. F-P is the ratio of positions in foreign companies' boards per board member. Both variables have also been frequently used in similar studies (for an overview see Schmid/Kretschmer, 2005). Moreover, AA comprehends the absolute number of Anglo-Americans on a supervisory board. Since there might be a risk of multicollinearity between F-M and AA, we tested for this potential problem. However, the variance inflation factors ($VIF_{F-M} = 2.34$; $VIF_{AA} = 2.4$) do not indicate any presence of multicollinearity.

We relied on return on sales (ROS) as measure of performance. Return on sales traditionally is the most common focused-on aspect of firm performance in Germany and is not too strongly dependent on company size. This measure has been frequently used in corporate governance and board research (e.g. Bausch/Krist 2007, Fan et al. 2007,

Ong et al. 2003). Taking the dependent variable, we introduced a time-lag of two years compared to the independent variables. This is based on the assumption that there is not an immediate effect of board internationality on firm performance but that a certain time is needed until some benefits from greater board variety occur. This is in line with what was found in similar studies (e.g. Gong 2006, Watson et al. 1993).

We also added a number of control variables to our model. The annual turnover is used as a variable reflecting company size. Furthermore, the amount of employee co-determination on the supervisory board, namely no employee seats, a third of seats or half of the seats reserved for employee representatives must be considered an important and peculiar institutional aspect of the German corporate governance system (Van Veen/Elbertsen 2008). Finally, the number of listings on foreign stock exchanges was introduced to reflect the company's general international orientation. This variable was also used in earlier studies (e.g. Hassel et al. 2003, Lu/Beamish 2004).

Results

A total of 133 foreign board members could be found in the sample, i.e. 47% of all supervisory boards have adopted in minimum one foreign member, 9% of all board members are of foreign origin, and the average internationality rate is 11%. A total of 66 Anglo-Americans could be found in the sample, i.e. 22% of all supervisory boards have adopted in minimum one Anglo-American member, 5% of all board members are of foreign origin, and 50% of all foreign board members are Anglo-Americans. Regarding foreign board positions a total of 603 mandates could be found in the sample, i.e. the average number of foreign board positions is 0.41 per board member and 4.7 per supervisory board respectively. Regarding co-determination, 53% of the supervisory boards observed have half of their seats, 17% have a third of their seats reserved for employee representatives, while 30% do not have any board level co-determination. Table 2 displays the correlation matrix.

Table 2. Correlation matrix

Variables	Mean	SD	1	2	3	4	5	6	7
1. F-M	.11	.18	x						
2. F-P	.41	.65	.50***	x					
3. AA	.51	1.47	.67***	.46***	x				
4. EMPL	n.a.	n.a.	-.30***	-.09	-.11	x			
5. TURN	9.11	21.77	-.02	-.01	.22**	.32***	x		
6. LIST	.59	1.80	.04	.03	.21**	.21**	.73***	x	
7. ROS	.09	.16	-.13	.16	-.00	-.10	-.08	-.02	x

Note:

*** p<.01

** p<.05

* p<.10

F-M = Share of foreign board members

F-P = Positions on foreign companies' boards per board member

AA = Number of Anglo-American board members

EMPL = Amount of employee co-determination on the supervisory board

TURN = Company turnover (in billion Euro)

LIST = Number of listings on foreign stock exchanges

ROS = Return on sales

We tested the influence of board internationality via multiple regression analysis (Aiken and West 1991). The dependent variable was return on sales (ROS), while the predictor variables were foreign board members (F-M), foreign board positions (F-P), their interaction (F-M x F-P), and the number of Anglo-Americans (AA). We used employee co-determination, company turnover and number of listings on foreign stock exchanges as control variables. As shown in table 3, both F-M and F-P exert significant

effects on performance ($\beta = -.28, p < .03$; $\beta = .55, p < .001$, respectively). In addition, the interaction between both variables is also significant ($\beta = -.73, p < .001$). In line with our expectation, the presence of Anglo-Americans in German supervisory boards is positively related to performance ($\beta = .31, p < .02$). The degree of employee co-determination exerts a slightly negative effect on ROS ($\beta = -.17, p < .07$), while the other control variables had no significant effect on company performance.

Table 3. Regression analysis

	Return on Sales (ROS)
Foreign members (F-M)	-.28**
Foreign positions (F-P)	.75***
F-M x F-P	-.73***
Anglo-Americans (AA)	.31**
Employee co-determination (EMPL)	-.17*
Company turnover (TURN)	-.20
Foreign listings (LIST)	.09
F	4.08***
Adj. R²	.15

Note:

*** $p < .01$

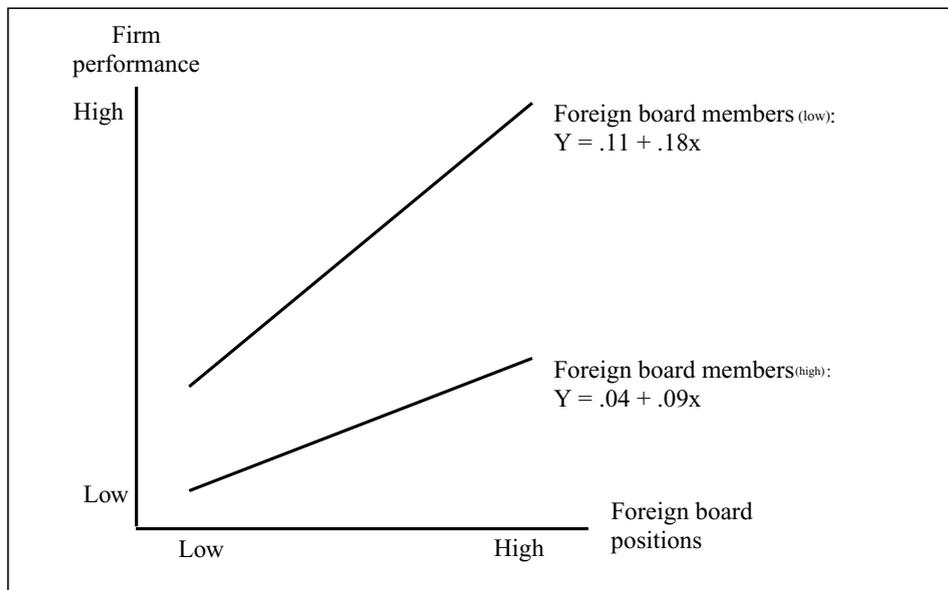
** $p < .05$

* $p < .10$

Beta coefficients are standardized.

Surprisingly, the influence of F-M on financial performance is negative, indicating that a higher degree of foreign board members would reduce ROS. The results suggest rejecting hypothesis 1. In contrast, F-P increases firm performance, which supports hypothesis 3. That is, while the amount of foreign board members negatively affects firm performance, the number of positions held in foreign firms positively impacts on performance. In addition, the number of Anglo-American board members contributes to firm performance, supporting hypothesis 2.

As recommended by Aiken and West (1991), we conducted simple slope analysis to better understand the nature of the interaction between foreign members and foreign positions. This analysis involves creating high and low conditional values for F-P. We used these conditional values to form interactions with F-M and specified separate regression models estimating the effect (i.e., simple slope) of F-M across the two conditions. The simple slopes associated with these regressions are depicted in figure 1. As shown, ROS is highest when F-P is high but F-M is low. When F-M is high ROS is low, especially when F-P is low too. Consequently, hypothesis 4 is rejected.

Figure 1. Interaction of foreign board members and foreign board positions

Discussion

Our paper intended to examine whether and how far the internationality of German supervisory boards affects the firms' financial performance. This should help closing the deficit of studies exploring this phenomenon within the context of a two-tier board system. Moreover, we aimed to contribute to a better and more differentiated understanding of the board internationality-performance link.

Our findings reveal a somewhat differentiated picture: Support of hypotheses 2 and 3 indicates that Anglo-American board members as well as positions held on foreign companies' boards positively impact on firm performance. Thus, both theoretical approaches (i.e. resource dependency theory, resource-based view) have demonstrated explanatory power with regard to the internationality-performance link in German supervisory boards. However, the share of foreign board members decreases performance. Similarly, high internationality in terms of many foreigners on the board and many positions held on foreign boards does not lead to highest performance. In contrast, return on sales was found highest when the supervisory board members hold a high amount of positions on foreign boards but, in the same time, the board does not adopt any foreign members. This can be interpreted in a way

that supervisory board internationality does indeed matter but that it is most effective when brought in by domestic board members. Internationality must therefore be considered an important resource for German supervisory boards but it must be handled with great care. This was also stressed by the findings of our qualitative pilot study that showed a widely held recognition of an internationalization deficit of German supervisory boards but, in the same time, also found a certain amount of skepticism regarding foreign members and their impact. From a theoretical perspective, it must be noted that diversity scholars have also described the problems of increasing complexity through internationality (Hambrick et al. 1998) and the need to integrate and coordinate board members and maybe conflicting goals (Cox 1993, Treichler 1995).

Among the control variables introduced in our model only co-determination was found having a significant (negative) effect. A few critical accounts in the pilot study interviews also pointed to the problematic role of board level co-determination. This supports the findings of Van Veen and Elbertsen (2008) about a distinctive impact of institutional factors on board internationalization. Although it is too early to generalize those findings, co-determination may be considered a crucial topic in the context of board internationalization. We assume, also based on our findings,

that this might be a two-sided phenomenon characterized, on the one hand, by a widely held ignorance and uncertainty of potential foreign board members about German co-determination and, on the other hand, by some vivid reservations and prejudices among employee representatives against foreigners on the board.

In *practical terms*, in order to increase the internationality of German supervisory boards (and to profit of the respective resources and influences) first of all an attitude change seems necessary. This concerns the self-concept of boards as a whole but also the question how each single board member, from the shareholder as well as from the employee side, perceives himself/herself and his and the boards tasks. Second, since foreign board experience was found to be a valuable resource, German corporations are well advised to develop their supervisory board structures and processes in a way to enable and encourage their members to behave accordingly. This includes aspects such as the provision of incentives for board members who accept foreign board mandates, the (long-term) planning of board meetings or the regulation about board member presence. Moreover, supervisory board chairmen should also think about how to attract and keep board members with rich international experience. Third, our finding that the presence of foreign members on German supervisory board may have a negative impact on firm performance leads to the presumption that there exist some considerable deficits regarding the preparation and integration of those members into the supervisory board structures and processes. As has been argued above in the context of board level co-determination, board internationalization also bears some risks. In order to overcome those risks and to create a value creating board some sincere and conceptually based investments in the human resources are crucial.

Nevertheless, some *limitations* of our study also need to be mentioned here. We have to note that our sample includes a high level of heterogeneity. Nearly all kinds of industries are represented as well as a large range of company size which in the end makes some clear-cut suggestions somewhat difficult. Moreover, although the choice of a German sample enriches the variety of studies in the field, the adaptability of our findings to the international level is somewhat limited. Since Germany possesses a fairly particular system of corporate governance, findings should only be transferred with care.

This finally leads us to some implications for *further research*. Further studies should explore some further aspects and mediators between supervisory board internationality and firm performance. This could include, on the one hand, some special events (e.g. company life cycle, large mergers) that have been hardly analyzed in this respect by now. On the other hand, as Cox (1993) has pointed out, both “first level outcomes” (e.g. board member turnover, board efficiency, group consensus) and “second level outcomes” (e.g. performance, market share) should be considered. Further on, since board internationality was found to be a complex topic, the consistency of boards' and board members' attributes ought to be explored in more depth. This would require a focus on (valuable or problematic) combinations of members and their characteristics rather than on mere statistical data. Finally, as postulated by Glaum and Oesterle (2007) recently, some longitudinal research designs regarding our topic are highly needed and could lead to deeper insights and conclusions. Understanding better how boards may impact on company performance would also contribute to closing the “expectation gap” in this respect (Brannen 2006).

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'Dogs of the Dow' Investment Strategy : Indian Context

Nirakar Nath Pandey

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The objective of this study is to test the performance of various versions of Dogs of the Dow strategy in Indian stock market against the return of Sensex. The finding shows that the popular version of Dogs of the Dow strategy (i.e. Top-10) outperforms the Sensex during the period from November 2006 to November 2016 on absolute basis as well as on risk adjusted basis. Moreover, it has also been found that even portfolio of 'Small Dogs' has outperformed the Sensex during the same period on absolute basis as well as on risk adjusted basis. However, the results are not statistically significant. Whereas, 'Dogs- Top 5' has given lesser return compared to Sensex on absolute basis as well as in terms of return per unit of total risk. It is expected that the findings of this study will help fund managers, investors and academia to understand the relevance of 'Dogs of the Dow' investment strategy in the Indian context.

Key words : *Dogs of the Dow strategy, Sensex, Dividend yield, Sharp ratio, Performance evaluation, Shapiro – Wilks W Test, Mann-Whitney U Test*



Dr. Nirakar Nath Pandey
Associate Professor, IMS Unison University
Dehradun
E.mail: nnp_9@yahoo.com

Dividend yield strategies have remained an immensely popular value oriented investment strategy since long. The goal of value investment oriented strategy is to identify value stocks which are having high dividend yields but low price-to-book ratios, low price-to-earnings ratios, and low expected growth rates. This strategy assumes that market overreacts for negative news and in the process creates value stocks. When markets absorb these overreactions, investment in value stocks give extraordinary return. Various studies have concluded that value oriented investment strategies tend to outperform the market (Basu 1977; Ambachtsheer and Farrell 1979; Sorensen and Williamson 1985; Chan, Jegadeesh, and Lakonishok 1995).

'Dogs of the Dow' is one of the popular dividend yield strategies of investment. It was first mentioned by John Slatter, an analyst, in Wall Street Journal in 1988. However, it was popularized by Michael O' Higgins and John Downs' through their book, "Beating the Dow" in 1991. The most important academic study on the Dogs of the Dow strategy

was performed by McQueen et al (1997). They used statistical methods to examine the performance of the portfolio over 50 years (1946-1995), and concluded that this strategy beat the Dow statistically but not economically if adjusted for risk, taxes and rebalancing cost. 'The Dogs of the Dow' is a simple investment strategy according to which, at the start of the year, investor buys the ten stocks out of thirty stocks in the Dow Jones index with the highest dividend yield. Dividend yield is the dividend amount per share divided by the current market price of share. After completion of one year the portfolio is revised by replacing stocks which are no longer in the highest yield group with stocks that are. These highest- dividend- yielding- stocks are commonly referred as 'Dogs of the Dow.'

As in any investment strategy this has also its merits and demerits. The first and foremost merit is that it is easy to understand and execute. The investor needs information only related to dividend and market price to calculate dividend yield. Second, investor clearly knows what to buy and what to sale by using dividend yield as a benchmark. More over investor also knows beforehand when to buy and when to sale i.e., after one year. Third, this strategy brings discipline in the investment pattern of the investors. As the date of buy and sale is pre-fixed the volatility of the market do not impact the action of the investor. That means this strategy prevents investor to be greedy in anticipation of more profit. Fourth, this strategy selects those stocks from flagship indices who are market leaders of their respective industry. Obviously, these are good quality stocks having proven track record and carries lesser risk.

However, the strategy has certain demerits also. Firstly, it is a short term strategy (holding period one year only). Experiences say that often long term holding gives more return compare to short term holding. Secondly, as stocks of well established companies having high market capitalization are selected the chances of getting multi-beggars are almost nil. Thirdly, as this strategy requires revision of portfolio every year it involves high transaction costs.

Various studies have been undertaken about the performance of 'Dogs of the Dow' strategy in different countries with mixed results. However, no latest study of this strategy in Indian context appears to have been done. One of the prominent studies was conducted by Chinmoy Sahu way back in 2001 titled "Effectiveness of 'Dogs of the Dow' Investment Strategy in Indian context," published in

Vikalpa, Vol.26, pp.65-71. Based on five years data (From 1996 to 2000) he concluded that in the Indian context, there appeared to be limited effectiveness of the 'Dogs' portfolio in beating the market or generating abnormal returns. However, in the last 15 years Indian capital market has experienced an impressive growth and become a most attractive destination of investments. Fully automated trading system, wide network of financial intermediaries and well-developed regulatory system etc. have created a very healthy and competitive environment of investment. Two prominent stock exchanges of India viz. Bombay Stock Exchange (BSE) and National Stock Exchange (NSE) are the eleventh and twelfth largest Stock Exchanges in the world based on total value of shares traded (World Federation of Exchanges, July 2016). By the end of July 2016, total market capitalization of the shares listed on the BSE amounted to \$ 1.63 trillion and on the NSE amounted to \$ 1.60 trillion. Obviously, these remarkable achievements are reflecting towards the efficiency of Indian capital market. It is imperative that a very popular investment technique like 'Dogs of the Dow' should be retested in this changed efficient environment. This study is an attempt in that direction.

The objective of this study is to analyse the performance of 'Dogs of the Dow' strategy in Indian stock market on an absolute and on a risk adjusted basis taking a longer period (from 2006 to 2016). It is expected that present study will help fund managers, investors and academia to understand the relevance of 'Dogs of the Dow' investment strategy in the Indian context.

Review of literature

Since introduction of the 'Dogs of the Dow' strategy to the investment world by John Slatter, it has been one of the most debated and researched topics in foreign capital markets. In US O'Higgins and Downes (1991) and Knowles and Petty (1992) published books examining the performance of the Dogs of the Dow strategy from 1973 to 1991 and showed its effectiveness. Cordeiro (2006) found that the Dow Dogs have regained their power in US capital market. Morgan and Thomas (1998) showed that high-yielding stocks earn positive risk-adjusted returns in the United Kingdom. Alles and Shen (2008) found the effectiveness of the Dogs of the Dow strategy between the period from 2000 to 2006 in Australia. Visscher and G. Filbeck (2003) suggested about the superiority of the Dogs of the Dow strategy in the Canadian stock market. Brzeszczynski and Gajdka concluded that the Dogs of the Dow strategy outperform the WIG index in Poland during

the period from 1997 to 2007. Eemeli and Sami (2011) concluded that the Dogs of the Dow strategy can be successfully applied to the Finnish stock market.

Qiu et al. (2013) concluded that the Dogs of the Dow strategy can be a successful and easy-to-practice investment strategy in the Japanese market. Wang et al. (2011) found that Dow Dogs portfolios significantly outperform the market benchmark even after adjusting for transaction costs and taxes for the period of 1994 to 2009 in China's markets. They advised that the fewer Dogs included in the portfolio, the greater the portfolio abnormal returns. Using the data from 1992 to 2007, Chong and Luk (2010) explained why the dividend-yield strategy works better for blue-chip stocks in Hong Kong. Da Silva (2001) concluded that much of evidences supported the arguments that the Dogs of the Dow strategy outperform the market in all Latin American countries except Brazil but the results were not statistically significant.

However, various studies also showed the negative performance of the Dogs of the Dow strategy in consonance with the classic efficient market hypothesis (Fama, 1970). Keating (1998) found that the Dogs had lost their bite. He suggested that popularity of the Dogs strategy among investors reduced the opportunity of abnormal profits associated with the Dogs. Domian, Louton, and Mossman (1998) presented evidence that the Dogs of the Dow strategy failed to deliver excess returns during the period 1989-97 because it was no longer selecting the true dogs. Hirschey (2000) examined the Dow Dogs strategy and claimed that the previously documented outperformance of the Dogs is attributable to data errors and data mining. Sahu (2001) concluded that in the Indian context, there appeared to be limited effectiveness of the 'Dogs' portfolio in beating the market or generating abnormal returns. Jeong, Lee and Mukherji(2009) found that Dow stocks do offer a value premium, but the appropriate value measure is earnings, not dividends.

Research Methodology

To fulfil the objective of this study, we have compared the performance of the 10 highest- dividend yielding (Dogs) stocks from the 30-stock BSE Sensitive Index (Sensex) against the performance of the Sensex itself on an annual basis from November 2006 to November 2016. We have taken the month of November for comparison of performance because till then almost all companies declared and paid their dividend. Sensex is the leading index for large companies of Bombay Stock Exchange (A premier stock

exchange of India). Sensex is not only scientifically designed but also based on globally accepted construction and review methodology. Due to its wide acceptance amongst Indian investors, the Sensex is regarded as the pulse of the Indian stock market. It consists of the 30(Thirty) largest and most actively traded companies, representative of various sectors, on the Bombay Stock Exchange (BSE). These companies account for around forty per cent of the market capitalization of the BSE.

The relevant data have been collected from annual reports of various companies, websites of Bombay Stock Exchange (www.bseindia.com) and Yahoo Finance (www.yahoofinance.com) We have simulated the Dogs of the Dow investment strategy in three steps. In step 1, we collected data for all 30 companies of Sensex on 1st November 2006, and constructed a portfolio of equally weighted 10 highest- dividend yielding stocks. In step 2, we held these stocks for one year one day and then sold them. The reason to hold the portfolio for one year one day is to avoid implication of capital gain tax. As per Indian Income Tax Act long term capital gain(holding more than one year) on shares are tax free. In step 3, we repeated the process for each year up to 2016. Apart from the most popular version of Dow Dogs technique having 10 stocks, we have also tested two other important versions of the Dow Dogs strategy. First one is a portfolio of equally weighted 5 highest- dividend yielding stocks (Popularly called Top-5) and second is small dogs also called puppies. Small dogs are the 5 lowest priced stocks from the top 10 companies with the highest dividend yield or the Dogs of the Dow. In both the versions, all above mentioned three steps have been conducted.

The return of portfolio has been calculated by applying the following formulae:

$$R = \frac{P_1 - P_0}{P_0}$$

Where, R = Return

P_1 = Market price at the end of holding period

P_0 = Market price at the beginning of holding period

For calculation of return of portfolio only capital appreciation has been considered, dividend has not taken into account. It has been assumed that dividend amount will take care of transaction costs related to reshuffling of portfolio every year.

Although comparison of absolute return data gives us some information about the performance of each of the portfolios, it provides little information about the level of risk in the portfolios. Thus, we have calculated 'Sharp Ratio' commonly

used risk-adjusted measures for comparison purposes. The Sharpe (1994) ratio considers excess return per unit of total risk. It is the appropriate measurement of risk-adjusted return when the portfolio is not well diversified and is exposed to some level of unsystematic risk.

The Sharpe ratio has been calculated by applying the following formulae:

$$\text{Sharpe ratio (SR)} = \frac{R_p - R_f}{\sigma_p}$$

Here, R_p = Realised return on the portfolio

R_f = Risk free rate of return

σ_p = Standard deviation of portfolio return

Risk free rate of return has been taken as 7% being bank fixed deposit rate for one year maturity period.

The Shapiro – Wilks W Test has been used to test the normality of data. Mann – Whitney U Test has been used for testing the equality of means. It is a very powerful non-parametric test as this can be used both for qualitative and quantitative data. This test is an alternative to a t test for testing the equality of means of two independent samples. The application of t test involves the assumption that the samples are drawn from the normal population. If the normality assumption is violated, as in our case, Mann – Whitney U Test can be used as an alternative to a t test.

Data Analysis Aand Findings

Table 1 shows the composition of the 'Dogs- Top 10' portfolio constructed based on highest dividend yield for every year under study.

TABLE 1: Composition of Portfolio of 'Dogs -Top 10'

2006	2007	2008	2009	2010	2011	2012	2013	2014	2015
ONGC	HLL	ONGC	ONGC	Hero Honda	Tata Power	ONGC	Coal India	SBI	Coal India
Tata Steel	ONGC	Tata Steel	Tata Steel	ITC	Tata Motors	Tata Steel	BHEL	Coal India	Infosys
Ambuja Cement	Tata Steel	Tata Motors	ACC	HDFC	BHEL	Coal India	NTPC	NTPC	ONGC
HLL	Ambuja Cement	ACC	HLL	ONGC	Hero Honda	BHEL	ONGC	ONGC	Tata Steel
NTPC	Tata Motors	Ambuja Cement	TCS	HLL	HDFC Bank	Gail India	HLL	Hero Honda	TCS
L&T	ITC	HINDALCO	NTPC	ACC	ONGC	NTPC	Hero Honda	Gail India	Hero Honda
Tata Motors	ACC	HLL	ITC	NTPC	Tata Steel	Hero Honda	Gail India	Tata Steel	Gail India
Tata Power	NTPC	Grasim	Grasim	WIPRO	ACC	TCS	SBI	HLL	NTPC
HDFC	TCS	ICICI Bank	SBI	TCS	NTPC	SBI	Tata Steel	ITC	ICICI Bank
ITC	WIPRO	TCS	ICICI Bank	Tata Steel	ITC	WIPRO	L&T	Infosys	Tata Power

Table 2 provides the frequency of companies that stayed on the portfolio year by year during the ten year period started from 2006 to 2015. During the 10 years period, 23 stocks were members of top 10 stocks (Dogs). Out of 23 stocks, 2

stocks appeared in the list every year, 1 stock for 9 years, 1 stock for 7 years, 3 stocks for 6 years, 1 stock for 5 years, 4 stocks for 4 years, 5 stocks for 3 years, 4 stocks for 2 years and 2 stocks for 1 year.

Table 2: Frequency of companies of Portfolio of 'Dogs -Top 10' by the year 2006-15

SL. No	Name Of Company	Frequency
1	ONGC	10
2	Tata Steel	10
3	NTPC	09
4	HLL	07
5	Hero Honda	06
6	ITC	06
7	TCS	06
8	ACC	05
9	Tata Motors	04
10	SBI	04
11	Coal India	04
12	Gail India	04
13	Ambuja Cement	03
14	Tata Power	03
15	Wipro	03
16	ICICI Bank	03
17	BHEL	03
18	L&T	02
19	HDFC	02
20	Grasim	02
21	Infosys	02
22	Hindalco	01
23	HDFC Bank	01

Table 3 shows the composition of the 'Dogs- Top 5' portfolio constructed based on highest dividend yield for every year under study.

Table 3: Composition of Portfolio of 'Dogs -Top 5'

2006	2007	2008	2009	2010	2011	2012	2013	2014	2015
ONGC	HLL	ONGC	ONGC	Hero Honda	Tata Power	ONGC	Coal India	SBI	Coal India
Tata Steel	ONGC	Tata Steel	Tata Steel	ITC	Tata Motors	Tata Steel	BHEL	Coal India	Infosys
Ambuja Cement	Tata Steel	Tata Motors	ACC	HDFC	BHEL	Coal India	NTPC	NTPC	ONGC
HLL	Ambuja Cement	ACC	HLL	ONGC	Hero Honda	BHEL	ONGC	ONGC	Tata Steel
NTPC	Tata Motors	Ambuja Cement	TCS	HLL	HDFC Bank	Gail India	HLL	Hero Honda	TCS

Table 4 shows the composition of the 'Small Dogs' portfolio consisting 5 lowest priced stocks out of top 10 companies with the highest dividend yield or the Dogs of the Dow for every year under study.

TABLE 4: Composition of Portfolio of 'Small Dogs'

2006	2007	2008	2009	2010	2011	2012	2013	2014	2015
ONGC	HLL	HLL	ONGC	WIPRO	Tata Power	ONGC	Coal India	SBI	Tata Power
ITC	ITC	Tata Steel	Tata Steel	ITC	Tata Motors	BHEL	BHEL	Coal India	NTPC
Ambuja Cement	Tata Steel	Tata Motors	ITC	Tata Steel	ONGC	Coal India	NTPC	NTPC	ONGC
HLL	Ambuja Cement	HINDALCO	HLL	NTPC	NTPC	NTPC	ONGC	ONGC	Tata Steel
NTPC	NTPC	Ambuja Cement	NTPC	HLL	ITC	Gail India	SBI	ITC	ICICI Bank

Table 5 shows the percentage capital gain (loss) of the Sensex vis-a-vis the portfolio of 'Dogs' for the respective holding periods. It also shows standard deviation, sharpe ratio and, Mann-Whitney U test results.

Table 5: % Capital Gain (Loss), standard deviation, sharpe ratio and Mann-Whitney U

Holding periods	% capital gain(loss) of Sensex	% capital gain(loss) of Portfolio of 'Dogs-Top 10'	% capital gain(loss) of Portfolio of 'Dogs-Top 5'	% capital gain(loss) of Portfolio of 'Small Dogs'	Winner
2006-07	53	97	28	33	Dogs – T 10
2007-08	-48	-48	-53	-33	Small Dogs
2008-09	54	74	83	102	Small Dogs
2009-10	32	36	42	13	Dogs – T 5
2010-11	-16	-3	-2	-8	Dogs – T 5
2011-12	6	2	-2	14	Small Dogs
20012-13	10	5	-12	-13	Sensex
2013-14	37	47	34	42	Dogs – T 10
2014-15	-9	-12	-14	-17	Sensex
2015-16	3	3	-6	27	Small Dogs
Average	12.2	20.1	9.8	16	Dogs – T 10
Standard Deviation	30.68	41.04	35.81	36.61	Sensex
Sharpe Ratio	0.17	0.32	0.08	0.25	Dogs – T 10
Mann- Whitney U (Asymp. Sig.)	-	.940*	.650*	1.000*	-

* Not significant at 5% level

From the above table, it is clear that Portfolio of 'Dogs- Top 10' (20.1%) and Portfolio of 'Small Dogs' (16%) have outperformed the Sensex (12.2%) on an absolute basis over the period from November 2006 to November 2016. Despite their superior returns, both the strategies have higher variability of returns compared to Sensex. Hence we have calculated Sharp ratio which considers excess return per unit of total risk. Sharp ratio is also indicating that both the strategies have outperformed the Sensex. But none of their returns are statistically significant at 5% level. So far as 'Dogs- Top 5' is concerned, it has given lesser return compared to Sensex on absolute basis as well as in terms of return per unit of total risk.

The findings of the performance evaluation of 'Dogs of the Dow' strategies in Indian stock market suggest that it adds value as an investment strategy. However, the results are not statistically significant.

Conclusion

In the stock market, investors are always looking for strategies which can help them in beating the market consistently. The 'Dogs of the Dow' is one of such strategy. This strategy has puzzled investors as well as academia for a long time given its inconsistent effectiveness in various stock markets of the world. Growing efficient investment environment and institutional setting of Indian stock market provide us a unique opportunity to examine the Dow Dogs strategy. In this study, we have tested the performance of various versions of Dogs of the Dow strategy in Indian stock market against the return of Sensex. We found that the popular version of Dogs of the Dow strategy (i.e. Top-10) outperform the Sensex during the period from November 2006 to November 2016 on absolute basis as well as on risk adjusted basis. Moreover, we also found that even portfolio of 'Small Dogs' has outperformed the Sensex during the same period on absolute basis as well as on risk adjusted basis. However, the results are not statistically significant. Whereas, 'Dogs- Top 5' has given lesser return compared to Sensex on absolute basis as well as in terms of return per unit of total risk. Therefore, we conclude that although much of the evidence supports the arguments that 'Dogs of the Dow' strategy outperforms the market, there is no strong statistical evidence to justify the claim. This strategy offers a number of evident advantages stemming from its simplicity. The 10 highest dividend-yielding stocks are relatively easy to recognise. Keeping track of investments is even easier. It

seems the strategy is more suitable for those investors who are interested in quality stock. A company's willingness and ability to pay higher dividends on year to year basis and its capacity to increase them provides good clues about its fundamentals. It is expected that findings of this study will help fund managers, investors and academia to understand the relevance of 'Dogs of the Dow' investment strategy in the Indian context. However, the findings of this study are time dependent and results may vary in different time horizon.

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Impact of Dividend Policy on Shareholders' Wealth: Indian Scene

Sandanam Gejalakshmi, and Ramachandran Azhagaiah

Abstract

The dividend is the key indicator of share price and firm's value. The optimal dividend policy (DP) is the one that maximizes the firm's stock price which leads to maximization of shareholders' wealth (SW) thereby ensures rapid economic growth in the country. The corporate growth makes it eventually possible to get more dividends. Therefore, the present study is intended to study the long-run relationship between the DP and the SW, and the impact of DP on SW, particularly in consumer non-cyclical sector in India. Out of 34 firms listed on Bombay Stock Exchange (BSE), 23 firms that have been paying dividend consecutively for the past ten years are considered for analysis. Besides descriptive statistics, Augmented Dickey Fuller Test (ADF), Levin, Lin & Chu (LLC) t test, Philip Perron (PP) Fisher χ^2 test, Im-Pesaran-Shin W (IPS-W), Breitung test and Johansen Co-integration test are used to test whether the data are stationary and to satisfy one pre-condition for co-integration. Regression and Chow test are also applied. The results of the co-integration test prove that there exists a stationary, long-run co-integration between DP and SW. The Chow test result proves that the impact of DP (DPS, DPO and DY) on SW (MPS) has been significantly affected by the event viz. the financial meltdown for Consumer non-cyclical sector.

Key words: Dividend policy, shareholders' wealth, financial meltdown

JEL Classification: G 35, L 25, L 66



Sandanam Gejalakshmi
Ph D Research Scholar
Kanchi Mamuniar Centre for PG Studies
Puducherry – 605 008, India
E-Mail: sankari_sandanam@yahoo.co.in



Dr. Ramachandran Azhagaiah
Associate Professor of Commerce
Avvaiyar Govt. College for Women
Karaikal – 609602, India
E-Mail: drrazhagaia@yahoo.co.in

The dividend decision of the firm is of crucial importance for the finance manager since it determines the amount of profit to be distributed among the shareholders and the amount of profit to be retained in the business (popularly termed as retained earnings) for financing its long-term growth. While taking dividend decision, the firm will obviously consider the effect of the decision both on maximization of SW as well as on long-term financing. In commercial usage, dividend is the share of the firm's profit, which is distributed among its shareholders. In the hands of the recipient it means the sum paid and received as the quotient forming the share of the payable amount to the recipient. Thus, we may say that the corporate earnings and profits, which are not retained in the business but are and distributed among the shareholders are known as dividends.

The shareholders' wealth (SW) (Azhagaiah and Sabaripriya, 2008) is represented by market price of the firms' common

stock, which in turn, is the function of the firms' investment, financing and dividend decision. The optimal dividend policy (DP) is one that maximizes the firm's stock price; in turn it leads to maximization of SW and thereby ensures rapid economic growth.

Therefore, the present paper is aimed at studying the long-run relationship between the DP and the SW, and the impact of DP on SW before and after the event i.e. the global financial meltdown.

2. Profile of the Study Sector - Consumer non-Cyclical Sector in India

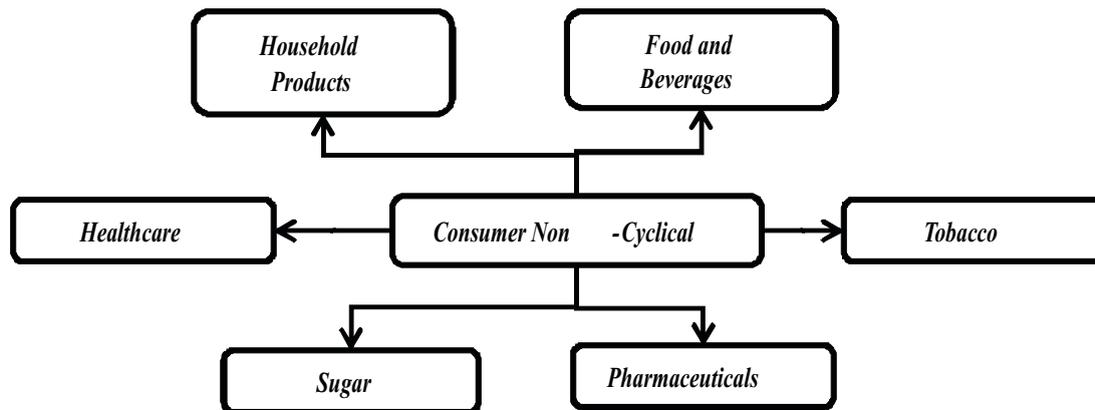


Figure - A
Consumer Non-Cyclical Sector in India

Source: <http://www.investopedia.com>

Non-cyclical stocks do well in economic downturns, since demand for their products and services continue regardless of the situations prevalent in the economy. When the economy is growing, stocks tend to lag behind, however during economic downturns their returns may look good. The non-cyclical consumer goods and services sector comprises firms engaged in the processing and production of food and beverages, tobacco, pharmaceuticals, sugar, healthcare, and household (vide figure –A).

Review of Literature

Researchers have propounded many theories about the firm's value as well as the SW. There was substantial literature on the relationship between the DP and SW and the impact of DP on SW. Several studies were made in respect of DP and SW in the developed as well as in the developing countries viz. India.

Bhanawat (2011), in a study selected 10 pharmaceutical firms from the firms listed on the Bombay stock exchange for the period from 2003 to 2008. Statistical techniques like average, co-efficient of variation and analysis of variance

were used. The study found that the difference among the average value of total shareholders' return was statistically significant. The firm size (FS) and retained earnings (RE) had positive relationship and was proved statistically significant on the shareholders' fund, while dividend payout had negative relationship with SW (Olandipupo and Okafor, 2011). However, turnover and retained earnings were of more significance in controlling the shareholders' wealth than that of the dividend payout of food / tobacco firms in Nigeria.

