



# MANAGEMENT TODAY

*- for a better tomorrow*

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# Management Today

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# EDITORIAL

## Teaching Pedagogy of Management Education

Management education has been widely recognized as one of the most important means for development. Although history of management education dates back to ancient times, modern management education found its formal structure during 1819. Since then, the content and pedagogy have come under many purposeful modernisation efforts to keep pace with the requirements of trade, commerce and industry. It is said that the first full-time MBA in India was started way back in 1957, and the two IIMs in Calcutta and Ahmadabad appeared in 1961 and 62, respectively. Since then the growth of management education in India has been phenomenal.

In India, the demand for skilled human resources is increasing to meet the competitive heights of business. As a result, there is a tremendous pressure on the academic field, to develop human resources with employable skills. A close observation into the present education system reveals that there is a huge gap between the human resources produced by the academia and the human resources required for the industry. The survey reports of The Confederation of Indian Industry (CII) reveal that 80% of the postgraduates of management studies (having the average score of 60% in their academics) are not fit for employment (2000-2011). This infers that the management education in India has failed in developing cognitive aspects of manager and there exists a large gap between the 'academic proficiency' and 'work proficiency' of the students. This issue is a major concern in the present educational system in India. Hence, the transformation or revolution should take place in terms of redesigning the curriculum and pedagogy in order to enable the students acquire employable and life skills. As a result, pressure is building upon management education in the country to identify the needs of the industry and to improve the pedagogy in order to bridge the gap between industry expectations and academic achievement. The teaching pedagogy of management education should aim at aligning the academic proficiency with the prevailing demands in the industry.

Pedagogy is the method and practice of teaching; art or science or profession of teaching; the principles and methods of instruction; the act, process, or art of imparting knowledge and skill; especially as an academic subject or theoretical concept. The term 'Pedagogy' can also be used to mean the discipline that deals with the theory and practice of education. It thus concerns the study and practice of how best to teach. Pedagogy is one of the dimensions of management education. Whatever may be the pedagogy used, it should increase, enhance or enrich the learning experience of the student.

Management education cannot be compared with studying the academic courses like economics, history, political science, mathematics etc. It can rather be compared with medicine, where no doctor is allowed near a patient purely on the basis of theoretical knowledge. In the same way, management students should be trained to take decisions and to monitor results in actual business scenario. It should also develop the analytical skills of the students and should improve the ability of the student to understand the complex internal and external factors influencing the organization. That is management education should not aim at just transferring knowledge but in developing a passionate and diligent management professional.

Till graduation, especially in India, the lecture method is used to a large extent. For almost 15 years students are exposed to this method. This makes the students passive participants in the learning process. At the same time the faculty is also drawn from the same background. Hence a new pedagogy should be used to make the students active learners. From the genesis, as a formal study in the early nineteenth century, the management education has undergone many changes in terms of content, curriculum and pedagogy, especially in the apex management institutions like IIMs. A variety of teaching and learning techniques are employed to impart knowledge and skills to the students of Management. Lectures, case analysis, simulation games and exercises, syndicates, group discussions and practical project work are commonly used to develop conceptual, analytical and decision making skills and to prepare the students to face the challenges of the complex business and organisational environment.

But in many of the colleges, offering management education, the traditional teaching pedagogy is used, with intermittent use of technology, to impart education. It is unable to fulfill the learning requirements resulting in low satisfaction level among the corporates. The management teachers have to come out of traditional school of thought and use the methods suitable to impart management education. Management education requires research based inputs to know the subject practicalities, well equipped libraries and online resources. Latest developments in the industry need to be observed and imparted to management students. It requires investment in areas of research. For imparting management education, a pedagogy, which ensures greater participation by the student; which provides flexible learning environment, and contextual and choice based learning; which facilitates self-paced learning, teacher-learner interaction and peer group learning; and which involves real life problem analysis etc. is to be adopted.

In India there are several types of institutions offering management education. Indian Institutes of Management, B-Schools, IITs, University Departments, Colleges or Institutes of Engineering and Technology, Postgraduate Colleges etc. Though, lot of research has been done and appropriate pedagogy has been invented / developed there is no uniformity in the teaching pedagogy used by different institutions offering management education in the country. The teaching pedagogy used in different institutions depends upon the commitment, perceptions, and awareness on the part of the management, faculty, students and regulatory authorities. Resource richness, rural and urban background of the institution also influence the teaching pedagogy used in different colleges / institutions.

**Babujee Apparao Punaty**  
**CHIEF EDITOR**

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## HRD in Vizag Steel Plant: An Empirical Study

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### ABSTRACT

HRD assumes critical importance for the growth and survival of any organisation. HRD activities should be uniform across various units or levels within an establishment to ensure equitable development of its employees and enable them contribute towards organisational goals by coping with change. In this backdrop, the present study was directed at comparing HRD perceptions held by managers in select departments of Vizag Steel Plant (VSP). Data were collected as part of a survey carried out in VSP in relation to the MBA project work of the co-author. The study made a comparative analysis of HRD activities prevailing in VSP using mean values, their percentage scores, ANOVA, t-tests and Cohen's effect sizes. Results show that some of the HRD mechanisms studied viz. performance appraisal and feedback; recognition and rewards; career planning and development; and growth opportunities available to employees are significantly varying among the four departments surveyed. Particularly, in MM and F&A departments, managers perceive subjective performance appraisals and ineffective recognition and reward practices. Similarly, career planning and development system is absolutely unsatisfactory and growth opportunities are inadequate for managers in these two departments. Findings create an impression that the top management's focus is less on implementation part which might have created room for subjectivity in some sections. Management review and its constant follow up may help the organisation rejuvenate HRD.

### Introduction

In this age of frequently changing economic, technological and industrial environments Human Resource Development (HRD) assumes critical importance for the growth and survival of any organisation. HRD programmes assist organisations in preparing their employees to meet the challenge of competition and contribute

towards organisational goals by coping with ever changing situations. HRD plays the role of a catalyst through its integrated sub-systems to manage organisational change (Nair, 1988 and Jain 1991).

According to Rao, T.V., HRD is a process by which employees of an organisation are helped in a continuous and planned way to;

- acquire or sharpen capabilities required to perform various functions associated with their present or expected future roles;
- develop their capabilities as individuals and discover and exploit their inner potentials for their own and/or organisational development purposes; and
- develop an organisational culture in which superior-subordinate relationships, teamwork and collaboration

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among sub-units are strong and contribute to the professional wellbeing, motivation and pride of employees.