Reddy (2011) found that net operating profit was less than the cost of capital employed; economic value added (EVA) showed negative figures while the market value added (MVA) showed positive figures i.e. the firm was adding value to the shareholders. The study concluded that the Shilpa Medi Care was creating value to the shareholders during the study period. Sakthivel (2011) stated that there was a significant association between MVA and EVA for firms of pharmaceutical industry; economic value added (EVA) had positive significant impact on value creation of

Pharmaceutical sector. Devaki and Kamalaveni (2012) stated that there was a positive association between lagged dividend, earnings, debt-equity ratio, sales size, age of the firm, and institutional shareholding of the Indian corporate hotels.

Chauhan and Virani (2013) stated that shareholders' value creation was based on firms' earning ability and firms' return on net worth. The study proved that return on investment was highly dependent on return on net worth, debt-equity ratio, creditors' velocity and price earnings ratio of Indian pharmaceutical industry. Dhillon (2013) found that earning per share (EPS), return on assets (ROA), return on equity (ROE) and economic value added (EVA) had positive relationship with stock return for IT sector, however for Telecomm sector, EPS, ROE, ROA and cash flow per share (CFPS) significant relationship with the stock return; and for FMCG sector, the EPS and CFPS only had significant relation with stock return.

Priya and Nimalathasan (2013) found that dividend payout had a significant impact on all the firms' performance except for return on investment (ROI) and return on equity (ROE). Besides, earnings per share (EPS), price earnings ratio (P/E), and market value to book value (PB) had significant correlation with ROA; P/E ratio had significant correlation with ROE; EPS and market price to book value (PB) were significantly correlated with ROE of the listed firms of hotels and restaurants in Sri Lanka. Kumaresan (2014) showed that there was a positive relationship between return on equity, dividend per share and dividend payout and shareholders' wealth of the firms while there was a negative relationship between retention ratio and shareholders' wealth of listed firms in hotels and travel sector of Sri Lanka. Iqbal et al. (2014) found that the DP, firm size and firm growth had significant positive impact on SW of the selected manufacturing industries (textile, sugar and chemical) of Pakistan.

The above literature provides an overview of impact of DP on SW. The previous studies, by and large, were attempted to study the long-run as well as the short-run relationship between DP and SW and the impact of DP on SW. Moreover, most of the previous studies covered almost similar methods to estimate the impact of DP on SW, hence

in the present study, an attempt has been made to estimate the impact of DP on SW before and after financial meltdown.

Statement of the Problem

Previous researchers have propounded many theories on DP as well as on SW. Thus, the researchers are puzzled by the question, "whether SW was affected by DP" for many years. In the literature, there are different views regarding whether DP affects firm's share price in the long-run. So, the present work has made an attempt to study the difference in the impact of DP on SW between pre and post financial meltdown periods of the selected firms of Consumer non-cyclical sector in India.

Research Questions

The research proposes to seek answers to the following questions:

- Whether long-run relationship exists between dividend policy and shareholders' wealth of listed firms of Consumer non-cyclical sector during the study period.
- How do the dividend variables along with financial variables influence the shareholders' wealth of Consumer non-cyclical sector?
- How does dividend policy impact shareholders' wealth before and after financial meltdown of Consumer non-cyclical sector in India?

Objectives of the Study

- To study the difference in the impact of dividend policy on shareholders' wealth between before and after financial meltdown periods.

Specific Objectives

- To study the long-run relationship between dividend variables viz., dividend per share, dividend payout as well as dividend yield and shareholders' wealth of the Consumer non-cyclical sector in India.
- To study the difference in the impact of dividend policy on shareholders' wealth of Consumer non-cyclical sector between pre and post financial meltdown periods.

Hypotheses Developed for the Study

- H_0^1 : “There is no co-integration between dividend per share and shareholders' wealth.”
- H_0^2 : “There is no co-integration between dividend payout and shareholders' wealth.”
- H_0^3 : “There is no co-integration between dividend yield and shareholders' wealth.”
- H_0^4 : “There is no significant difference in the impact of dividend per share on shareholders' wealth between pre and post financial meltdown periods.”
- H_0^5 : “There is no significant difference in the impact of dividend payout on shareholders' wealth between pre and post financial meltdown periods.”

- H_0^6 : “There is no significant difference in the impact of dividend yield on shareholders' wealth between pre and post financial meltdown periods.”

8. Research Methodology

8.1. Data Source and Period of the Study

The study used secondary data, which are collected from the capital market data base called Centre for Monitoring Indian Economy Private Limited (Prowess CMIE) for a period of 10 years on year to year basis from 2003-04 to 2012-13.

8.2. Sampling Procedure and Technique

The study used multi-stage non-random sampling technique and the different stages involved in it are shown in figure - B.

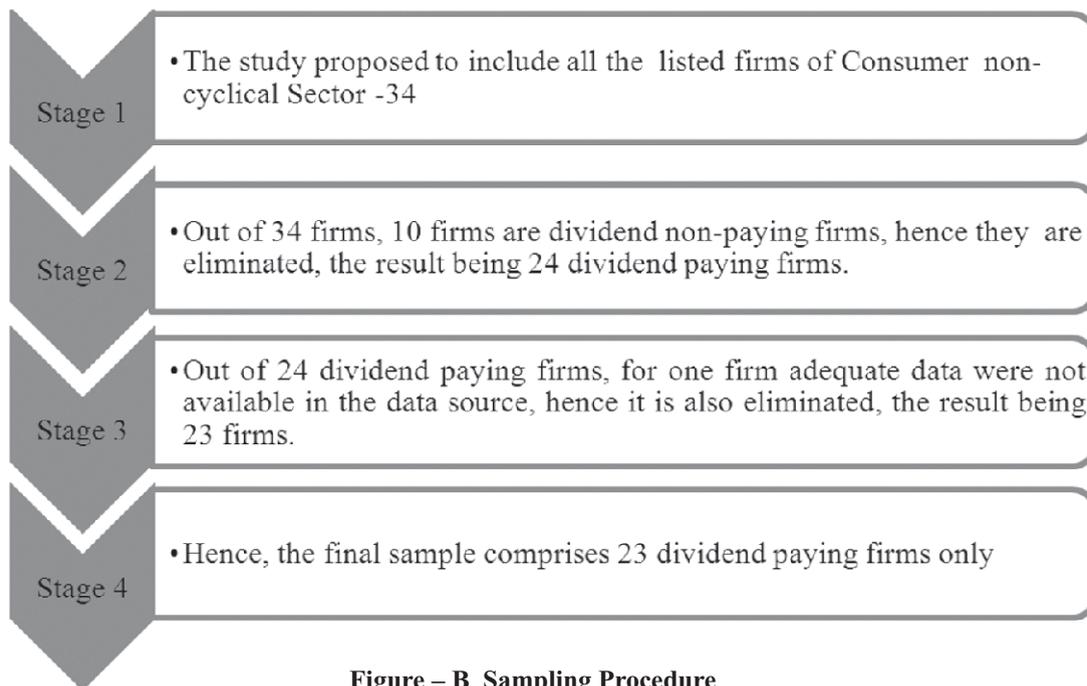


Figure – B Sampling Procedure

Source: Compiled and edited data collected from PROWESS database provided by CMIE

Table 1
List of Firms Selected from Consumer Non-cyclical Sector (Based on listed firms in BSE 200)
for the Study Period 2003-04 – 2012-13

Total No. of Firms (1)	Dividend non-paying firms (2)	Adequate Data not available in the data source (3)	Total number of firms eliminated (4) = (2) + (3)	Ultimate sample firms selected for the study (5) = (1) – (4)
34	10	1	11	23

Source: Compiled data collected from PROWESS database provided by CMIE

Table 1 shows the number of firms of Consumer non-cyclical sector listed in the Bombay Stock Exchange (34), out of which dividend non-paying firms (10), and firms for which adequate data were not available in the data source (1) are eliminated, hence the ultimate number of sample firms considered for the study is 23 only.

Research Methods

Besides various dividend variables and finance factors statistical methods viz. Augmented *Dickey Fuller Test*,

Johansen Co-integration, Ordinary Least Square Method of regression and *Chow test* are applied for analysis of data using *Eviews 7 Econometrics software package*.

Ratios used for Analysis

The study used two important ratios viz. dividend related ratios and shareholders' wealth related ratios and the description of them are shown in table - 2.

Table 2
Dividend Variables (DPS, DPO and DY) Used to Estimate the Impact of DP on SW (MPS)

Sl. No.	Ratios Used	Variables	Description	Inference
1	Dividend related ratios	a. Dividend per share (DPS)	Dividend / Number of equity shares outstanding	The DPS reveals how well earnings support the dividend payout.
		b. Dividend payout ratio (DPO)	Dividend per share / Earnings per share	The DPO provides an idea as to how well earnings support the dividend payment.
		c. Dividend yield (DY)	Dividend per share / Market price per share	The DY shows how much a firm pays out as dividend each year relative to its share price. Higher dividend yield is considered to be desirable for most investors; a high share price leads to low dividend yield and vice versa.
2	Shareholders' wealth (SW) related ratio	d. Market price per share (MPS)	Market capitalization / Number of equity shares outstanding	High market price reflects that the firms are in very good position and low market price reflects otherwise.

Source: www.scibd.com/essays/finance.php; www.ukessays.com/essays/finance/current-assets-current-liability.php

Table-2 shows the variables which are used to study the relationship between DP before as well as after financial meltdown periods of the Consumer non-cyclical sector. Market price per share (MPS) is considered as proxy

response variable of shareholders' wealth (SW), while dividend per share (DPS), dividend payout (DPO), and dividend yield (DY) are considered as predictor variables.

Relationship between DP and SW: Analysis and Discussion

Test of normality

Table 3 - Descriptive and Jarque-Bera Normality Test Statistics for Market Price per Share and Dividend / Finance Variables for Firms under Consumer Non-Cyclical Sector from 2003-04 to 2012-13

Name of Firm	Mean	SD	Skewness	Kurtosis	Jarque Bera Test	
					Value	p Level
Market Price per Share (MPS)						
Apollo Hospitals Enterprise	462.03	167.14	-0.52	2.68	0.5	0.78
Aurobindo Pharma	445.58	259.07	0.54	2.4	0.64	0.728
Britannia Industries	1016.5	424.87	-0.06	1.56	0.87	0.648
Cipla	370.81	229.63	2.28	6.97	15.23**	0.0005
Colgate-Palmolive (India)	542.17	373.51	0.73	2.34	1.08	0.5835
Dabur India	112.73	28.36	-0.34	1.84	0.75	0.6869
Dr.Reddy'S Laboratories	1074.5	409.83	0.39	1.87	0.79	0.6737
Emami	311.71	159.63	-0.08	1.89	0.53	0.7686
Glaxosmithkline Healthcare	1152.7	1018.9	0.98	2.51	1.7	0.4273
Glaxosmithkline Pharma.	1327.8	601.95	0.23	1.76	0.72	0.6971
Glenmark Pharma	349.25	109.38	0.66	2.33	0.9	0.6362
Godrej Consumer Products	311.05	170.73	0.62	2.52	0.74	0.6909
Godrej Industries	190.77	90.39	-0.23	1.96	0.55	0.7609
Hindustan Unilever	252.68	100.67	1.2	3.81	2.67	0.2632
ITC	428.03	364.36	1	2.25	1.91	0.3856
Ipca Laboratories	481.02	153.3	0.56	2.21	0.78	0.6781
Lupin	702.72	220.31	0.95	2.91	1.5	0.4719
Marico	182.94	124.9	1.16	3.52	2.37	0.306
Nestle India	2028.4	1505.6	0.72	2	1.27	0.5292
Piramal Enterprises	399.18	155.3	0.88	3.02	1.29	0.5234
Reliance Industries	1112.8	592.64	0.63	2.11	0.99	0.6085
Tata Global Beverages	511.56	289.28	-0.22	1.45	1.08	0.5834
Titan Industries	948.8	853.49	1.37	4.47	4.03	0.1336

Firm Name	Mean	SD	Skewness	Kurtosis	Jarque Bera Test	
					Value	p Level
Colgate-Palmolive (India)	12.6	11.06	0.01	1.4	1.07	0.5857
Dabur India	1.69	0.4	0.65	2.73	0.72	0.6959
Dr.Reddy'S Laboratories	2.2	2.29	2.06	6.15	11.23**	0.0036
Emami	3.12	2.79	0.96	2.62	1.59	0.4522
Glaxosmithkline Healthcare	2.07	1.64	0.88	2.12	1.61	0.4467
Glaxosmithkline Pharma.	3.34	1.15	-0.55	2.89	0.51	0.7741
Glenmark Pharma	0.76	0.66	1.39	3.08	3.21	0.2008
Godrej Consumer Products	3.94	0.87	-0.49	2.55	0.49	0.7822
Godrej Industries	1.23	0.48	-0.15	1.68	0.76	0.6825
Hindustan Unilever	7.89	3.93	2.2	6.67	13.69**	0.0011
ITC	4.23	2.24	1.82	5.6	8.34*	0.0155
Ipca Laboratories	1.15	0.49	0.3	1.89	0.66	0.7195
Lupin	1.12	0.5	0.3	1.87	0.69	0.7099
Marico	0.65	0.09	0.52	3.69	0.65	0.7214
Nestle India	3.65	1.2	-0.12	1.26	1.29	0.5259
Piramal Enterprises	3.66	2.99	1	2.25	1.92	0.3836
Reliance Industries	0.86	0.22	0.2	1.88	0.6	0.7425
Tata Global Beverages	1.82	0.76	0.85	3.56	1.33	0.5142
Titan Industries	1.08	0.84	0.4	1.79	0.88	0.6442
Dividend Yield (DY)						
Apollo Hospitals Enterprise	0.15	0.04	1.39	4.32	3.94	0.1395
Aurobindo Pharma	0.29	0.33	1.38	3.47	3.27	0.1951
Britannia Industries	0.33	0.3	1.33	3.03	2.93	0.2311
Cipla	0.41	0.15	0.13	2.91	0.03	0.9845
Colgate-Palmolive (India)	1.91	1.41	-0.16	1.33	1.21	0.5467
Dabur India	1.65	0.81	1.08	2.66	1.98	0.3709
Dr.Reddy'S Laboratories	0.19	0.14	1.92	5.81	9.46**	0.0088
Emami	0.94	0.5	0.36	3.22	0.23	0.891
Glaxosmithkline Healthcare	0.2	0.05	0.07	1.4	1.08	0.5841
Glaxosmithkline Pharma.	0.27	0.06	0.43	1.69	1.02	0.6012
Glenmark Pharma	0.23	0.19	1.4	3.51	3.36	0.186

Godrej Consumer Products	1.6	0.87	1.02	2.63	1.79	0.4084
Godrej Industries	0.76	0.3	-0.42	2.02	0.69	0.7069
Hindustan Unilever	3.17	0.79	0.27	1.58	0.96	0.6201
ITC	1.72	1.23	0.55	3.16	0.52	0.7703
Ipca Laboratories	0.27	0.17	0.68	1.79	1.38	0.5021
Lupin	0.17	0.1	1.06	2.69	1.92	0.3836
Marico	0.53	0.35	0.72	2.19	1.14	0.5668
Nestle India	0.24	0.1	0.28	2.38	0.29	0.8655
Piramal Enterprises	0.93	0.63	0.93	2.88	1.46	0.4816
Reliance Industries	0.09	0.04	0.22	1.97	0.53	0.7682
Tata Global Beverages	0.62	0.7	1.55	3.8	4.26	0.1186
Titan Industries	0.17	0.23	2.58	7.82	20.75**	0
Dividend Payout (DPO)						
Apollo Hospitals Enterprise	4.23	0.9	1.04	3.24	1.84	0.3991
Aurobindo Pharma	5.24	8.35	2.42	7.3	17.46**	0.0002
Britannia Industries	9.74	11.65	1.32	3.11	2.9	0.2348
Cipla	10	3.66	0.08	3.03	0.01	0.9946
Colgate-Palmolive (India)	52.33	37.91	-0.35	1.19	1.57	0.4558
Dabur India	46.38	10.14	0.38	2.41	0.39	0.8237
Dr.Reddy'S Laboratories	4.86	3.91	1.91	5.96	9.71**	0.0078
Emami	23.41	15.03	0.74	2.97	0.92	0.6304
Glaxosmithkline Healthcare	4.25	1.32	2.01	6.06	10.62**	0.0049
Glaxosmithkline Pharma.	6.81	1.27	-0.29	1.66	0.89	0.6422
Glenmark Pharma	8.87	7.45	1.47	3.71	3.81	0.1492
Godrej Consumer Products	43.07	19.75	0.37	1.71	0.92	0.6315
Godrej Industries	43.69	47.66	1.85	5.73	8.83**	0.0121
Hindustan Unilever	91.45	24.64	1.08	3.22	1.98	0.3724
ITC	44.97	32.56	0.25	2.51	0.2	0.9043
Ipca Laboratories	3.92	3.27	0.85	1.89	1.73	0.4214
Lupin	3.73	2.81	1.34	3.01	3	0.2231
Marico	14.61	11	0.56	1.93	0.99	0.6091
Nestle India	7.54	1.84	-0.04	2.32	0.2	0.9057
Piramal Enterprises	-51.51	197.47	-2.64	8.03	22.17**	0

Reliance Industries	1.36	0.28	-0.4	2.71	0.3	0.8593
Tata Global Beverages	15.9	18.43	1.47	3.43	3.66	0.1607
Titan Industries	5.87	8.57	2.55	7.74	20.24**	0
	Earnings per Share (EPS)					
Apollo Hospitals Enterprise	15.1	4.48	-0.11	2.08	0.37	0.83
Aurobindo Pharma	33	24.05	0.64	2.57	0.75	0.6863
Britannia Industries	47.6	25.22	-0.01	1.83	0.57	0.7525
Cipla	15.21	9.89	2.26	6.88	14.83**	0.0006
Colgate-Palmolive (India)	18.78	10.58	0.3	1.52	1.06	0.5882
Dabur India	3.69	0.72	0.63	2.35	0.83	0.6613
Dr.Reddy'S Laboratories	44.19	15.74	-0.25	1.52	1.02	0.5996
Emami	13.45	6.64	0.43	2.97	0.31	0.8581
Glaxosmithkline Healthcare	45.71	27.29	0.58	2.1	0.91	0.6356
Glaxosmithkline Pharma.	49.77	19.19	0.15	1.9	0.54	0.7647
Glenmark Pharma	9.55	5.15	1.54	4.64	5.08	0.0787
Godrej Consumer Products	10.48	3.81	0.38	2.51	0.33	0.8464
Godrej Industries	6.2	5.27	1.07	2.62	1.95	0.3765
Hindustan Unilever	8.49	2.22	0.46	2.5	0.45	0.7978
ITC	21.21	23.31	1.23	2.79	2.55	0.2795
Ipca Laboratories	39.13	16.16	-0.12	1.28	1.26	0.5339
Lupin	35.29	13.42	0.42	1.86	0.83	0.6611
Marico	7.89	5.91	0.44	1.44	1.33	0.5133
Nestle India	53.93	29.69	0.61	1.89	1.13	0.5683
Piramal Enterprises	-0.97	41.02	-1.03	2.92	1.78	0.4115
Reliance Industries	65.72	21.1	0.17	2.27	0.27	0.8741
Tata Global Beverages	20.88	12.31	0.39	2.75	0.28	0.8708
Titan Industries	26.34	21.07	0.99	3.21	1.63	0.4416

Source: Computed from the compiled & edited data from the financial statements of selected firms listed-CMIE-prowess package

** Significant at 1% level; * Significant at 5% level

Table 3 presents the mean, standard deviation, skewness and kurtosis and results of Jarque Bera test for MPS, DPS, DY, DPO and EPS of firms selected for the study. From the standard deviation, it is found that the MPS is high for majority of the firms; the skewness is $>+1$ for five firms (Cipla, Hindustan Unilever, ITC, Marico and Titan Industries), which shows that the (MPS) data are asymmetrical for these five firms. For 11 firms, the (MPS) data are moderately skewed (moderately asymmetric), whereas the skewness is trivial for the remaining seven firms (Britannia Industries, Dabur India, Dr.Reddy's Laboratories, Emami, Glaxosmithkline Pharma, Godrej Industries, and Tata Global Beverages).

The JB test statistics for MPS data are insignificant for 22 firms and are significant for one firm, Cipla, which led to accept the null hypothesis that the data are normally distributed i.e. the MPS data of 22 firms are normally distributed.

For DPS, skewness ranges from -0.50 to $+0.50$ for 13 firms, this shows that the DPS data are approximately symmetric. Out of 23 firms with play kurtic, the DPS data are found to be with kurtosis, which is approximately equals to 3 for seven firms and are > 3 for eight firms. However, the JB test statistics are not significant for 20 firms, which confirm the presence of normality.

For DY, the data are found to be kurtic for most of the firms (Apollo Hospitals Enterprise, Aurobindo Pharma, Britannia Industries, Dr. Reddy's Laboratories, Emam, Glenmark Pharma, ITC, Tata Global Beverages and Titan Industries), which is > 3 . The JB test result shows that they are

insignificant for 21 firms. For DPO, the data are found to be kurtic for most of the firms and the JB test results are insignificant for 18 firms, which confirm the presence of normality in the DPO data too.

Further, the EPS also shows that the JB test results are not significant for 22 firms, which shows that there exists normality in the EPS data; therefore, it is found that the data of MPS, DPS, DY, DPO and EPS are normally distributed for the firms.

Unit Root Test

Table 4 shows the results of panel unit root test, which is carried out for MPS, DPS, DPO and DY to examine whether the time series data are non-stationary at level and stationary if first differenced to satisfy one pre-condition for co-integration test.

It is found that all the three test statistics (LLC, ADF & PP) for the first model (no intercept and no trend) for MPS data are insignificant at level and are significant at first difference (vide table-4), which implies that the MPS data have no unit root at first difference and hence are stationary. Similarly, the MPS data series has unit root at level and has no unit root at first difference about a constant as well as with time trend; the IPS W-statistics for model with intercept and without trend is significant at level. Breitung t-test for model with both the intercept and the time trend is significant at first difference besides LLC, ADF and PP test statistics. Therefore, it shows that the MPS data are integrated of order 1, i.e. $I(1)$, satisfying one precondition for co-integration test.

Table 4 Unit Root Test (Panel) Results for Market Price per Share and Dividend Variables for Firms under Consumer Non-Cyclical Sector

Method	No Intercept No Trend			Intercept No Trend			Intercept and Trend					
	Level	First Difference	Level	First Difference	Level	First Difference	Level	First Difference				
	Statistic	p Value	Statistic	p Value	Statistic	p Value	Statistic	p Value				
Market Price per Share (MPS)												
Levin, Lin & Chu t (LLC)	5.42	1	-11.25**	0	-4.31**	0	-11.98**	0	-7.86**	0	-17.36**	0
Breitung t-stat									1.64	0.9499	-2.27*	0.0118
IPS W-stat					-2.44**	0.0073	-7.14**	0	-1.94*	0.0264	-3.91**	0
ADF - Fisher Chi-square	37.6	0.8066	195.9**	0	97.43**	0	135.5**	0	90.02**	0.0001	130.25**	0
PP - Fisher Chi-square	36	0.8551	189.35**	0	65.27*	0.0322	127.69**	0	63.35*	0.0456	122.67**	0
Dividend per Share (DPS)												
Levin, Lin & Chu t (LLC)	4.39	1	-12.28**	0	-1.81*	0.035	-12.97**	0	-9.63**	0	-9.73**	0
Breitung t-stat									-0.23	0.4071	0.03	0.5138
IPS W-stat					1.54	0.9381	-5.87**	0	-1.33	0.092	-2.28*	0.0113
ADF - Fisher Chi-square	17.98	0.9999	198.51**	0	39.86	0.7261	130.63**	0	72.92**	0.007	101.99**	0
PP - Fisher Chi-square	17	1	220.06**	0	42.46	0.6214	213.29**	0	115.36**	0	174.78**	0
Dividend Payout (DPO)												
Levin, Lin & Chu t (LLC)	-0.41	0.3392	-13.82**	0	-1.63	0.0511	-13.15**	0	-6.39**	0	-9.46**	0
Breitung t-stat									2.41	0.9921	2.58	0.995
IPS W-stat					1.69	0.9547	-4.67**	0	0.9	0.8164	-0.67	0.2517
ADF - Fisher Chi-square	26.08	0.9921	208.99**	0	45.6	0.4891	121.79**	0	46.56	0.4494	73.2**	0.0065
PP - Fisher Chi-square	25.9	0.9927	219.61**	0	40.44	0.7035	142.49**	0	59.8	0.0832	143.16**	0
Dividend Yield (DY)												
Levin, Lin & Chu t (LLC)	-2.24*	0.0124	-15.66**	0	-6.05**	0	-16.69**	0	-11.56**	0	-21.75**	0
Breitung t-stat									2.27	0.9885	-1.45	0.0731
IPS W-stat					-1.08	0.1394	-6.47**	0	-0.9	0.1833	-2.58**	0.005
ADF - Fisher Chi-square	38.67	0.7698	233.65**	0	65.92*	0.0285	135.62**	0	74.4**	0.005	99.87**	0
PP - Fisher Chi-square	44.84	0.521	226.51**	0	57.46	0.1199	151.84**	0	89.27**	0.0001	143.37**	0

Note: Levin, Lin & Chu & Breitung t-stat - Null: Unit root (assumes common unit root process)
 IPS (Im, Pesaran & Shin) W-stat, ADF - Fisher Chi-square & PP - Fisher Chi-square - Null: Unit root (assumes individual unit root process)
 Source: Computed from the compiled & edited data from the financial statements of selected firms listed-CMIE-prowess package.
 ** Significant at 1% level; * Significant at 5% level.

Regarding the DPS, DPO and DY data series, it is inferred that the DPS data series are non-stationary (unit root) at level and are stationary when first difference for LLC, ADF and PP test statistics. The DY has unit root at level and has no unit root at first

difference i.e. the DY data are non-stationary at level, but become stationary at first difference, hence the DPS, DPO and DY data series are integrated of order 1, i.e. I(1), satisfying one precondition for co-integration test

Lag Length Selection

Table 5

Lag Length Selection Criteria for Co-integration Test for Market Price per Share with Dividend Variables

Lag	LogL	LR	FPE	AIC	SC	HQ
Market Price per Share (MPS) and Dividend per Share (DPS)						
0	-1034.6	NA	2.10E+07	22.53	22.59	22.56
1	-873.74	311.24*	6.90E+05	19.12	19.29*	19.19*
2	-869.6	7.82	6.9E+05*	19.12*	19.4	19.23
3	-868.78	1.52	7.40E+05	19.19	19.57	19.35
4	-864.25	8.16	7.30E+05	19.18	19.67	19.38
5	-861.34	5.13	7.50E+05	19.2	19.81	19.45
6	-859.24	3.61	7.80E+05	19.24	19.96	19.53
Market Price per Share (MPS) and Dividend Payout (DPO)						
Lag	LogL	LR	FPE	AIC	SC	HQ
0	-1280.7	NA	4.40E+09	27.88	27.94	27.91
1	-1201.9	152.48*	8.7E+08*	26.26*	26.42*	26.32*
2	-1200.5	2.71	9.20E+08	26.31	26.59	26.42
3	-1199.7	1.5	9.90E+08	26.38	26.77	26.54
4	-1196.7	5.35	1.00E+09	26.41	26.9	26.61
5	-1196.6	0.22	1.10E+09	26.49	27.09	26.73
6	-1196.3	0.47	1.20E+09	26.57	27.28	26.86
Market Price per Share (MPS) and Dividend yield (DY)						
0	-869.91	NA	5.80E+05	18.95	19.01	18.98
1	-749.47	233.02	4.7E+04*	16.42*	16.59*	16.49*
2	-746.26	6.08	4.70E+04	16.44	16.71	16.55
3	-744.65	2.97	5.00E+04	16.49	16.88	16.65
4	-739.2	9.83*	4.80E+04	16.46	16.95	16.66
5	-737.16	3.6	5.10E+04	16.5	17.11	16.75
6	-735.31	3.17	5.30E+04	16.55	17.26	16.84

*Indicates lag order selected by the criterion

LR: sequential modified LR test statistic (each test at 5% level)

FPE: Final prediction error; AIC: Akaike information criterion; SC: Schwarz information criterion

HQ: Hannan-Quinn information criterion

Source: Computed from the compiled & edited data from the financial statements of selected firms listed-CMIE-prowess package.

Table 5 shows the criterion LR, FPE, AIC and HG, which suggest six lags while SC criterion suggests one for better fit of model co-integrating MPS with DPS. Based on the lag length suggested by majority of criterion, lag two is chosen for co-integration test between MPS and DPS. In the same way, the chosen lag length for co-integration test is one each between MPS and DPO and between MPS and DY respectively (the lag suggested by FPE and AIC is superior over LR test). Hence, the chosen lag length for co-integration test between MPS and DPS; MPS and DPO; and MPS and DY are two, and one each respectively.

Co-integration Test

Table 6 shows the results of trace test and maximum eigen value test without deterministic trend. The analysis of DPS and MPS shows the critical value as 12.32 and 11.22, statistical value as 23.90 and 23.76 respectively, which is highly significant at 1% level; and that of for with intercept and without time trend the critical value as 15.49 and 14.26, statistical value as 12.80 and 12.79 respectively; and that of for with intercept and time trend the critical value as 18.40 and 17.15, statistical value as 12.17 and 12.16 respectively, which however are not significant.

The statistical values of the *trace test and maximum eigen value* test are > critical values for one situation i.e. without deterministic trend hence, the null hypothesis H_0^1 : “*there is no co-integration between dividend per share (DPS) and shareholders' wealth (SW)*” is rejected at 1% level. Therefore, the co-integration results prove that there exists a stationary, long-run relationship between DPS and MPS.

The results of *trace test and maximum eigen value* test with intercept and without time trend show the critical values as 15.49 and 14.26, statistical values as 0.44 and 0.40 respectively, which are highly significant (at 1% level). The statistical values of the *trace test and maximum eigen value* test are > critical values for with intercept and without time trend hence, the null hypothesis H_0^2 : “*there is no co-integration between dividend payout (DPO) and shareholders, wealth (SW)*” is rejected at 1% level.

The results of trace test and maximum eigen value test without deterministic trend for DY and MPS show the critical values as 12.32 and 11.22, statistical values as 15.75 and 12.67 respectively; that of for with intercept and without time trend the critical values as 15.49 and 14.26,

statistical values as 17.33 and 17.21 respectively, which are significant (at 5% level). The statistical values of the trace test and maximum eigen value test are >critical values for two situations i.e. without deterministic trend, and with intercept without time trend. Hence, the null hypothesis H_0^3 : “*there is no co-integration between dividend yield (DY) and shareholders' wealth*” is rejected (at 5% level). Therefore, the co-integration results prove that there exists a stationary, long-run relationship between the MPS and DY.

Therefore, it is proved that there is a long-run relationship between DP and SW (MPS and DPS; MPS and DPO; and MPS and DY).

Difference in the Impact of DP on SW in Pre and Post Financial Meltdown Periods

An attempt has been made to estimate whether there has been any significant difference in the impact of DP on SW between pre and post financial meltdown periods using the Chow test (1960) and the results are shown in table 7.

$$F = \frac{(RSS_p - (RSS_1 + RSS_2)) / k}{(RSS_1 + RSS_2) / (N_1 + N_2 - 2k)}$$

This is distributed as F with k and $n_1 + n_2 - 2k$ degrees of freedom

Where, F is the test statistic

RSS_p = residual sum of squares for the whole sample

RSS_1 = residual sum of squares for the first group (before financial meltdown)

RSS_2 = residual sum of squares for the second group (after financial meltdown)

N = number of observations

K = number of regressors (including the intercept term) in each unrestricted sub-sample

2K = number of regressors in both the unrestricted sub-sample regressions (whole sample)

N_1 = number of observations for before financial meltdown period

N_2 = number of observations for after financial meltdown period

Impact of DP on SW in Pre and Post Financial meltdown Periods

Table 6 Co-integration Test Results for Market Price per Share and Dividend Variables

Test	Hypothesized Number of Co-Integration	No Deterministic Trend				Linear Deterministic Trend							
		Eigen-value	Statistic	Critical Value	p Value	Intercept No Time Trend		Intercept and Time Trend					
						Eigen-value	Statistic	Critical Value	p Value	Eigen-value	Statistic	Critical Value	p Value
Market Price per Share (MPS) and Dividend Per Share (DPS)													
Trace	None [®] At most 1	0.1211 0.0008	23.90** 0.14	12.32 4.13	0.0004 0.7557	0.0672 0	12.8 0	15.49 3.84	0.1225 0.9524	0.0639 0	12.17 0.01	18.4 3.84	0.2969 0.9352
Maximum	None [®] At most 1	0.1211 0.0008	23.76** 0.14	11.22 4.13	0.0002 0.7557	0.0672 0	12.79 0	14.26 3.84	0.0843 0.9524	0.0639 0	12.16 0.01	17.15 3.84	0.2299 0.9352
Market Price per Share (MPS) and Dividend Payout (DPO)													
Trace	None [®] At most 1	0.0149 0	2.78 0.01	12.32 4.13	0.8745 0.9402	0.0022 0.0002	0.44** 0.03	15.49 3.84	1 0.8542	0.0034 0	0.64 0.01	18.4 3.84	1 0.9264
Maximum	None [®] At most 1	0.0149 0	2.77 0.01	11.22 4.13	0.8225 0.9402	0.0022 0.0002	0.40** 0.03	14.26 3.84	1 0.8542	0.0034 0	0.63 0.01	17.15 3.84	1 0.9264
Market Price per Share (MPS) and Dividend Yield (DY)													
Trace	None [®] At most 1	0.0665 0.0166	15.75* 3.08	12.32 4.13	0.0128 0.0936	0.0893 0.0006	17.33* 0.12	15.49 3.84	0.0262 0.7335	0.0881 0.0005	17.07 0.1	18.4 3.84	0.0759 0.751
Maximum	None [®] At most 1	0.0665 0.0166	12.67* 3.08	11.22 4.13	0.0277 0.0936	0.0893 0.0006	17.21* 0.12	14.26 3.84	0.0166 0.7335	0.0881 0.0005	16.97* 0.1	17.15 3.84	0.053 0.751

Note: p Values based on MacKinnon-Haug-Michelis (1999)
 Source: Computed from the compiled & edited data from the financial statements of selected firms listed-CMIE-prowess package.
 **Significant at 1% level; *Significant at 5% level

Table 7 Results of Chow Test for the difference in the Impact of DP on SW between Pre and Post financial Meltdown Periods

Variables	Pooled Regression (2003-07, 2009-13)		Regression for Pre Period 2003-07		Regression for Post Period 2009-13	
	Beta (β)	t-value	Beta (β)	t-value	Beta (β)	t-value
MPS = f (DPS, DPS_1)						
Intercept	591.36**	9.19	488.54**	8.23	699.21**	6.9
DPS	1.96	0.05	73.17	0.93	-8.87	-0.2
DPS_1	29.72	0.71	-70.81	-0.93	34.07	0.65
R ²	0.0243		0.0135		0.0143	
Adjusted R ²	0.0135		-0.0164		-0.0033	
F Value	2.26 ^{NS}		0.45 ^{NS}		0.81 ^{NS}	
DF	2..181		2..66		2..112	
CHOW Test	F Value 2.50*		DF 178		p Value 0.0323	
MPS = f (DPO, DPO_1)						
Intercept	804.11**	13.12	591.65**	14.2	987.66**	10.37
DPO	-0.06	-0.05	-8.50*	-1.97	0.26	0.21
DPO_1	-6.66**	-3.2	1.78	0.41	-8.93**	-3.25
R ²	0.0704		0.192		0.101	
Adjusted R ²	0.0601		0.1675		0.085	
F Value	6.85**		7.84**		6.29**	
DF	2..181		2..66		2..112	
CHOW Test	F Value 7.35**		DF 178		p Value 0	
MPS = f (DY, DY_1)						
Intercept	859.34**	13.45	599.27**	14.44	1064.37**	10.7
DY	-235.05*	-1.96	-208.97	-1.77	-308.96	-1.96
DY_1	-19.82	-0.18	9.08	0.09	-22.92	-0.15
R ²	0.1033		0.2128		0.1394	
Adjusted R ²	0.0934		0.189		0.124	
F Value	10.43**		8.92**		9.07**	
DF	2..181		2..66		2..112	
CHOW Test	F Value 7.96**		DF 178		p Value 0	

Source: Computed from the compiled & edited data from the financial statements of selected firms listed CMIE-prowess package. **Significant at 1% level; *Significant at 5% level; NS – Not significant.

The result of Chow-test (vide table 7) shows that there is a significant difference in the impact of DP (DPS, DPO and DY) on SW between pre as well as post financial meltdown periods. The F value for DPS (2.50) is significant (at 5% level), and that of for DPO 7.35 and of for DY 7.96 respectively are highly significant (at 1% level). Hence, the hypotheses, H_0^4 : "there is no significant difference in the impact of dividend per share (DPS) on shareholders' wealth (SW) between pre and post financial meltdown periods", H_0^5 : "there is no significant difference in the impact of dividend payout (DPO) on shareholders' wealth (SW) between pre and post financial meltdown periods" and H_0^6 : "there is no significant difference in the impact of dividend yield (DY) on shareholders' wealth (SW) between pre and post financial meltdown periods" are rejected. Hence, it is concluded that the impact of DP (DPS, DPO and DY) on SW (MPS) is significantly affected by the global financial meltdown for the Consumer non-cyclical sector in India.

Concluding Remarks

This paper is an effort to reveal the insight dynamics of the impact of dividend policy on shareholders' wealth, particularly from consumer non-cyclical sector in India. In the light of the previous literature, key explanatory variables were found to reveal the relationship between DP and SW. The response variable, i.e. market price per share (MPS) is considered as proxy for measuring the SW. Dividends per share (DPS), dividend payout (DPO) and dividend yield (DY) are considered as predictor variables. Out of 34 listed firms on BSE, only 23 firms are selected using multi stage non-random sampling technique considering the availability of data.

Panel unit root test is carried out for MPS, DPS, DPO and DY to examine whether the time series data are non-stationary / stationary. The probability of results suggested that four variables were stationary viz. market price per share (MPS), dividend per share (DPS), dividend payout (DPO) and dividend yield (DY) of order 1(1). Therefore, a co-integration test is conducted, which indicates the presence of two co-integrating equations (at 1% and 5% level of significance) thereby confirm the presence of long-run relationship between the selected dividend variables.

The study used Johansen co-integration, regression and chow test to study the impact of DP on SW and reveals that

the trace and maximum eigen value statistics for the CEs without and with deterministic trend for MPS with DPS, DPO and DY hypothesized as 'atmost 1' are not significant at level, which leads to accept null hypothesis that there is atmost one co-integration equation for MPS with each one of the dividend variables, which means that the MPS and dividend variables are co-integrated, hence there is a long-run relationship between DP and SW of the selected firms of Consumer non-cyclical sector in India.

The study proves that there is a significant difference in the impact of DPS, DPO and DY (DP) on MPS (SW), hence it can be concluded that the impact of DP on SW of firms of Consumer non-cyclical firms in India is significantly affected by the financial meltdown.

When the firms pay regular dividend with growth, the SW would be maximized. This is quite possible for all the dividend paying firms in Consumer non-cyclical sector in India. The DP has significant effect on SW of Consumer non-cyclical sector. From the study, it is inferred that DPS, DPO and DY, as important variables, determine the MPS. In general, higher DP enables increase in the market price of equity share and vice versa. The shareholders preferred current dividend to future income so, dividend is considered to be an important variable, which significantly determined the SW.

The findings of the present study on the long-run relationship between DP and SW corroborated with the findings of the previous research studies viz. Chidinma et al. (2013), Dewet and Mpinda (2013), Haque Collins et al. (2013), Mokaya et al. (2013), Oladele (2013), Salman (2013), Kumaresan (2014) and Toby (2014).

Limitations and Scope for Further Studies

The study is based on secondary data collected from the Centre for Monitoring Indian Economy Private Limited (Prowess CMIE). Therefore, the quality of the study depends upon the accuracy, reliability, and quality of the secondary data source. The analysis has produced some meaningful inferences and results, and one avenue for future research is to extend the investigation to other sectors and across sectors.

The present study has used market price per share (MPS) as proxy for studying the shareholders' wealth (SW). Further

studies may be conducted using the response variable viz. economic value added (EVA) and market value added (MVA) to measure the SW.

The study has used research tools viz. Johansen co-integration test, multiple regressions and Chow test for analyzing the co-integration between DP and SW. Therefore, inclusion of some more appropriate methods of analysis viz. Block Exogeneity Wald test (1943), Bai-Perron test (2003) and Variance decomposition for analysis may add exploring further in-depth inference in the area of research.

Policy Prescription

The DP has significant effect on SW in consumer non-cyclical sector in India. When the consumer non-cyclical firms pay dividend regularly with periodic enhancements, the SW would be increasing. Hence, the selected 23 firms should have the policy of paying the dividend consecutively rather than ploughing back the earnings for their further and future expansion plans so that they enhance the SW.

Past performance of the firm plays a vital role in enhancing the SW. Whenever the shareholders are interested for investing in shares, the past performance is well scrutinized by them. The increase in dividend payment and past performance of firms significantly increased the SW of the selected firms of consumer non-cyclical sector in India for the study period.

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Investment and Herding Behaviour : Indian Investor

D. Lazar and Vijayalakshmi Sundar

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Behaviour finance helps to understand the attitude and perception of investors on their investment decisions. Every investor differs from others in all the aspects due to a range of factors like demographic and socio-economic background. An optimal investment decision plays a vital role and is a major deliberation. The present study aimed at investigating Investment and Herding behaviour of Indian investors and its relationship with socio-economic factors using sample response from 400 investors including Bombay stock exchange, banks, investment company, and stock brokers. The study found that socio-economic background and the investment behaviour are dependent in most of the cases except few also found existence of herding behaviour among our sample respondents.

Key words : Behaviour finance, Investor, Herding, Stock market.



Dr. D. Lazar

Professor
Department of Commerce
School of Management, Pondicherry University.
Email: lazar.dani@gmail.com



Vijayalakshmi Sundar

Ph. D. Scholar
Department of Commerce
School of Management, Pondicherry University.
Email: vijisundar.pu@gmail.com

Behavioral finance discovers the investor's emotions and psychology which influence the investment decision, and ordinary errors of common people while making their financial decision out of emotions. Decision making is the most multifaceted and demanding doings of investors. Every investor differs from the others in all aspects due to a range of factors like demographic factor, socioeconomic background, educational level, gender, age etc, An optimal investment decision plays a vital role and is a major deliberation however the ideal request could make a victorious investor gain. Several psychological and behavioral factors influence investors in decision making, which are also studied by authors like Merikas et al. (2007) who undertook an empirical survey of the factors that mostly influence individual investor behavior in the Greek Stock Exchange. Andersson et al. (2007) analysed the effects of financial incentives on herding in a simulated financial market with two different experiments. Zaiane and Abauob

(2008) analyzed the existence of overconfidence in the Tunisian Stock Market. Lai et al. (2008) identified the investment decision of Malaysian institutional investors during the period of the bullish and bearish market. Fogel, S. O et al. (2010), Prasanna Gai and Sujit Kapadia (2010), Srinivasa, and Rasure (2011), Zaidi and Tauni (2012) have documented the tendency of individual investors for the stock market investment.

Aduda, J., O. E. Oduor, and Onwonga (2012) investigated the behavioral aspects such as overconfidence, cognitive dissonance, regret theory, and prospect theory. Das and Jain (2014) have investigated the relationship between four demographic variables and investment decision of investors. While analysing the literature it was found that there are not many studies which examined the herding behaviour in Indian market till recently. The present study aimed at investigating Investment and Herding investors and its relationship with socio- factors.

Data and Methodology

The target group selected for the study is the Individual Investors of the Capital market. Data were collected mainly from Bombay stock exchange, the workplaces of different banks, investment companies, and stock brokers from Bombay, Chennai, Bihar, and UT of Puducherry using convenient sampling technique. The data were collected from the respondents who were ready to expose the information since many investors were unwilling to disclose their financial particulars mainly the amount of money invested in a different investment opportunity. Though 750 questionnaires were served, only 400 respondents could be included in the final sample. The methods adopted were Simple Percentage, Mean Score Values, Chi-square Analysis, and Discriminant Analysis.

Demographic characteristics of the respondents

It is evident from Table 1 that 80% of the respondents were men, and 20% women. The majority of the respondents were married (73%). Also, a greater part of respondents held a Bachelor's degree (50%). And about 30% are businessmen

and followed by 28.8% of full-time employees. While nearly half (44.5%) of the sample reported monthly income group between Rs. 25,001 and Rs. 50000.

The majority of the respondents (37.50%) were between 26 to 35 years old. Nearly 74.1% respondents were under the age of forty-five; while just nearly half of the respondents were under the age of thirty-five (46.30%). To indicate their marital status, participants were given the option to choose among: married or single. Overall, the majority of the respondents were married (73%).

The survey instrument requested educational details and possible answers included were Master's degree, Bachelor's degree, High school or equivalent. The exactly half of the respondents (50%) held bachelors degree, among this majority were men (40.20%) than women (9.80%) and a very small percentage of the total sample indicated that they had a less than high school (9.8%).

Information provided by the respondents about their occupations has been grouped in five occupational categories that are recognized by Professional, Business, Employee, Retired and Others. The majority (30%) of the respondents were business people. Nearly 19.8% of the respondents have indicated that they are professionals and held managerial positions such as financial analysts, accountants, executives, educational administrators, and managers. A small percentage of the respondents have (5.2%) have indicated that they are retired, as can be seen from the information presented below. There were notable differences between the occupations of men and women in the study. The majority of men (25.20%) than women (4.80%) were engaged in their own Business. A majority of the respondent's (44.5%) incomes are between Rs. 25001 and Rs. 50000. However, a small group of (12.50%) of the respondents were in highest income category, more than Rs. 75,000 monthly. Gender differences were notable on both ends of the income scale. Nearly 10.80% of men and 1.80% women reported a monthly income is above Rs. 75000.

Table: 1: Demographic and socio-economic characteristics of respondents

Variable	All		Men		Women	
	N	%	N	%	N	%
Gender	400	100	320	80	80	20
Age						
Up to 25 Years	35	8.80	24	6.00	11	2.80
26 - 35 Years	150	37.50	114	28.50	36	9.00
36 - 45 Years	111	27.80	87	21.80	24	6.00
46 - 55 Years	49	12.20	44	11.00	5	1.20
56 - 65 Years	39	9.80	36	9.00	3	0.80
65 and Above	16	4.00	15	3.80	1	0.20
Marital Status						
Single	108	27	89	22.20	19	4.80
Married	292	73	231	57.80	61	15.20
Education						
Master's degree	161	40.2	126	31.50	35	8.80
Bachelor's degree	200	50	161	40.20	39	9.80
High school/ equivalent	39	9.8	33	8.20	6	1.50
Occupation						
Professional	79	19.8	62	15.50	17	4.20
Business	120	30	101	25.20	19	4.80
Employee	115	28.8	94	23.50	21	5.20
Retired	21	5.2	19	4.80	2	0.50
Others	65	16.2	44	11.00	21	5.20
Monthly Income						
Up to 25000	148	37	122	30.50	26	6.50
25001 to 50000	178	44.5	138	34.50	40	10.00
50001 to 75000	24	6	17	4.20	7	1.80
Above 75000	50	12.5	43	10.80	7	1.80

Behavioral Factors of Investors

In this particular section, the responses for the various behavioral factors of the investors that have been considered in the questionnaire were analysed. The investor's preference in relation to Term of investing, the frequency of monitoring stock market, the frequency of buying and selling of shares, analysed in Investor's Stock preference,

Investment Objectives of investors and various other factors have been analysed.

A. Term of investment

From the Table 2 it is understood that majority (29%) of investors have stock market investment held for the period of 5 years, followed by that 23% of investors have share market

investment held for the period 6 to 12 months, 20% investors are investing very short term with the investment time horizon less than 6 months. Only 9% of investors are

investing for the period 4 to 5 years, perhaps the rate of interest for the different period is the reason for investor's choice of term.

Table 2: Frequency of term of Investment

Term of Investment	No of Respondents	Percent
Up to 6 Months	81	20
6 to 12 Months	93	23
2 to 3 Years	77	19
4 to 5 Years	34	9
Above 5 Years	115	29
Total	400	100

a) Relationship between demographic factors and term of investment

H_0 : Investors' socio - demographic characteristics and term of investment are independent.

H_1 : Investors' socio - demographic characteristics and term of investment are not independent.

These chi-square results (Table 3) indicate whether there is a relationship between the demographic variables and the term of the investment. The chi-square results reveal that there is a statistically significant relationship between the investor's marital status and their term of investment ($\chi^2 = 10.276^a$, $p = 0.036$), since the P-value is less than the significance level (0.05), it is concluded that the both categorical variables are not independent. (H_0 rejected).

When the other demographic variables such as age ($\chi^2 = 29.029^a$, $p = 0.087$), gender ($\chi^2 = 4.193$, $p = 0.381$), education ($\chi^2 = .9417^a$, $p = 0.308$), occupation ($\chi^2 = 12.678^a$, $p = 0.696$) and monthly income ($\chi^2 = 20.501^a$, $p = 0.058$) are concerned, the results indicate that these variables are not having a statistically significant relationship. As comparing the P values to the significant level it shows that the P-values for these variables are more than the significance level (0.05), therefore it is concluded that both categorical variables are independent (fail to reject H_0).

Table3: Chi Square Results

Variables	Pearson Chi-Square value	df	Asymp. Sig. (2-sided)p
Age	29.029 ^a	20	0.087
Gender	4.193 ^a	4	0.381
Marital Status	10.276 ^a	4	0.036
Education	9.417 ^a	8	0.308
Occupation	12.678 ^a	16	0.696
Monthly Income	20.501 ^a	12	0.058

B. Frequency of monitoring the stock market

Investors seem to be active as the Table 4 reveals that 38% of investors are checking/ monitoring their Stock Market

Investment daily, 21% checking monthly, 19% monitoring weekly, only 13% are involved in intraday checking, and very low percentage (5%) are inactive investors who check half yearly or once in a year.

Table 4: Frequency of checking/ monitoring the Stock Market Investment

Checking/ monitoring the Stock Market Investment	No of Respondents	Percent
Intraday	51	13
Daily	151	38
Weekly	75	19
Monthly	84	21
Half-yearly	18	5
Yearly	21	5
Total	400	100

a) The relationship between investor's frequency of monitoring stock market and their socio - demographic variables.

H_0 : Investor's frequency of monitoring stock market and socio - demographic variables are independent.

H_1 : Investor's frequency of monitoring stock market and socio - demographic variables are not independent.

The chi square results (Table 5) indicate whether there is a relationship between investor's frequency of monitoring stock market and socio demographic factors. The result

reveals that investor's frequency of monitoring stock market and socio demographic variables are not having significant relationship. [Age ($\chi^2 = 31.299^a$, $p = 0.179$), gender ($\chi^2 = 3.870^a$, $p = 0.568$), marital status ($\chi^2 = 8.920^a$, $p = 0.112$), education ($\chi^2 = 14.042^a$, $p = 0.171$), occupation ($\chi^2 = 15.717^a$, $p = 0.734$) and monthly income ($\chi^2 = 8.073^a$, $p = 0.921$)]. As comparing the P values to the significant level it shows that the P-values for these variables are more than the significance level (0.05), therefore it is concluded that both variables are independent (fail to reject H_0).

Table 5: Chi-Square Results

Variables	Pearson Chi-Square value	df	Asymp. Sig. (2-sided)
Age	31.299 ^a	25	0.179
Gender	3.870 ^a	5	0.568
Marital Status	8.920 ^a	5	0.112
Education	14.042 ^a	10	0.171
Occupation	15.717 ^a	20	0.734
Monthly Income	8.073 ^a	15	0.921

C. Buying and selling of shares

Even though investors are checking/ monitoring the Stock Market Investment daily but when it comes to buying and selling of shares in a day Table 6 give some interesting results. The majority (40%) are not buying and selling of

shares in a day. Very close to that 39% are involved in buying and selling of shares 1 to 5 times in a day. 11% of respondents do it in 6 to 10 times. Very less percentage of respondents (6%), (5%) involved in buying and selling of shares in a day 11 – 15 times and more than 15 times.

Table 6: Frequency of buying and selling of shares in a day

Buying and selling of shares in a day	No of Respondents	Percent
Nil	160	40
1-5 times	156	39
6-10 times	42	11
11 - 15 times	23	6
More than 15 times	19	5
Total	400	100

a) The relationship between investor's frequency of buying and selling of shares of investors and their socio-demographic variables.

H_0 : Investor's frequency of buying and selling of shares and their socio - demographic variables are independent.

H_1 : Investor's frequency of buying and selling of shares and their socio - demographic variables are not independent.

These chi-square results (Table 7) checks whether there is a relationship between the frequency of buying and selling of shares of investors and their socio-demographic variables. The chi-square results reveals that there is a statistically significant relationship with regards to the investor's age ($\chi^2=20.570^a$, $p=0.042$) and gender ($\chi^2= 10.870^a$, $p=0.028$),

since the P-value is less than the significance level (0.05), it is concluded that the both categorical variables are not independent. (H_0 rejected).

When the other demographic variables such as marital status ($\chi^2= 4.779^a$, $p = 0.381$), education ($\chi^2= 6.084^a$, $p = 0.308$), occupation ($\chi^2= 18.903^a$, $p = 0.696$) and monthly income ($\chi^2 = 20.893^a$, $p = 0.058$) are concerned the results indicate that these variables are not showing a statistically significant relationship. As comparing the P values to the significant level it shows that the P-values for these variables are more than the significance level (0.05), therefore it is concluded that both categorical variables are independent (fail to reject H_0).

Table 7: Chi-Square Results

Variables	Pearson Square value	Chi- df	Asymp. Sig. (2-sided)
Age	20.570 ^a	20	0.042
Gender	10.870 ^a	4	0.028
Marital Status	4.779 ^a	4	0.311
Education	6.084 ^a	8	0.638
Occupation	18.903 ^a	16	0.274
Monthly Income	20.893 ^a	12	0.052

D. Investor's stock preference

H₀: Investors stock preference will be of the same proportion.

H₁: Investors stock preference will not be of the same proportion.

Table 8 shows the stock preference of investor's, it reveals that majority of the respondents [(MSV 0.5275) (Rank I)] prefer to invest in Mid-Cap Stocks, followed by Small-Cap Stocks [(MSV 0.3700) (Rank II)], Big cap stocks [(MSV 0.2650) (Rank III)] whereas very fewer respondents prefer to invest in Micro-Cap Stocks [(MSV 0.0925) (Rank V)] and Mega Cap stocks [(MSV 0.2175) (Rank IV)].

Table 8: Ranking of investor's stock preference

Sl. No	Investors Stock Preference	MSV	Rank
1	Prefer to invest in Mid-Cap Stocks	0.5275	I
2	Prefer to invest in Small-Cap Stocks	0.3700	II
3	Prefer to invest in Big-Cap Stocks	0.2650	III
4	Prefer to invest in Mega-Cap Stocks	0.2175	IV
5	Prefer to invest in Micro-Cap Stocks	0.0925	V

Results of Chi-square goodness to fit

The chi-square result checks whether the Investors stock preference will be of same proportion or different. The results (Table 9) reveal that the data are not consistent with a

specified distribution with regards to of investors stock preference, (H₀ rejected) in all the stocks except in case of Mid-Cap Stocks ($\chi^2 = 1.210^a$, $p = 0.271$), the stock preference is of same proportion (fail to reject H₀).

Table 9: Chi-Square Results

Sl. No	Investors Stock Preference	χ^2	df	Asymp. Sig.
1	Prefer to invest in Micro-Cap Stocks	265.690 ^a	1	.000
2	Prefer to invest in Small-Cap Stocks	27.040 ^a	1	.000
3	Prefer to invest in Mid-Cap Stocks	1.210 ^a	1	.271
4	Prefer to invest in Big-Cap Stocks	88.360 ^a	1	.000
5	Prefer to invest in Mega-Cap Stocks	127.690 ^a	1	.000

E. Investment Objective

Table 10 explains the ranking of the investment objectives of investors; it reveals that investor's first objective for investment is to make easy money [(MSV 0.4025) (Rank I)]; second objective is to meet financial needs such as kid's education and marriage [(MSV 0.3025) (Rank II)].

Followed by other objectives such as avail tax exceptions and deductions [(MSV 0.2075) (Rank III)], Passion of undertaking risk [(MSV 0.20) (Rank IV)]. And respondent's least objectives are to earn steady income via dividend [(MSV 0.1775) (Rank V)] and Benefit from daily price fluctuations [(MSV 0.1625) (Rank VI)].

Table 10: Ranking of Investor's Investment objectives

Sl. No	Investment objectives	MSV	Rank
1	Make easy money	0.4025	I
2	To meet personal financial needs	0.3025	II
3	To avail tax exceptions and deductions	0.2075	III
4	Passion of undertaking risk	0.2	IV
5	Earn steady income via dividend	0.1775	V
6	Benefit from daily price fluctuations	0.1625	VI

a) Chi-square goodness to fit

H_0 : Investors are investing with a similar aim/objective.

H_1 : Investors are not investing with a similar aim/objective.

The chi-square results (Table 11) checks whether the Investors investment objectives are same, and investing with the same motive. The results reveal that the data are *not*

consistent with a specified distribution with regards to investment objectives of respondents, (H_0 rejected) in all the cases as the P value is less than the significance level 0.05 and conclude that there is a significant difference between observed and the expected values, or in other words investors are not investing with a similar objectives.

Table 11: Results of Chi-square goodness to fit

Sl. No	Investment objectives	χ^2	df	Asymp. Sig.
1	Make easy money	15.210 ^a	1	.000
2	Earn steady income via dividend	166.410 ^a	1	.000
3	Passion of undertaking risk	144.000 ^a	1	.000
4	Benefit from daily price fluctuations	182.250 ^a	1	.000
5	To avail tax exceptions and deductions	136.890 ^a	1	.000
6	To meet kid's education, marriage, retired growth fund	62.410 ^a	1	.000

F. Herding behaviour of Investor

This section discusses the herding behavior of investors. An investor would display herding behavior when he depends more on information confirmed by a crowd, rather than depending on his own decision. It is due to the popular insight that the crowd cannot be incorrect and also due to being cautious of likely ridicule which he might look if the crowd is actually correct. If investors are deeply prejudiced by other investors or analysts then the capacity to come up with their own investigation and decision gets vulnerable.

In order to draw their herding behavior, further participants were asked about their possible influence of a buying and selling of shares, they had to respond to the question whether they trust their own judgment more than that of others and the results are shown in Table 12 some interesting facts were

observed:

Only 13% of the investors trusted their own judgment more than information/analyses from other listed sources. Investors seemed to give most importance to opinions of either friends or colleagues (21%), 38% of them opined that they listened to brokers, and 24% get information from expert/professional while making their investment decisions who seem to know just about every twist and turn the market takes. 34% of them opined that they get information from media and also 19% from the internet. This could perhaps be due to the truth that investment advice is often obtainable in the trading stand and via email intraday and before/after-market. From the investigation, it was obvious that young investors mostly favored online trading over trading at the brokerage.

Table 12: Herding behaviour of Investor

Herding	Mean	Sum	Percent	N
Self	0.1250	50	13	400
Brokers	0.3775	151	38	400
Friends/colleagues	0.2075	83	21	400
Media	0.3400	136	34	400
Expert/professional	0.2300	92	23	400
Internet	0.1900	76	19	400

A. Influence of investment decision of others on own decisions

As a creation of a long-term investment, daily trading volumes of the share preferably should not have much load in the choice because high volumes regularly represent speculators and day traders at work. The best case in favor of trading volume should be to select a best possible entry point where the sellers are perhaps tired, and prices are not likely to drop much further owing to speculation swings.

Participants were asked whether they get influenced by the large quantities of stocks bought by other investors, in order to check the existence of herding behavior. To perform a conjoint analysis, responses to the questions were arithmetically joint and classified to fit into the 3-point Likert scale. The contingency Table 13 shows that 69% of the investors were exhibiting the Herding bias, in other words, 69% of the investors were agreed to the statement that they get influenced by the stocks bought by other investors.

Table 13: Response on Herd Behaviour

Herding	Frequency	Percent
Disagree	52	13
Neutral	73	18
Agree	275	69
Total	400	100

B. Herding behaviour and socio- demographic characteristics of investors

This section presents the demographic and economic characteristics of the respondents with emphasis on Herding behaviour which include gender, age, marital status, education, occupation, monthly income etc. The question asked by giving three options Disagree, Neutral and Agree to target respondents' economic differences in herding behaviour. (See..Table14)

Overall we found that 68.8% of respondents exhibit herding behaviour by agreeing to the statement. A gender difference was found quite evident. The majority of men (71.90%) than women (56.2%) are exhibiting herding behaviour. Slightly more proportion of married (69.50%) than single (66.70%)

respondents agreed to the herding behaviour statement. It was observed that (irrespective of male and female) gender has no role to play as there was no much difference seen, as marriage increases more or less same level of behaviour among men and women. When we compare the education and herding behaviour there is a small difference between Master's Degree (74.50%), Bachelor's Degree (62.50%) and Vocational/High School (76.90%). Among these Vocational/High School (76.90%) showing comparatively high extent of herding. It was observed that education has not a big role to play here as there was no much difference seen, as high qualification or less same level of behaviour among all. When we see herding behaviour of respondents with a different occupation, results reveals that majority of the retired people (76.20%) were agreed to the statement. It

was observed that occupation has no role as there was no much difference seen, whether it is employee or profession or business more or less same level of behaviour among all. When income is concerned, a majority of the respondents (79.20%) with incomes between Rs. 50,000 and Rs.75,000

reported high herding bias. Also, not much difference seen among different income groups. It shows income and herding behaviour is not associated, whether it is a high-income group or low-income group, the behaviour is not having a great difference.

Table: 14 Socio-demographic factor and herding behaviour

			Herding Behaviour			
			Disagree	Neutral	Agree	Total
Gender	Male	Count	41	49	230	320
		% within Gender	12.80%	15.30%	71.90%	100.00%
	Female	Count	11	24	45	80
		% within Gender	13.80%	30.00%	56.20%	100.00%
	Total	Count	52	73	275	400
		% within Gender	13.00%	18.20%	68.80%	100.00%
Marital Status	Single	Count	12	24	72	108
		% within Marital Status	11.10%	22.20%	66.70%	100.00%
	Married	Count	40	49	203	292
		% within Marital Status	13.70%	16.80%	69.50%	100.00%
	Total	Count	52	73	275	400
		% within Marital Status	13.00%	18.20%	68.80%	100.00%
Education	Master's Degree	Count	16	25	120	161
		% within Education	9.90%	15.50%	74.50%	100.00%
	Bachelor's Degree	Count	34	41	125	200
		% within Education	17.00%	20.50%	62.50%	100.00%
	Vocational/High School	Count	2	7	30	39
% within Education		5.10%	17.90%	76.90%	100.00%	
Total	Count	52	73	275	400	
		% within Education	13.00%	18.20%	68.80%	100.00%
Occupation	Professional	Count	7	15	57	79
		% within Occupation	8.90%	19.00%	72.20%	100.00%
	Business	Count	19	17	84	120
		% within Occupation	15.80%	14.20%	70.00%	100.00%
	Employee	Count	10	29	76	115
		% within Occupation	8.70%	25.20%	66.10%	100.00%
	Retired	Count	2	3	16	21
		% within Occupation	9.50%	14.30%	76.20%	100.00%
	Others	Count	14	9	42	65
% within Occupation		21.50%	13.80%	64.60%	100.00%	
Total	Count	52	73	275	400	
		% within Occupation	13.00%	18.20%	68.80%	100.00%
Monthly Family Income	Up to 25000	Count	22	21	105	148
		% within Monthly Family Income	14.90%	14.20%	70.90%	100.00%
	25000 to 50000	Count	25	35	118	178
		% within Monthly Family Income	14.00%	19.70%	66.30%	100.00%
	50000 to 75000	Count	2	3	19	24
		% within Monthly Family Income	8.30%	12.50%	79.20%	100.00%
	Above 75000	Count	3	14	33	50
		% within Monthly Family Income	6.00%	28.00%	66.00%	100.00%
	Total	Count	52	73	275	400
		% within Monthly Family Income	13.00%	18.20%	68.80%	100.00%

VI. Conclusion:

In the stock market herding behaviour is one of the strongest and most dangerous emotional illnesses expected from the investor, which may lead to fair disastrous results in the market. The herd mentality may be motivated by many factors such as conformity or peer pressure, cascades, fear, reputation and it may arise due to imitating a whole group or crowd. The herding may spawn out from a formal or informal group's decisions or may arise due to pseudo-consensus, common conventions or rituals, bandwagon effect, i.e. trend of following or joining the majority or due to crowd hysteria etc.

The investors' preference in relation to Term of investing, the frequency of monitoring stock market, the frequency of buying and selling of shares, Investor's Stock preference, Investment Objectives of investors and various other factors have been analysed and to conclude most of these variables are statistically significant with demographic and socio-economic variables. The respondents are indeed exhibiting herding behaviour as results revealed that 69% of the respondent agreed to the statement that they get influenced by the other investors and finally the range of herding behavior comes to 98.8% that means 98.8% of the sample exhibits herding behavior. Therefore overall we could infer people tend to follow the crowd and that there exists intense herding behavior among the investors. However, when we compare the herding behavior with demographic and social factors, it is found overall that there is no association between investors, socio-demographic features and herding behavior since the majority of the factors shows insignificant results.

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Asymmetry Revisited: What Leadership of Organizational Change Can Learn from Tango Argentino

Ralf Wetzel and Frauke Nees

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The article improves the understanding of leadership in organizational change by drawing on the metaphor of the Tango Argentino. Based on the reasonably young research stream of Organizational Aesthetics, the relationship between a leader and a follower is compared and exploited to better understand the essentials of leading and following in organizational change. The article shows the importance of a trustful, resilient connection between leader and follower to successfully and substantially design organizational change. By giving up of control, and following the follower especially the leader can gain new resources to explore new territory while the follower can prove and take on responsibility for successfully shaping a better organizational future.

Key words : “Change Leadership, Tango Argentino, Followership, Organizational Aesthetics, Applied Dance”



Dr. Ralf Wetzel

Associate Professor for Organisation & Management
Vlerick Business School
Avenue du Boulevard 120
B-1210 Brussels, Belgium
Email: ralf.wetzel@vlerick.com



Frauke Nees

Psychologist, Coach, Trainer & Tango artist
Wildenbruchstrasse 76
D-12045 Berlin, Germany
Email: f.nees@web.de

Since decades, the discussion about the leadership of change processes in organization is trapped in a basic contradiction. On the one hand, a strong top-down approach is business as usual, in which the top management decides about the reasons of necessary change, the goals for a better organizational future and about the proper means to reach them. Accordingly, a highly formalized and politically backed uni-linear control model of change has emerged and is widely used. On the other hand, a grassroots approach has been made popular, which is closely related to terms like the 'learning organization'. Here, a strong affinity to self-organization and to circular processes of collective adaptation is at the core of the proposal. In both cases, rather opposite images of leadership are employed. In the first asymmetric top-down model, the classic hero is required, leading hierarchically and powerfully, followers are expected to execute what the leaders envisioning and decide. In the more symmetric bottom-up approach, the asymmetrically influencing leader has almost disappeared and instead gives space to self-organized, vagabonding

leadership of the followers. Both leadership models proved to be sufficiently problematic. The top-down asymmetric leader tends to reduce the intelligence of the system in reaction to surprise and ambiguity to his/her own cognitive resources, almost literally wasting the intelligence and creativity of the followers. The grassroots-approach is confronted with slow and complex decision-making, partly connected with a low quality of decisions, which always can be questioned by the challenge of not being sufficiently (formally) authorized.

In this paper we suggest an alternative, which we draw from a very specific social relation happening outside organizations. By using the Tango Argentino as a metaphor for leadership, we review and re-introduce the notion of asymmetry, which we closely combine with the notion of complementarity. Based on the foundation of a strong relationship between leader and follower this combination enables organizations to respond beneficially to external surprise and ambiguity. It allows organizations to employ strong improvisation skills which are essential to benefit from vulnerable environments. The Tango Argentino shows impressively how beneficial a paradoxical constellation of asymmetry and complementarity can become for leadership of change processes in organizations. Based on this metaphor it becomes possible to propose a 'third way' able to combine both change management approaches. The Tango informs strikingly about the relation between leaders and followers in change and its impact to a proper reaction to vulnerable conditions in three distinctive aspects:

- a.) The dance shows impressively how it is possible to play with instead of following external constrains.
- b.) The dance instructs about how to use asymmetry (aka: hierarchy) beneficially if it is linked to role complementarity and based on a profound relationship between leader and follower.
- c.) The dance informs about how failure can be used destructively in terms of power games or, more importantly, how conflict can be overcome beneficially by the willingness of both participants to listen, to be open and get changed by the other.

We unfold our arguments by firstly reviewing the current main traits of leadership and leadership in organizational change. This will clearly show how paradox the leadership

of organizational change needs to be: it requires to be as much improvisational as directive, as much sensitive to the 'intelligence of the crowd'. Following this clarification, we secondly introduce the metaphor of the Tango Argentino, a dance, which in many aspects appears to be similar to change leadership. In the third part of the paper we draw conclusions from the perspective of leadership of organizational change, discussing the above mentioned three core hypotheses of the paper. In the final part, we summarize and develop subsuming guidelines for effective leadership of organizational change.

Leading change: the developmental line and the common defeat of structural asymmetry

The defeat of asymmetry in leadership studies

Far away seem to be the times, in which a leader was entitled to rule an organization by means of hierarchy, meaning by applying a formal asymmetry between the leader and the follower (Dutton, 1996). One of the formatting developments in leadership theory throughout the last centuries journey "... is the rejection of the command-and-control view of leadership which focuses on top-down control based on the authority of position. Instead, leaders are now viewed as individuals who motivate their staff by establishing an emotional link with them through the power of their personality—their charisma—and not the power of their position in the organisation" (Burnes and By, 2011: 3) (Higgs and Rowland, 2005). The fundamental sources of influence of leaders have shifted from structural sources (formal position, informal power sources) to individual ones (charisma, emotional intelligence, presence, capability) (Fletcher, 2004). This development strongly correlates with an overall withdrawal of hierarchy within organizations as a design principle as such (Kühl, 1998). The notion of 'flat' organizations has not only become a popular buzzword, closely linked to concepts like Business Process Re-Engineering or Lean Management, it emerged as empirical evidence of reduced hierarchical layers in organizations throughout the last decades. Accordingly, the relevance of formal hierarchy and influence has declined in favour of informal, political sources and individual sources as well. This comes not as a surprise as the conditions for proper organizing have changed. Discontinuity, surprise and paradox seem to have conquered stage (Handy, 1989; Handy, 1994). That has brought formalized and planned approaches

much under pressure, given the almost random, unplannable and unexpectable nature of the given environments. In fact, improvising through change has become an increasingly strong option (Pina e Cunha et al., 1999; Crossan and Hurst, 2006). Furthermore, it supports classic approaches to organizing, which highlight the on-going flow of “organizational becoming” (Tsoukas and Chia, 2002), a constant move of organization-in-the-making (Weick, 1979; Weick, 1995), requiring a different approach of managing and organizing (Weick et al., 1999; Weick, 1996).

Accordingly, while the respective literature still highlights the asymmetry of influence of the leader, clearly an increase of impact of the followers by using their informal and individual power sources have occurred. What we see here is an increasing relevance of what Niklas Luhmann once called “reverse controlling” (Luhmann, 1964; Gabarro and Kotter, 1993), a sublime and informal management of the leader by the followers. In other words: by informalizing the leadership asymmetry in fact the asymmetry has been reduced, given the strong counter impact of the informal power sources of the follower. Asymmetry as such was and still is on its defeat. As a compensation, more broadly defined leadership concepts became popular, like shared leadership (Crevani et al., 2007) or rotating leadership (Davis and Eisenhardt, 2011), which highlight a less individualistic, self-adaptive idea of leadership. In these concepts, the focus shift from leadership by means of asymmetry to leadership by shared knowledge (Sander et al., 2015) and collective intelligence (Svobodová and Koudelková, 2011).

Heroic leadership and rivalling approaches of asymmetry and symmetry in leadership of change

While this was the case in the general leadership discussion, in the leadership of organizational change, this asymmetry could hibernate though. Clearly, two dominating approaches still exist. There is on the one hand the planned approach of change, which relies on a strong top management influence based on formal position power and a clear tayloristic distinction between head (formal management) and executing hand (the rest of the organization). In the relevant approaches like Kotter (1995) etc., a structural power base is an essential feature. On the other hand, there are emergent approaches of change, which mainly rely on self-organization (Luhmann, 1990; Wheatley

and Kellner-Rogers, 1996; Burnes, 2005) and collective self-adaptation (Weick and Roberts, 1993), reducing leadership to just a moderating feature of the emergent self-adaptation process without much deliberate impact on the strategic orientation of both, the individual change effort and the organization in general. Here, we clearly see a asymmetric and a symmetric idea of leadership. The asymmetric leadership approach comes close to the classic heroic and formally established leadership model, in the symmetric leadership, the modern, highly empowering, moderating and balancing idea of leadership is very present.

By comparing both leadership models, the classic asymmetric approach convinces by a strong decisiveness and a fast development of solutions are mentioned in the respective literature (Kotter and Schlesinger, 1979). The downsides are described as the dependence on only a few people influencing the decision-making process (restricted intelligence, being disconnected from the interfaces of the organization to its environment) and mainly difficulties in convincing the rest of the organization about the appropriateness of the developed solution. As in any other dilemma-tensions in organizations, the downsides of the one approach are the benefits of the other. The grass-rooted learning organization scores by a high support of developed solutions by the workforce, a highly elaborated solution developed by a self-steering group, facing on the dysfunctional side a long and complex way of decision-making, undermining quick application (Senge, 1990). Confronted by discontinuity, surprise and ambiguity, the top-down approach seems to be able to react faster with a lower quality of decision making, while the grass-root approach of the learning organization takes longer with a higher quality of the developed solution (Todnem By, 2005).