Organisations use various mechanisms to realise HRD. These include: performance appraisal, potential appraisal, career management, training and development, feedback, performance counseling, quality circles, recognition and rewards, job rotation, etc. These should be uniform across different units or departments in any system to ensure equitable growth of all its employees as their efforts must be pointed towards achieving common organisational objectives. Through HRD mechanisms an organisation's culture can be changed by giving emphasis on employee relations and interdepartmental communication (Advani, 1989).

## Literature Review

Rao and Abraham (1986) through their study of HRD mechanisms in fifty-three Indian organisations suggested that HRD functions need to be developed a lot to ensure organisational effectiveness. Gupta (1988) pointed out that HRD functions often remaining at the corporate office are not percolating down to the field level. Shah, Saiyadain and Sheth (1984) opined that managers have to translate corporate policies into constructive practice at the grass-root level. Abraham (1988) in his paper commented that there was a wide gap between the belief of the top management and their practice with regard to HRD. Virmani (1991) in his paper expressed that the HRD strategy has to be linked to the investment policies, fiscal policies, monetary policies and even wage and price policies. Rao and Rath (1992) felt that the success of any HRD mechanism depends upon how effectively one implements its 'process'.

The review of current literature about HRD creates an impression that in various industries HRD practices are not being implemented in their true spirit. This screams for a fresh study, to comprehend the status of HRD in the turbulent economic conditions prevailing all over. The present study seeks to fill this research gap as it examines the position of HRD in Vizag Steel Plant which is a Navaratna PSE, playing a vital role in the Indian economy.

## HRD Philosophy of Vizag Steel Plant

Vizag Steel Plant bestows HRD a strategic priority among the functions like production, maintenance, materials and finance. It believes that:

- i. Its employees are the greatest and most valuable resources, hence they should be treated with all respect.
- ii. HRD should appropriately harness employees' potential for the attainment of the company's objectives.
- iii. HRD does not refer to training alone. It refers to creative and innovative initiatives in several management functions for the development and growth of employees.
- iv. HRD should eventually be a core philosophy of all management actions and should not remain merely a departmental or sectional activity.
- v. all functional and divisional heads responsible for various activities of the company will imbibe HRD spirit and suitably integrate HRD into their plans, decisions and actions.

## Objectives of the Study

- vi. To compare HRD perceptions held by the managerial personnel in select departments in Vizag Steel Plant (VSP); and
- vii. To discuss about the implications of the results.

## Methodology of the Study

### i. Sample

Table 1 shows the present manpower position of VSP, which includes 35% of executives and 65% of non-executives. Actual sample for the present study consists of 60 managers drawn randomly from the executive population of four 'non-works' departments. The majority of the responses was obtained from MM department followed by P&HRD department (table 2).

## Data Collection and Analysis

Data were gathered as part of the MBA project work carried out by the co-author during August-September 2014 in VSP. A questionnaire developed by the authors was administered randomly among the sample respondents which contained 25 items. It focuses on six dimensions viz. HRD philosophy of the management; performance appraisal and feedback; recognition and reward; training and development; career planning and development; and growth opportunities. The instrument uses Likert's five-point scale ranging from, Strongly Agree-5 to Strongly Disagree-1. Cronbach's alpha coefficient of internal consistency for the scale has been calculated to 0.961, showing its high degree of reliability. George and Mallery (2003, p231) provide a thumb rule, i.e. " $\geq 0.9$ -excellent;  $\geq 0.8$ -good;  $\geq 0.7$ -acceptable;  $\geq 0.6$ -questionable;  $\geq 0.5$ -poor; and  $\leq 0.5$ -unacceptable".

For the purpose of analysis, initially, statement-wise mean values of the responses were calculated for each department. Then, for making a comparative analysis of HRD activities, ANOVA and *t*-tests have been employed. Further, these tests were accompanied by Cohen's effect sizes (*f*-for one-way ANOVA and *d*-for *t*-tests) to draw inferences about the validity of the differences identified (Lenhard & Lenhard, 2014). Also, the statistical power of hypotheses and post hoc tests was calculated (Faul et al., 2007) to comprehend the magnitude of power achieved. Subsequent interpretations were based on the percentage scores computed from the mean values, using T.V. Rao's formula 'Percentage Score= (Mean value-1) x25'. Final conclusions were based on the following five-levels of assumptions (Srinivas, 2014):

Percentage Score	Assumption
$\leq 50.00$	'Unsatisfactory'
$> 50.00$ but $\leq 60.00$	'Less Moderate'
$> 60.00$ but $\leq 70.00$	'Moderate' or 'Average'
$> 70.00$ but $\leq 80.00$	'Good'
$> 80.00$	'Excellent'

## Hypotheses

The present study formulates six multivariate null hypotheses analysed individually. It is assumed that there is no significant difference among the four departments at RINL-VSP concerning management philosophy towards HRD (H1<sub>0</sub>); performance appraisal and feedback (H2<sub>0</sub>); training and development (H3<sub>0</sub>); recognition and rewards (H4<sub>0</sub>); career planning and development (H5<sub>0</sub>); and growth opportunities available to employees (H6<sub>0</sub>). To statistically test these hypotheses, the study adopts 'ANOVA: single factor' technique.

## Hypotheses Testing

ANOVA results in tables 4, 6, 7 and 8 show significant differences among the four departments regarding HRD mechanisms viz. performance appraisal and feedback, recognition and rewards, career planning and development and employees' growth opportunities. Further, the calculated Cohen's (1988) effect sizes  $f$  (0.10, 0.25 and 0.40 represent small, medium and large effect sizes, respectively) with respect of significant ANOVA, show that the differences are also meaningful. Therefore, the null hypotheses formulated earlier in this study, i.e.  $H_{20}$ ,  $H_{40}$ ,  $H_{50}$  and  $H_{60}$  are rejected and alternatively it is concluded that the four HRD mechanisms among the four departments surveyed are inconsistent. Alphonsa (2000) also had similar findings. She observed, HRD climate perceptions of supervisors belonging to different departments in a private hospital were significantly varying. However, in respect of management attitude towards HRD ( $H_{10}$ ) and training and development activities ( $H_{30}$ ) ANOVA results in tables 3 and 5 present insufficient evidence as to the existence of differences between departments. Regarding  $H_{20}$ ,  $H_{40}$ ,  $H_{50}$  and  $H_{60}$  ANOVA being significant necessitates post hoc analysis.