What both approaches somehow require but almost unreflectedly pre-suppose is the relation between leaders and followers. How essential this relation is demonstrates the Tango Argentino.

The Tango Argentino

The Tango, which belongs since 2009 to the world cultural heritage of the UNESCO, stems from the lower class suburbs of Buenos Aires, with first traits in 1880. There, different cultures melted under the conditions of high unemployment, poverty and a desire for a lost home. Africans, Gauchos from

the pampas and European immigrants expressed their desires and hopes by the Tango. By that means, so, the Tango itself represents the evolution and disruption of the Argentinean society across the last two centuries, it is an iconographic representation of the cultural mind and heart of Argentina (Nielsen and Mariotto, 2006).

Basic features and the unique handling of constrains

The Tango Argentino rests upon a clear and asymmetric positioning between the leader and the follower. The roles are clearly defined: one leads, one follows. At the same time, there are no standardized step- or movement sequences on how proceed the dance, the Tango is fundamentally improvised. „The heart of tango is not about learning figuras ... The accomplished dancer has far more freedom to determine directions and movements” (Dinzel and Dinzel, 2000: 235). Even the music does not determine the dancers to a specific rhythm. The dancers can interpret the music as they want, they can adapt to the rhythm and to double, to break it or to set steps off-beat, or chose the melody to follow. The improvisational nature of the Tango gives way to a remarkable feature. It belongs to the dances which is not a captive of the conditions in time, space, music and involved bodies. The Tango plays with all of these conditions and gives the dancers the utmost liberty. The dancers have the authority to even literally not to move while dancing, meaning to break, to stop and to pause, while still being in the dance. Therefore, the Tango is a synonym for a shifted perspective: ‘Stop following your restrictions, play with them, since you are not necessarily a captive, you can be the master of your limits.’ The Tango stands for the omnipresent plethora of alternatives, the dancers can chose to move on and for the enactment of otherwise restricting conditions. These features provide the dance with a tension for a passionate and energetic performance striving for mutual seduction and the mutual challenge of the capabilities of both dancers.

Asymmetry and role complementarity

The difference between leader and follower does not mean that one is dominating and the other one is obedient. Much more, the dance is an encounter of two equally relevant persons with separated though complementary tasks and skills. The dance is a play between the leader and a follower based on mutual respect and appreciation. Both meet on eye height and challenge each other. If both partners open up for

each other, and take the music as third partner into the encounter, something unique and special can emerge. It is an encounter which can impact both participants. This works by means of complementarity within an asymmetrically established relationship. Leading means to take clear decisions, to communicate them clearly and to avoid insecurity since this spills into the whole performance. The leading role includes to take over responsibility, the role of the follower includes to rely on the leader, to devote her/himself into the followership. This is not a passive execution of received “orders”. The follower must be very active. The follower is independent and able to stand her/his own axe in each moment.

The putative strength of the leader

Here it becomes clear that the power of the leader as such is challenged. The ambition to lead is an offer by the leader, the follower nonetheless needs to accept, there is always a risk of being rejected. The follower needs to confirm the offer of the leader. If this does not takes place, the dance interrupts, a break appears instead of a flow which defines the dance in the first place. The leader enacts his/her role only as long as the follower grants him this power. This vulnerability of the leader is enforced by the fact, that taking charge of failures is part of his role. This increases the pressure for the leader, given that it is in the leader’s hands to provide security and safety for the follower to perform. Accordingly, the follower needs to spill back safety to the leader. The follower has no interest in disclosing the failures of the leader since the follower has an interest in a strong leader. To let her/himself fall into the dance, the follower needs to trust the leader visibly. Both partners reduce fear and insecurity mutually and build upon the offers of the other to develop a strong relationship. In case of occurring insecurity of one dancers provides safety and trust for the other.

Indirect communication and the role of body language

Almost all communication between the dancers is nonverbal, subtle, and indirect. Cues and codes about directions, figures to be chosen, changes in tempi etc. are not necessarily provided by the right and left hands of the leader, but by touches of the legs, sere positions of the bodies in space and in relation towards each other and especially space not being taken. The latter is a clear indication of negative cues, where the absence of something, a missing of a straight cue or a body part gives instructions. This requires a highly

skilled body awareness to not only feel and observe one's own and the partners body, but the relative positions and the established gaps between both. Two different ways to communicate are applied, a direct with clear codes given by hands, arms or legs and indirect ones like absence and gaps to be filled. That opens up a much richer way to communicate, and to convert the richness of the selections possible at any time into the richness and the performativity of the dance. Additionally, the mastery of this twofold body language is the precondition for properly working mutual understanding. And it is a way to communicate by not talking, especially by not moving or even by moving away, essentially requiring to put oneself into the shoes and perspective of the other, to see the space he/she could move into.

Power struggles - the dark side of the Tango

An asymmetrical structure is always a power relation and depends on how power is applied. Independently from the weak constitution of the leader, "The tango is about power, the role of the dominant, the role of the subjugated, and the interplay between them. Power symbolism can be found in its lyrics, and its music, but most compellingly in its body motion. Tango kinetics reflect physical tension, in the dynamic balance between dependence and rebellion, between acceptance of the current power hierarchy, and defiance of it" (Nielsen and Mariotto, 2006: 34) Historically, and established by an orthodox though common Tango practice, the leader is supposed to dominate with clarity and force, the follower is expected to obey and execute, with devotion and beauty. Literally, the leader is supposed to give "orders" (Dinzel and Dinzel, 2000: 125). This however, is hardly acceptable for any follower. Against this power structure of the orthodox Tango, the follower has to oppose in order to save its own face as a competent, autonomous and creative human being. The power source of the follower is obvious: it is 'reverse controlling' (Luhmann, 1964) by means of body movement. How exact an order is executed, how far the body is in fact moved according to the leader's wish, is in full autonomy of the follower. By adapting the follower's body in deviation to the expectation, the follower can influence the variability of the leader to improvise and to define his next step. This can be done by means of blocking or sabotage. In this regard, it is a power play about utilizing the "zones of uncertainty" (Crozier and Friedberg, 1977) one dancer controls against the one of the

other. Deviation from the leader's expectation turns into a game about injecting insecurity into the perspective of the other. Especially the leader must interpret this as a challenge to his leadership position, requesting for an even stronger call to the follower to follow precisely. That quickly turns poisonous and supports mutual self-doubt, hesitation, preventing flow and performed brilliance. However, this battle can't leave the "sphere of contention" (Dinzel and Dinzel, 2000: 138), and it must not violate the idea of the central axis, which both bodies and the balance of the couple refer to. If one of both conditions is violated, failures of the couple become visible, if dancers do not risk to stumble and fall. If the battle remains within the rules of the dance "The observer can be transfixed by the seeming paradox, that a sense of unity transcends apparent conflict and independent action." (Dinzel and Dinzel, 2000: 22). Accordingly, an abuse of power can only be avoided by building the relationship upon mutual respect appreciation. If this is not given, conflicts and a loss of commitment including relevant knowledge are probable to occur.

Another design of the Tango asymmetry?

Contrary to the orthodox understanding of the role distribution in the dance, the origins of the dance display a much more collaborative and shifting way of leading and improvising. By connecting the understanding of the dance to its basic origins, Dinzel and Dinzel (2000) speak of the dance as a dialogue, requiring action and reaction by both the male and the female dancer. Without dialogue, the improvisational nature of the dance is undermined. This is not necessarily conflicting with the idea of the asymmetry between the leader and the follower. Contrary, it is re-designing the classic understanding of asymmetry as formal distinction of domination and obedience (Dinzel and Dinzel, 2000). The alternative understanding leads to an asymmetry in which three aspects are key:

- a.) A basic feature of a different design of the Tango comes by means of 'competent followership'. In this case the leader can totally rely on the follower, meaning the follower executes precise and safe, he/she resolves insecurities and doubts of the leader by his/her own account. The leader can then fully count upon the follower and can liberate him/herself from a control attitude towards the follower. Then the consciousness of the leader can switch from controlling and leading to

being creative, because the leader does not need attention for leading anymore (Spitzer and Bertram, 2013).¹ If there is a competent follower, the leader can shift attention from controlling to creating, releasing in the dance a fully new potential for performing as a pair.

- b.) The follower is entitled to react to the leader's impulses (i.e. musicality) by own creativity, influencing the dance in an own way (for general insights of the role of the follower see (Collinson, 2006). This already requires the openness of the leader and the willingness to listen actively to the follower, to in fact get changed by the follower, to adapt to the followers impulses and builds upon them. Here, the follower still acts in the role of the follower, following the basic role distinction, with enriched competences to act and take part in the dialogue of the dance.
- c.) The ownership of the leadership shifts between the two dancers. Here, it is about the capability of both dancers to follow and to lead. The basic complementarity in terms of mastery, expertise and capability turns into a pre-condition for a switching leadership.

These three options lead to the point that the one is leading, who is capable of doing. The capability of the leader remains the same: providing stability, reliability, clarity and – this is new – freedom to the follower to enrich the dance beyond a sheer embellishment of the leaders orders by giving own impulses. If someone can lead in this manner, followership especially under modern, equality-sensitive conditions becomes much more easy to accept and to apply. There is a reward of following, if someone is leading well. In this regard, the quality of leadership (meaning his capacity of leading and willingness to involve with the follower) determines the willingness to follow and to commit. Is the leadership quality low, an experienced and highly skilled follower will become quickly frustrated and reluctant to follow – and eager to take over leadership. Furthermore, if the ability to follow is high, the leader can reduce the amount of attention in leading the follower and can use this attention for developing and enriching the dance. Again, much depends on the openness of the leader. If the leader doesn't

¹ Spitzer & Bertram (2013) show in their study about the brain activities of musicians while improvising, that broad parts of frontal cortex are deactivated. He suggests that while improvising the executive control is suspended, which is necessary for creativity to strongly unfold.

take the input and/or the claim to lead from the follower as a threat of his/her status but as an offer for a creative play and dialogue, the dance can profit even more. This might pick up tendencies, the Tango already experiences in modern circumstances. Not only the existing visibility of the Queer Tango, where the roles are random and/or where only females or males dance together is an indication of such a development in the Tango. Already the changing self-perception of males might give way to these innovations: "Today, prototypical Tango man takes refuge in the dance hall, because his tango role carries more certainty than he finds elsewhere. Many male dancers believe that the Tango is an expression of power, but they also believe that while dancing it, they feel greater sensitivity, greater capacity to love, closer to the ideals of childhood, and vulnerability" (Nielsen and Mariotto, 2006: 27).

Accordingly, if both sides are willing and ready to expose vulnerability, a sound basis for mutual as much as individual development for both dancers and for a shifting kind of leadership is given, in a rather new way. If the relationship is developed to that stage, this mirrors in body behaviour. If the follower feels safe and can put him/herself totally into the hands of the leader, then the follower is so relaxed, that the lower jaw is relaxed too and leaves the mouth half-opened. This phenomenon is described in the voice training approach of Kristin Linklater (2014). A loose and relaxed jaw is a clear sign for openness in perception, emotions and communication. If this openness is not given, a tension remains in the tongue, the lower jaw and the lower belly, preventing a free flow of the breath, linked to a closing attitude towards the other. In this respect, a developed relationship in Tango as much as in leadership can lead towards openness, essential for high-quality improvisation and overall adaptation. It becomes visible in body language, the body remains a core impact factor in these interactional relationships.

Bringing leadership in Tango to leadership in change

By comparing the main tracks of the leadership-of-change literature with the features of the leadership in the Tango, four points become instantly and strikingly clear:

- 1) Mastering limits: follow or play your constraints

The dance is a striking example on how to rule any given constraints. Almost all other dances follow the time and space constraints resting in the rhythm of the music, the Tango

doesn't. It appreciates and recognizes these constraints, but it does not follow them, it plays with them, even being able to do the opposite of what the dance in fact is about: the Tango is able to stop and break at any given time, it can invert what the constraints provide. Transferred to leadership of organizational change, this example indicates how little alternation, deviation and innovation in the contemporary management of organizational change resides. Fundamental constraints of organizational change like shifting consumer needs and values, rapid technological changes, the striking impact of mass and social media and the ambivalent developments of socio-political indicators end up in the call to constant adaptation to it, like in the classic dances. How could a Tango-like approach to the constraints look like? The constraints of the dance appear in time (when: rhythm), space (where: distribution of dancers in the room) and social (who: who is the partner, experience & skills of each partner, size & weight of bodies). In terms of organizational change, the constraints are in time (when is/has the surprise happening?), content (what is the subject/focus of the changed reality?) and social respects (who is involved in triggering and solving the surprise?). With regard to time, change management could be much more skilled in playfully shift between pre-, during- and post-surprise activities, explicitly including non-reaction (no change, ignorance), interrupting certain activities (almost unimaginable: dance the break appearing as a stop) and, given a specific rhythm of the change occurrences: double or bisect the answer to this rhythm might provide a much larger scale to respond to time constraints. In terms of content (what is supposed to be changed?), random (unplanned, emergent) activities belong to the unknown tactics of change, as much as paradox activities (more of the same pathology). Different approaches for problem-identification, goal-definition and methodology are imaginable here. Finally the social aspect of change (who is how involved?) might raise questions about how to select the appropriate people, how to structure participative/instructive efforts of implementation etc. by thoroughly following the Tango metaphor, a full range of ignored, suppressed and unidentified ways to time wise handle constraints and triggers might be detected, providing a much more larger scope for action.

Contemporary strategies for managing organizational change strongly rely on a formally designed, rigid and cognition-based 'corset' of methodologies and activities. It

is mainly a somehow planning and control based approach, even in the rather emergent approach of the learning organization control and planning is included. Given the rigidities of planned change on the one hand and the fluid, ambiguous and partly random nature of external, environmental change, a clear disconnection between the formalized reaction to change and the generic nature of change becomes visible by studying Tango. The dance offers an improvised way to move forward, even when there is no external change relevant for the dancers. How the dancers develop the next step is important here. It is all about selecting the next move from a sheer variety of options, only restricted by the previous position of parts of the bodies of the dancers and the given space for the pair. The couple constantly adapts to their environment by only focussing on the moment of the moment and accepts to what this move in time and space might bring. There is no strategy. Here, the benefits of improvisation as such for organizational redesign and change (Weick, 1993; Pina e Cunha et al., 1999) come into play and offer change management a complete different approach of reacting and benefiting from external change. Improvisation is a way to adjust between the 'natural' non-linear occurrence of change and the organization in its process of becoming (Tsoukas and Chia, 2002).

Clearly, there are not many more powerful metaphors available for the development of contemporary change management, given the permanently perceived pressure to change and the rather rote-like blueprints to react. What is in the quiver of classic and modern change management are 'technical dances' (concepts and approaches), accepting the given constraints but not creatively playing with them. The Tango teaches how to change the mastery of constraints and conditions, based on the skills of improvisation.

2) Mastering (Re-Designing) asymmetry from direction/obedience to framed complementarity

The Tango helps to understand the benefit and the applicability of asymmetry in modern organizations if it is designed differently. Asymmetry may not be taken as the classic distinction of order and obedience but as the difference of role and competence. There might be differences in role definition, but this only becomes beneficial based on an equal set of mutually enriching, compensating and complementing capabilities and competences applied by leaders and followers artfully and in mastery. That may include the need of both, leaders and

followers to know the perspective and the skills needed to perform the other part respectively. The basis of a masterfully enacted asymmetry and the deliberating acquaintance with constraints is a solid relationship between the dancers, founded on the basis of mutual appreciation. The Tango is generated in the moment when the dancers experience the music and the respective partner in their cognitive, emotional and physical presence. The building of a strong, reliable and protective relationship is a core requirement in change leadership. This is the essence of a powerful relationship, far away from the political influencing tactics of current change leadership experiences.

The models for change leadership are divided between asymmetric top down (direction/obedience) and symmetric collaboration. The scientific discussion therefore has created a dilemma, in which a decision for one model always contains the reasons to later on shift to the other. Oscillation seems to be the answer. The Tango provides a third way. The dance applies a strict rule of asymmetry in the role definition between the dancers. That enables the couple quick decision-making, fast adaptation and the ability to move on without hesitation. This asymmetry is nonetheless based on the complementarity of the dancers' provisions and their equally developed skills. For change leadership includes not only a strong call for framed complementarity, but for a strongly developed relationship between both dancers. Structure (Asymmetry) and creativity (freedom of the follower & openness of the leader) require each other. The oscillation between both is essential, since only what is flexible can change. This flexibility is provided by the relation between the dancers, framed in asymmetry. The Tango shows impressively how important a strong formal structure can become, if it is properly enacted by a strong connection between those, who enact the asymmetric roles. Only then leadership can create a sense trust amongst the dancers, releasing passion, curiosity and creativity. Asymmetry then works like a final allowance to fly mutually. In this respect, we still call for the relevance of organization in its visible asymmetry, contrary to the plenty attempts of erasing it. The societal profit of organization is still given but widely ignored (Luhmann, 1994). The tango shows how asymmetry can remain instructive if based on a profound relationship building in organizations.

3) Failure handling by openness and willingness to be changed: how to get away from power games

Dancing as much as observing Tango is exciting, since by its improvisational nature, there is always the risk of failure. Accordingly, the proper handling of surprise like through failures between the dancers is key. Instead of attempting to avoid them, an appropriate handling is based on an acceptance of failures to occur, to perceive them actively and to employ them deliberately as source of information and inspiration. It is the sovereign handling of failures, which turns the dance into a fascinating performance, since it is this sovereignty that turns an unexpected failure into a new move, surprising the dancers and the audience. The same holds true for change leadership. The treatment of failure is key for a successful change. A change process consists fundamentally of failures, they are unavoidable. Accordingly, sovereignty in dealing with failure is essential for successful change. However, an attitude and a skill box on how to turn unavoidable failure into productive input is hardly available. Instead, leadership of change mostly is confronted with political issues. There is a clear dominance of political, informal and therefore subtle undermining processes. The Tango reflects these power structures and its 'dark side' very well. What a modern development of the dance might demonstrate, is how another way to connect between leader and follower, how a complementarity in skills combined with a shifting role execution between leading and following could overcome alienating power structures. If the leader's role includes the willingness and openness to listen to the followers creativity and suggestions, going even until stepping back into the following role if necessary, suppression could be removed to give full way to passion and creativity. That is in fact the end of the hero in the context of leadership and the macho in the context of the dance. Vulnerability is not only a term of a follower. Only if the leader is able to become more open and to turn him/herself vulnerable, a substantial development of the leader and the relationship can happen. Then vulnerability turns into a personal, interactional and systemic strength.

5. What to do?

To turn this a little more practical and more normative, we recommend the following moves:

1. Re-connect the intended change with the flux process of organizational becoming by improvisation! Clearly,

there is no other way than just to accept that the world cannot be planned. The discontinuous nature of change requires both planning and improvising. However, improvisation is much more than just a poor 'plan B', it is a professional alternative and complement to planning. It is enabling an organization to re-connect with its flux process of becoming and adapting. Improvisation furthermore helps to constructively manage fear and uncertainty in change processes and to approach discontinuity positively and beneficially. The core recommendation therefore is: Learn again to play and play with the constraints, conditions and the failures of your development! Take the offer to dance of your followers seriously!

2. Build your asymmetric roles on a profound dialogue between leader and follower! Asymmetry and role complementarity only become a strong tool if there is a mutual willingness to listen, to adapt to impulses from the other and to follow each other circularly. It is all about this circularity, about taking dialogue and appreciation seriously and to meet on eye height within asymmetric roles. Based on mutual respect and trust, both need to become visible and exposed, based on developed skills and experience in executing the leader's and the follower's role. Together with competence in leading and following, this enables both to suppress the tendency to control the own and the other's behaviour and to release capacity to unfold creativity. In this respect: Build competence, mutual confidence and mutual recognition to increase the amount of creativity and quick adaptation within the leadership relation!

3. Build inner strength! Based on that, a way to inner strength both individually and interactively is opened. Such a strength is much more powerful than control-based approaches, which unavoidably evoke fear and insecurity. Such strength needs the willingness to get changed by the other, to make oneself vulnerable, which is only based on a trustful and confident encounter. Then personal and systemic growth comes substantially in sight. In this respect: invest in making yourself vulnerable. It turns yourself and your system much stronger.

4. Finally, what the Tango metaphor teaches is: **Go looking at the world outside your management thinking box!** Especially Arts and organizational aesthetics (Linstead, 2000) contain a big deal of inspiration to overcome long existing obstacles in management science. Go playing. Go improvising through a joyfully messy world!

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Post-retirement Work: Among Academics

Preeti Tarkar, Somesh Dhamija, and Pawan Kumar Singh

A b s t r a c t

The purpose of this paper is to examine how teachers' attitude towards work affects their intention to continue working after retirement. The authors have hypothesized that job satisfaction, commitment to the organization, passion for work and relationship with co-workers affect the intention to work after retirement. Intention to work after retirement leads to life satisfaction of the retirees. Data for the study was collected through the survey instrument and was filled by 240 respondents. Data was analyzed using the PLS Structural Equation Modeling. The satisfaction level of the teachers towards their job has a significant effect on the intention to do the work after retirement. This study adds to the extant literature that working after retirement depends on the Job factors such as passion for work, affective commitment and close relationship with co-workers and attract the employee to do the work beyond age.

Key words : *Job Satisfaction, Intention to work, Life satisfaction, PLS-SEM*



Preeti Tarkar

Research Scholar
Institute of Business Management
GLA University, Mathura, Uttar Pradesh
preeti.tarkar_phd13@gla.ac.in

Dr. Somesh Dhamija

Professor
Institute of Business Management
GLA University, Mathura, Uttar Pradesh
somesh.dhamija@gla.ac.in

Dr. Pawan Kumar Singh

Professor
Indian Institute of Management
Indore, Madhya Pradesh
pawan@iimdr.ac.in

Aging populations around the world are increasing rapidly: owing to declining fertility, decreasing mortality, and most importantly increasing life expectancy. In the world, after China, India's elderly population is the second largest population. The aged person's experience of being older is also changing in tune with the changes in the values and technology. This population, which was 7.4% of the total population (2011 census,) is projected to 10.7% by 2021. On the basis of projection, the elderly population of India will surpass its population below 14 years children by 2050. The annual growth rate of the elderly in India is 3%, higher than the total population growth rate 1.9%. Three-fourths of the elderly population live in rural areas.

In recent times of aging and shrinking workforce, older employees, working beyond their official retirement age, are a necessity for organizations' functional capability. This necessitates that organizations should encourage the concept of work after retirement. After retirement, generally, people have time to pursue a better quality of life and they are free from family constraints.

Retirement is of different kinds: regular, early, voluntary, or compulsory. Some elderly retire voluntarily, often before the age of normal retirement. They do so because of ill health or owing to their desire to spend the remaining lives doing things more meaningful to them. Studies on teachers suggest that heavy workloads, great stress, and the work environment have contributed to experienced teachers leaving their profession (Bano and Agarwal, 2016).

This paper examines the job related factors that affect the job satisfaction of the persons at workplace and demonstrates post-retirement desire of the retiree to continue the work or discontinue the work.

This research paper has been categorized into segments. The first segment covers intention to work in retirement, life satisfaction during retirement and job satisfaction and their dimensions. The second segment covers the theoretical background of the research and hypotheses development, including the conceptual framework. The third segment comprises the methodology of the research, including measures, samples, and tools of data collection. The fourth segment carries the analyses of the data and discussion of the results. Finally, conclusions and managerial implications of the findings are presented, followed by the limitations and future prospects for study.

Literature Review

In recent times, retirement age and nature of retirement are important public debatable issues (Shultz and Wang, 2011; Ekerdt, 2009). According to Phillipson (1998) over the past fifty years, economic and social factors have led to reshaping the concept of retirement. Kumar and Chandrashekhar (2013) say that retirement doesn't mean that retired people don't have the capacity for doing further physical or mental activity. On the other hand, a quite number of people after retirement proceed with some kind of work to stay dynamic (Fasbender, Deller, Wang, and Wiernik, 2014).

According to Hulme (2012), retirement is both a significant major transition in life and a period of disengagement from work. The conventional tripartite model of education-work-rest outlines an edge between "work" and "rest. The concept of role of successful aging and research on the role of age in the workplace, is growing very fast (Zacher, 2015; Truxillo, Cadiz, and Hammer, 2015).

Retirement in the academic context

From the review of literature on academics' retirement, it is found that in the early periods, academic staff generally welcomed early retirement. A number of studies were conducted on the experiences of retired academics (Dorfman, 1985, 2000, 2009; Tizard, 2004; Tizard and Owen, 2001). Some studies on academics show that many academicians undertake academic and professional activities beyond retirement (Tizard and Owen, 2001; Dorfman, 1985).

The global trend of 'managerialism' and 'marketization' in the education sector has led to academic work standardization and bureaucratization. There is a considerable change in the environment of higher education (Parker and Jary, 1995). The academic roles with traditional unity between research and teaching are facing challenges (Harley et al., 2004). The opportunities for senior academics are less and more limited. However, the status of emeritus is very common and restricted. In universities only few of selected grades of readers and professors are available (Thody, 2011). As such, "retirement vs employment" may have had less noteworthiness than in other more conventional segments. The concept "emeritus" (alluding to the previous title of an office, having resigned yet permitted to hold the title as a respect) is most frequently utilized as a part of its academic setting. It typifies one route in which retired persons can remain individuals in the group of people.

Theoretical Background

There are a number of theories mentioned in the literature review on research on retirement that are most useful for interpreting retirement timing. Feldman and Beehr (2011) showed a three-phase model of retirement in which they described a number of theories related to when and in what form people are likely to retire. These include social-normative theories, life and career stage theories, person-environment fit theory, disengagement theory, rational-economic and motivational-instrumental theories (Feldman and Beehr, 2011).

The life course perspective is relevant to retirement timing, as research has evolved to focus on time, context, and process (Madero-Cabib et al., 2016). Continuity theory indicates that individuals seek to maintain continuity or stability in the

types of activities, behavior, and relationships across their lifespan (Atchley, 1989). Accordingly, continuity theory provides the context to understand the adaptive choices underlying when and how older workers undergo transition to retirement. Person–environment (P-E) fit theory refers to the match between individual worker characteristics and characteristics of the work environment (Feldman & Beehr, 2011) and has been offered as an additional theory for explaining retirement preferences and behavior (Feldman & Beehr, 2011).

Post Retirement Work

It is manifest that the global populace is aging and there is expanding interest of the work power support in the most recent decade. Therefore, it prompts the expanding significance of the post-retirement employment (Deller and Pundt, 2014). Cahill, Giandrea, and Quinn (2013) notice that in numerous nations on the planet, having an increasing trend of post-retirement livelihood, such as Japan, Austria, the United States, Finland, and the United Kingdom. As per the Zhan, Wang, Liu, and Shultz (2009), older people find to be healthy and happy who keep on working after retirement contrasted with the individuals who don't keep on working after retirement.

As enthusiasm for comprehension of the antecedents and consequences of work after retirement is rising. Hesketh, Griffin, Dawis, and Bayl-Smith (2015) state that there is some non-work related activities for retirees which are crucial for the adjustment.

Kim and Hall (2013) and Wang and Shi (2014) state that Post-retirement employment is a late career development stage, which incorporates self-employment and part-time jobs (Beehr and Bennett, 2015; Shultz, 2003). Post retirement employment research has already revealed diverse predecessors of employment after retirement, e.g., demographic attributes, family-related variables, retirement planning activities and job-related psychological variables (Wang and Shi, 2014).

Predictors of Job Satisfaction

Literature on retirement indicates that prominent researchers preferred to use job-related factors extensively. Undeniably, predictability of intention to work after retirement is affected by job related attitudes and

characteristics of the job (Gobeski and Beehr, 2009, Lo and Chan, 2014). Among the different job-related predictors affective commitment, passion for work, intimacy with co-workers, and job satisfaction were examined in this research. Intimacy with co-workers, commitment, and passion for work impact career attitudes were related to attitudes towards the work. On the premise of Topa, Moriano, Depolo, Alcover, and Morales (2009) study job satisfaction was negatively associated with the decision and planning for retirement. Particularly in previous retirement studies, Wang et al. (2008) verified that non-career bridge employment and career bridge employment were optimistically related to job satisfaction. In 2009 Gobeski and Beehr conducted study on US retirees: "US retirees relate back to the past also confirmed that job satisfaction of prior job was related to Career Bridge than non-career bridge job." These obvious particulars underpin that individuals have the tendency to conserve the suitable and satisfying role for work upon retirement which is mentioned in the role theory. Work intentions (specifically an intention of a person to do the work in a job which is similar to the previous one, doing that part-time, full time, or self employed) were predicted by the persons' attitudes toward work. In the previous couple of years research has indicated workers' employment history as an essential indicator of retirement timing and for the work's intention after retirement.

A person satisfied with the previous work, presently should work after retirement in a similar job. Similarly a person who wants to do a job, not satisfied with his previous work, should work in different jobs after retirement.

The Ajzen's model was utilized by Warren (2009) for predicting the intention to work after retirement in which he mentioned (in case of retirement) job satisfaction as a predictor of intentions. According to Warren's study, people at work positively related to the work planned after retirement. Taylor and MacFarlane Shore (1995) conducted the same study before and found a similar relationship between post retirement work and organizational commitment. Peoples' passion for work positively affects the attitude towards the work (Warren, 2009). Kalokerinos, von Hippel, and Henry (2015) investigated the role of job attitudes as factors affecting workers' interest in part time employment. There was a significant relation between an interest in extending employment within the same

organization beyond retirement and attitudes towards job. Employees who reported higher levels of job involvement and affective commitment were more likely to express interest in employment after retirement.

Bridge employment

The literature on bridge employment is still quite new, and a number of fascinating theoretical advancements have been made in this area. Bridge employment is characterized as the model of human capital contribution demonstrated by older employees as they depart from their jobs and post retirement, employee moves toward a complete withdrawal from employment (Shultz, 2003). As indicated by Feldman (1994), bridge employment is self-employment, part-time job or short-term employment after the completion of permanent employment and prior to commencement of permanent retirement. Bridge employment after retirement can be of two types: post retirement employment with the same employer in the same industry or field and post retirement employment in a different area with a different employer (Feldman, 1994; Kim and Feldman 2000, Shultz, 2003). Fisher, Chaffee and Sonnega (2016) have further analyzed bridge employment where retirement is progressively differed as the potential of bridge employment increases with some workers deciding not to retire before their retirement date. Bridge employment makes a significant impact on the decision of workers to retire from their job vis-à-vis permanently exiting the workforce. Phased and partial retirement work arrangements represent alternatives to traditional sudden retirement; however, the vast majority of the general population discontinue at retirement (Bass, Caro, and Chen, 1993). However, many workers end their careers gradually through phased retirement schemes, measured or partial retirement involving part-time work, and through the use of bridge jobs, which can be utilized with either method (Ruhm, 1990). Workers utilizing phased retirement are more likely to decide to continue working part time than others.

There are less such plans officially offered, though frequently, workers are allowed to proceed with them informally. While the lack of available part time positions may stop numerous retirees, they may find other ways to go through a phased retirement.

Life Satisfaction:

Life satisfaction refers to a cognitive, judgmental self-assessment of life as a whole (Diener, Emmons, Larsen, and Griffin, 1985). Our sense of accomplishment and satisfaction towards life reflects our estimations of numerous different aspects of our lives, includes wealth, mental health, physical health, social relationships.

Life satisfaction is a state of mind and it relies on the view of the individual and his status to acknowledge the things. Retirement from the employment has most likely a mental effect on the individual and presumably raises the way toward aging. Various types of socio-psychological problems arise in individuals due to reduced income, reduced health and the sudden break from a particular kind of occupation. As individual starts a retired life, critical changes are likely to occur in the person's immediate environment. In this period of alienation, the attitude of retired person towards the family members change and family members also behave differently with him (S. Mohanthy). Most of the times, the concept of satisfaction towards life has been used to understand the feelings of retirees in terms of happiness and unhappiness. Due to the change in the occupation and socio-economic status within and outside of the family, it is difficult for the retirees to continue same habits of recreation after retirement. In order to be healthy and active, most of the elders have expressed their involvements in social activities. However, after retirement, expressions and feelings of retirees differ because of different retirement plans (Kumar and Chandrasekhar, 2013).

Objectives of the study

Objectives of the study include:

1. To analyze the relationship of job related factors which affect the job satisfaction,
2. To establish a relationship between the job satisfaction and intention to work after retirement,
3. To find out the relationship between job satisfaction and life satisfaction, and
4. To identify the relationship between the intention to work after retirement and life satisfaction of retirees.

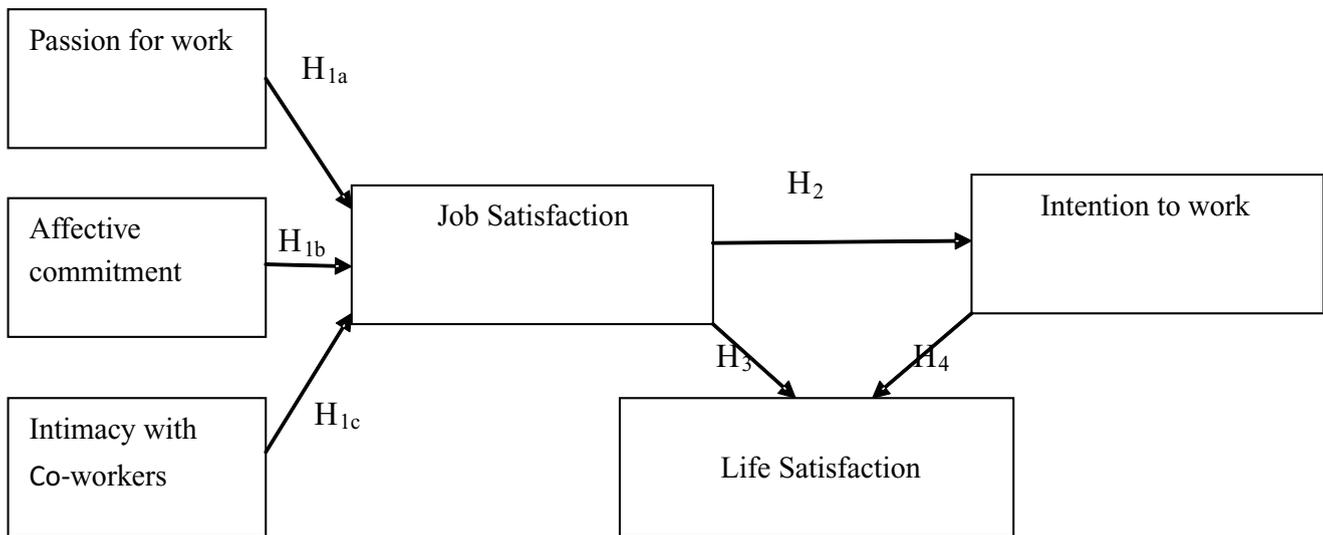


Figure 1

Source : by the author

Conceptual Model

Hypothesis development

Peoples’ attitude towards work is formed by the various factors such as intimacy with co-workers, affective commitment and passion for work. Intimacy with co-workers positively affects the person’s attitude towards work (Warren, 2009). Adams and Beehr (1998) opines that one who has a higher commitment to the organization and job satisfaction would have less intention to take full retirement.

H_{1a}: Passion for work has a significant effect on the job satisfaction.

H_{1b}: Affective commitment has a significant effect on the job satisfaction.

H_{1c}: Intimacy with co-workers has a significant effect on the job satisfaction.

Morales et al. (2009) indicated that job satisfaction was negatively associated with the decision to retire. In previous retirement studies, Wang et al. (2008) verified that non-career and career bridge employment were positively related to the job satisfaction.

H₂: Job satisfaction has a positive effect on the intention to work after retirement.

Especially, in the case of professionals, participation in bridge employment should be positively related to

retirement satisfaction and life satisfaction (Bradford, 1979; Sonnenfeld, 1988; Kim and Feldman (2000) identified a positive relation between job satisfaction and life satisfaction.

H₃: Job Satisfaction has a significant effect on the life satisfaction.

People’s intention to closely tie with their employment should be related to life satisfaction. It is often assumed that work after retirement, in the form of bridge employment is positively related to psychological well-being. (Feldman, 1994, Kim and Feldman, 2000).

H₄: Intention to work after retirement has a significant effect on the overall life satisfaction.

Measure

Measurement instrument constructed for this study was based on review of the literature and objectives of the research. Initially for checking the instrument’s validity, pilot testing was conducted by the researcher on the sample size of 35. The instrument used in this study was divided into four parts.

Demographic information: Demographic information was collected from the respondents related to gender, age, marital status and education.

Job Satisfaction: The questionnaire contained the items related to the job satisfaction. A well established scale was

used for measuring the job satisfaction which was given by the Fields in 2002 and it was modified according to this study in Indian context.

Passion for work: Items for measuring the passion for work was taken from the I love my Job Scale (Inness, 2006).

Affective commitment: Four items were adapted from the scale I Love my Job (Inness, 2006) Scale for measuring the affective commitment.

Intimacy with co-workers- Items were adapted from I love my Job Scale (Inness, 2006) for measuring the intimacy with co-workers.

Life satisfaction: This was measured by four questions. In order to measure life satisfaction a well established scale Satisfaction with Life which was given by (Diener, Emmons, Larsen, and Griffen, 1985) was used and it was modified according to this study.

Intention to work: intention to work in the same profession was measured by three questions which were related to the post retirement activities and intention to work in different profession was measured by the three items. All these items were used by Warren (2009) in her study which yielded reliability.722 reliability; it is modified according to this study.

For measuring all constructs, a five-point rating scale ranging from strongly disagree (1) to strongly agree (5) was used.

Data Collection

In order to test the hypothesis and objectives of the study, a survey questionnaire was prepared, intended for the retired teachers and professors. Questionnaire was distributed to the 280 respondents. 259 filled questionnaires were collected and among them 240 questionnaires were used in this study.

Sample Summary

The responses collected through the questionnaire survey were 240 in which 208 (86.7%) male and 32 (13.3%) female

by gender. On the basis of age group data can be classified as 72 (30%) comes under the 61-65 age group, 84 (35%) were aged 66-70, 58 (24.2%) belonged to aged 71-75 and 26 (10.8%) were 76-79 years old. Regarding the marital status, majority of the respondents were married (84.7%), followed by widowed (13.6%) and rests were single. Respondents can be classified on the basis of education level, majority of the respondents had post graduation (28.3%), followed by post graduation with PhD (21.7%), graduation (20.8%), Intermediate (19.2%) and high school (10%).

Data Analysis

In this Study, for data analysis, Partial Least Square regression (PLS) Path Model was used to test research hypothesis. Partial least squares (PLS) path modeling is a technique which is widely applied in social science and business research. It is a variance-based structural equation modeling (SEM) technique. PLS is a formidable statistical tool for new technology research. It has an ability to model composites and factors and PLS Path Model is a technique which can evaluate Inner or Structural Model representing path and explanatory power of variable and measurement or Outer measuring a validity of variable and it is based on principal component analysis that deals in total dispersion and stands for structural equation model.

Measurement model analysis

In order to analyze the measurement model Confirmatory Factor Analysis (CFA) was conducted. On the basis of analysis of measurement model results were derived and the values of discriminant validity, internal consistency and convergent validity were evaluated and suitability of them was also identified.

Convergent validity

Convergent validity can be grasped through the reliability of the individuals measuring items. It refers to the degree to which two measures of constructs that theoretically should be related. The value of standardized loading values should be .7 ideally, and .6 at minimum.

The result of Confirmatory Factor Analysis (CFA) is shown in below table. The values derived from the analysis shows the Convergent Validity.

Table No. 1 : Confirmatory factor analysis

	Affective commitment	Intimacy with co- worker	Job satisfaction	Life Satisfaction	Intention to work	Passion for work
AC1	0.740	0.297	0.336	0.130	0.217	0.413
AC2	0.830	0.499	0.409	0.204	0.005	0.214
AC3	0.814	0.443	0.434	0.192	0.155	0.400
AC4	0.737	0.439	0.365	0.191	0.115	0.486
ITW1	0.088	0.054	0.084	0.046	0.791	0.087
ITW2	0.111	0.196	0.055	0.073	0.779	0.126
ITW3	0.112	0.001	0.046	0.010	0.713	0.034
ITW4	0.014	0.077	0.125	0.058	0.795	0.027
ITW5	0.046	0.068	0.012	0.083	0.702	0.071
ITW6	0.004	0.131	0.134	0.003	0.709	0.051
IWC1	0.364	0.796	0.449	0.165	0.065	0.470
IWC2	0.477	0.735	0.499	0.183	0.019	0.374
IWC3	0.473	0.862	0.221	0.247	0.031	0.491
IWC4	0.442	0.742	0.352	0.240	0.055	0.209
IWC5	0.489	0.842	0.471	0.261	0.027	0.455
IWC6	0.450	0.806	0.388	0.260	0.016	0.434
IWC7	0.443	0.708	0.459	0.248	0.039	0.460
JS1	0.473	0.459	0.817	0.274	0.022	0.387
JS2	0.489	0.373	0.777	0.217	0.033	0.404
JS3	0.213	0.459	0.770	0.166	0.214	0.457
OLS1	0.171	0.192	0.221	0.766	0.069	0.249
OLS2	0.173	0.267	0.250	0.865	0.068	0.267
OLS3	0.213	0.263	0.269	0.888	0.049	0.298
OLS4	0.219	0.256	0.176	0.790	0.026	0.273
PFW1	0.492	0.417	0.352	0.308	0.065	0.878
PFW2	0.368	0.381	0.410	0.205	0.007	0.796
PFW3	0.394	0.316	0.426	0.215	0.019	0.767
PFW4	0.384	0.480	0.451	0.305	0.142	0.864

As from the Table No. 1 all the measuring items show the value .7 or above, thus this measuring model secure convergent validity and all items are valid to measure.

Internal Consistency

An internal consistency is a level of validity in which a latent variable set of observed variables reflects latent variable and

it was analyzed by Average Variance Extracted (AVE), Cronbach's Alpha and composite reliability. Generally, it has reliability if the value of cronbach's alpha is 0.6 or above, AVE Value it should be .5 or above and for Composite Reliability the value should be .7 or above.

Table No. 2 : AVE Value

	Cronbach's Alpha	rho_A	Composite Reliability	Average Variance Extracted (AVE)	R Square
Affective commitment	0.788	0.798	0.862	0.611	
Intimacy with coworkers	0.886	0.891	0.911	0.597	
Job satisfaction	0.694	0.695	0.831	0.621	.538
Life Satisfaction	0.846	0.854	0.897	0.687	.118
Intention to work	0.805	0.861	0.852	0.504	.049
Passion for work	0.819	0.854	0.880	0.649	

As from the table no. 2 the values of cronbach’s alpha are above from the .7 and composite reliability for all variables were greater than the .7. The values of AVE were above than .5 these all shows the Internal Consistency of the variable.

Discriminant Validity of Latent Variable

Discriminant Validity shows that variables are separate to each other it is a level discriminate a concept of a specific latent variable from a concept of other latent variables. In this study, it is evaluated with the two following conditions

(Gefen and Straub, 2005). First, it secures discriminant validity if the values are higher than the cross loadings in other factors and second, if it utilizes a square root value of mean dispersion extracted value of all the extracted variables than it has a discriminant validity. To analyze the Discriminant Validity in a general manner the value of an AVE square root value should be higher compared to the correlation coefficient .7 or above.

Table No. 3 : Discriminant validity of Latent variable

	Affective commitment	Intimacy with Co-worker	Job satisfaction	Life Satisfaction	Intention to work	Passion for Work
Affective Commitment	0.781					
Intimacy with Co-worker	0.582	0.772				
Job Satisfaction	0.624	0.590	0.788			
Life Satisfaction	0.534	0.696	0.579	0.829		
Intention to Work	0.570	0.618	0.587	0.642	0.703	
Passion for Work	0.581	0.589	0.649	0.628	0.571	0.806

From the table no. 3 it is clear that the diagonal axis which shows the AVE square root values of correlation coefficient are greater than the .7 which indicates the discriminant validity.

Table No. 4 : Summarized Results of the Hypothesis Verified

Hypothesis		P-Value	T- statistics	Adopted/Rejected
H1a	Passion for Work → Job Satisfaction	.000	6.019	Adopted
H1b	Affective Commitment → Job Satisfaction	.000	4.725	Adopted
H1c	Intimacy with Co-workers → Job Satisfaction	.001	3.468	Adopted
H2	Job Satisfaction → Intention to work	.032	2.154	Adopted
H3	Job Satisfaction → Life Satisfaction	.000	3.867	Adopted
H4	Intention to work → Life Satisfaction	.162	1.401	Rejected

[Hypothesis 1] It is clear from the table that the hypothesis 1a is accepted. There is a significant effect of passion for work on the job satisfaction. The value of t is significant at the level of .05.

[Hypothesis 1b] it is verified from the table the value of t is significant at the .05 significance level. So there is a significant effect of the affective commitment on the Job satisfaction.

[Hypothesis 1c] there is a significant effect of the co-workers intimacy on the job satisfaction. Hypothesis is accepted at the significant level .05.

[Hypothesis 2] Resulting from the hypothesis verified that the value of t is significant at the .05 level of significance, so hypothesis 2 is accepted. There is a significant effect of job satisfaction on the intention to work.

[Hypothesis 3] It is resulting from the table that the hypothesis 3 is accepted. There is a significant effect of job satisfaction on the life satisfaction. The value of t is significant at the level of .05.

[Hypothesis 4] there is no enough evidence to accept the hypothesis 4.

Discussion

From the table no. 4 it is clear that passion for work have a significant effect on the job satisfaction of the Person. Similarly, if an employee has a strong

commitment to the organization and it leads to the job satisfaction and at the workplace people have close relationships with the co-workers or colleagues, it also affects the satisfaction of a person towards his job. Job satisfaction has a significant relationship with the intention to work, so people who are satisfied with his job will be interested to do work after retirement. Job satisfaction has a significant effect on the life satisfaction, so is a good predictor of life satisfaction. Intention to work does not significantly leads to the life satisfaction. It is not a predictor of life satisfaction. SRMR value for the model was .087 which was less than .1 and the value of chi square was 1492.715. These values show the model fitness.

Managerial Implications

There are several theoretical and practical implications of this research. Theoretically, this research relates to the life satisfaction of the retired teachers of northern India. Practically, this research provides the mindset of retired academicians to indulge in work after retirement either on a part time or full time basis for fulfilling their social needs. In many aspects academic jobs are still attractive. Older employees are doing well beyond retirement, It is evident from the few institutions and from universities. Universities may have justified how older staff can effectively participate in academic work.

It is beneficial to the employees who are not yet retire, but in the process of retiring, to identify the various factors which affect satisfaction after the retirement. It proves that the job satisfaction of a person is an important aspect for life satisfaction.

Limitations

The study has certain limitations. It was difficult to measure the number of independent variables to find job satisfaction of the retirees. Only few variables are used for measuring the job satisfaction and intention to work after retirement. More variables can be added and can be tested with various other statistical tools. In this study, data were collected from the single occupation and limited number of respondents was considered which restricted its generalization. Further studies can be done on the larger sample of different occupations. Due to time and fund constraints, this study was restricted to the western U.P. and NCR only.

Conclusion

Retirement denotes the boundary between rest and work and it is thought to be a noteworthy life move. In reality, the biggest gathering of retirees can be classified as individuals who did not wish to proceed with any significant working association with their university post-retirement. Notwithstanding, retirement seems to more complex and truth of complexities was shown by this study among the sample of academic staff. A more multifaceted position towards retirement is taken by the significant minority. The retirement move joins unique strands including work and retirement. A lot of research studies have been conducted in foreign countries but in India, retirees are untapped human resources and it is a new area of research. Presently, 8.3% of the Indian population are 60 years of age and above (Census, 2011); life expectancy of the population is increasing so the importance of post retirement employment is, in turn, increasing. Intention to work after retirement is positively led by the future prospects and is also affected by the family support, friends support and special person support. All these factors affect intention to work after retirement and life satisfaction. Moreover, there is large scope for further research in this area.

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Six Sigma Deployment in HR: Enhancing Competitiveness

Pankaj M. Madhani

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Six Sigma is a disciplined, quality approach and philosophy for eliminating defects in any process – from manufacturing to transactional and from product to service. Six Sigma is flexible enough to be applied to different challenges throughout business and organizations can use it in diverse areas such as HR. Six Sigma deployment in HR helps in its reengineering by increasing the speed, quality and efficiency of HR services. Six Sigma deployment in HR is important for overall performance and growth of business. This research provides HR process improvement steps in terms of efficiency and effectiveness, develops various frameworks for its successful implementation and document benefits of Six Sigma deployment in HR with various case studies.

Key words : HR, Six Sigma, TQM, HRM practices, DMAIC, Competitive advantages



Dr. Pankaj M. Madhani

Associate Dean and Professor,
ICFAI Business School (IBS)
IBS House, Opp. AUDA Lake
Science City Road, Off. S.G. Road,
Ahmedabad – 380 060, India,
pmadhani@iit.edu

In this highly competitive environment every functional areas of an organization needs to perform better, faster and cheaper, to keep the company ahead of the competition. In this context, human resource (HR) function is no exception as more cost effective and streamlined HR processes will create value for the organization, instead of just being a support function for the management. By aligning HR processes and scientifically building human capital, HR can contribute significantly to the organization's effectiveness and competitiveness (Becker and Huselid, 1998). Effective and efficient HR practices will streamline efforts of various functional departments in the organizations and thus increase the overall customer value. Six Sigma is well suited to contribute to and support these efforts of the organizations due to its focus on problem identification, process improvement, and its emphasis on the customer. Six Sigma aims to reduce variation in manufacturing and business processes and was adopted by a large number of companies in the 'Fortune 500' list with a view to make measurable improvements and savings based on evidence.

Six Sigma is a data-driven improvement methodology that emphasizes defect prevention over defect detection by

focusing on improving process inputs to improve process outputs and view all work as processes that can be defined, measured, analyzed, improved, and controlled (DMAIC) (Benbow and Kubiak, 2005). Six Sigma is a disciplined, quality approach and philosophy for eliminating defects in any process – from manufacturing to transactional and from product to service. Six Sigma has been applied to different challenges throughout business and organizations also used it in diverse areas such as HR. Six Sigma deployment helps in the reengineering of HR by increasing the speed, quality and efficiency of its services.

2.0 Literature Review

Six Sigma is a philosophy as well as strategy used by organizations for systematic problem solving. Six Sigma is a total quality system developed by Motorola, a US based company to identify tools, methods and best practices for generating innovation and driving revenue growth (Creveling et al., 2006). Motorola and GE have integrated Six Sigma so well into the corporate culture that it can be considered part of the DNA of the company. Six Sigma is a powerful strategy that enables companies to use simple and powerful statistical methods to drastically improve their performance (Nabhani and Shokri, 2009). Six Sigma based methodology is used to reduce cost of poor quality by improving already existing processes, reducing costs, eliminating defects, raising customer satisfaction and significantly increasing profitability of organizations (Tong et al., 2004).

Six Sigma offers organizations a statistical toolkit that, when applied, results in a more successful and profitable organization (Pande and Holpp, 2002). Six Sigma focuses on variation and defect reduction (Kumar et al., 2009; Naslund, 2008), process improvement (Lee-Mortimer, 2006; Buch and Tolentino, 2006), customer satisfaction and financial enhancement (Kumar et al., 2008a). Six sigma is described as a business excellence strategy (Antony et al., 2007); customer-driven (Nakhai and Neves, 2009), a project-driven (Assarlind et al., 2012) or a business-driven (Savolainen and Haikonen, 2007) methodology, which focuses on decision making based on statistical and non-statistical tools (Manville et al., 2012), to lead towards improving the organization's product, process and service (Savolainen and Haikonen, 2007) or financial performance (Nakhai and Neves, 2009).

Six Sigma is a business improvement program that targets process variation. It has been frequently applied in

manufacturing through improving processes (Montgomery and Woodall, 2008). Tylutki and Fox (2002), empirically studied the Six Sigma implementation to improve the feeding system of a dairy farm. Krishna et al., (2008) studied a case study illustrating how a multinational Indian corporation was able to successfully implement Six Sigma principles to improve its manufacturing operations. Six Sigma problem-solving methodologies in manufacturing process was studied by Kumar et al., (2007) to identify the parameters causing casting defects and to control these parameters. Six Sigma methodology was also applied to specific case of thermal power plant for conservation of energy (Kaushik and Khanduja, 2008). They implemented Six Sigma project recommendations to reduce the consumption of demineralized (DM) make-up water from 0.90 to 0.54 percent of maximum continuous rating (MCR) resulting in a comprehensive energy saving of INR 0.305 million per annum. Kumar and Sosnoski (2009) studied the potential of Six Sigma in realizing the cost savings and improved quality by using the case study of a leading manufacturer of tooling.

Using Six Sigma methodology, quality management can be employed in supply chain management (SCM) to improve the performance of various issues in the whole supply chain network (Wang *et al.*, 2004). Six Sigma does have something novel to offer organizations over the contribution of existing approaches to supply chain improvement (Knowles *et al.*, 2005). Wei and Yi-zhong (2013) proposed a framework based on Six Sigma metrics to measure and improve supply chain performance. The deployment of Six Sigma in the manufacturing and supply chain arena has led to next-generation supply chain solutions (Keene et al., 2006; Yeh et al., 2007). The impacts of aligning supply chain and quality management strategies with manufacturing goals and business performance have been investigated by Kanji and Wong (1999) and Tan et al., (1999). According to Wang et al., (2004), improving the quality of all supply chain processes leads to cost reduction, improved resource utilization and improved process efficiency. Yeung et al., (2005) and Yeung (2008) have studied quality-based supply chain strategies. Six Sigma metrics has been used as a framework for evaluating and benchmarking the performance of supply chain (Dasgupta, 2003).

Researchers have emphasized the importance of the concept of Six Sigma as an effective methodology for monitoring and controlling supply chain variables (Yousef *et al.*, 2008). Six Sigma has been applied in the context of supply chain design

to analyze mitigation of container security risk (Kumar et al., 2008c). Chang and Wang (2008) presented a case study to show the benefits of Six Sigma improvement model on replenishment forecasting. According to Breyfogle (1999), reduced cycle time, superior customer delight, decreased errors, elimination of wasted effort, improved transactions, and continuous improvement are a few deliverables achieved from deploying Six Sigma. Liu (2006) offered an application of Six Sigma to reduce cycle time and defects in clinical report entry. Nabhani and Shokri (2009) used a case study to highlight reduction of the delivery lead time with the implementation of the Six Sigma methodology. Chang *et al.*, (2012) applied the Six Sigma to improve the performance of the production planning procedures.

Does et al. (2002) conclude that Six Sigma can be applicable in non-manufacturing contexts with minor adaptations. According to Mehrjerdi (2013), Six Sigma is not only for manufacturing, but any process where an opportunity exists for error and hence can be used in diverse business areas to improve on time delivery; reduce cycle time for hiring and training new employees; improve sales forecasting ability; and improve quality of customer service. Motorola, GE and Honeywell are some of the companies that have utilized the Six Sigma methodology beyond production and integrated those principles throughout the business operation (Pande et al., 2000). Li et al., (2008) studied a specific case on implementation of Six Sigma approach to improve the capability of the solder paste printing process by reducing variations in thickness from a nominal value. A case study on improvement of the Sigma level at the screening process, which is regarded as the most critical process in printed circuit boards (PCB) manufacturing was studied by Tong et al. (2004).

Lean and Six Sigma are seen as complementary process excellence methodologies (Salah et al., 2010; Shah et al., 2008) and the tools and techniques are often rolled together in order to maximize the gains from initiatives and sustain it. Lean Six Sigma implementation has shown that the average patient waiting time and variation in waiting times in an Indian super specialty hospital have been reduced by 50 and 40 per cent, respectively. This has resulted in significant patient satisfaction and the overall patient satisfaction score within the pathology department has been increased by over 50 per cent in the subsequent years (Gijo et al., 2013). Taner et al., (2007) studied five case studies in healthcare to show the performance improvement accomplished by Six Sigma presenting a road-map for problem solving and

service/process improvement. The research outcome showed that the healthcare organization gained a greater ability to address challenges across the system; maximized resource utilization; reduced redundancies, waste and rework; diminished bottle-necks related to scheduling; and improved working conditions for healthcare personnel. The findings showed that healthcare organizations are able to increase their market share in the long run after Six Sigma implementation. Dreachslin and Lee (2007) designed a case on application of Six Sigma techniques in determining the effectiveness of diversity initiatives in healthcare management in the USA.

Six Sigma is a powerful business strategy that yields a dramatic reduction in defects, errors, or mistakes in service processes (Antony, 2005a, b). Kumar et al., (2008b) presented a case of implementation of the Six Sigma approach for improvement in service system by a major consumer electronics and appliance retailing company in the USA. Six Sigma benefits are related to various areas such as reduction in process variability, increase in profitability, reduction of operational costs, increase in productivity, reduction of customer complaints and improved sales (Antony et al., 2007). Chen et al., (2005) presented a case study in context of automobile industry in Taiwan. The study used Six Sigma to measure the performance of customer requirements.

Six Sigma is a powerful methodology developed to accelerate improvement in service quality by focusing relentlessly on reducing process variation and eliminating non-value added steps or tasks (Kwak and Anbari, 2004). Six Sigma is gaining recognition not only in a product and manufacturing environment but also in transactional activities. Six Sigma can and should be applied to sales and marketing processes with the ultimate goal being customer satisfaction (De Mast and Bisgaard, 2007; Reidenbach and Kenett, 2009). Morgan (2006) has identified three key elements in achieving Six Sigma performance related directly to the customer: focus on the customer and identify their critical to quality (CTQ) factors; ensure that processes are designed to meet the CTQ's; ensure there are measurements to understand how well the customer requirements are being met and the customers' perception about how well they are being met. In CTQ concept only process, outcome, or service characteristics vital to customer satisfaction are investigated for improvement (Black and Revere, 2006).

Though Six Sigma was first used in manufacturing set up, its scope is expanding from manufacturing to the fields like sales for deciding pricing (Sodhi and Sodhi, 2005) and HR involving employee-customer engagement (Fleming et al., 2005) and has opened up new opportunities (DeFeo, 2000). Companies deploying Six Sigma company-wide have also realized efficiencies in their marketing processes (Maddox, 2004). Applications of Six Sigma to sales and marketing are not common, but the potential for huge benefits exists (Pestorius, 2006, 2007). Six Sigma can lead to improved customer relationships by improving the process that delivers the product or service to the customer, and that the key is for companies to recognize the entire system, and not to focus on optimizing individual departments such as advertising, sales, or operations (Donath, 2005). Madhani (2017) provided various frameworks for deployment of Six Sigma in sales and marketing.

Six Sigma highlights the organizational mindset in which people make decisions based on data, look for root causes of problems, define defects based on external or internal customer, seek to control variation, and track leading indicators of problems to prevent them (Lanyon, 2003). Six Sigma practices have been deployed in HRM (Human Resource Management) also. The combination of Six Sigma and HRM was first applied at GE, where Six Sigma deployment helped improve the overall quality of HRM (Pande et al., 2000). US defense giant Raytheon has also employed Six Sigma in HRM as a broad tool for creating customer value and changing culture to make HRM processes more efficient, cost-effective, and user-friendly (Lanyon, 2003). Hewitt, the global leader in human resource solutions has achieved remarkable results in retaining employees by introducing Six Sigma process improvement methods since 2006. Hewitt claimed that Six Sigma allowed HR specialists to think differently about business issues and solve the fundamental problems (Leatherbury, 2008).

Wyper and Harrison (2000) described a case study on using the Six Sigma methodology to improve processes within a HR function. They confirmed that Six Sigma is applicable in non-manufacturing areas but difficulties arise in HR field such as defining the project scope and working with less tangible measurements. They also emphasized that the data analysis mismanagement can be a major cause of unsuccessful end results when implementing Six Sigma in HR process. Laureani and Antony (2010) did a Lean Six Sigma case study in transactional services. The study describes improvements in the HR practices attributable to

Lean Six Sigma: a decrease in employee voluntary turnover and an increase in employees' satisfaction.

There is a greater partnership between Six Sigma and the HR function (Fazzari and Levitt, 2008). Dow Chemical's HR resource center saved \$3.2 million in financial benefits through Six Sigma implementation (Linda, 2004). HR practitioners at Ford Europe and Intel have significantly improved their internal processes based on Six Sigma initiatives (Bhatnagar et al., 2004). Six Sigma deployment in HR is important for overall performance and growth of business. This research provides HR process improvement steps in terms of efficiency and effectiveness, develops various frameworks for its successful implementation and document benefits of Six Sigma deployment in HR with various case studies.

3.0 Successful Six Sigma Deployment in HR: Various Case Studies

Successful Six Sigma deployment in HR is illustrated with two case studies: (1) reducing turnover of regular employees (Case study-I) and (2) reducing turnover of contract employees (Case study-II). In both cases, HR deployed Six Sigma DMAIC methodology to reduce employee turnover rate.

3.1 Case Study – I: Reducing Turnover of Regular (Formal) Employees

In a large multinational company in the service sector there was high employees' turnover, with an average of 35 per cent and highs of 40 per cent in specific regions and/or functions. For the company, the recruitment and training costs of new employees were \$5,000, and in the previous year the company had to hire 5,500 new employees, for a whopping total cost of \$27.5 million, excluding the productivity lost during the learning curve of a new employee. The project was given high priority status and sponsor of the project was the vice president for global talent management, who assembled a project team led from a Six Sigma Black Belt, and with members from various departments within the HR areas i.e. recruiting, training, compensation and career development. The objective of the project was to reduce turnover to an overall average of 25 per cent across the organization.

A project charter was made and agreed from relevant stakeholders and VOC was collected from former employees of last two years to know the reasons why they left the organization. Key metrics of the project were identified to determine the size of the opportunity and calculate the

defects of the process. These metrics include cost per hire; time to fill a position; training/orientation expenses per hire; use of performance management programme; and use of exit interviews. The vast majority of turnover (61.3 per cent) was in the first 6 to 12 months of employment. Hence, improvement actions were focused on the recruitment and orientation steps, as those were the steps directly affecting new recruits. In terms of defect, the Six Sigma project team considered a defect of the HR process as any employee who voluntarily left the organization: as such the defects per million opportunities (DPMO) was calculated. Hence, employees' turnover of 35% corresponds to 350,000 DPMO. The most common reasons for turnover during first 6-12 months were found from the survey: mismatch of work duties / work schedule expectations; lack of training / orientation/ career progression; higher salary expectations. Based on these findings, following improvements actions were piloted in two regions (one US state and one European country) and, after a positive result, they were deployed across all of the corporations:

1. The recruitment process was reviewed, with less reliance on recruitment agencies and more use of direct recruitment and a so-called "Refer-A-Friend" programme, where existing employees are rewarded for referring a person to the company. The underlying idea was to recruit people that best fit the organization, therefore trying to reduce the high first-year turnover. To incentivize the programmer, a bonus scheme was put in place: once a person was hired, being referred from an employee, that employee would receive a \$500 bonus, and if the new recruit stayed more than six months, another \$500 bonus would be paid to the employee that referred him or her.
2. An extensive review of the training and orientation for new hires was done - spanning the time from the new hire accepting the offer to the end of the induction period.
3. A standard, global orientation day was designed, to ensure each new employee was exposed to the mission, vision and values of the organization.

All these actions were implemented and a "C-Chart" control chart was developed to monitor the employees' turnover level over the last 24 months. After Six Sigma deployment in

HR, the overall, corporation wide, employees' turnover rate decreased from an average of 35 to 25 per cent as 559 employees voluntarily left the organization, instead of the 783 that would have if the turnover rate stayed the same. The cost to replace each departing employee was estimated at \$5,000 and hence reduced turnover has resulted in to cost savings of about \$1.1 million (Laureani and Antony, 2010).

3.2 Case Study – II: Reducing Turnover of Contract (Dispatched) Employees

Company M, a typical foreign invested high-tech electronics enterprise in Tianjin City, China was facing high turnover rate of dispatched (contract) employees. Company M deployed about 6000 dispatched employees. Dispatched employees are persons hired through an employment service agency, who later work at different companies or locations and they have no employment relationship with the companies where they work. The high turnover rate (2.5% per week) of dispatched employees resulted in high recruiting and training costs as well as production problems for Company M. Hence, HR department deployed Six Sigma DMAIC methodology to reduce the turnover rate (i.e. goal of 1.5% per week) and increase retention rate of dispatched employees. In this study, dispatched employees are external customers of the HR department while departments in need of dispatched employees are regarded as internal customers. Also, employee turnover rate was considered as CTP (critical to process) and employee retention as CTQ (critical to quality).

To identify root cause of high turnover of dispatched employees, their organizational commitment, work satisfaction, job hunting, and family responsibility were studied. Impact of various factors - such as salary and benefits, work pressure, training and work environment, career development, external opportunities, rotation system, personal relationships, and humane care - on work satisfaction were also analyzed. It was found that many dispatched employees complained of unsatisfying work and were unwilling to stay because of low salary, obscure future, frequent changes of working schedule etc. After taking care of these factors by HR department, the voluntary turnover rate of dispatched employees in company M declined from a weekly average of 2.5% to 1.4%, saving recruiting and training costs while contributing to production quality and yield stability (He et al., 2014).

4.0 Need for Improvement in HR: TQM versus Six Sigma Initiatives

For any organization, HR is a service department as it has various services to provide, customers to satisfy, government rules and regulations to comply with, HR budgets to meet, and a bottom line to improve. Prior to the introduction of improvement initiatives in the HR function, most traditional HR department did not enjoy a desirable reputation in the organization. It was mainly because of perceptions regarding HR as it was seen as reactive, uncoordinated, and even unprofessional, delivering poor, slow and non-cost-effective services. Hence, Total quality management (TQM) has been deployed across various functions of the organizations including HR to improve overall performance.

4.1 TQM and HRM Practices

TQM is generally defined as the presence of a quality management philosophy that focuses on customer satisfaction, continuous improvement and treating the organization as a total system (Dean and Snell, 1991; Sitkin et al., 1994). TQM is an organization-wide process-oriented philosophy that requires changes not only in production, but also in employee development, employee participation and involvement and also in decision-making processes (Abdullah et al., 2009; Mehra et al., 2001; Power and Sohal, 2000). Customer satisfaction and focus, team working, cost reduction, continuous improvement, training and education, top leadership commitment, and having an appropriate work culture are key contents of a TQM approach (Reed et al., 2000).

The research evidence shows that when organizations aim towards TQM they adopt more constructive approach to the management of HR by advancing the role of HR function

and revamping existing HRM practices to fit into quality plans and objectives (Blackburn and Rosen, 1993; Vouzas, 2004). Prior studies found that organizations introduce or re-design HRM practices, such as HR planning, recruitment and selection, performance appraisal, rewards and recognition, and HR development to integrate with TQM expectations (Ahmad and Schroeder, 2002; Bou and Beltran, 2005; Hassan et al., 2006; Kanji and Sa, 2003; Monks et al., 1997; Paauwe and Boselie, 2003; Soltani, 2005; Soltani et al., 2004; Zairi, 1998).

Process improvement initiatives are introduced by organizations, within the HR department in such a way to support strategic aims of quality and to bring it more along the lines of TQM principles (Greasley, 2004; Hur, 2009; Santos-Vijande and Alvarez-Gonzalez, 2009). According to Bendell (2005), there is need of process improvement along with quality improvement initiatives. Process improvement is core to a variety of models of quality excellence such as ISO 9001, European Quality Award, Canadian Quality Award, MBNQA and Deming Prize (Stading and Vokurka, 2003). Process improvement within the HR department is essential to organization-wide structured approach to quality improvement (Bowen and Lawler, 1992; Soltani et al., 2006).

4.2 Six Sigma and HRM Practices

Six Sigma can be just as suitable in HR as it would be in any other functional departments of the organization. The statistical thinking of Six Sigma can be an effective tool for analyzing HR issues and improving performance of the HR department. With Six Sigma's focus on the entire process, its methods would be more appropriate for a complete overhaul of HR processes. Six Sigma based HR practices and Traditional HR practices are compared in Table I.

Table I: Traditional HR Practices versus Six Sigma based HR Practices

Sr. No.	Parameters	Traditional HR Practices	Six Sigma Based HR Practices
1	New initiatives	Trial & Error	Robust design
2	Analysis basis	Experience	Data
3	Focus	End result	Process
4	Time	Reactive	Proactive
5	Planning	Short term	Long term
6	Control	External	Self-control
7	Psychological contract	Compliance	Commitment
8	Structures & Systems	Bureaucratic	Organic
9	Employee relations	Low trust	High trust

(Source: Tabulated by author)

4.3 TQM versus Six Sigma: Commonalities and Differences

According to Hoerl and Snee (2003), following common features can be found in both TQM and Six Sigma initiatives:

1. Customer focus;
2. Continuous improvement in process/service quality or cost reduction strategies;

3. Process management;
4. Fact-based decision-making; and
5. Use of statistical tools and techniques for problem solving.

However, following differences (Table II) can also be found between TQM and Six Sigma initiatives (Antony, 2005b):

Table II: TQM versus Six Sigma

Sr. No.	Criteria	TQM	Six Sigma
1	Deployment process to drive fundamental change in the organization	Not strong	Strong
2	Integration of tools and techniques within the problem-solving framework	Missing	Greatly emphasized
3	Role of organizational leadership and infrastructure to enable the successful deployment of tools and techniques	Weak	Strong
4	Alignment of assigned projects with strategic business objectives of the organization	Missing	Strong
5	Measurement of financial results in hard-dollar savings	Missing	Strong
6	Management style	Bottom-up	Top-down leadership
7	Cultural change	Gradual and slow	Fast change
8	Rewards and recognition	Less emphasized	More emphasized

(Source: Tabulated by author and adapted from Antony, 2005b)

A major difference between Six Sigma and other quality approaches is that Six Sigma aims to achieve 3.4 defective parts per million (Smith et al., 2002). Six Sigma provides business managers with the strategy, methodology, infrastructure, tools and techniques to change the way businesses are run. Six Sigma focuses on reducing the number of opportunities that could result in defects by shifting the emphasis from fixing defective products to making perfect products (Antony and Banuelas, 2001).

5.0 Six Sigma Concept and Evolutions: An Overview

5.1 Six Sigma Concept

Sigma is a statistical term that measures how far a given

process deviates from perfection. The name of the Six Sigma methodology is derived from the Greek alphabet symbol sigma (σ) utilized in statistics for standard deviation; a measure of the variability within a population around the mean, a measurement to quantify variation and process inconsistency. Six Sigma focuses to obtain the same result every time and utilizes the well-defined problem solving approach via statistical tools.

The central idea behind Six Sigma is that if organizations can measure how many “defects” they have in a process, they can systematically figure out how to eliminate them and get as close to “zero defects” as possible. For customer oriented organizations, defect is anything that caused customer

dissatisfaction or does not meet a customer's specification. Such organizations see everything through their customer's eyes as they deliver what the customer wants and when she or he wants it (George et al., 2004). Reaching Six Sigma level means what organization delivers is what the customer wants. The Six-Sigma quality level is equal to 3.4 defects per million opportunities (DPMO) and can be shown as 3.4 DPMO. An "opportunity" is defined as any chance for nonconformance or not meeting the required specifications. This reduces waste and hence saves money whilst improving customer satisfaction.

Six Sigma provides a quantitative, statistical notion of quality useful in understanding, measuring, and reducing variation. Six-sigma method allows firms to reduce things to a common denominator - defects per unit and sigma and hence provides a common language and the ability to benchmark themselves against like products, processes and practices' (Harry, 1997). Most organizations produce at a level of two to three Sigma, meaning that between 66,807 and 308,537 defects occur with every one million opportunities; this means between 6.7% and 30.9% of everything produced contains a defect (Table III).

Table III: Sigma Level: Defects Per Million Opportunities

Sr. No.	Sigma Level <i>(Capability of Process)</i>	Defects Per Million Opportunities <i>(DPMO)</i>	Yield <i>(Error Free)</i>
1	1	690,000	31%
2	1.5	500,000	50%
3	2	308,537	69.1%
4	3	66,807	93.3%
5	3.5	22,750	97.725%
6	4	6,210	99.38%
7	4.5	1,350	99.87%
8	5	230	99.977%
9	5.5	32	99.997%
10	6	3.4	99.9997%

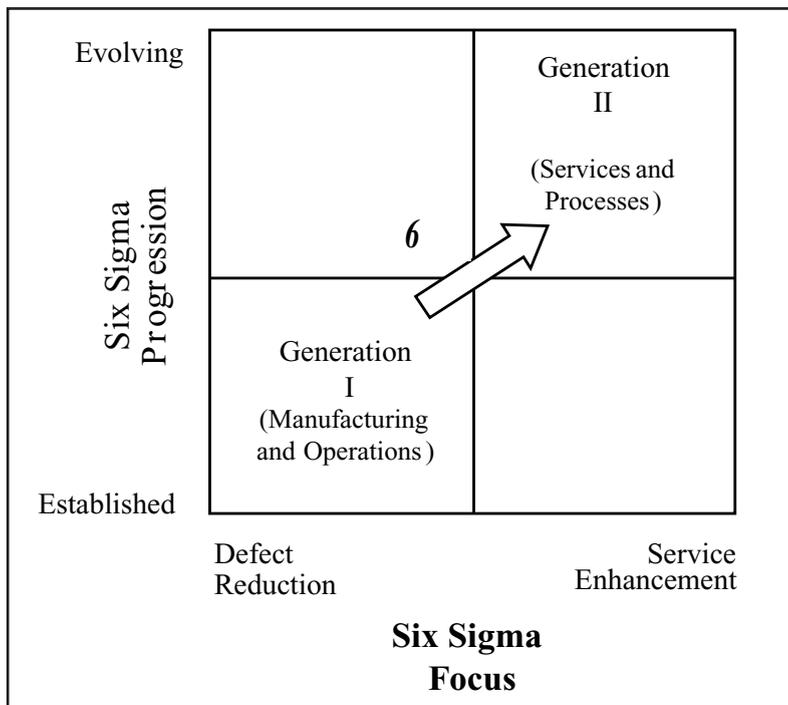
(Source: Table compiled by author)

There are actually an infinite number of Sigma, with each higher Sigma representing an exponential improvement in quality. A Sigma quality level offers an indicator of how often defects are likely to occur, whereby higher sigma quality levels indicate a process that is less likely to create defects as the quality level also increases accordingly (Madhani, 2016).