## Post hoc Comparisons and Discussion

Table 9 contains data pertaining to department-wise comparisons of HRD mechanisms for their significant differences. Regarding performance appraisal and feedback mechanisms, perceptions of managers between MM-P&HRD departments are significantly differing ( $t_{\text{stat}} 5.57 > t_{\text{crit}} 4.30$ ,  $P.03 < \alpha 0.05$ ). Moreover, the computed Cohen's large effect size ( $d=1.761$ ) shows this difference as meaningful. Cohen (1992) suggested that the effect sizes of 0.20 are small, 0.50 are medium, and 0.80 are large. Depending on the results of his simulation study, de Winter (2013) commented that there are no objections to using a  $t$ -test with extremely small samples, as long as the effect size is large. Although, the difference between D&E-P&HRD departments is significant ( $t_{\text{stat}} 7.21 > t_{\text{crit}} 4.30$ ,  $P.02 < \alpha 0.05$ ), it seems to be moderately meaningful as the effect size worked out is medium ( $d=0.589$ ). Thus, significant ANOVA, which lead to the rejection of  $H_{20}$ , is due to the difference really existing between MM-P&HRD departments. It can be observed from the data in table 4 that in MM department, superiors are almost reluctant to give a meaningful and constructive feedback to their subordinate managers on their performance deficiencies (item 9=50.00). This may tend to inhibit the performance of managers. The data also reveal that the performance evaluation system is highly subjective in this department (item 11=46.43). Perhaps, performance standards are lacking here. Superiors might be excessively highlighting their personal impressions and showing discrimination among their subordinates. If the organisation lacks objective performance standards, it is difficult to verify the validity of (subjective) evaluations by superiors. To promote objectivity in the evaluation procedure, management can afford to receive feedback from multiple sources which minimises the subjective element in superior's evaluations.

Further, regarding recognition and reward system the study identifies significant and meaningful differences (table 9) between departments MM-D&E ( $t_{\text{stat}} 6.23 > t_{\text{crit}} 4.60$ ,  $P.00 < \alpha 0.01$ ,  $d=2.841$ ) and MM-P&HRD ( $t_{\text{stat}} 5.26 > t_{\text{crit}} 4.60$ ,  $P.01 = \alpha 0.01$ ,  $d=2.90$ ). Thus, rejection of  $H_{40}$  based on ANOVA remains highly valid. The data in table 6 indicate that in MM department the system of recognising and rewarding the contributions and abilities of employees is biased (item 3=41.67). Consequently, managers in this department believe that there is no practice of rewarding any good work done by them (item 14=45.24). They also feel, the extent of recognition for talent (item 21=51.19) and encouragement for creativity (item 22=53.57) is less

moderate. Further, rewards are ill-timed and also not of the right magnitude (item 25=39.29). Overall, the recognition and reward system is completely discouraging for managers in this department (Average=46.19). Perhaps, their valuable efforts and contributions might be ignored, which might have paved way towards this sort of discouragement. Hence, management should ensure in place, an objective, far-reaching and transparent system of recognition and reward to positively reinforce and nourish the efforts and contributions of human resources which will guarantee excellence in their performances.

Next, regarding career planning and development also the study recognises significant and meaningful differences (table 9) between the departments MM-P&HRD ( $t_{\text{stat}} 5.88 > t_{\text{crit}} 5.84$ ,  $P.01 = \alpha 0.01$ ,  $d=4.574$ ), D&E-F&A ( $t_{\text{stat}} 6.07 > t_{\text{crit}} 5.84$ ,  $P.01 = \alpha 0.01$ ,  $d=3.980$ ) and P&HRD-F&A ( $t_{\text{stat}} 5.91 > t_{\text{crit}} 5.84$ ,  $P.01 = \alpha 0.01$ ,  $d=4.927$ ). Hence, rejection of  $H_{50}$  based on ANOVA remains extremely consistent. The data in table 7 clearly indicate that the percentage scores obtained in respect of all statements in MM and F&A departments are absolutely unsatisfactory i.e.  $< 50.00$ . It is evident that in these two departments, employees are not provided opportunities to develop their capabilities (item 5). Similarly, superiors are not supportive to their subordinates to upgrade their qualifications and thereby prepare them for promotion tests (item 8). Further, managerial careers are not being well planned and developed (item 16). Management makes no attempt to identify and utilise managerial potential (item 19). Hence, it can be inferred that in these two departments, managers are lacking opportunities to learn new skills and prepare for future assignments. Managers usually have high level career aspirations and expect their management to provide the required support and resources in realising these. Indeed, an organisation's success or failure depends mostly on its ability to meet the expectations of its employees.

As regards, growth opportunities available for employees the study notices significant and meaningful differences (table 9) between departments MM-P&HRD ( $t_{\text{stat}} 3.20 > t_{\text{crit}} 3.18$ ,  $P.05 = \alpha 0.05$ ,  $d=2.458$ ) and P&HRD-F&A ( $t_{\text{stat}} 4.58 > t_{\text{crit}} 3.18$ ,  $P.02 < \alpha 0.05$ ,  $d=2.529$ ). Thus, rejection of  $H_{60}$  based on ANOVA remains logical. However, the significant difference between D&E-P&HRD departments ( $t_{\text{stat}} 5.09 > t_{\text{crit}} 3.18$ ,  $P.01 < \alpha 0.05$ ) seems to be moderately expressive as the effect size worked out is medium ( $d=5.09$ ). Data in table 8 make it clear that in MM department managers are lacking enough opportunities for advancement (item 15=47.62). They perceive that growth opportunities are not equally available to all employees (item 17=44.05). Managers in F&A department also articulate similar opinion (item 17=46.15). Further, growth and development opportunities are scant in both MM and F&A departments (item 23=48.81 and 51.92). Particularly, managers in F&A department comment that the promotional policy of the organisation is not fair (item 12=48.08). Delay in promotions may cause serious problems as it tends to decrease commitment and productivity levels of the personnel. Government employees may have job security, but their families also grow and tend to increase the cost of living. VSP can follow merit cum seniority principle, while awarding promotions. In case, managers reach high levels in the organisational ladder where promotions are unlikely, seniority pay and performance based incentives may still work as alternative strategies to ensure their continued support in accomplishing goals.