5.2 Six Sigma Evolutions

The initial focus of Six Sigma was the rigorous process of variance reduction leading to the design of business processes that produce 3.4 DPMO. This emphasis on defect

reduction is termed as Generation I of Six Sigma (Harry and Crawford, 2004). Later many companies, including Motorola, GE, and Bank of America applied Six Sigma to service processes and experienced bottom-line benefits (Krehbiel et al., 2007). This phase of Six Sigma, where the focus is on process improvement and economics, is termed as Generation II. In manufacturing and operations (Generation I of Six Sigma), usually there are very high correlations between the quality of process inputs and the quality of process outputs, thereby making operation easy, predictable, fact based and thus making Six Sigma deployment smooth (Figure 1).



(Source: Framework developed by author)

Figure 1: Six Sigma Evolutions: Various Generations

Generation II of Six Sigma focuses on transactional processes to reduce its variability and includes its application to HR services. Improved processes lead to improved customer satisfaction, increased productivity, increased market share, business profitability, and so on.

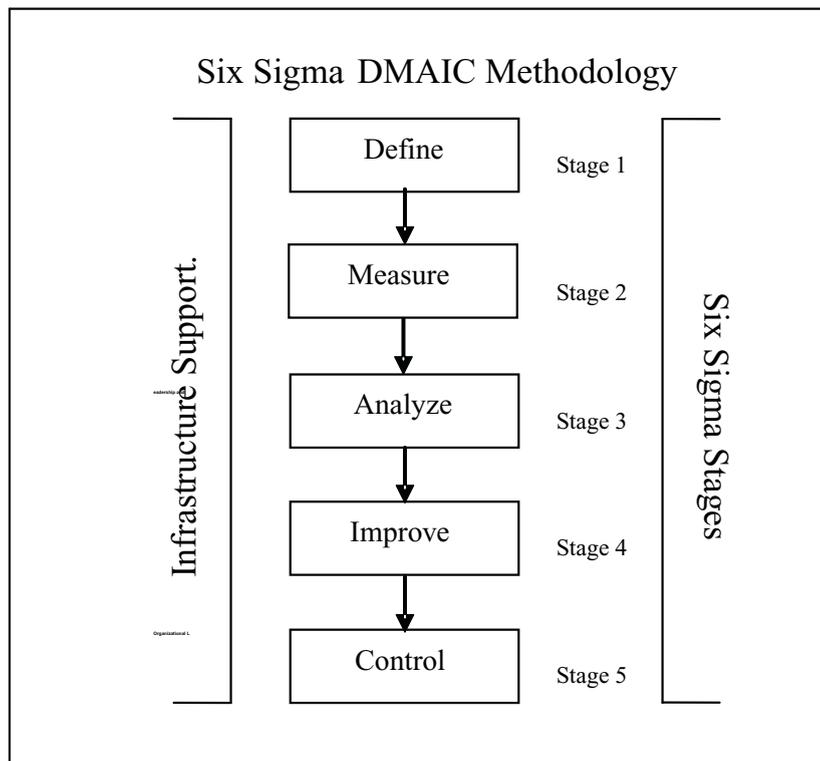
Transactional processes that require high human input avoid control as process inputs and outputs are weakly correlated. Hence, in HR, the linkages between inputs and outputs are simply not as easy to adjust as they are in manufacturing processes and therefore Six Sigma deployment in HR is complex.

6.0 Research Methodology

This section focuses on deployment of Six Sigma in HR and provides various frameworks and methodologies.

6.1 Six-Sigma Deployment in HR: DMAIC Methodology

Six Sigma offers an organizational structure and a culture that stimulates an investigative and experiment attitude at all levels (De Mast, 2006). Successful deployment of Six Sigma in HR requires commitment of organizational leadership and required infrastructure support. Six Sigma requires trained men power in different categories such as 'Black Belts, 'Master Black Belts, Green Belts' etc. According to Six Sigma vocabulary, "Black Belts" and "Master Black Belts" work full time on projects while "Green Belts" spend some time working on projects while maintaining their regular work responsibilities. "Process Owners" are traditional line managers whose operations are the focus of Six Sigma projects. The most important aspect of the Six Sigma approach is its five-step process DMAIC (define, measure, analyze, improve, and control) methodologies responsible for improving HR performance (Figure 2).



(Source: Framework developed by author)

Figure 2: Six Sigma DMAIC Methodology in HR

The DMAIC process is the essence and core of Six Sigma philosophy in identifying and solving problems (Pisani et al., 2009). The use of the DMAIC process is not limited to solving quality problems, but also involves all aspects of business improvement, such as time saving, cost saving and service improvement (Thawani, 2004). By approaching the HR problems using this framework, it is expected that the improvement activities can be managed in a structured manner, data driven, and involve all line of employees.

Following are various stages of DMAIC:

1. *Define*: What is it HR department is seeking to improve?
2. *Measure*: How is the HR process measured? What is the current capability of the process? How is it performing in terms of variability?
3. *Analyze*: What are the most important causes of HR related problems? How to map the process, and prioritize for action?

4. *Improve*: How do HR department remove the causes of problems? How do HR re-engineer the process and simplify?
5. *Control*: How can HR department maintain the improvements? What are various statistical process control tools to monitor performance?

Six Sigma deployment in HR focus on identifying what customers want/need, translating these into CTQ characteristics and deploying these through specific process improvement stages. These stages are explained in detail below:

6.1.1 Define

The first stage in Six Sigma DMAIC methodology is the define stage. Define stage begins by identifying and prioritizing the HR processes that offer the greatest options for growth. It is mainly because not all HR improvement opportunities are worth an investment. The opportunities must be evaluated using a quantifiable approach and not one

driven by guesses, agendas or intuition. Define stage identifies the HR problem being addressed, its customers being affected, what they view as important, and what performance matrices will be used. HR goal, scope, expected outcome, boundaries and project schedules are specified in this stage. HR problems are defined clearly and as much possible as numerical. This stage develops problem statement, goals and benefits, project plan and milestone and identifies champion, process owner and team members.

After the HR activities are identified they are assigned to process improvement. The define stage focuses on the defining the core HR process influencing its customer (i.e. their CTQ issues and Voice of the Customer (VOC)) that have the highest priority for improvement. This stage also identifies and prioritizes CTQ factors that drive the value matrix. Without this information, few HR efforts can satisfy either the effectiveness or efficiency criteria that are so important in HR success. By hearing the VOC, HR process performance can be measured as VOC focuses on identifying and measuring basic requirements of HR customers (internal as well as external). VOC is a very valuable way to uncover the needs of customers and can be captured in a variety of ways: direct discussion or interviews, surveys, focus groups, observation, and field reports etc.

6.1.2 Measure

This stage measures the capability of the existing HR processes and focuses on the performance of the core HR processes involved. Measure stage determines what processes are potentially contributing to the problem, develop a data gathering plan and system, collect data to determine the types of matrices and validate how the information (data) will be used to drive HR performance decisions and finally establish the base-line performance level. The purpose of this stage is to measure problem areas and accordingly identify HR performance measures such as cost, efficiency, and service levels. Moreover, this measure can help to identify the deviations of current measurements.

This stage focuses on defining value for the issues identified in the define stage. Because the definition of value changes from one process to the next, so does the thrust of Six Sigma approach. It captures the VOC, which provides the basic input necessary to make informed decisions and hence assures that subsequent changes are directed by the contingencies of the specific process. In order to begin measuring performance, HR must define which key data exists, where it resides, which data is needed, and how or if the data can be obtained. This stage begins developing $Y=f(x)$ relationship as it attempts to understand which inputs (x 's) have the greatest effect on the output metrics (y 's).

This stage helps to create an understanding of the types of performance measures that are currently employed. Some of the measurement matrices in HR are:

1. Reliability: It concerns about the failure to deliver required processes by HR;
2. Customer satisfaction: It concerns about whether customers are satisfied with the HR service that is provided and
3. Cost: It concerns about the cost that is incurred in a HR.

6.1.3 Analyze

Analyze stage uses statistical tools and techniques to narrow the list of possible causal elements to those that contribute the most to the HR problem and find the root causes by analyzing when and where problems occur. Hence, this stage verifies the relationship and causality of factors by determining vital few x 's for $Y=f(x)$ relationship.

Potential root causes are also analyzed by various Six Sigma tools (see Table IV). One of the simple and most widely used tools is a technique known as the "Five Whys." The Five Whys approach uses a systematic questionnaire technique to search for root causes of a problem. The tool Five Whys is used by asking "why?" at least five times as root cause are analyzed through various levels of detail. Once it becomes difficult to answer to "why?" then probable cause of the problem may have been identified (Pojasek, 2000). Another widely deployed Six Sigma tool is value stream map as value stream map makes it easier to determine where bottlenecks exist in the process (periods of waiting that hold up the process). It also provides a visual map for a project team to develop a list of quick actions where the solution is fairly obvious. The process of creating the value-stream map helps organization see where the waste is located in the process to better know - on what they should be working to change. In an HR process, Lean Six Sigma defines waste as any part of the process that does not benefit the customers of HR and defects as errors or mistakes in the process.

In order to eliminate waste in the HR processes, it is possible to apply Six Sigma tools to each step of the human capital value stream map (Wyper and Harrison, 2000). The human capital value stream map identifies the flow of human capital required for an organization to deliver its products or service to customers. With set metrics for each step of the human capital value stream map, an organization can apply Six Sigma methodology to it. It is also necessary to establish proper quantitative metrics in these steps to allow objective assessment and control of the process step (Sullivan, 2003): this makes use of the more quantitative statistical tools from the Six Sigma tool chest possible.

Establishing HR metrics can be contentious, with different parts of the organization having different objectives (Jamrog and Overholt, 2005), but for each step focusing on expected deliverable, relevant metrics, key performance indicators and probabilities of defects may help in identifying the real value each step can provide. Analyze stage focuses on the evaluating data collected and process maps to determine overall opportunities for improvement. In this stage the causes of problems that yield process variations are investigated and relevant factors examined in details. The purpose is to evaluate current performance and re-evaluate the standards for cost, efficiency, and service objectives. As Six Sigma approaches is process focused and value driven, these tools are designed to capture and use the customer's perception of value.

6.1.4 Improve

The first step in this stage consists of identifying and prioritizing improvement areas. Once these areas have been prioritized, the areas that must receive immediate attention, considering time and cost restrictions, are identified. The purpose of continuous improvement is to reduce the amount of common-cause variations in the HR processes. Improve stage develops plans to change the HR process involved to eliminate or reduce the effect of the root causes of variations. This stage focuses on the enhancing target process by designing creative solutions to fix and prevent HR problems. It involves testing these plans, determine whether the solution is able to reduce variations, establish their efficacy, and then implement changes so that the overall HR process performance can be improved. This stage develops potential solutions and defines operating tolerances of potential

system. Statistical methods are used to validate the improvements. After this testing, the improvement should be implemented throughout the process.

6.1.5 Control

Control stage maintains changes made to the HR process and monitor process performance to determine whether it is in control. If the process is in control, the standards of cost, efficiency, and service are set to those of the improved process. Hence, this stage identifies the controls that must be in place to sustain the benefit of the new process. The basic purpose is to control and monitor efficiency and service performance in HR to ensure that the process meets the identified standards. A control chart can be employed to detect whether or not the process is in control. A process is considered as in control when there are no occurrences of special causes of variations. Once the process is in control, current data can be used to evaluate the process performance. In this last stage, focus is to eliminate the causes of problems and to maintain the continuity in sales process improvement. In this final stage, standards and procedures are developed for controlling future process performance, benefits are verified, cost savings is documented, handover plan and documents are finalized, and action plan is communicated to process owner.

6.2 Six Sigma Deployment in HR: Performance Matrices and Process Tools

Six Sigma provides a variety of analytical and statistical tools. The Six Sigma DMAIC process utilizes a set of statistical and visual tools as shown in Table IV.

Table 4 : Overview of the DMAIC Process Tools

Sr. No.	Stage	Tools
1	<i>Define</i>	Project charter, Basic rules, Stakeholders analysis Responsibility matrix, SIPOC (Supplier-Input-Process-Output- Customer), Flowcharts, Flow process charts, Relation diagrams and Gantt charts
2	<i>Measure</i>	Process maps, VOC (Voice of Customer), Histogram for variable frequency analysis, Initial process capability, Fishbone (Ishikawa) diagrams, Benchmarking
3	<i>Analyze</i>	Cause and effect diagram, Correlation analysis, Regression analysis, ANOVA (Analysis of variance), Standard deviation, FMEA (Failure Mode Effect Analysis), Five Whys, Value stream maps, Multivariate charts, Pareto analysis
4	<i>Improve</i>	Future state maps, Work plan, Simulation model, Pilot study, Design of experiments, Brain storm, Fool-proofing, Performance/Importance gap analysis
5	<i>Control</i>	Capability of final process, Standard work, Scatter diagram for variable relationship analysis, Statistical process control, Control charts, Run charts for trend analysis, Standard operating procedures, Training, Checklists, Surveys

(Source: Table compiled by author)

6.3 Six-Sigma Deployment in HR: Strategic - Tactical - Operational Linkages

When Motorola first implemented Six Sigma in the late 1980s and obtained amazing results, it was then faced with the dilemma of how to reward its employees for those successes (Gupta, 2005): this was the first time Six Sigma and HR practices came into contact. In the past the term HR was related only to administrative functions (e.g. payroll, timekeeping, etc.), however, in the last few decades the term has increased substantially to include the acquisition and application of skills and strategies to maximize the return on investment (ROI) from an organization's human resource (Milmore et al., 2007). Hence, HR management is the

strategic approach to the management of all people that contribute to the achievement of the objectives of the business (Armstrong, 2006). In fact, it includes all steps where an employee and an organization come into contact, with the potential of adding value to the organization (Ulrich, 1996). To fully capture HR's responsibilities of value delivery from its service offering, the deployment of Six Sigma DMAIC methodology should focus on HR's strategic, tactical, and operational aspects. HR's role in each of these three areas can be defined by the activities it performs in each and how it links the strategic, tactical, and operational areas in a closed-loop fashion (Figure 3).

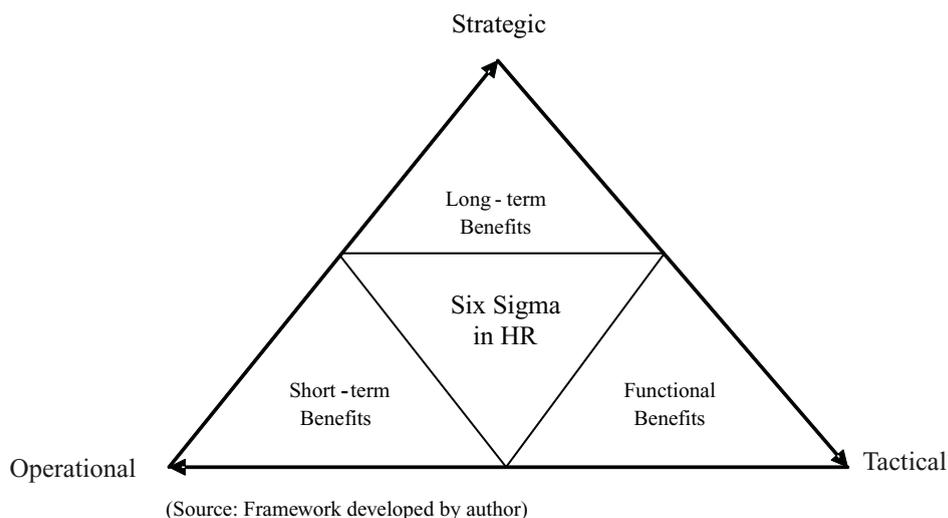


Figure 3: Six Sigma Deployment in HR: Key Linkages

The application of Six Sigma at operational levels results in short-term benefits (e.g. cost reduction in routine activities) whereas the application at the strategic levels results in organization-wide benefits. Strategic level HR practices make efforts to attract, retain and motivate key talent and builds organizational culture with commitment of leadership. Tactical level HR practices focus on staffing, training, development, appraisal, and remuneration. Operational level HR practices focus on educating employees, communicating HR related matters and providing support for generating work-life balance.

6.4 Application Areas of Six Sigma in HR

Following are various areas where Six Sigma can be deployed in HR:

1. Improving quality of hire and reducing time and cost to hire new employees.
2. Developing job descriptions and providing training.
3. Faster response time to internal queries about compensation, benefits and payroll.
4. Establishing and tracking career progression and career paths with employees performance management review.
5. Reducing employee turnover and increasing employee retention.

7.0 Six Sigma Deployment in HR: Major Challenges

Transactional processes that require high human input avoid control as process inputs and outputs are weakly correlated. In HR the linkages between inputs and outputs are simply

not as easy to adjust as they are in manufacturing processes and hence proven to be difficult for Six Sigma application. There are various other reasons why HR applications of Six Sigma are uncommon:

1. Six Sigma program has inherent production-centric bias. Six Sigma consultants are typically from manufacturing background and do not understand HR processes. The manufacturing sector is full of numbers-oriented people accustomed to the process concept while those people involved in HR are not. Also, many times “Black Belts” and “Master Black Belts” supporting projects in this arena have little or no hands-on experience in HR. They cannot provide the practical, knowledgeable assistance that newly trained Six Sigma HR personnel require.
2. In manufacturing, it is often believed that almost every processes variable can be controlled. However, there is no strong call for actions such as the quality concerns (e.g. removing process variability) in HR. Six Sigma has difficulty in establishing an appropriate HR measurement system analysis and metrics as HR processes are not very well defined. In most cases, process performance data such as defect levels, cycle time, etc. does not exist or is difficult to access as HR issues are transactional in nature, and process performance parameters are sparse. Thus, it creates measurement challenge in HR.
3. Measurability of a HR process depends on the perception of an individual HR person in HR activities. Where there is no any standard parameter to measure the HR process, it depends on the perception of individual decision. Even though there are some tools called HR score cards are available in industry to measure HR performance, many times there is no benchmark for HR performance as it is consider as the supporting activity in organizations.
4. Data in HR is mostly qualitative and discrete and hence end-to-end process outcome thinking is not prevalent. Also, data collection can be difficult in

the field of HR, as the project team is dealing with very sensitive issues. There is also difficulty to perform any pilot project and hence it is going to impact on the behavior of staff, making it challenging to accurately measure its results.

8.0 Research Implications

The Six Sigma approach adds more “science” to the “art” of HR. Process-centric work design of Six Sigma may at first seem slow, routine, and burdensome. There is doubt that deployment of a structured approach requiring processes, matrices and data would only suppress the quick response required to be successful in HR. Besides, HR may think statistical analysis can dampen outcome of their traditional practices. Even with the hurdles inherent in applying Six Sigma, there is promising future for Six Sigma application in HR. Significant savings can be realized from improved transactional processes because, unlike most manufacturing efficiency gains, improved HR processes directly impact satisfaction of internal customers. While manufacturing and even supply chain operation costs have been squeezed effectively without compromising quality, HR operations have not seen comparable increases in efficiency as well as effectiveness.

8.1 Benefits of Six Sigma in HR

1. Six Sigma establishes a common language and systematic approach to problem solving methods and thus provides new capabilities for problem solving
2. Six Sigma establishes focus on reduction of variability and waste elimination and hence drives the improvement of HR processes to achieve the strategic objectives of the organization.
3. Six Sigma in HR helps organizations in getting right people in the right place at the right time at the right cost.
4. Six Sigma in HR helps organizations in providing prompt HR response to internal inquiries for benefits, payroll, promotion and fairness.
5. Six Sigma deployment in the HR function provides benefits such as reduction in time and cost to hire an employee, reduction in training costs, reduction in overtime, reduction in employee turnover, reduction in safety violations, reduction in cost of managing employee separation (Gupta, 2005).

The outcomes of these HR improvement activities are better, faster and more cost-effective HR services in the organization, with improved internal customer satisfaction, greater motivation and job satisfaction of HR employees and, ultimately, improved top line and bottom line performance (Wyper and Harrison, 2000).

9.0 Conclusion

HR is playing an increasingly strategic role in achieving business goals as well as delivering key services throughout the organization. Six Sigma DMAIC methodologies provides to HR, an assessment, measurement, and enforcement framework to control defects or problems in HR process. The application of Six Sigma can bring a valuable process discipline and emphasis on performance measurement to HR activities. The Six Sigma discipline adds measurable value to HR performance. DMAIC methodology of Six Sigma underscores the use of data and process. HR is a fundamental part of any organization, and should lead by example by championing statistics driven change provided by Six Sigma. However, people's behaviour is very complex and hence it is difficult to quantify many HR practices, making implementation of Six Sigma in HR challenging. This research provides various tools and frameworks for a successful deployment of Six Sigma in HR and emphasizes significance of Six Sigma deployment in HR.

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Cross Cultural HRM Issue: Cheng Hi's Chinese Construction Company

Mohan B, and Latha R. Nair

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Infrastructure sector is growing world-wide. Chinese companies are aggressively pursuing the growth opportunities provided by the surge in this sector globally. Middle East is the first testing ground for any construction company with global aspirations. But the workforce is multinational and cross cultural issues do pop up. The narrative is a case study of a Chinese construction company stepping out of China on its growth path and encountering problems owing to multicultural workforce in Middle East. Organizational restructuring towards a matrix structure helped the firm to come out of the problem.

Key words : Infrastructure, multi national workforce, cross cultural issues, matrix structure.



Dr. Mohan B.
Associate Professor
SCMS Cochin School of Business
mohanb@scmsgroup.org



Dr. Latha R Nair
Assistant Professor
Department of Computer Science
CUSAT
Latha5074@gmail.com

Infrastructure sector is growing worldwide and provides great opportunities for construction firms to expand globally. UAE has been a launching pad for many of them. UAE has a benevolent government, which encourages the participation of foreign firms in the nation build up. The work standards are international and timely completion of work is sacrosanct. Construction firms face the challenge of managing the multinational work force of UAE in harsh climatic conditions meeting the stiff targets of time, quality and approved budget, which calls for efficient allocation of human and material resources across various sites. This situation demands a flexible work structure and a universal work culture that can function in consonance with national beliefs and ethics of UAE. Structure is a useful tool in achieving proper coordination between various positions in an organisation.

ABC Company in operation in UAE.

ABC is a Chinese construction company with \$300 million turn over owned by Cheng Hi, a civil engineer from Shanghai, which is about to start its first overseas job. This

job is to construct a government office complex in UAE, which he is carrying out as a sub-contractor to Morgan Incorporated, a Finnish firm. The work site is 25 KM away from town, in a hillock. The HR Dept. selected UAE based labourers for the job. They were from India, Pakistan and Srilanka. Few were natives of UAE itself. They were to report to Chinese supervisors. The mobilization was swift and smooth. Labour quarters were set up close to the work site. During the first three weeks land development works went on smoothly. However, during the fourth week, there was some unrest in the labour quarters as two groups of labourers - one group from Pakistan and the other from Srilanka got into altercation between them and started fighting. It all started when one Pakistani labourer made some gesticulation towards a Buddha idol and shouted something in Urdu when the other group was about to start their prayers. The Sinhalese workers were upset and they objected to it. In the ruckus that followed the Pakistani labourer hit a Sinhalese labourer. The news spread fast and there was a flare up of emotions. The pace of the work suddenly declined and there was unrest all around. The supervisor reported the matter to the HR Dept. in the headquarters at Shanghai. The HR Dept. advised the supervisor to conduct an enquiry and submit a report. Based on the report, the HR Dept. decided to suspend the Pakistani labourer from the services and bring back order and discipline. The Chinese supervisor issued the suspension orders. However, the Pakistani labourers resented the action and thought that the Chinese supervisor exaggerated the incident to favour the Sinhalese labourer. They thought that the Chinese supervisor was also a Buddhist. Next day there was near stalemate in the work front. Morgan Company called Cheng Hi for a discussion. Cheng Hi took stock of the situation and assessed the cause as improper communication and lack of trust between the two groups as the cause of the issue. He sought the help of a liberal UAE Muslim cleric to discuss the issue with Pakistani labourers and simultaneously engaged a Buddhist monk to talk to Sinhalese. The suspension period of Pakistani labourer was fixed as fifteen days. The matter was sorted out and the work resumed. In the meeting Morgan and company cautioned Cheng Hi slippage of time was unacceptable and handle workers' unrest tactfully. He realized that handling work place diversity has many dimensions and managing a multi ethnic work force in a foreign country was very much different from handling labourer belonging to a single

cultural background. Additionally he has to recast the organizational structure to handle the major work that he has at hand.

The prevailing work environment in UAE

UAE has a population of about 8.2 m of which expatriates account for 90%. The migration rate of UAE is the highest in the world. Construction and domestic work segments accommodates the highest number of migrant labourers (Faridi & El-Sayegh, 2006). The construction and domestic work segments are dominated by labour force from India, Bangladesh, Pakistan, Srilanka and the Philippines (Human Rights Watch, 2006).

The native UAE talent pool is insufficient to support such massive works and it necessitated recruitment of many expatriate professionals. The ongoing development works in UAE has only led to increasing rate of migrant workers in the total worker intake. The diverse environments emerging out of globalization and transparency while encouraging new ideas and innovative approaches to solving problems, also brings in significant challenges (Van den Born and Peltokorpi, 2010). The differences in value systems and behavioral patterns can well become causes of friction, conflicts and miscommunication (Matveev and Milter 2004). UAE firms are increasingly under pressure to manage the diverse force belonging to different cultural and racial backgrounds.

In a work environment, nonverbal communication is more important than verbal one as 93% of the meaning transmitted through nonverbal channels. Nonverbal communication considered more reliable than verbal communication when the two contradicts (Bloisi, 2003). Guirdham (2005) states that in multicultural work groups, people tend to communicate with each other not just as individual personalities but also as undifferentiated representatives of social groups. Franseco and Gold (2005) highlight stereotyping as a potential hindrance to effective inter cultural communication. They state that stereotyping conjures up an image for stamping on every blank face.

One can see that issues faced by ABC Company as discussed above were caused by workplace diversity. The term "workplace diversity" denotes "the co-existence of staff from diverse racial and cultural backgrounds in a particular organization" (Chan, 2011, p. 1). The current global workplace demands diversity which can cause conflicts

between people belonging to different cultures (Trompenaars & Hampden-Turner, 2004) and impede the smooth flow of business.”

However, work force diversity is not always considered as a hindrance in a work place. Diversity is valued in organizations for a variety of reasons. Researchers show that diversity brings its own benefits to organization such as equality of opportunity. Schneider and Barsoux (2003) have pointed out that 'Research seems to indicate that multi-cultural teams either tend to perform much better or much worse than mono cultural teams. Initiatives giving support to diverse culture are aimed to ensure that an organization is able to retain the talent without wasting them. Thus diversity is a challenge faced by contemporary organization (Elmadssia, 2011, p 201).

UAE operation is a challenge to Mr. Chen Hi in his dream of making ABC a global company.

Culture

An organization is no longer a pure workplace but can be considered as a mini society, which has its own pattern of culture and subculture (Morgan, 2001, p.129). In these "societies," employees are not only required to provide their labour but are also required to communicate between themselves so that the purpose of their work is well understood (Dixon and Dougherty, 2010). Culture has many dimensions. The notation of culture implies a spontaneous acceptance of etiquettes, manners and norms by a group of believers which are transmitted from generation to generation (LeBaron, 2003). Culture works through symbols, heroes, rituals, and deeply held values (Benedict, 1991).

Hofstede (2001) defines culture as the collective programming of the mind that distinguishes one group of people from another. This outlook argues that values of different groupings manifest in workplace behavior, attitudes and arrangements. It also influences the ways in which meanings are attributed to situations.

Culture operating in linkage to communication has great relevance in a work place. *Culture is communication; communication is culture* (Elaine, 2005) and it influences the workplace as shown below:

1. The members of an organization at various levels can transmit core values of a culture in the work place consciously or unconsciously.
2. The cultural differences become explicit through communication, which can have favourable or adverse effect in overall efficiency of the team.
3. Cultures are sustained by communication. If the members of a team communicate well with all other members effectively, the adverse effects caused by dominating culture in a group will be reduced and the team will be better integrated.

Many of the findings on intercultural interactions is well interpreted by the insights provided by Geert Hofstede (2001) who identified country dimension as one of five universal dimensions along which individual societies can be compared. He states that, it is rational to accept country influence in cultural setting of an organization rather than trying to ignore it. Hofstede (2003) states that one needs to follow the rules of the culture where the work is taking place rather than following rules of your own culture. This can be due to two reasons. Work force being diverse every one following his/her own culture would lead to dissonance hence a common rule/culture is to be followed. If such a common rule is in consonance with local rules, it will reduce external conflicts (Hofstede (2003, 2004))

Cheng Hi realized that the turn of events in the UAE Unit of his company can be attributed to the new cultural settings in which different groups had to operate. His vision was to make ABC a global construction firm. As he expands his business to different countries, he has to think of having a right organisational structure which is fully functional, open to innovation and changes and flexible enough to efficiently operate with diverse workforce in alien environments.

ABC Co. – Organisational Structure

As Peter Drucker stated that though a properly designed structure may not assure success of an organization, an improper structure certainly be a non-performer as far as realization of organizational goal is concerned (Drucker, 1973, p. 519). In contrast to the western thought, the Chinese believed that organisations function better when they are small sized (Montagu – Pollock (1991). In this type of organization, the room for formalization and specialization

is limited. More of a personalized style of management is practiced. Francesco and Gold (2005) opine that though family business was outlawed in Chinese mainland for years, it survived because of its above-mentioned structure, which has deep roots in culture. Schneider and Barsoux (2003) suggest that “theories about how best to organize put forward by different people reflect social concerns of the times and cultural background of the people who put forward such theories. *The organizational structure of ABC Company was traditional.* It worked well in a Chinese environment. However, the changed setting demands a relook in the organizational structure of ABC Company.

What should be the organizational structure that Mr. Cheng Hi has to formulate for making his ABC Company truly global? Should ABC be a traditional Chinese company or should it adopt a universal image that would go beyond the limits of nationalism and promote common approach towards values and attitudes based on education gender, age and other cultural aspects (Jameson, 2007). In the words of Bennis and Nanus (1997), strategic decision makers or founders must first have developed a mental picture, a mental image, of a possible and desirable future state of the organisation.

Organisation structure is the manner in which managers group activities to meet the goals of the organization. The design of the structure is based on the perceptions of the managers about the business reality and the actions to be taken to handle it. The western thought on management centres towards the concepts of economies of scale and big sized organisations. The different components as per that school of thought are set out as below:

1. Formalisation; The degree to which the organization stipulates the way a work is to execute. It gives stress on the extent an organization is bound by procedures.
2. Specialisation: It is the extent to which work involves specialist activities and how far the workers are grouped accordingly. The hallmark of specialization in an organisation is number of functionally based departments existing in an organisation.
3. Vertical differentiation: It denotes the reporting levels that exist in the hierarchy of the organization. It takes into account the span of control while deciding the extent of differentiation

4. Centralisation: Whether the decision authority lies with the managers mostly or it is spread throughout the organization.
5. Line or staff function: It denotes the horizontal coordination and control of an organization.

The classical structures of organisations evolved over a period of time in the backdrop of industrialization and the structures were designed with a focus on quantity of output. The organization structures evolved in response to the quest of societies to find out systematic solutions. There was a cultural shift from traditional authority to rationality in decision making in the method of operation of work places (Watson, 2006). Marx Weber’s concept about bureaucracy reflected a sense of rationality in society that he observed. Bureaucracy is impersonal in nature. The bureaucratic structure though strong in stability and longevity has the inherent weakness of rigidity and resistance to change.

The contingency approach evolved in 1950 s put forward the theory that organisations are influenced by their environment and for best performance they should adapt to ensure high performance. It was thought that organisations develop in a similar way across the globe and variables such as size determine organizational structure. Child and Kieser (1979) after elaborate studies on the impact of culture in organizational structures concluded :

1. Culture intervenes at the level of realities of structural features of organisations.
2. Culture influences the thoughts and philosophies of those who design the organisations structures.
3. Culture also shows its presence in the prior orientation of managers and workers towards concept like authority there by influencing their perception on what is acceptable and what is not.

Organizational structure impacts the overall behavior pattern of its members. It has a strong bearing on their level of motivation and level productivity (Stewart, 1999). Peter Drucker opines that there may not be a universally accepted organizational structure which will fit into any environmental setting. Every structure has its own uniqueness in its response to a situation, internal or external (Drucker, 1999).

Matrix structure evolved as a response to the need for a formal interface between vertical and horizontal controls and sharing of experts and equipment between projects. As per Larson and Gobeli, a matrix structure is a lateral authority has overriding influence over a formal structure.

Matrix structures work best in dynamic project-based environments, such as engineering and construction, each team involved can concentrate their energies upon their designated project, drawing across the range of central services as needed.

In fact, the nature of matrix structure facilitates more frequent communication, both formal and informal (Joyce 1986).

The fact that each employee reports to two or more superiors can be a reason for conflict and power struggle. From the perspective of an employee, possibility of interpersonal conflict with his team members and with leaders does exist. Role ambiguity and role conflict can cause interpersonal issues. The necessity to work with a team consisting of employees with different functional backgrounds increases the potential for task conflict at work (Ford and Radolph 1992).

Stanley M. Davis and Patrick Lawrence in their article 'Problems of matrix organization' published in Harvard Business review (May 1976) comment that Matrix structure has remedies for many common ills that an organization succumbs to owing to issues ranging from power struggles to contracting business cycles. An insightful CEO can derive the best advantages of the structure to tide over business crises effectively.

They highlight the ability of matrix organization to respond fast to changes in complex technical and market requirements as its single most advantage. The matrix organization matures over a period after a series of trial and error attempts. It refutes the myth that Matrix is an anarchic organisation. They say that power struggle in a matrix organisation is inevitable. However, the CEO can easily control it cautioning the winner that to win temporarily is to lose it ultimately. The warring parties would realize that the winner of a struggle damages the balance of the matrix structure and leads to total collapse. Sharing of power is an underlying principle of a matrix structure. Once they take an

institutional point of view, they would realise that healthy competition is a requirement of matrix organizational structure and the weaklings in matrix structure should be replaced with a strongest possible hand. The controlling officer of the two warring power seekers would do well to protect the weaker part of the structure not the weak manager. The decisions in Matrix organisations are not group decisions but are taken by those managers who possess the basic information for making such decisions. The matrix structure is well suited for contracting business cycle. The structure gives opportunity for the manager of the area which got hit due to cyclical contraction to be in command of all the elements in the structure falling in his territory and take cost control measures as deemed fit. The matrix structure provides a great advantage in reducing cost of employee engagement. It facilitates part time engagement of a specialist for a job instead of full time as the structure is always managed by multiple commands.

Conclusion

For a Construction firm aspiring for a place in the new globality of business, multi-cultural workforce has to be accepted as a norm. However, though the diversity of workforce promotes innovation and creativity and ensures fairness and equality in disbursement of benefits it can also create conflicts caused by cultural differences. There has to be a customized organizational structure for such a firm. It has to be flexible enough to accept multiple controls for individual positions and agile enough to share material and human resources as and when required between its various units. This structure also should permit functional freedom to its units to match the cultural setting of the country in which it operates. Such an organization will be truly multinational but each of its unit will reflect the nativity of that country in which it operates. Chen Hi may take a cue from General Electric Company in its Organisational Planning Bulletin (September 1976) "Successful experience in operating under a matrix constitutes better preparation for an individual to run a huge diversified institution—where so many complex, conflicting interests must be balanced—than the product and functional modes which have been our hallmark over the past twenty years." The modern day business is more complex than ever. Acceptance by local public is key to the survival of growth of any foreign company. Cheng Hi will do well to modify the company structure at Shang Hai to give cultural

freedom to individual country units to align well with national flavor of the country where the unit is operating. This way every national units of ABC Construction Company would combine and constitute a truly

multinational giant with strong national identity and acceptance. A custom-made organization structure for ABC Construction Company adopted by Cheng He is shown below:

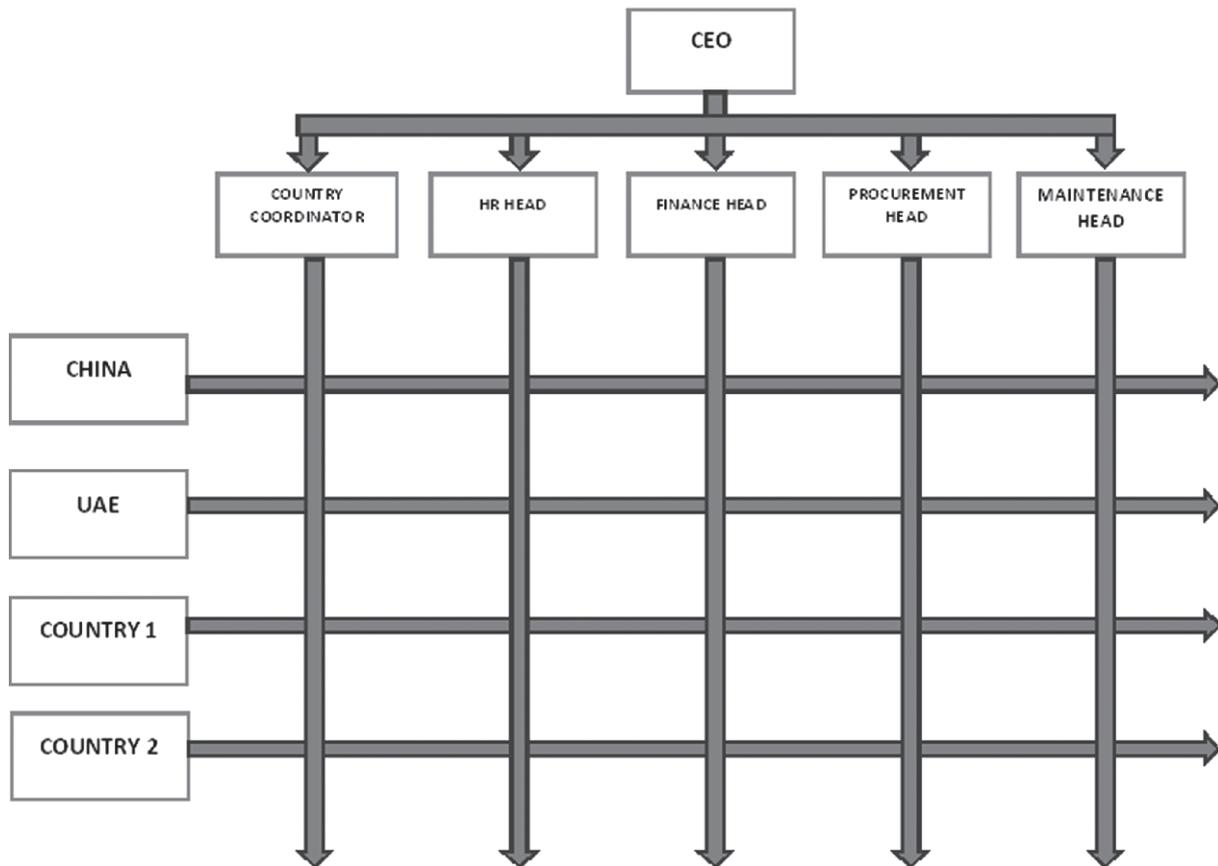


Figure : ABC CONSTRUCTION COMPANY
New Organisation Structure

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HRD Practices on Employee Engagement: Retail Organizations

Sumathi K.

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The Indian retail industry can be divided into two parts i.e. organized and unorganized sectors. The organized retailers need to have better Human resource development practices in order to continuously develop the human capital of the organized retailers. Therefore the present study is an attempt to study and identify the link between HRD practices adopted by various organized retailers at the state of Karnataka and employee engagement at the same.

Key words : Organized Retailers, GDP, HRD, Employee Engagement



Dr. Sumathi K.

Faculty Member, IMSR,
Jnanasahyadri, Kuvempu University,
e-mail sumathik02@gmail.com

Retailing industry is one of the pillars of Indian economy and it accounts for 14 to 15 percent of its GDP⁽¹⁾. The Indian retail market is estimated to be US\$500 billion and one of the top five retail markets in the world by economic value. India is one of the fastest growing retail markets in the world, with 1.2 billion people as of 2013⁽²⁾. Before 2006 India's retailing industry was essentially owner managed small shops. In 2010, larger format convenience stores and supermarkets accounted for about 4 percent of the industry, and these were present only in large urban centers. The industry employs about 40 million Indians⁽³⁾. Thus it is clear that the retailing industry getting better position over a period of time due to many reasons viz., emergence of nuclear families, an increase in the double-

1 Piyush Kumar Sinha, Srikant Gokhale, Sujo Thomas (2012), Development of Modern Retailing in India: It's Impacts on Distribution and Procurement Networks and Changing Consumption Pattern, IIMA Research and Publication, W.P. No. 2012-12-04, December 2012

2 Ms Priya Vij (2013), The Study And The Analysis: An Impact Of Organized Retail On Unorganized Retail In India, EXCEL International Journal of Multidisciplinary Management Studies , ISSN 2249- 8834, EIJMMS, Vol.3 (7), July (2013), zenithresearch.org.in

income households trend, large working population, reasonable real estate prices, increase in disposable income and customer aspiration, demand as well as increase in expenditure for luxury items and growing preference for branded products⁴. Though the industry is attracting number of top players from India and abroad, challenges, like lack of efficient it is not out of challenges, like lack of efficient supply-chain management, lack of required retail space, lack of fixed consumption pattern; lack of proper infrastructure and improper distribution channels, high prices and lack of standard HR practices.

Some of the human resources related problems are: inexperienced workers, long hours of working, highly visible employees, part-time workers, variations in customer demand, lack of training and less salary, and lack of work life balance. These features create difficulties to retailers. Therefore the traditional ways of competitive advantage have to be supplemented with organizational capability i.e. the firm's ability to manage people organizational capability relates to hiring and retaining competent employees and developing competencies through effective human resource management practices⁵.

1.2 Concept of Human Resource Development:

According to Leonard Nadler, "Human Resource Development is a series of organized activities conducted within a specialized time and designed to produce behavioral changes". Human resources development is a continuing process comprising three interdependent components:

- Investment in human resources to enhance productive capabilities,
- Utilization of those human resources to produce increased output, and

3 Urvashi Gupta (2012), Changing Consumer P References F Rom Unorganized Retailing Towards Organized Retailing : A S Tudy InJ Ammu, Journal of Emerging Knowledge on Emerging Markets, Vol. 4 [2012], Art. 10, Published by DigitalCommons@Kennesaw State University, 2012

4 Gary Dessler (2005), A Framework of Human Resource Management, Pearson Education, INC, Third Edition, ISBN 81-297-0538-9

5 Karuppasamy R, N. Ramesh Kumar (2014), Human Resource Practices In Organized Retailing-A Study Of Selected retailers, International Journal of Engineering and Management Sciences, Society for Science and Nature, VOL.5(1) 2014:17-21, ISSN 2229-600X, www.scienceandnature.org

- Participation of the human beings who have improved resources (better education, better skills levels etc.) in the consumption of that increased output through a better quality of life⁶.

1.3 Meaning of Human Resource Development

According to the American Society of Training and Development (ASTD), HRD is the integrated use of training and development, organizational development, and career development to improve individual group, and organizational effectiveness. Society is faced with new challenges and changes daily which increase the need to provide employees with appropriate learning experiences. Moreover, HRD helps organizations to provide learning related to the goals of the organization and its employees. This learning is accomplished by providing training, education, and development⁷.

1.4 Conceptual Framework of the Study:

Figure :1.1 Showing conceptual framework of the study

Above figure clearly shows the conceptual framework of the study. The study mainly concentrates on the HRD practices adopted by selected segments of organized retailing in the state of Karnataka. HRD practices include Training and development, performance appraisal, motivation and Labor welfare measures, career planning and development, Employee job satisfaction and employee engagement.

2. Review of Earlier Works

In order to understand the concept of HRD and diverse HRD practices adopted by the organized retail organizations a exhaustive literature survey has done by using published reports, research articles, books and also journals published nationally and internationally.

W. Stanley Siebert, and IZA Bonn, Nikolay Zubanov , Arnaud Chevalier, Tarja Viitanen (2006) have studied the relationship between labor turnover and labor productive. The study also highlights that by contrast, between shops, there is a positive link between average rates of turnover and

6 Udai Pareek and Roll.Lynton (2007), Training for Development, Vistaar Publication, Second Edition, ISBN: 10:81- 7036-129-x

7 Gary Dessler (2005), A Framework of Human Resource Management, Pearson Education

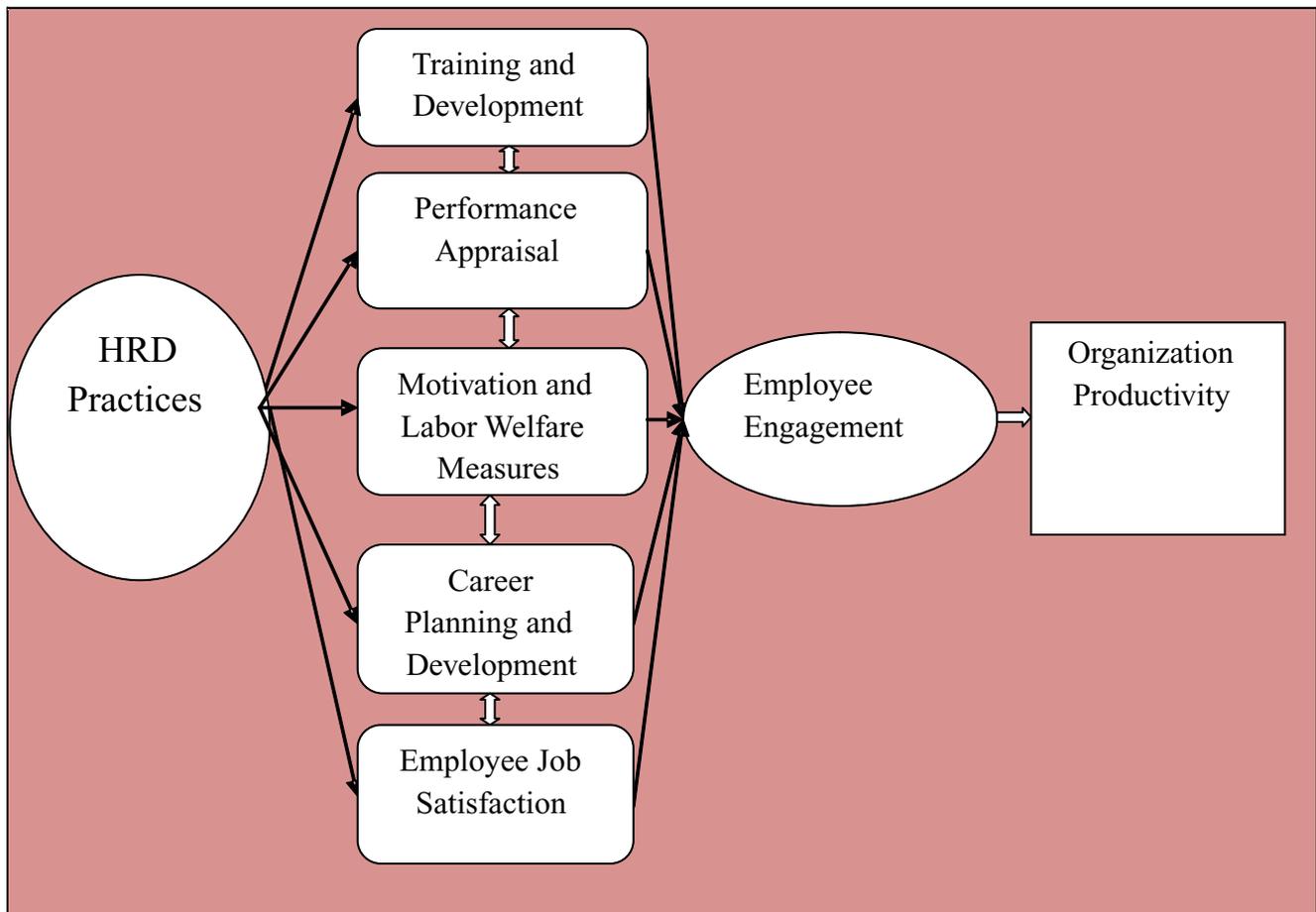


Figure1.1: Compiled from various sources

average productivity, suggesting that an unobservable management quality factor generates both high turnover and productivity. Therefore the retail organizations have to concentrate much on improving the management quality of organization⁸

Subhashini Kaul (2007) described that service quality is being increasingly perceived as a tool to increase value for the consumer; and as a means of positioning in a competitive environment to ensure consumer satisfaction, retention, and patronage. The research indicates that consumers satisfied with the store's service quality are most likely to remain loyal. However, despite its strategic importance, Indian retailers do not have an appropriate and established instrument to measure service quality. And also the study examines the Retail Service Quality Scale (RSQS) developed in the US for applicability in India.⁹

Paramashivaiah, B Eshwarappa and S. Aravind (2008) opined that organized creating is still in its nascent stage. HR practices in the industry are at the rudimentary level. Recruitment is very simple i.e. walk in interviews. The selection criteria are limited to personal interview only. The Training programmes are just through on the job methods, as and when it is felt by the management. Training programmes of the employees are self-motivated. Salary is the least motivating factor for them. The wage level of the industry is at the minimum. The employees are made to work continuously for more than 10 hours a day with less salary.

8 W. Stanley Siebert ,and IZA Bonn, Nikolay Zubanov , Arnaud Chevalier, Tarja Viitanen 'Labour Turnover and Labour Productivity in a Retail Organization', IZA Discussion Paper No. 2322 September 2006

9 Subhashini Kaul (2007), 'Measuring Retail Service Quality: Examining Applicability of International Research Perspectives in India', VIKALPA, Volume 32, No1, January - March 2007, pp-15-26

This is justified by the low skills required on the job and simplicity in the nature of work. Implementation of more technology in the industry is mandatory. To cope with the changes it will lead to increase skill level of the employees and also better HR practices¹⁰

3. Research Gap:

Studies on HRM in retailing have been conducted from various perspectives, the important aspects like Training and Development initiatives, performance and labor welfare measures, career planning and development, Employee Satisfaction and its effects on employee engagement have not been clearly addressed. Current research is an attempt to address issue other than the above.

4. Objective of the Study:

The study deals with the difference in the contribution of predictor variables (Training and Development, Performance Appraisal, Motivation and Labor Welfare measures, Career Planning and Development, Employee Job Satisfaction) in predicting the criterion variable (Employee engagement) of employees of organized retail organizations.

5. Hypothesis of the Study:

H₀: There is no significant difference in the contribution of predictor variables (T&D, Performance appraisal, motivation and labor welfare measures, Career planning and development, employee job satisfaction) in predicting the criterion variable (employee engagement) of Employee level.

6. Research Methodology

6.1 Type of Research

The present study is exploratory, descriptive and analytical in nature. The study is based on both quantitative and qualitative methodologies to investigate into different constructs postulated.

6.2 Scope of the Study

Out of 27 districts in Karnataka, the study was conducted in 11 districts (Bengaluru, Mysore, Mandya, Mangalore, Udupi, Dharwad, Belgaum, Hubli, Shivamogga, Davanagee and Hassan), where the selected organized retailers have their stores. For the study three segments of the organized retail industry like lifestyle, food and grocery, electronics

and home appliances have been covered. In turn the conceptual scope of the study is confined to human resource development practices like training and development, performance appraisal, motivation and labor welfare measures, career planning and development employee job satisfaction and employee engagement. However the study is conducted for organized retailers who have different chains in different cities across the world. The study also covers only employee level except managerial level employees.

6.3 Data Sources

A self-instructed questionnaire was developed for the study to collect the required data from the employees of the organized retail organization at three segments. The secondary data is collected through published sources like Books, Journals and also Company Websites and other e-sources.

6.4 Sampling Technique

The sampling procedure followed in the present research study is that of Stratified simple random sampling, however the study area is divided into three strata's like Lifestyle segment, food and grocery segment and electronics and Home Appliances segment for the data collection purpose.

6.5 Sample Size

Sample size is 600 employees from organized retailing organizations, 200 from each segment.

6.6 Analytical Techniques

MS excel and SPSS 21 was used for the purpose of data analysis. Co-relation and regression analysis is used to prove the contribution of independent variable on dependent variable.

7. Results and Discussions:

For the analysis purpose the training and development, performance appraisal, motivation and labor welfare measures, career planning and development and employee job satisfaction have been studied separately and finally the effects of these predictor variables on criterion variable is exhibited below.

7.1 Testing of Hypothesis:

H1₀: There is no significant difference in the contribution of predictor variables (T&D, performance appraisal, motivation and labor welfare measures, career planning and development, employee job satisfaction) in predicting the criterion variable (employee engagement) at employee level.

10 P. Paramashivaiah, B Eshwarappa & S. Arvind (2008) "HR Practices in Retail Industry", the Indian Journal of Commerce", vol. 61 No. 4, October to December 2008, PP 79 to 86.

Table 1: Shows Regression Co-efficient of Contribution of HRD Practices on Employee Engagement (Model Summary)

R	R Square	Adjusted R Square	Std. Error of the Estimate
.723 ^a	.707	.707	1.17266

Table: 2 Summary of ANOVA for Regression

Model	Sum of Squares	df	Mean Square	F	Sig.
Regression	8000.032	5	1600.006	1163.528	.000 ^b
Residual	815.454	593	1.375		
Total	8815.486	598			

Interpretation

The effect of Training and Development (X₁), Performance Appraisal (X₂), Motivation and Labor Welfare measures (X₃) and Career Planning and Development (X₄), Employee job Satisfaction (X₅) was found to be significant (F=1163.528, p<0.01) on Employee engagement at employee level at 0.01 level of significance. Hence, the

null hypothesis is rejected and alternative hypothesis is accepted. It means that, Training and Development (X₁), Performance Appraisal (X₂), Motivation and Labor Welfare measures (X₃) and Career Planning and Development (X₄), Employee job Satisfaction (X₅) are the significant Predictors of Employee engagement at selected segments of organized retails.

Table: 3 Summaries of Regression Coefficients for Employee Engagement

Model	Un standardized Coefficients		Standardized Coefficients	t	Sig.
	B	Std. Error	Beta		
(Constant)	1.693	.270		6.260	.000
Training and Development	.056	.024	.048	2.295	.022
Performance Appraisal	.372	.035	.269	10.505	.000
Motivation and Labor Welfare Measures	.429	.036	.307	11.771	.000
Career planning and Development	.127	.026	.115	4.935	.000
Employee Job Satisfaction	.464	.023	.422	19.822	.000

Dependent Variable: Employee Engagement

Results of the above table clearly indicated that, the effect of Training and Development(X_1) was found to be positive and significant on employee engagement of employees at managerial level (Regression co-efficient= .048, $t=2.295$, $p<0.01$) at 0.01 level of significance. Hence, the null hypothesis is rejected and alternative hypothesis is accepted. It means that, Training and Development (X_1) is a significant predictor of employee engagement of selected segments of organized retails

The effect of Performance appraisal (X_2) was found to be positive and significant on employee engagement at managerial level (Regression co-efficient= .269, $t= 10.505$, $p<0.01$) at 0.01 level of significance. Hence, the null hypothesis is rejected and alternative hypothesis is accepted. It means that, performance appraisal (X_2) is a significant predictor of Employee engagement at employee level.

The effect of Motivation and Labor Welfare measures (X_3) was found to be positive and significant on employee engagement at managerial level (Regression co-efficient= .307, $t=11.771$, $p<0.01$) at 0.01 level of significance. Hence, the null hypothesis is rejected and alternative hypothesis is accepted. It means that, Performance Appraisal (X_3) is a

significant predictor of Employee Engagement of employees at employee level.

The effect of Career planning and Development (X_4) was found to be positive and significant on employee engagement at managerial level (Regression co-efficient= .115, $t=4.935$, $p<0.01$) at 0.01 level of significance. Hence, the null hypothesis is rejected and alternative hypothesis is accepted. It means that, Career Planning and Development (X_4) is a significant predictor of employee engagement of employees at employee level.

The effect of Employee job Satisfaction (X_5) was found to be positive and significant on employee engagement at managerial level (Regression co-efficient= .422, $t=19.822$, $p<0.01$) at 0.01 level of significance. Hence, the null hypothesis is rejected and alternative hypothesis is accepted. It means that, employee job satisfaction (X_5) is a significant predictor of employee engagement of employees at employee level.

The relative contribution of Training and Development, Performance Appraisal, Motivation and Labor Welfare measures and Career Planning and Development, Employee job Satisfaction on employee engagement of employees at employee level are also presented in the following table

Table: 4 Relative contributions of predictor variables on criterion variable (Employee Engagement)

Independent Variable	B	r	$\beta \times r$	% of contribution
Training and Development	.048	.	0.033072	3.3072%
Performance Appraisal	.269	0.796	0.2141	21.4124%
Motivation and Labor Welfare Measures	.307	0.885	0.02716	2.71695%
Career planning and Development	.115	0.832	0.09568	9.0%
Employee Job Satisfaction	.422	0.851	0.359122	35.9122%
Total				72.34875%

The Total contribution of all the independent variables on Employee Engagement at employee level found to be 72.34875% in which, the contribution of Training and development (X_1)= 3.3072%, Performance Appraisal (X_2)=21.4124%, Motivation and Labor Welfare Measures

(X_3)=2.71695% and Career Planning and Development (X_4) is about 9% and Employee Job Satisfaction (X_5) is about 35.9122%. Therefore it can be concluded that the Employee job satisfaction (X_5) is the First contributor/predictor followed by performance appraisal (X_2), career planning and

development (X_4) and Training and development (X_1) and Motivation and labor welfare measures (X_3) on Employee Engagement of employees at selected segments of organized retailing at employee level. However the regression analysis has been done based on the opinion given by the respondent employees at the study area. Hence based on the percentage contribution of the independent variables on dependent variable, it can be concluded that the employees are satisfied with their job followed by performance appraisal, where as other HRD functions like training and development, career planning and development and motivation and labor welfare can be concentrated much.

The regression equation developed for the contribution of predictor variables (Training and Development, Performance Appraisal, Motivation and Labor Welfare Measures, Career Planning and Development and Employee

Job Satisfaction) in predicting the criterion variable (Employee Engagement) at employee level is

$$Y = 0.056 + 0.048(X_1) + 0.372 + 0.269(X_2) + 0.429 + 0.0307(X_3) + 0.127 + 0.115(X_4) + 0.464 + 0.422(X_5)$$

Y = Employee Engagement

X_1 = Training and Development

X_2 = Performance Appraisal

X_3 = Motivation and Labor Welfare Measures

X_4 = Career Planning and Development

X_5 = Employee Job Satisfaction

Above results are shown in the figure below with its contribution in terms of percentage.

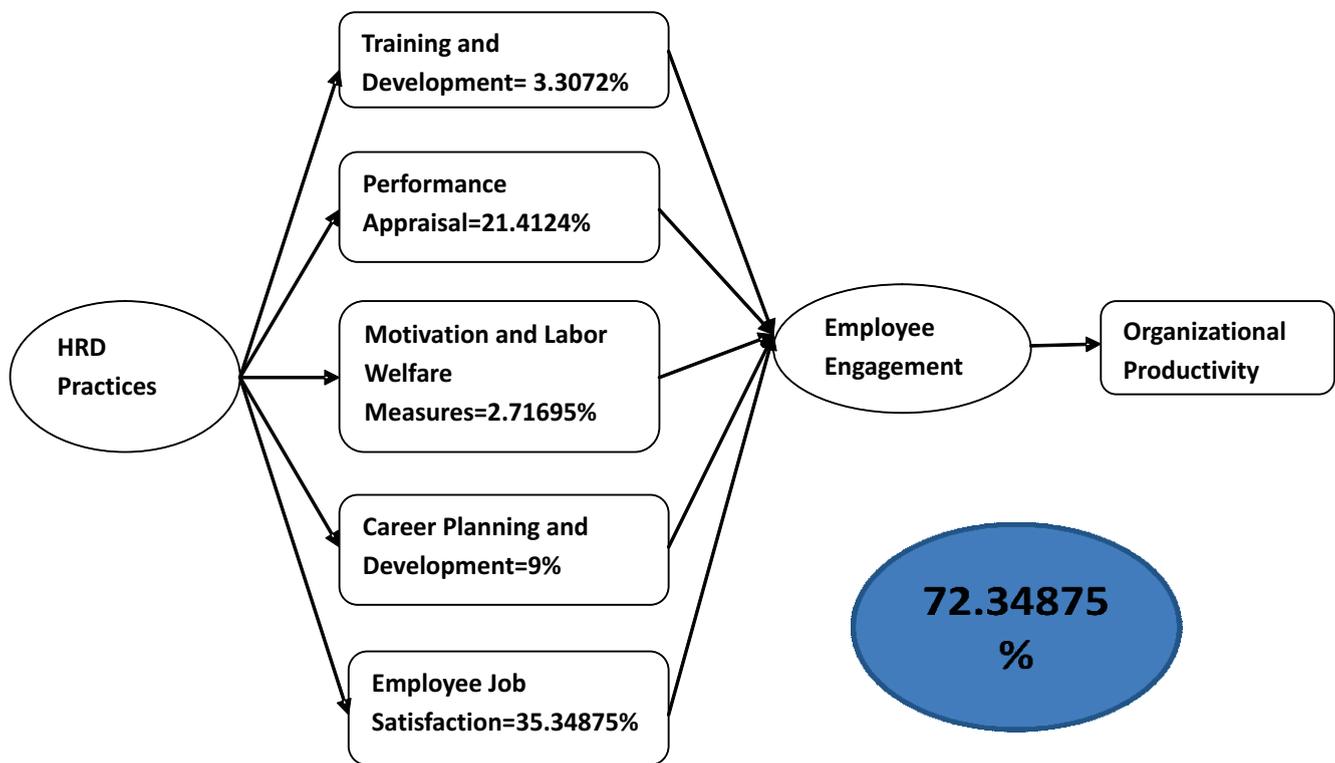


Chart: 2 Contribution of predictor variables on criterion variable in percentage

Interpretation:

From the above chart it can be clear that the predictor variables have their own contributions in predicting the criterion variable at different percentage, the total percentage of contribution is 72.34875% remaining will be other factors which contribute to the employee engagement which could not be identified by the present study. and suggested for further research.

Conclusion:

The findings of the present study in three selected segments of the study area reported that many organizations like Shopper Stop, Lifestyle, Joy Allukas, Abharana are adopted by very sound HRD practices like training and development, performance appraisal, motivation and labor welfare, employee job satisfaction which will effect on the employee engagement in turn supports to organizational growth and efficiency. At the same time it is identified that the retail chains falling under the food and grocery segment like More, Big Bazaar, Food Bazaar have not adopted very sound HRD practices when compare to other segments, the reason behind this is stumpy turnover of the organization. And also the sample organizations selected for the study have different practices for two different levels of their employees. Hence forth the study outcomes suggested that the Indian Retail association have major role to play and they have to control the activity of organized retail organizations to bring efficiency in the sector. At the same time the organizations also need to have their best and benchmarking practices in order to bring out effectiveness and efficiency of both individual and organization as well. To evidence the statement the above chart 2 shows the contributions of different practices on employee engagement are very high. Therefore it suggested to the retail organizations that even though the retails have very sound HRD practices if they develop their practices further, it will lead to better employee engagement and there by contributes to increased productivity of the organization.

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Backwater Tourism : RT Initiatives and Socio- Environmental Dynamics

Ravish Mathew, Anu Chandran R.C., and Sampada Kumar Swain

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The Vembanad Lake is an iconic tourist place and an identified Ramsar Site. Over the years, it has been touted as an established backwater tourism region. Vembanad Lake is also the biggest fresh water lake in Kerala and the people around are profoundly dependent on its offerings for their livelihood. Kumarakom, the premier backwater tourism destination in the region is listed as part of the Responsible Tourism (RT) initiative of Kerala Tourism. An in-depth enquiry has brought to light the road blocks with respect to the RT initiatives and the thematic analysis and inferences shall strengthen the blueprint so as to enable the planners, policymakers, and tourism service providers fine tune the societal dynamics as well as take remedial measures for the preservation of the depleting lake ecosystem in a sustainable manner.

Key words : *Backwater Tourism, Responsible Tourism Initiative (RT), Wetlands, Ecosystem, Ecological Threats, Environment Pollution, Preservation, Sustainable Development.*



Dr. Ravish Mathew
Post Doctoral Fellow
Department of Tourism Studies
School of Management
Pondicherry University, India

Dr. Anu Chandran R.C.
Assistant Professor
Department of Tourism Studies
School of Management
Pondicherry University, India

Prof. Sampada Kumar Swain
Professor
School of Tourism and Hospitality Management
Indira Gandhi National Tribal University, M.P. India.

The paradigms of tourism are undergoing certain marked shifts; world over. The scale of tourism development and tourists' footfalls at the global level is quite impressive. According to UNWTO, in 2015, international tourist arrivals touched 1,186 million and are forecasted to rise to 1.8 billion by 2030. Thus, the tourism phenomenon can be expected to continue to expand as more people in more countries around the world have growing affluence and time to travel. Domestic tourism is even more significant than international, with estimates pointing to 4 billion domestic tourists' worldwide. The neo forms of tourism are slowly but steadily gaining traction. An explorative dimension has started to rule the roost as regards the vibrant and varied tourism offerings dished out by fascinating global destinations. The experiential aspects of tourism have been leveraged by Destination Management Organizations (DMO's) to greater effect so as to woo the various segments of tourists. Through the ages, water bodies have mesmerized tourists across continents. Destinations possessing marine resources are rapidly growing and the

impacts of tourists' activities are posing serious concerns to planners and developers. However, there are scores of examples where tourism has produced positive results in aqua-based tourism destinations in terms of associated infrastructural developments, enhancement of standard of living of the host communities, eco-cultural revival, and resource protection. Furthermore, the silver lining here is that tourism brings forth an agenda for the legitimate protection of water-based resources and the emergence of more conservation advocates and projects. Rather than putting its weight on mass tourism, the need of the hour for fragile destinations such as backwater regions like wetlands is to focus on alternative tourism practices. The value of the world wetlands is ever increasing and receiving due attention as they contribute to a healthy environment in many ways (Paul et.al 2011). It is also observed that urban wetland act as a haven for many species of flora and fauna, stabilize the local climate, help in flood control and replenish ground water, and also it is important for carbon sequestration and emission. Wetlands are amongst the most productive of the world's ecosystems, providing services such as water, food, construction materials, transport, and coastline protection, as well as provide important opportunities for tourism and recreation, which are also defined as 'ecosystem services'. Wetlands and Wetlands associated tourism are enamoring forms of tourism which configure leisurely cruise through the lakes, rivers, or backwaters, and the experience linked dimensions of adventure water sports activities. Projections of tourism and ecological organizations such as UNWTO, IUCN, etc., vouch for the fact that many segments of tourists evince interest towards wetland and wetland related tourism activities. At present in India only 50% of the wetland remains. They are disappearing at a rate of 2% to 3% every year (Surker.D).

In India, the state of Kerala which is often described as '*the favorite child of nature*' possesses a niche identity owing to the extensive backwaters and blue lagoons that dot the coastal belt. Kerala is among the few states renowned for wetlands and more importantly for its scintillating backwaters. Kerala has a long coast line of 580 km (360 miles) entrenched with beautiful sandy beaches, 44 rivers and 10 lakes, (41 west flowing rivers and 3 east flowing rivers, viz, *Kabani, Bhavani & Pampar*). The important stretch of this unique water world is the 168 km expanse

from Kollam to Kottapuram, declared as a National Waterway. (http://www.kerenvis.nic.in/Database/Lakes_1634.aspx)

The number of rivers and lakes establishes that the state is rich in water potential. Besides, canals, springs, waterfalls, rivulets, marshes, vernal pools, bogs, and mangroves adds to the wetland potentiality of Kerala. As regards the tourists' arrivals to Kerala in 2015, the State was ranked 7th (4.2% of the total foreign tourist visit in India). The foreign exchange earnings during the year 2015 stood at Rs.6949/- crore, which record an increase of 8.61% over the previous year. While the total revenue generated from tourism was Rs.26689.63/-crore. The Kerala Tourism Policy document's projections of 2012 targeted an annual growth rate of 15 percent in foreign tourists' arrivals and expect to receive 3 million tourists by 2021. On the Kerala front, the planners are looking forward to achieve an annual growth rate of 7 percent for the next decade and host 18 million domestic tourists by 2021. (Source: www.keralatourism.org/tourismstatistics.pdf) Kerala has been in the forefront in offering finest travel and hospitality experiences to the visitors. The cultural and biological diversity of the wetlands as a whole incredibly represents the invaluable wealth that sustains the hosts and guests, both physically and emotionally.

Wetland Tourism – World Scenario

The global importance of wetlands came into limelight after the Ramsar Convention. Around the globe, there were much hue and cry to protect the wetlands and flora and fauna directly or indirectly associated with it. The Mission of the Ramsar Convention on Wetlands is the conservation and wise use of all wetlands through local and national actions and international cooperation as a contribution towards achieving sustainable development throughout the world. Giving more importance to Wetlands and Wetlands associated tourism, UNWTO and the Secretariat of the Ramsar Convention signed a Memorandum of Cooperation in February 2010 as the starting point for effective and fruitful synergy. Particularly, UNWTO mooted the theme of "*Wetland Tourism and Recreation*" for the Ramsar's 11th Conference of the partners in Bucharest, Romania and the World Wetland Day 2012 was dedicated to the theme "*Wetlands & Tourism-A Great Experience*". Wetlands are among the most productive of world's ecosystems providing a diversity of ecosystem services that sustain all forms of

lives. These include *Cultural Ecosystem Services* such as the aesthetic, recreational, and spiritual values manifested by any wetland and it is these services that will go on to explain the popularity of wetlands as tourist destinations, attracting millions of visitors every year. Some of the most important wetland destinations across the globe and its geographical and tourism importance are (a) Everglades, (United States of America), 6,21,000 ha of the wetland consists of fresh water and wet prairies, subtropical forest, salt marshes, mangrove forests, beaches, dunes, brackish water estuaries; (b) Sooma Wetlands (Estonia) 39,639 ha, famous for its raised bogs, rivers, swamps, forests, flood plains, and meadows; (c) Skocjan Caves (Slovenia), 41,300 ha, having a unique geographical system like river catchments with meadows, forest plains, karst and under water cave system; (d) Ichkeul (Tunisia), 12,600 ha lake surrounded by Mediterranean scrubs and forests; (e) Pantanal (Brazil, Bolivia, Paraguay) which is one of the largest and best preserved wetlands in the world, covering a total area of 1,50,000 km² and its complex system of marshlands, flood plains, lagoons, and interconnected drainage lines are home to over 658 species of birds, 190 mammals, 50 reptiles, 270 fish species and a truly outstanding 1,132 species of butterflies. Pantanal is also a renowned Jaguar Tourism destination; (f) Ibera Marshes (Argentina) 13,000 ha, configures lakes, marshes, rivers and forests; (g) Nakuru (Kenya) 18,800 ha, renowned for shallow alkaline lake in an enclosed basin surrounded by marshes, grass lands and forests; (h) Abrohlos Marine National Park, Brazil 91,300 ha consists of coral reefs, seagrass beds, mangrove beaches and sand banks; i) Tso Moriri (India ,J.K & Ladakh) 12,000 ha in high altitude consists of fresh water lakes and marshes; (j) Be Lake (Vietnam) 10,480 ha of freshwater lake surrounded by forests and limestone karsts and jaw dropping landscape.