## Conclusion

HRD is the proactive role of HRM and also believed to be for the organisation as a whole, and not just for some few levels or personnel (Prasannasai, 1993). Vizag Steel Plant also believes that HRD should eventually be a core philosophy of all management actions and should

not remain merely a departmental activity. Relatively, in D&E and P&HRD departments, HRD is under implementation as per the intentions of the organisation. But, in MM and F&A departments HRD is not engrossed in its true character and spirit. The organisation expects that all functional and divisional heads shall imbibe HRD spirit and suitably integrate HRD into their plans, decisions and actions. This approach, however, is missing in MM and F&A departments. Performance appraisals, recognition and rewards, career planning and development and growth opportunities are not well implemented in these two departments. Indeed, the top management deserves appreciation for having faith in HRD philosophy and implementing various HRD activities throughout the organisation to realise its HRD policy and philosophy. What's lacking may be their effective implementation and constant follow up. This might have given room for their inefficient use. Hence, the organisation needs an on-going management review of HRD. HRD audits and surveys help the management assess the effectiveness of various HRD programmes or practices and ensure their objective implementation. The surveys may entail a comparison of HRD between works and non-works departments.

(The authors would like to thank Shri O. Ram Mohan Rao, Assistant General Manager (Management Development), RINL-VSP and the respondents for their support with this project)

#### Appendix: Questionnaire

Item No.	Statement*
1	Your management believes that HRD activities contribute to business effectiveness.
2	Your management uses the system of performance appraisal as a tool for providing feedback to employees.
3	Your management fairly recognises and rewards the contributions and abilities of employees.
4	Your management conducts assessment of training needs frequently.
5	Employees are provided opportunities to develop their capabilities.
6	In this organisation, training makes you more competent and resourceful.
7	Your management recognises employees and makes them feel important by giving higher level responsibilities.
8	Your superiors encourage you to improve your qualifications and prepare you for promotion tests.
9	Your superiors give feedback on your deficiencies without hurting your ego.
10	Your management appreciates good performance and achievements of employees.
11	The system of appraising employees is based on objective assessment and not on favouritism.
12	The promotion policy of your organisation is fair and rational.
13	Your management arranges for adequate training facilities.
14	In your organisation, there is a mechanism to reward any good work done by any employee.
15	Employees in your organisation have enough opportunities for advancement.
16	Your management plans on a regular basis for your career development.
17	Growth opportunities are open to every employee in your organisation.

18	Senior officers take an active interest in juniors and help them learn their job.
19	The top management makes efforts to identify and utilise potential of the employees.
20	Job-rotation is frequent in your organisation.
21	Employees are recognised for their talent and work performance.
22	Creative ideas are always encouraged and rewarded.
23	Growth and development opportunities are at high degree.
24	Management considers development as an important dimension.
25	The rewards are always timely and of the right magnitude.

\*Strongly Agree - 5, Agree - 4, Neutral - 3, Disagree - 2, Strongly Disagree - 1

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**Table-1: Manpower Position as of 01-03-2014**

Class	Works	Non-Works	Projects	Mines	Total
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Executives	4250	1511	421	117	6299
Non-Executives	11016	800	48	221	12085
Total	15266	2311	469	338	18384

Source: Management Development Profile, Vizag Steel, 2014, P12.

**Table-2: Distribution of Respondents**

Sl.No.	Department/unit	Number of Respondents	% in Total
1	Materials Management (MM)	21	35.00
2	Design & Engineering (D&E)	10	16.00
3	Personnel & HRD (P&HRD)	16	27.00
4	Finance & Accounts (F&A)	13	22.00
Total		60	100.00

## Appendix

**Table-3: Management Philosophy towards HRD**

Item	MM		D&E		P&HRD		F&A		ANOVA*
	Mean	%	Mean	%	Mean	%	Mean	%	
1	3.86	71.43	3.70	67.50	4.00	75.00	3.46	61.54	$F_{cal} = 3.28$ $F_{crit} = 3.49$ P-value = 0.06
7	3.05	51.19	3.60	65.00	3.75	68.75	3.15	53.85	
10	3.24	55.95	3.70	67.50	3.75	68.75	3.46	61.54	
24	3.00	50.00	3.50	62.50	3.44	60.94	2.92	48.08	
Avg.	3.29	57.14	3.63	65.63	3.73	68.36	3.25	56.25	

\*Insignificant @  $\alpha=0.05$

**Table-4: Performance Appraisal & Feedback**

Item	MM		D&E		P&HRD		F&A		ANOVA*
	Mean	%	Mean	%	Mean	%	Mean	%	
2	3.33	58.33	3.60	65.00	3.69	67.19	3.00	50.00	$F_{cal} = 5.46$ $F_{crit} = 4.06$ P-value = 0.02 Cohen's $f = 1.299$ **Power=0.999
9	3.00	50.00	3.30	57.50	3.44	60.94	3.15	53.85	
11	2.86	46.43	3.40	60.00	3.50	62.50	2.54	38.46	
Avg.	3.06	51.59	3.43	60.83	3.54	63.54	2.90	47.44	

\*Significant @  $\alpha=0.05$ ; Effect size is large, since  $f > 0.40$

\*\*Power was calculated using  $\beta=0.20$ ,  $\alpha=0.05$  and  $N_T=60$

**Table-5: Training & Development**

Item	MM		D&E		P&HRD		F&A		ANOVA*
	Mean	%	Mean	%	Mean	%	Mean	%	
4	3.05	51.19	3.70	67.50	3.50	62.50	2.69	42.31	$F_{cal} = 2.87$ $F_{crit} = 3.24$ P-value = 0.07
6	3.29	57.14	3.60	65.00	3.88	71.88	3.08	51.92	
13	3.48	61.90	3.50	62.50	3.75	68.75	3.31	57.69	
18	2.81	45.24	3.50	62.50	3.63	65.63	3.00	50.00	
20	3.19	54.76	2.80	45.00	3.06	51.56	3.31	57.69	
Avg.	3.16	54.05	3.42	60.50	3.56	64.06	3.08	51.92	