Literature Scan

Wetland – Core Concepts

The geographical resource of Wetland is aptly distinguished thus: “*A wetland is a land which is wet*”. But not all wetlands result in a wetland. Why is this so? A wetland is found where the land is wet enough (i.e. saturated or flooded) for long enough to be unfavorable to most plants but are favorable to plants adapted to anaerobic soil conditions. As soil becomes increasingly wet, the water starts to fill the space; between the soil particles. When all the spaces are

filled with water the soil is said to be saturated. In areas which are not wetlands, water drains away quickly and the soil does not remain saturated. However, in wetlands the water persists or drains away very slowly and the soil remains saturated or flooded for long periods. Soil in these conditions is said to be waterlogged. Depending on factors such as temperature, it usually takes a week or so for the plant roots and other living organisms in the soil to use up the oxygen, causing anaerobic conditions to develop in the waterlogged soil. The importance of wetlands got a global visibility after the famous Ramsar Convention which was held in Iran in the year 1971. The Ramsar Convention (1971) Article 1 (1) defines Wetland as “*area of marsh, fen, peatland or water, whether natural or artificial, permanent or temporary, with water that is static or flowing, fresh, brackish or salty including areas of marine water, the depth of which at low tide do not exceed six meters. It may also incorporate riparian and coastal zones adjacent to wetlands and islands or bodies of marine water deeper than 6 meters at low tide lying within the wetlands. A Ramsar Site, or Wetland of International Importance, is a wetland area designated under the Ramsar Convention by the national government of a Member State. Currently there are over 2,000 such sites covering over 192 million hectares: an impressive global network of wetlands that meet criteria related to their biodiversity and uniqueness.* Researchers often refer to wetland as ‘kidneys’ of the earth and forest as the ‘green lungs’ of the earth. The same concept has also been adopted by the European Commission, which groups the wetlands in Europe broadly as marine and coastal wetlands, estuaries and deltas, rivers and flood plains, lakes, freshwater marshes, peat lands and manmade wetlands (CEC, 1995). Cowardin et.al (1979) defines wetlands as “*the lands transitional between terrestrial land aquatic systems where the water table is usually at or near the surface, or the land is covered by shallow water.*” It includes three attributes that help to delineate a wetland: (i) the area must be permanently or periodically inundated or water must be present for at least seven successive days during the growing season; (ii) the area must support hydrophytic vegetation; and (iii) the substrate is predominantly hydric soils that are saturated or flooded for a sufficiently long period to become anaerobic in their upper layers. The following is a brief description of the major classes of wetlands under the Cowardin (1979) system. Marine - Open Ocean overlying the continental shelf and coastline exposed to waves and currents of the open

ocean shoreward to (1) Extreme high water of spring tides; (2) seaward limit of wetland emergent's, trees, or shrubs; or (3) The seaward limit of the Estuarine System, other than vegetation. Salinities exceed 30 parts per thousand. Estuarine - Deepwater tidal habitats and adjacent tidal wetlands that are usually semi-enclosed by land but have open, partly obstructed, or sporadic access to the ocean, with ocean-derived water at least occasionally diluted by freshwater runoff from the land. The upstream and landward limit is where ocean-derived salts measure less than during the period of average annual low flow. The seaward limit is (1) an imaginary line closing the mouth of a river, bay, or sound; and (2) the seaward limit of wetland shrubs or trees when not included in: (1). Riverine - All wetlands and deepwater habitats contained within a channel except those wetlands (a) dominated by trees, shrubs, persistent emergent's, emergent mosses or lichens; (2) which have habitats with ocean-derived salinities in excess of Lacustrine - wetlands and deepwater habitats (3) situated in a topographic depression or dammed river channel; (4) lacking trees, shrubs, persistent emergent's, emergent mosses or lichens with greater than 30% aerial coverage; and (5) whose total area exceeds 8 hectares (20 acres); or area less than 8 hectares if the boundary is active wave-formed or bedrock or if water depth in the deepest part of the basin exceeds 2 m (6.6 ft) at low water. According to Bacon (1987), recreational use of wetlands need not conflict with their conservation objectives. However, decisions concerning the protection of wetlands should precede recreational planning. From the utilitarian point, wetlands can be defined as transitional areas between permanently flooded deep water environments and well drained uplands that contribute to a wide array of biological, social, and economic benefits (Watzin & Gozzelink, 1992). Orams (1995) argued that ecotourism management strategies should attempt to move ecotourism experiences beyond mere enjoyment to a more active role which incorporates learning, attitude, and behavioural change. Through these desired objectives, the activities of visitors would actually contribute to the health and viability of the natural environment. The Boondall Wetlands Reserve has adopted such management strategies through the facilitation of education at the Visitor Centre. By providing financial support and/or labour through community involvement, visitors are assisting directly in the maintenance and

protection of the natural environment. The behavioural objective is more complex and difficult to measure, and is recognized as being a somewhat idealistic objective. Wetland ecosystems are such a complex resource. They account for about six percent of the global land area and are among the most threatened of all natural resources. Wetlands found in temperate climate zones in developed economies have long suffered significant losses and continue to face an on-going conversion threat from industrial, agricultural, and residential developments, as well as from hydrological perturbation, pollution, and pollution-related effects (Turner, 1991).

Responsible Tourism

The responsible tourism concept mandates each tourism business to do their part and take responsibility for achieving sustainable tourism. Specifically, the 2002 Cape Town Declaration, formulated during the Cape Town Conference on Responsible Tourism in Destinations, argues that this form of tourism: minimizes negative economic, environmental and social impacts; generates greater economic benefits for local people and enhances the well-being of host communities; improves working conditions and access to the industry; makes positive contributions to the conservation of natural and cultural heritage and also to the maintenance of the world's diversity while providing more enjoyable experiences for tourists through more meaningful connections with local people; creates a greater understanding of local culture, social and environmental issues; provides access for physically challenged people and, is culturally sensitive and engenders respect between tourists and hosts and builds local pride and confidence. (p.3). In other words, responsible tourism helps "*create better places for people to live in and better places to travel and visit.*" (Cape Town Declaration 2002). In 2007, the Kerala government adopted "Responsible Tourism" (RT) as the cornerstone of its tourism policy and chose Kumarakom, Thekkady, Wayanad, Kovalam, and Bekal as pilot destinations for implementing the concept. The objective was to promote community engagement in tourism planning and programmes. The community engagement came through creation of micro enterprises, undertaking group farming, and setting up ethnic restaurants run by women from Below Poverty Line (BPL) families.

Research Design and Methodology

The researchers chose the qualitative method by reviewing and analyzing the media reports, published works, and research outputs and dossiers of consultancies and NGOs working in the field of Responsible Tourism such as EQUATIONS, DHAN Foundation, Ecosphere and Srishti. Tourism officials and industry practitioners were consulted over the social media platforms as well as over e-mail to reinforce the thematic analytical insights posited by the researchers and also to take resourceful views on the issues. In the present study, thematic and content analyses were used to scrutinize and infer the data acquired from report reviews and expert responses.

Backwater Tourism Vistas in Kerala

Kerala is situated in the extreme south west corner of the Indian Sub-Continent. The *God's Own Country* comprises the narrow coastal strip surrounded by the Western Ghats in the East and the Arabian Sea in the West. Kerala comprises three natural divisions which are: (a) The High Land – The Western Ghats constitute this region; (b) The Low Land – it stretches along the coastal plain in the West, and (c) The Midland- in between the High Land and the Low Land which is rich in agricultural products. Besides the sea coast Kerala has a chain of lagoons and backwaters. They provide communication between different parts of Kerala. The most important lakes of Kerala are *Ashtamudi*, *Vembanad*, and *Sasthamkotta*. Backwater tourism has been positioned in the tourism map as the Unique Selling Proposition (USP) of Kerala Tourism.

Kerala's centuries old backwater stretch over 900 km long snake their way across the land, sometimes seeping into the sea, then emerging and flowing on, bestowing fertility on surrounding villages and paddy fields. The merchant ships used to tread the backwaters carrying valuable articles of ivory, gold, coconut, rubber, and spices. The entire backwater stretch- some clogged over a period of time- act as vital channels for the transport of goods, people, and produces (<http://www.keralabackwater.com/tours/backwaters.htm>). The backwaters are sometimes the only link between remote villages and major towns. The backwater regions throb with enchanting cultural expressions and manifests. The tourists get invigorated by just experiencing the voyage through the poppling water relishing the lake side delicacies and delights. The lush palm

groves and lovely paddy fields offer spectacular visual treat. Tourists are found eagerly observing the practices along the shoreline such as pounding coconut husks for coir fiber, angling, etc. There are regular ferry services and cargo boats that ply to and fro from dawn to dusk. The smaller canoes also can be found operated by native village folks. Thatched country-side shops along the lake side offer fermented nectar with fried carps (*Karimeen*).

The history of water transportation in Kerala can be traced back to the mighty Chera period. It is believed that Chera kingdom had one of the impregnable and powerful navy and the boats were designed in such a way that it can carry 100 army troupes at a time. The renowned backwaters comprise an intricate network of lakes, canals, estuaries, and deltas of forty-four rivers that drain into the Arabian Sea. The important stretch of this unique water world is the 168 km expanse from Kollam to Kottapuram, declared as a National Waterway. As tourism activities started gaining momentum, local country boats were converted for sports and leisure activities. Today, the traditional boat (*Chundan Vallam*) is used during the annual boat races during the harvest festival of Onam. The age old cargo boats were converted in to luxury house boats (*known as Kettuvalloms in olden days*) in due course of time. Country boats are made using sustainable and local materials like jack wood, woven together with coir (*a coarse fiber found on the exterior of a coconut shell*) and sealed with fish oil. The house boats are usually made of Rose Wood. The boats normally have longevity of 50-60 years, with annual application of fish oil. Houseboats are in the current age constructed lavishly and configure one bed room to five bed rooms. Some houseboats provide facilities like restaurants, swimming pools, ayurvedic massages and cultural entertainments.

The backwaters were formed by the action of waves and shore currents creating low barrier islands across the mouths of many rivers flowing down the Western Ghats range. The backwaters have a unique ecosystem - freshwater from the rivers meets the seawater from the Arabian Sea. In certain areas, such as the Vembanad Kayal, where a barrage has been built near Kumarakom, salt water from the sea is prevented from entering the deep backwaters and lakes inside, keeping the fresh water intact. Such fresh water is extensively used for irrigation purposes. Vembanad Kayal is the largest of the lakes, covering an area of 200 sq.km, and bordered by Alappuzha (Alleppey), Kottayam, and Ernakulum districts. The gateway to the great backwaters is the magnificent

eight-armed Ashtamudi Lake in Kollam, which gets connected to the vast Vembanad Lake that flows through Alappuzha and Kottayam districts, before opening out into the sea at the Kochi Port. Home to more than 20,000 waterfowls - the third largest of such population in India, the Vembanad Wetland System is included in the List of Wetlands of international importance, as defined by the Ramsar Convention for the conservation and sustainable utilization of wetlands in November 2002. The backwaters in Kerala consist of Allapuzha, Kottayam, Thiruvananthapuram, Kollam, Kuttanad, Kozhikode, Kasaragod, Kochi, and Kumarakom backwaters. Conjointly, Kerala Tourism has tagged it as *'The Most Fascinating Water World on Earth - The Great Backwaters.'*

Unique and Enthralling Offerings of Kumarakom Backwaters vis-a-vis Facets of Special Interest Tourism Kottayam district is popularly known as the *Land of Lakes,*

Latex, and Letters. Bordered by the towering Western Ghats on the east and the alluring Vembanad Lake and paddy fields of Kuttanad on the west, Kottayam is a land of unique characteristics. Panoramic backwater stretches, lush paddy fields, highlands, hills, and hillocks, extensive rubber plantations, places associated with many legends, and the high number of literate people have made Kottayam a vibrant district of Kerala with a special place in the realm of tourism. The State is an important trading center of spices and commercial crops, especially rubber. Most of India's natural rubber originates from the acres of well-kept plantations of Kottayam, also home to the Rubber Board. Kottayam is also called as *"Akshara Nagari"* which means the *'City of Letters'* considering its contribution to print media and literature. Kottayam Town is the first town in India to have achieved hundred percent literacy (*a remarkable feat achieved as early as in 1989*).

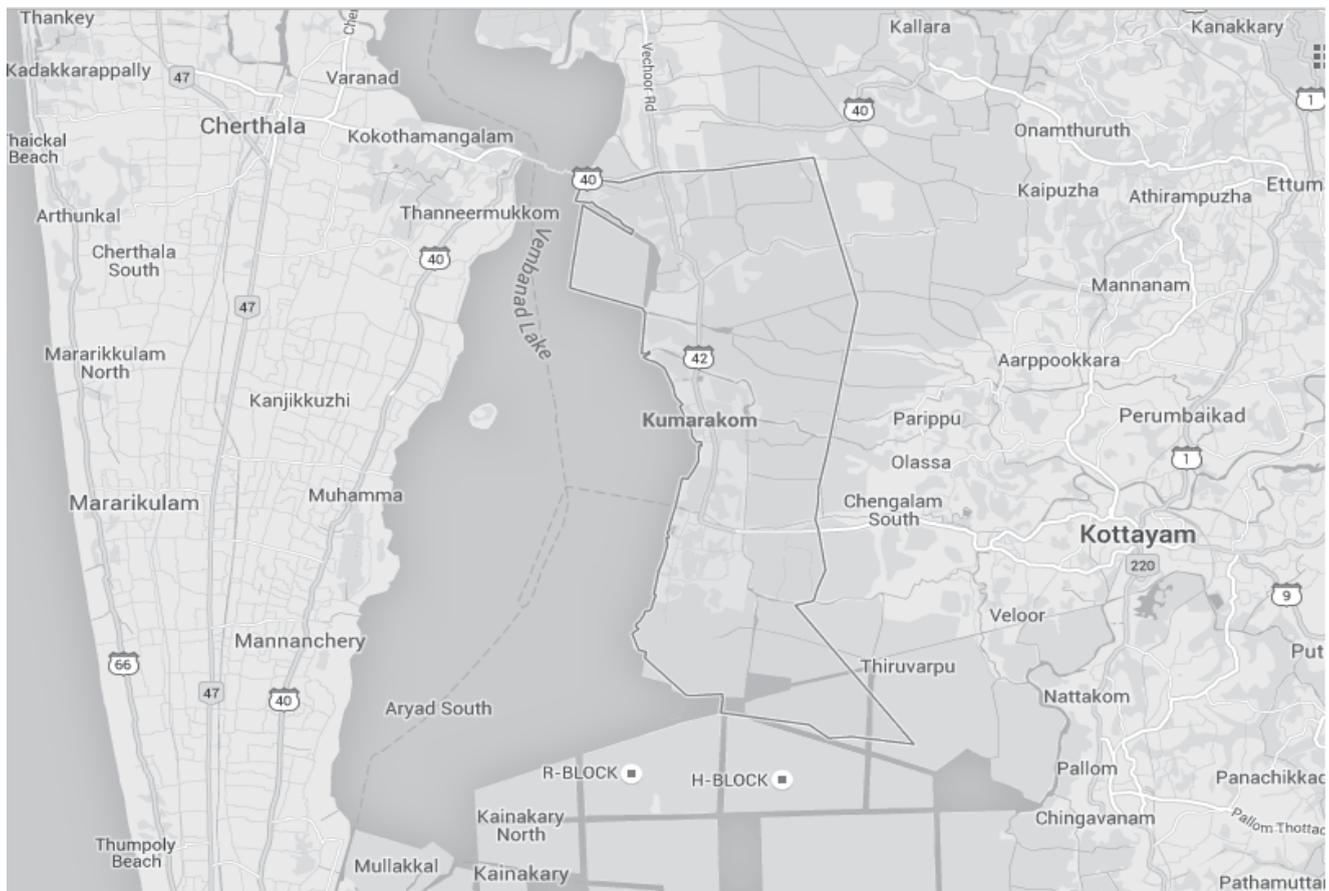


Figure:1. Mapping Destination Kumarakom and its Location Features.

Source: <http://www.google.co.in/kumarakom+map>

The name '*Kumarakom*' is said to have derived from the words '*kuminja*' (*heap*) and '*akam*' (*inside*), referring to a land formed by the accumulation of sediments. The island created by the deposition of mud and other materials through natural and man-made methods, is one of the world's most favorite tourist spots. The mythological name of "*Kumarakom*" was derived from the deity of the oldest temple Kumaran. '*Kumaran's Akam*' or place eventually became Kumarakom. In 1878, the marshy mangroves on the banks of the Vembanad Lake was cleared and replaced by coconut plantations. Kumarakom is situated on the banks of Vembanad Lake, 10 km west of Kottayam district located between. (09° 00' – 10° 40' N Latitude and 76° 00' -77° 30' E Longitude). It has an area of 51.67 sq.km (12,844 Acres) of which 24.13 sq.km is part of Vembanad lake, 15.04 sq.km spatially dotted by an island and 16 sq km is covered by paddy fields. Four important canals connect the lake to the sea namely (a) *Thottappally* (b) *Andhakaranazhi* (c) *Kochi* (d) *Azhikode*. The lake is fed by six major rivers from Western Ghats (a) *Achankovil* (b) *Pampa*(c) *Meenachil* (d) *Manimala* (e) *Muvattupuzha* (f) *Periyar*. The total length of the lake is 96km. South to Thaneermukkam Bund is 13,224 hectares and the area of the lake North of Thaneermukkam Bund is 23500 hectares. The designated area of the settlement of the village is only 12 Sq.kms. Due to its natural charm and aesthetic beauty, Kumarakom has gained momentum to entice both foreign and domestic tourists. The saying '*Kayal, Kuil, and Karimeen*' (*Lakes, Indian cuckoo—(Cuculus Micropterus)- and Pearl Spot- a highly sought after variety of wetland fish.* is popular keeping in view the offerings of Kumarakom. George Alfred Baker, an English farmer who arrived in India in 1857, reclaimed 500 acres of Vembanad Lake and made gardens and paddy fields. He built Baker's House, in which four generations of Bakers lived until 1962. Apart from the efforts of the Government to promote tourism in the area a crucial factor which has also contributed to the growth of tourism here is the mention of Kumarakom in one of the best seller novels of the modern century - *God of Small Things* by Booker Prize winning writer Arundhati Roy. Following the success of the book, the Ayemenem House, where Arundhati Roy spent her early childhood has been turned into a tourist attraction. In order to protect the ecology of the place, the Kerala government has declared Kumarakom as a Special Tourism Zone (STZ). In pursuance of the Declaration, any development against the ideals of sustainability is restricted in the area and the

projects must be approved by the government, as laid down in the Special Tourism Zone Act of Kerala. Kumarakom is home to a wide variety of flora and fauna. Kumarakom Bird Sanctuary is a noted bird sanctuary where many species of migratory birds visit. The charming backwaters have rich aquatic life. The Vembanad Lake/Vembanad Kayal spans several districts in Kerala. The Vembanad Wetland System covers an area of over 2033.02 km² thereby making it the longest lake in India and the largest in Kerala. The Vembanad Lake is approximately 14 km wide at its broadest point. The total area drained by the lake is 15,770 sq. km, which accounts for 40% of the area of Kerala. Fed by 10 rivers including the six major rivers of central Kerala namely *Achankovil, Manimala, Meenachil, Muvattupuzha, Pamba and Periyar*; it boasts of rich bio-diversity; for instance, it is home to about 150 species of fish. The estuarine nature of the lake, with its rich sediment deposits, makes it a good habitat for Shrimp. Mulletts, Catfish, and Pearl fish that are seen in abundance. In the 70's and 80's, it was the only breeding area of Night Herons. Three major varieties of Mangroves are identified in Kumarakom. The backwaters also has more than 70 edible species, which include Crabs, Oysters, Clam, Milk fish, Scampi, Catfish etc. The Vembanad Lake, the largest backwater in Kerala, is habitat for many marine and freshwater fish species and it teems with Karimeen (Pearl spot also known as (*Etroplussuratensis*) Shrimp (*Metapenaeusdobsonii*) common name *Poovalanchemeen*. In view of the sparkling rise and achievements, destination Kumarakom bagged the National Tourism Award for the year 2012-2013 for *Best Civic Management Award for Kumarakom Grama Panchayat*.

Pathiramanal or 'Island of Midnight Sand'

Pathiramanal or '*Island of Midnight Sand*' is known as a place where the King of Kochi traditionally made a night halt on his journey to South Kerala. The island is also known as *Anantha Padmanabhan Thoppu* which was purchased by *Chevalier (Orders of Knighthood) ACM Anthraper*, from Bhemji Devji, Trust of Cochin and was under the private ownership of Thaimattathil Family until the late seventies. The 19.6 hectares of land supposedly surfaced from the lake out of an earthquake. Pathiramanal Island is 28.505 ha. It is about 1.5 km from Muhamma Boat Jetty and about 13km from Allapuzha. The island is 5km from Kumarakom and situated 4km North West. Maximum length is 550m (SW-NE), Maximum Width 450m (SE to NE), Perimeter 1800m,

Estimated area: 19.6 ha and distance to the nearest mainland is 810m. The bird sanctuary extends over 14 acres (57,000m²), and came into existence following the preservation efforts initiated by the Government. Kumarakom Bird Sanctuary is the first scientifically formed and preserved bird sanctuary in India. The Pathiramanal Island is home to about 180 species of birds and 30 species of butterflies. The backwater between the island and the Kumarakom Bird Sanctuary is a favorite haunt of migratory birds from Siberia and Europe. A good number of migratory birds flock to Kumarakom, more particularly Pathiramanal. During migratory season an avian fauna called the 'Siberian Crane'- a special visitor- can be spotted.

Tourism in Kumarakom largely revolves around the backwaters of the Vembanad Lake. Several luxury and budget resorts are lined up on the shore side of the lake which provides tourists with facilities for boating, yachting and angling, and panoramic views of the lake. The other major attraction is the Bird Sanctuary which can be visited by canoes arranged by local fishermen at the entrance to the sanctuary. The best time to visit the sanctuary is morning and evening. A two-hour rowing canoe trip is quite cheap, and is best undertaken in the evening or early morning to avoid the afternoon sun. Bird sanctuary in Kumarakom is the first destination in India to implement Responsible Tourism practices. Kerala Tourism was awarded for its path-breaking 'Responsible Tourism' project in Kumarakom, which has successfully linked the local community with the hospitality industry and government departments, thereby creating a model for empowerment and development of the people in the area while sustaining eco-friendly tourism. Apart from carving a niche image as a spellbinding ornithologists' paradise, Kumarakom is also famous for its food festivals, flower shows, and exhibitions of indigenous works. The tourists to Kumarakom are given a taste of the Kerala village life. The traditional works such as coir making, cashew production practices, and retting of coconut husks allures tourists and therefore is main ingredients of the itineraries. The diversified attractions of Kumarakom are bundled by tour operators are providing special interest tourism packages.

An Overview of RT Initiatives of Kerala Tourism

The Department of Tourism, Govt of Kerala organized a State level consultation on Responsible Tourism in association with International Center for Responsible

Tourism- India (ICRT) and EQUATIONS (Equitable Tourism Options) on 2nd and 3rd February 2007. Furthermore, a (SLRTC) State Level Responsible Committee which met during April, 2007 decided to take up implementation of RT initiatives in phases. The Kerala government has also selected Great India Tourism Planners and Consultants (GITPAC) to provide technical assistance. (<https://www.keralatourism.org/rt-keralaupdate.php>).

The Tourism Department has identified 114 Panchayats across the state as potential RT destinations. It has also taken in to consideration the classification of hotels and resorts based on global Sustainable Parameters. *Kudumbashree* was appointed as a consultant for Responsible tourism on practical aspects. Kumarakom has initiated programmes like fallow land cultivation, establishing rapport with hotel industry and local producers, Kumarakom has started two innovative Village Life Experience packages under Community Based Tourism Products called "*Village Life Experience and A Day with Farmers*". Besides, promotion of local artifacts, promotion of cultural and ethnic tourism underpinning fair trade in tourism and efforts to create a positive image by showcasing the cultural expressions and social life have worked wonders. Energy saving measures and resource mapping were also carried out as part of the RT Initiative at Kumarakom.

The Responsible Tourism Paradigm in the Backwater Destination

The current study is to examine how far the RT initiatives and the subsequent socio-environmental impacts have influenced backwater tourism in the wetlands of Kumarakom. The progressive and promising agenda of Responsible Tourism are investigated. The RT agenda envisaged minimizing negative economic, environmental, and social impacts; generating greater economic benefits for local people; enhancing the well-being of host communities; and improving working conditions and access to the industry.

Sometimes Responsible Tourism can be termed as a "Triple Bottom Line" (TBL) with spotlight on Economic Responsibility, Social Responsibility & Environmental Responsibility. (<http://www.ibrc.indiana.edu/ibr/2011/spring/article2.html>).

The concept of responsible tourism was mooted from 1996. Albeit, it was after the Cape Town Declaration of 2002 that a clear picture of responsible tourism including its aims and factors was devised. Kerala has emerged as one of the prime tourism trendsetters in the country. The quick and easy availability of natural resources, skilled man power, supportive entrepreneurial community, strong local self government, civil society organizations, multitude of micro enterprises, streams of professionals and academicians, and responsible media and responsive tourism industry provide the state an ideal setting to implement and practice responsible tourism. The first projects of responsible tourism in India were implemented in the State and it stands much acclaimed today. Inspired by the Second International Conference on Responsible Tourism in Destinations concluded in Kochi, Kerala on the 24th of March 2008 the Kerala Declaration impelled a pro-active plan directed towards the stakeholders in tourism. The State Level Consultation Workshop was thus organized in the capital city of Thiruvananthapuram. Responsible Tourism (RT) initiatives of the Government of Kerala were started on 7 February 2012. Mr. Harold Goodwin, Director, International Centre for Responsible Tourism (ICRT), UK launched the Responsible Tourism Classification Standards. Responsible Tourism (RT) - an innovative and far-reaching concept of Kerala Tourism –completed its pilot program last year, with noticeable achievements. Being the pilot phase, it was then implemented only in four destinations viz. Kovalam, Kumarakom, Thekkady and Wayanad. Later on Kumbalangi in Ernakulum, Vythiri and Ambalavayal in Wayanad and Bekal in Kasargod were enrolled. Among these destinations Kumarakom evolved as the successful model for responsible tourism and was honored by Ministry of Tourism, Government of India for the best Responsible Tourism Initiative in Kerala. Based on recommendations of the State Level Committee which reviewed the experiences of Responsible Tourism during the pilot phase, Responsible Tourism is now becoming a reality, across the State. The RT Classification will be a self assessment module with four key parameters -sustainable management, socio-cultural responsibility, economic responsibility and environmental responsibility. The criteria for classification are developed in line with the Global Sustainable Tourism Criteria (GSTC). Already 13 resorts at Kumarakom, the pioneer in RT and winner of the coveted UNWTO Ulysses Award for innovation and public policy in governance under the tourism category have

fetches a niche image for the destination. The government is working on the classification of home stays and houseboats. The seven existing RT destinations did a combined business of Rs. 3.50 crore during the last tourism season with Kumarakom alone contributing Rs.1.50 crore. The government targeted Rs.10 crore by the end of the tourism season in 2014. The social aspects focus on sustaining traditional livelihood by integrating practices like coir making, toddy tapping, pottery and net fishing into tourism packages and ensuring proportionate distribution of revenue among the community members. Promoting arts and culture by attracting tourists to watch traditional art forms in the natural settings rather than serving it in capsule form at the resorts they stay is another focus area. Responsible Tourism at Kumarakom started on December, 2007; but it was officially inaugurated on March, 2008. As the local self body holds the key position in the works, the hurdles in the formative stages were resolved and responsible tourism was effectively boosted. Moving towards the second year, responsible tourism at Kumarakom is slated to be a big success. As regards women empowerment, around 900 women directly involved in the production processes and made revenue within a small period of time. With respect to the employment opportunities, responsible tourism focuses on the economic participation of local people as direct owners in the business of tourism and not just as beneficiaries of charity. Local self bodies also succeeded in propping up profit oriented production and sales at Kumarakom. With the cooperation of the State Tourism Department and Grama Panchayat, 15 hotels and as many resorts joined the responsible tourism team over a period of time. In the year 2008, Responsible Tourism Destination Cell has been incepted synergizing the technical, economic, social, and environmental aspects and thus more core and augmented tourism services were made available. Under the leadership of *Kudumbasree nine Karshaka Samithis* were formed in Kumarakom and one in a nearby place *Manjadikkare*. The functioning of small scale *Kudumbasree* units of altogether 250 members, home stead farming performed by 512 families and *Karshaka Samithis* with 450 members' uplift the production and sales dynamics of responsible tourism at Kumarakom. To match demand and supply, an agreement was made with hotels and resort groups on the purchase of vegetables, fruits, eggs, meat and milk from the villagers. Specific arrangements are made for regular supply of quality items by the *Kudumbasree* units.

Inferences and Discussions

Backwater tourism is indeed the USP of Kumarakom as evidenced by the success of RT initiatives, resource protection, and socio-economic development. The dying art forms are ardently revived, for instance coir making, souvenir making, making of cane furniture and lanterns, etc. Self-help groups are very active in Kumarakom and they are empowered to a very great extent. Most of the investments are found to be productive, but caution has to be exercised in the sanction of more projects. Decentralization, if ideally practiced can bring efficient results. Entrepreneurs in tourism can be locally drawn as they have both the potential and indigenous know-how. Industry players can capitalize on the RT initiatives and join together, pool in resources and effectively market the destination rather than making individual efforts. RT directives strongly recommend only eco-friendly projects in Kumarakom. It is essential for the long-term success of backwater tourism in the destination. The RT agenda should be fullproof to thwart any attempt to commodify cultural symbols and embodiments and violation of social and cultural codes and exploitation in myriad ways. Furthermore, displacement of host population for tourism projects should not be permitted at any cost. An entrepreneurial vision and management has to be further nurtured as part of the RT agenda. Moreover, the agenda must enhance its focus on micro enterprises which can infuse stability to the destination. Documentation of the resources of Kumarakom must become an integral part of the RT practices. Ethical conduct of business must be diligently monitored. Environmental auditing is a key part of RT agenda and it is necessary to give prospective directions. Visitor management strategies are to be well-designed in the RT agenda of Kumarakom. Permit system may be introduced to regulate tourist traffic. Appropriate local controls and positive checks can prevent socio-environmental exploitation. RT initiatives are designed to elevate tourists' experiences and have attained certain crucial goals. Responsible tourism agenda can ameliorate the capacity building endeavours of the destination.

Major Findings and Suggestions

RT initiatives have helped Kumarakom as a destination to maintain its environment pristine and pollution free. The

service quality leaves much to be desired and hospitality aspects can be strengthened by offering adequate training to the host community. The use of motorized boats needs to be restricted in the areas in proximity to the wetland. Excessive tourism needs to be curtailed by making soft tourism the norm; preventing quarrying, construction works, depreciation of floral coverings, etc., in the wetlands. Care has to be taken to avoid filling of mangrove swamps. Construction of groins and piers, trampling, and collection of marine artifacts from the wetland hampers the sustainable progress and counteract preservation efforts. A conducive environment has to be maintained for the flocking migratory birds. The local bodies must ensure solid waste management. The resorts, hotels and ayurvedic establishments must not channelize their sewage outfall to the water bodies. Sewage management and effective treatment must be given due importance. The consultation of all stakeholders including the host communities is of paramount significance and so are capacity building programmes and skills development endeavours for artisans, weavers, craft-makers, taxi drivers, guides, resort staff, tourism police, etc. The tremendous opportunities for investments have to be tapped, though in a sustainable manner. Community Participation and holistic involvement along with synchronized decision making have to be at the crux of the RT action plans. Frequently organized skills development workshops can do a world of good to service delivery part and give ample fillip to tourism advancement of Kumarakom. Authenticity of tourism resource stewardship has to be attended meticulously. Tourist guides can be selected from the local community and given professional training. The planners and designers of Kumarakom have to put forward many innovative ideas to sustain the development by linking ecology, planning, and protection. Consultants must be engaged to conduct feasibility and technical viability studies including (EIA) Environment Impact Assessment. The Limits of Acceptable Change (LAC) needs to be determined in Kumarakom. RT initiatives have made tourism a social and environmental force in Kumarakom. Finally, the host communities can be actively engaged in pro-environment resource conservation ventures like organic farming and renewable energy conservation in Kumarakom.

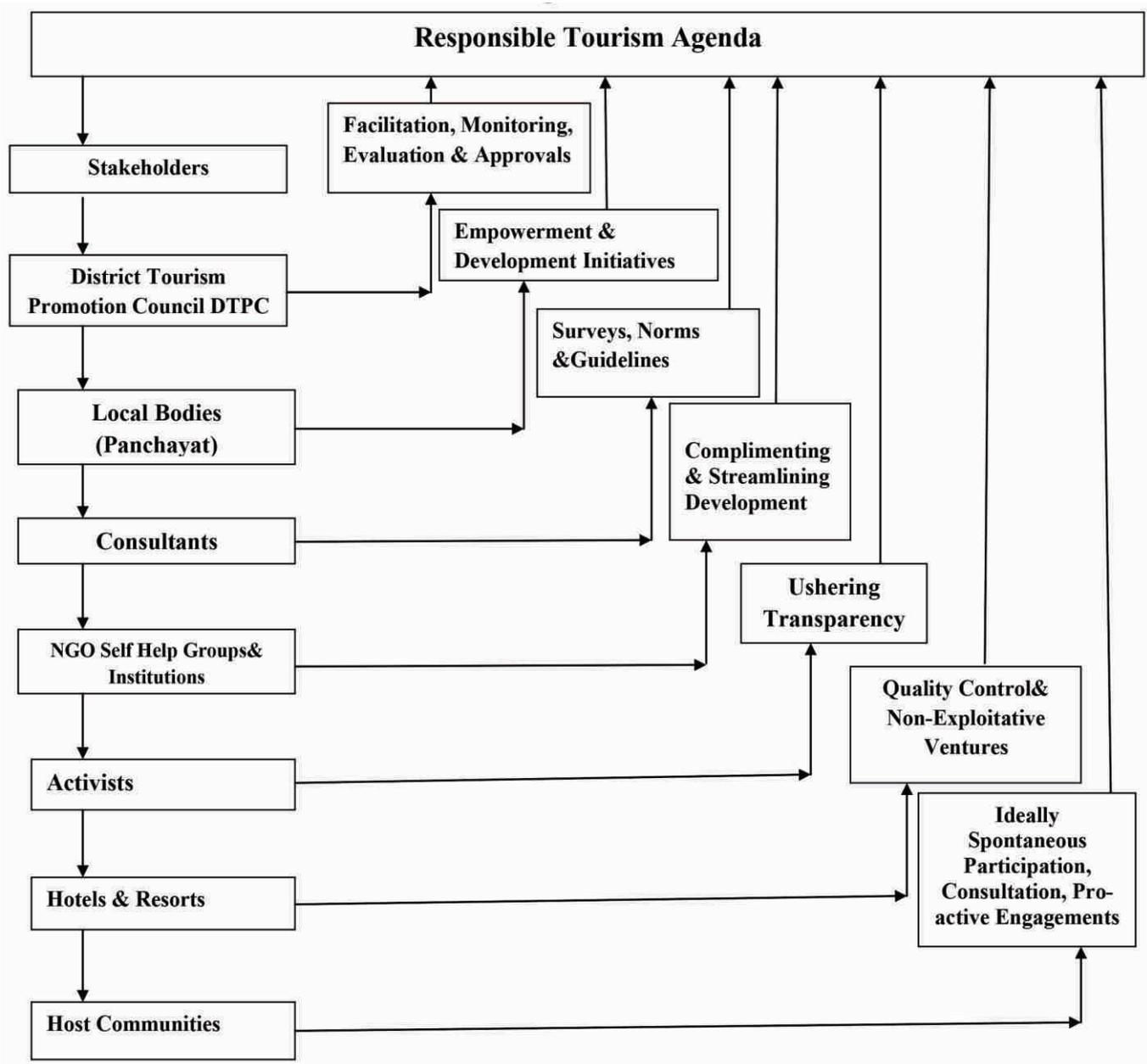


Figure - 2
A Proposed Model Framework for Responsible Tourism Agenda in the Backwaters and Wetlands of Kumarakom.

Proposed Model Interpretation

While examining the contours of the study area in consonance with the dynamics of responsible tourism, the profound roles of stakeholders mooted to be very crucial, have surfaced. The District Tourism Promotion Council (DTPC) of Kottayam district is the premier public sector concern which may be empowered to invite tourism projects strictly conforming to the environment impacts- stated as within its ambit and as per the norms; identify the potential areas; design campaigns at the local level; approve the projects and award them to the investors based on merit; facilitate infrastructure development; and from the point of sanctioning the project, monitor and evaluate the overall functioning. The local bodies like Panchayat need to be empowered to innovate in the realm of tourism in staging novel eco-friendly practices and cultural forays, issue licenses to micro and small scale enterprises in tourism, and also advance the development initiatives. The dire need for in-depth technical and viability studies for eco-friendly tourism are highly essential, which can contribute to the blueprint of sustainable development. Consultants with requisite expertise could be engaged to conduct EIA and similar studies to unveil the multi-dimensional footprints of tourism in the backwaters of Kumarakom. The focused pragmatic groups, maybe the NGO's and local self-help groups can usher in newer conservation paradigms and ingrain the same with the ongoing plan. The stark role which may be donned by the activists with respect to accomplishing transparency in all socio-economic and environmental aspects of the tourism activities was quite obvious during the course of this study. The hotels and resorts need to lay ample stress on quality control ensuring the avoidance of green washing ventures which was found to deliver substantial impetus to the backwater tourism assets linked to the wetlands of Kumarakom. The destination has garnered steam owing to the thrust laid on tourism by the host communities. The nuanced approaches as regards destination planning and management undoubtedly warrant the pro-active participation; not a coerced one but spontaneous participation of the local residents. Engaging the indigenous vibes will definitely boost the facets of tourism in the backwater tourism haven.

Conclusion

Wetland is fragile natural resources .At the same time it has a spectacular charm to be promoted as a tourism site. This is owing to the fact that wetland attracts migratory birds, is instrumental in the sustenance of myriad flora and fauna, and offers the apt background for lot of activities such as angling that amuses the tourist. Backwater tourism is deemed to be the USP of Kerala tourism and the districts of Kottayam and Alleppey are the focal point of backwater tourism offerings, Kumarakom a renowned tourism heaven in Kottayam possesses a significant part of the Wetland which is identified as Ramsar Site in the year November 2002. Backwater tourism gives ample fillip to the local livelihood activities. It is a prime revenue earner for the host community of Kumarakom in many fold ways. Concerns over tourism depreciating/adversely affecting the environmentally fragile wetland resources of Kumarakom arose from various quarters following which the place was designated as a Responsible Tourism destination. This study delves on the strides taken by Kumarakom in the realm of tourism by imbibing the ideals of Responsible Tourism. Sustainable Resource Management has received remarkable thrust due to the Responsible Tourism initiatives in Kumarakom. The Private sector enterprises are showing more sensitivity towards the ecological and environmental aspects while the local community proactively engages in offering tourist amenities without compromising on resource depletion. Yet, the monitoring mechanism needs to be strengthened to maintain consistency. The reviews pertaining to secondary data sources namely the study reports on Kumarakom indicate that it leaves much to be desired when it comes to enforcing and regulating development in favour of conservation of environment. Responsible Tourism can leverage environment education which can for a very great extent address such challenges as world over innovative and environmentally sensitive tourism projects, are gaining traction. The role of public sector agencies and NGO's would be to strengthen the arms of the host community.

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