\*Insignificant @  $\alpha=0.05$



**Table 6: Recognition & Reward**

Item	MM		D&E		P&HRD		F&A		ANOVA*
	Mean	%	Mean	%	Mean	%	Mean	%	
3	2.67	41.67	3.60	65.00	3.63	65.63	2.77	44.23	<i>F cal</i> = 8.96 <i>F crit</i> = 5.29 P-value = 0.00 Cohen's <i>f</i> = 1.296 **Power=0.999
14	2.81	45.24	4.10	77.50	4.06	76.56	3.46	61.54	
21	3.05	51.19	3.50	62.50	3.63	65.63	3.31	57.69	
22	3.14	53.57	4.00	75.00	3.56	64.06	3.46	61.54	
25	2.57	39.29	3.30	57.50	3.25	56.25	3.00	50.00	
Avg.	2.85	46.19	3.70	67.50	3.63	65.63	3.20	55.00	

\*Significant @  $\alpha=0.01$ ; Effect size is large, since  $f>0.40$

\*\*Power was calculated using  $\beta=0.20$ ,  $\alpha=0.01$  and  $N_T=60$

**Table-7: Career Planning & Development**

Item	MM		D&E		P&HRD		F&A		ANOVA*
	Mean	%	Mean	%	Mean	%	Mean	%	
5	2.90	47.62	3.50	62.50	3.63	65.63	2.85	46.15	<i>F cal</i> = 24.83 <i>F crit</i> = 5.95 P-value = 0.00 Cohen's <i>f</i> = 1.075 **Power=0.999
8	2.86	46.43	3.30	57.50	3.25	56.25	2.92	48.08	
16	2.62	40.48	3.60	65.00	3.56	64.06	2.77	44.23	
19	2.81	45.24	3.20	55.00	3.44	60.94	2.69	42.31	
Avg.	2.80	44.94	3.40	60.00	3.47	61.72	2.81	45.19	

\*Significant @  $\alpha=0.01$ ; Effect size is large, since  $f>0.40$

\*\*Power was calculated using  $\beta=0.20$ ,  $\alpha=0.01$  and  $N_T=60$

**Table-8: Growth Opportunities**

Item	MM		D&E		P&HRD		F&A		ANOVA*
	Mean	%	Mean	%	Mean	%	Mean	%	
12	3.43	60.71	3.20	55.00	3.56	64.06	2.92	48.08	<i>F cal</i> = 4.68 <i>F crit</i> = 3.49 P-value = 0.02 Cohen's <i>f</i> = 1.190 **Power=0.999
15	2.90	47.62	3.60	65.00	3.75	68.75	3.38	59.62	
17	2.76	44.05	3.40	60.00	3.63	65.63	2.85	46.15	
23	2.95	48.81	3.00	50.00	3.38	59.38	3.08	51.92	
Avg.	3.01	50.30	3.30	57.50	3.58	64.45	3.06	51.44	

\*Significant @  $\alpha=0.05$ ; Effect size is large, since  $f>0.40$

\*\*Power was calculated using  $\beta=0.20$ ,  $\alpha=0.05$  and  $N_T=60$

**Table-9: Post Hoc Comparisons of HRD Activities between Departments**

Dimension	MM-D&E ( $N_T=31$ )	MM-P&HRD ( $N_T=37$ )	MM-F&A ( $N_T=34$ )	D&E-P&HRD ( $N_T=26$ )	D&E-F&A ( $N_T=23$ )	P&HRD-F&A ( $N_T=29$ )
Performance Appraisal & Feedback ( $\alpha=0.05$ ; $t_{crit}=4.30$ )	$t_{stat}=4.24$ P=0.05	$t_{stat}=5.57$ P=0.03* $d=1.761$ Power=1.00	$t_{stat}=1.03$ P=0.41	$t_{stat}=7.21$ P=0.02* $d=0.589$ Power=0.68	$t_{stat}=2.56$ P=0.12	$t_{stat}=3.27$ P=0.08
Recognition & Reward ( $\alpha=0.01$ ; $t_{crit}=4.60$ )	$t_{stat}=6.23$ P=0.00** $d=2.841$ Power=1.00	$t_{stat}=5.26$ P=0.01** $d=2.90$ Power=1.00	$t_{stat}=3.84$ P=0.02	$t_{stat}=0.78$ P=0.48	$t_{stat}=4.34$ P=0.01	$t_{stat}=3.15$ P=0.03
Career Planning & Development ( $\alpha=0.01$ ; $t_{crit}=5.84$ )	$t_{stat}=4.51$ P=0.02	$t_{stat}=5.88$ P=0.01** $d=4.574$ Power=1.00	$t_{stat}=0.16$ P=0.88	$t_{stat}=0.99$ P=0.39	$t_{stat}=6.07$ P=0.01** $d=3.980$ Power=1.00	$t_{stat}=5.91$ P=0.01** $d=4.927$ Power=1.00
Growth Opportunities ( $\alpha=0.05$ ; $t_{crit}=3.18$ )	$t_{stat}=1.27$ P=0.29	$t_{stat}=3.20$ P=0.05* $d=2.458$ Power=1.00	$t_{stat}=0.22$ P=0.84	$t_{stat}=5.09$ P=0.01* $d=0.509$ Power=0.49	$t_{stat}=1.87$ P=0.16	$t_{stat}=4.58$ P=0.02* $d=2.529$ Power=1.00

All *t* values are two-tail; \*Significant at  $\alpha=0.05$ ; \*\*Significant at  $\alpha=0.01$ ; *d*=effect size.

$N_T$ =Total Sample Size from two departments; Power was calculated using *P*, *d* and  $N_T$



## Influence of Risk Relievers on Dimensions of Perceived Risk in Car Purchase

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### ABSTRACT

Perceived risk is the uncertainty that is created in the minds when they doubt the success of their purchase or when they are unable to decide as to which brand or model to choose out of the multiple options on offer before them. Perceived risk was classified into nine components namely physical risk, psychological risk, functional risk, social risk, financial risk, time risk, decision risk, obsolescence risk and facility risk. Risk reducers are strategies that are used by consumers in order to bring the risk to a certain level below which they feel comfortable to take a decision. In this paper seventeen risk relievers has been identified. The influence of risk reliever s on the specific component of risk is identified. This study will help manufacturers to identify risk reliever s which they can promote in their own subtle way so as to overcome the perceived risk barrier in customers. Future studies can incorporate new risk relievers that have not been considered for this study and this study can be extended to other geographical areas.

### Introduction

Perceived risk usually plays an important role in the purchase decision making process, regardless of the nature of the purchase occasion (planned versus impulse). Every purchase contains some degree of risk. Perceived risk is the uncertainty that is created in the minds when they doubt the success of their purchase or when they are unable to decide as to which brand or model to choose out of the multiple options on offer before them. Bauer (1960) was the first to bring up the idea of perceived risk and observed that consumers perceive uncertainty in contemplating a particular purchase intention. The outcome may make consumers unhappy and regretful. The study

considers that consumers' behavior is risk taking. Buying a car is not a regular purchase activity that is characterized by repeat purchases. The car market in India has evolved only in the last ten years with many new manufacturers having entered the Indian market and with people slowly upgrading from two wheelers towards car. Still as Joseph (2011) explained, India continues to have one of the lowest car density (estimated at 13 cars per 1000 people), when compared to China (45), Brazil (160) and Indonesia (42). This is an ideal situation for car manufacturers across the world to take a pie of the Indian car market which is possible only if they can address the perceived risk associated with the car purchase process.

Dholakia (1997) identified that perceived risk is a function of three dimensions: (1) the probability that the innovation will not perform as desired; (2) the consequence of it not performing as desired; and (3) the ability to reverse and the cost of reversing, any negative consequences. There are basically two methods of reducing perceived risk. The consumer can reduce uncertainty by increasing certainty. This is done by seeking additional information. The consumer can reduce the consequences by reducing the amount at stake, which he can do by lowering his performance and purchase goals.

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Perceived risk in this study has been classified into nine components namely physical risk, psychological risk, functional risk, social risk, financial risk, time risk, decision risk, obsolescence risk and facility risk. These components are explained as follows

**Table-01: Risk and Reviews**

Dimensions of perceived risk	Definition	Reference
Functional Risk	Risk that the product will not perform as expected	Cunningham [1967], Roselius [1971], Jacoby and Kaplan [1972], Peter and Ryan [1976], Stone and Gronhaug [1993]
Physical Risk	Risk that the product will be dangerous or harmful to the consumer	Jacoby and Kaplan [1972], Peter and Ryan [1976], Stone and Gronhaug [1993], Cunningham [1967]
Financial Risk	Risk that the product will not be worth the money the customer pays	Cunningham [1967], Jacoby and Kaplan [1972], Peter and Ryan [1976], Stone and Gronhaug [1993],
Social risk	Risk that a poor product choice will bruise the consumer's ego	Cunningham [1967], Jacoby and Kaplan [1972], Peter and Ryan [1976], Stone and Gronhaug [1993]
Psychological risk	Risk that a will not be consistent with the consumer's self-concept or will not satisfy self – esteem needs	Cunningham [1967], Roselius [1971], Jacoby and Kaplan [1972], Peter and Ryan [1976], Stone and Gronhaug [1993]
Time risk	Risk that the time spent in product search may be wasted if the product does not perform as expected	Cunningham [1967], Roselius [1971], Peter and Ryan [1976], Stone and Gronhaug [1993]
Linked decision risk	Buying a product will result in additional purchases of other goods or services as a direct result of having selected the product	Lindquist (2007)
Obsolescence risk	Risk that the technology will soon become obsolescent	Kidiyoor (2013)
Facility risk	The risk that the support faculties (road congestion, parking facility) needed to utilize the product will not be helpful	Introduced through this paper

## Objective

To identify the influence of risk relievers on specific components of perceived risk

This study tries to examine the major risk relievers involved in the purchase of car. The main research instrument was an interviewer administered survey. The research instrument was developed using the conceptual base of the dimensions of perceived risk and the contextual basis of the focus group outcomes. The resultant questionnaire comprised 64 Likert scales reflecting the nine dimensions of perceived risk. Exploratory factor analysis with a varimax rotation was conducted on the total 64 questions, which were later reduced to nine dimensions. The survey incorporated inclusion criterion of recent car purchase and was carried out with respondents who had purchased a car within four months. A total of 200 completed questionnaires were obtained.

**Table-02: Dimensions of Perceived Risk**

Dimensions of Perceived Risk (Perceived Risk Concerning)	Loadings
<b>Components of Functional Risk</b>	
Boot Capacity	.968
Quality of audio system	.954
Traversing hill roads	.947
Capability of local technicians	.946
Availability of nationwide service outlets	.942
A good after sales service	.934
Pleasing car interiors	.932
Engine pick up/ performance	.928
Cameras and other accessories	.924
Leg room inside the car	.921
Mileage	.915
<b>Components of Psychological Risk</b>	
Thirst for high speed driving	.965
Car can be stolen	.959
Expensive car	.957
Fear of driving	.942
Making a poor choice of a car	.927
Driving experience	.925
Poor resale value	.923
Doubtful of backseat comfort	.920
<b>Components of Decision Risk</b>	
New to the market car	.963
Misguiding advertisements	.949
Performance after two years	.945
Tempted because of loyalty / exchange bonus	.938
Biased newspaper reports	.936
local mechanics can misguide my selection of car	.932
Utilize the money for other purpose	.927
Company reputation	.910
<b>Components of Social Risk</b>	
Friends will not complement the decision to purchase this car	.957
Pleasing color	.947
The car is liked by all members of the family	.939
The shape of my car will add my social status	.937
Getting a sense of more importance among my friends after I own the car	.936
Social standing will get decreased after buying this car	.932
Starting trouble	.904
<b>Components of Time Risk</b>	

Long time to learn to drive the car	.970
wasted a lot of time in searching the car of choice	.956
Not be able to clean / cover the car properly	.949
Wasting time in search of service mechanic	.943
Car loan procedure will consume a huge amount of time	.942
A car loan that can help the hassle of wasting time in loans elsewhere	.941
Waiting time to get the car	.913
<b>Components of Facility Risk</b>	
Exteriors can get damaged in parking lots	.993
Non availability of garage at home	.986
Inability to drive without making scratches	.979
Roads are congested	.971
Frequent speed breakers on daily usage roads	.967
Difficulty of parking while using it for shopping	.966
<b>Components of Financial Risk</b>	
Pay a higher EMI for buying this car	.979
Not sure if the car is maintenance free	.978
The price of the car will come down after purchase	.973
Is the car worth the money spent	.970
The cost of spares for this car can be expensive	.959
Is the price of car within budget	.948
<b>Components of Physical Risk</b>	
Brake performance	.954
Lighting system in the car	.950
Road grip	.947
Performance/ absence of airbags	.943
Air conditioning system	.943

Non availability of assisted brake system (ABS)	.922
<b>Components of Obsolescence Risk</b>	
The car will soon become outdated	.948
There will be shortage of personnel to repair with advent of new technology	.912
The manufacturer will stop this model at any time	.909
There will be shortage of spares when new launches start pouring in	.903
Will lose its resale value	.902

#### Primary Data Computed

From the factor analysis nine factors have been divided and the factor loading above .90 in each column is formed a dimension. The 64 variables addressed the various components of risk. Seventeen risk relievers (action initiated by the purchaser or the seller in order to reduce the perceived risk) were identified as relevant in purchase of cars. The study was confined to Cuddalore district, India.

Consumers characteristically develop their risk reduction strategies for reducing their perceived risk. Risk reducers are strategies that are used by consumers in order to bring the risk to a certain level below which they feel comfortable to take a decision. The following seventeen risk relievers were identified as suitable in purchase of car. They include consumer satisfaction index, sales man assurance, test drive, auto magazine reviews, brand preference, frequent advertisements, recommendation of motor mechanic, authorized service station, country of origin, extended free service, celebrity emulation, looks of the car, dealer reputation, high price edition, social observation, market tenure and word of mouth.

**Table-01: Influence of Risk Relievers on Components of Perceived Risk**

Risk reliever statements	Physical risk	Psychological risk	Functional risk	Social risk	Financial risk	Time risk	Decision risk	Obsolescence risk	Facility risk
Consumer satisfaction index				-.080		-0.135			
The sales man assurance					-0.090				
The test drive	-0.302	-0.060				-0.101	-0.267	-0.095	
Review from Auto magazines							-0.127		
Looks of the car			-0.157	-0.099	-				-0.093
The television advertisements					-0.104	-0.100			
Opinion leadership									
The availability of company authorized Sales / service stations	-0.178		-0.089	-0.096	-0.096				
country of origin	-0.149	-0.155	-0.225	-0.473		-0.123		-0.144	
extended warranty / price reduction	-0.118				-0.255				-.092
Celebrity emulation								-0.169	
Brand preference		-0.454	-0.274	-0.172	-0.098	-0.107	-0.157	-0.216	
Dealer reputation									
highest end edition		-0.175							
Social observation				-0.091					
Market tenure	-0.112				-0.102				
Word of mouth		-0.054	-0.086			-0.204	-0.135		
Constant	4.730	5.142	4.694	5.375	4.531	4.502	4.350	4.256	2.671
R Square	0.494	0.842	0.587	0.747	0.283	0.302	0.319	0.337	0.048

Source: Primary data computed

Stepwise multiple regression analysis was carried out to identify the influence of risk relievers on the components of perceived risk.

The results of the stepwise regression are shown in table no. 2. It is found that out of the seventeen risk relievers chosen for the study

only 15 risk relievers have an influence on the components of perceived risk.

The R Square value infers that 49.4 percent of physical risk has been explained by the five risk relievers test drive, availability of service station country of origin, extended warranty and market tenure. Test drive is the most influencing risk relievers that tend to reduce physical risk.

The R Square value infers that 84.2 percent of psychological risk is relieved by the five risk relievers viz, word of mouth, country of origin, test drive, high priced edition and market tenure. The preferred brand is the most influencing risk reliever that tends to reduce psychological risk. Research shows that brand name can help consumers reduce search cost and cognitive effort when making product evaluations (Landes and Posner, 1987)

The R Square value infers that 58.7 percent of functional risk is mitigated by the five risk relievers namely looks of the car, availability of service station, preferred brand, country of origin and word of mouth. Preference of brand is the most influencing risk reliever that tends to reduce functional risk. Lumpkin et al. (1985b) showed that perceived risk changed when consumers were made aware of the country of origin

The R Square value infers that 74 percent of social risk is allayed by the six risk relievers customer satisfaction index, preferred brand, authorized service, Country of origin, looks of the car and social observation are the most influencing risk reliever that tends to reduce social risk. Country of origin is the most influencing risk reducer that reduces social risk. Brody and Cunningham (1968) define Social risk as the extent to which the consumer thinks that other people judge him on the basis of the brand he uses.

The R Square value infers that 27.7 percent of financial risk is decreased by six risk relievers identified as sales man assurance, advertisements, extended warranty, preferred brand, market tenure and availability of service station. Extended warranty is the most influencing risk reliever that tends to reduce financial risk. Peter, J. P. and Tarpey, L. X., (1975) examined financial risk as the net financial loss to a consumer through reasons like lack of warranty and high maintenance fees

The R Square value infers that 29.3 percent of time risk is dispelled by six risk relievers noted as customer satisfaction index, test drive, advertisements, country of origin, preferred brand and word of mouth. Word of mouth is the most influencing risk reliever that tends to reduce time risk. Sunitha et al. (2012b) identified that Factors like word of mouth, magazine reviews, test drive, availability of service stations had a major role in the purchase decision making process

The R Square value infers that 31.9 percent of decision risk has been explained by the four risk relievers - test drive, auto magazine reviews, preferred brand and looks of the car. Test drive is the most influencing risk reliever that tends to reduce decision risk.

The R Square value infers that 33.7 percent of obsolescence risk is reduced by four risk relievers - test drive, brand preference, country of origin and celebrity emulation. Preferred brand is the most influencing risk reliever that tends to reduce obsolescence risk. Arndt (1967) indicated that word of mouth can be explained as seeking social support for adoption or non-adoption and as risk reduction by group action.

The R Square value infers that 4.8 percent of facility risk is influenced by the two risk relievers extended warranty and looks of

the car. Looks of the car is the most influencing risk reliever that tends to reduce facility risk.

Among the seventeen risk relievers considered for the study, test drive, word of mouth, country of origin, availability of service stations, looks of the car and preferred brand are risk reducers that impact upon multiple components of perceived risk. Among these preferred brand is found to weigh upon seven risk reducers. Manufacturers should create brands that are enduring by designing cars that are trouble free, having well developed service centres, well informed sales men and providing a hassle free dealership experience. Roselius (1971) explained that the most common risk-reducing strategy employed is to become loyal to a particular brand. Test drive and availability of service stations are risk relievers that influence multiple dimensions of perceived risk. Hence companies should take efforts to draw customers to test their vehicles and increase the number of service stations while improving the quality of service which in turn will create a positive word of mouth which again is an effective risk reliever. Companies should invest on their brand, a product of promotion, quality and customer experience as brand value tends to be an effective risk reliever. Hence companies should put their effort in developing knowledgeable sales people, a class product free of hassles, develop and communicate a good brand image, have large number of authorized service centres which ultimately result in a positive word of mouth for their product. Companies should design cars that by its looks should inspire the confidence of future buyers.

Social observation is a risk reducer that consumers can easily lean upon as it requires a simple observation of the vehicles on the road. As identified by Cox (1967) Social expectations or peer pressure are examples of external references consulted during risk information search. There might be other risk relievers which would not have been accounted in this manuscript which can be included in future studies and the study can be extended on a pan India basis. The major implication that can be drawn from the study is that manufacturers should leave no stone unturned in their effort to minimize the perceived risk of customers.

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## A Study of Non-Performing Assets in the Indian Banking Industry

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### ABSTRACT

The strength and soundness of a banking system primarily depends upon the quality of the assets. Non-performing assets (NPA) is one of the major concerns for banking system in India. This study analyzes NPA management in Indian banks for the period 2004-2013. The data for the study pertained to gross and net NPAs of different bank groups over the research period, and was collected from the Reserve Bank of India (RBI) website. The results of the study show that there has been a reduction in the NPA ratios over the research period, which indicates improvement in the asset quality of Indian public sector banks, private sector banks, and foreign banks. There was significant improvement in the management of NPAs of the public sector banks. The stringent prudential and provisioning norms and other initiatives taken by the regulatory bodies have pressurized banks to improve their performance, and consequently resulted in reduction of NPA as well as improvement in the financial health of the Indian banking system. The various steps initiated by the RBI and the Government of India in strengthening/improving the functioning of the Debt Recovery Tribunals, Lok Adalats, and SARFAESI Act as a comprehensive settlement policy certainly has resulted in improved recovery of NPA accounts. All these efforts have improved the efficiency and profitability of Indian banks, and have strengthened the financial position of the public sector banks and private sector banks. The study further reveals that despite the huge NPA level of public sector banks, they have been successful in reducing their respective gross and net NPA ratios at par with the private sector banks.

### Introduction

One of the primary functions of banking is the granting of loans and advances to customers to provide finance for their economic activities. The funds received back from borrowers plays a major part in the cash cycle of banks, and contributes largely to their profits. Non-recovery of interest and/or instalments on the loan portfolio disrupts the effectiveness of the credit cycle, constraining the funds of banks, impacting their profitability, and compelling banks to

for possible loan losses.

As per RBI guidelines, as of March 31, 2004, a non-performing asset (NPA) is a loan or an advance in any of the following cases:

- interest and/or instalment of principal remain overdue for a period of more than 90 days in respect of a term loan,
- the account remains 'out of order' for a period of more than 90 days, in respect of an overdraft/cash credit (OD/CC),
- the bill remains overdue for a period of more than 90 days in the case of bills purchased and discounted,
- interest and/or instalment of principal remains overdue for two harvest seasons but for a period not exceeding two half years in the case of an advance granted for agricultural purposes, and
- any amount to be received remains overdue for a period of more than 90 days in respect of other accounts.

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maintain minimum capital reserves and provisions to act as an offset



An account is treated as 'out of order' if the outstanding balance remains continuously in excess of the sanctioned limit/drawing power. In cases where the outstanding balance in the principal operating account is less than the sanctioned limit/drawing power, but there are no credits continuously for six months as on the date of Balance Sheet or credits are not enough to cover the interest debited during the same period, these accounts should be treated as out of order.' Any amount due to the bank under any credit facility is 'overdue' if it is not paid on the due date fixed by the bank.<sup>2</sup>

The recognition of the importance of Non-performing Assets has grown since the Narshimham Committee Report on banking sector reforms in 1991, which can be considered as the second landmark in banking sector in India after nationalization of banks. After the nationalization of banks, RBI focussed its attention mainly on the lending policy of nationalized banks, but not so much on the recovery of advances of nationalized banks.

The recovery of non-performing assets has become critical performance area for all banks in India. As per the RBI report of March 1999<sup>3</sup>, the gross NPA of all the scheduled commercial banks and primary co-operative banks had gone up to Rs.58,554 crores (14.6%) and to Rs. 4,535 (12.2%) crores, respectively. There was a lack of specific and unanimous guidelines which had resulted in huge misallocation of bank funds.

Thus it was pertinent to develop some specific guidelines regarding NPAs. In April 1992 RBI introduced a new set of prudential norms for commercial banks, which were subsequently extended in stages to urban co-operative banks as well, as per the recommendations of the Madhavaro Committee in May 1999 as a need for strengthening the co-operative sector in order to enhance operational efficiency, productivity and profitability and with the objective of implementing international best practices in Indian banks, it is compulsory for all banking institutions to comply with prudential norms of RBI.

### Literature Review

There is a very extensive literature examining the causes and management of NPAs. The following is a review of some of the more recent literature in the Indian context.

Murari (2014) identified a continuous increasing trend in gross and net NPAs for public sector banks in comparison to private sector banks. He also found a statistically significant difference in the gross and net NPAs of public and private sector banks, but no significant difference in gross and net NPA ratio of public and private sector banks, which indicated that the public and private sector banks are trying hard to reduce their NPA ratios consistently due to the regulatory and supervisory pressure.

Khedekar (2012) examined the causes of NPAs, and its prevalence in different sectors in India. She argued that the level of NPAs is an indicator reflecting the credit risks and efficiency of allocation of bank resources. She suggested the necessity of provisions to offset possible NPAs, which in turn reduces the overall profitability of banks.

Vadivalagan and Selvarajan (2012) analysed the impact of NPAs on liquidity and profitability of banks. They concluded that the presence of NPAs has an adverse impact on the productivity and efficiency of Indian banks, resulting in the erosion of profits. They suggested that banks should keep NPAs at low level through efficient recovery mechanism (before loans turn into bad debts), in order to maintain the liquidity and profitability.

Veerakumar (2012) studied the priority sector advances by the public, private and foreign banks in India, and compared the priority sector and non-priority sector NPAs over the period 2001-11. He also identified the categories of priority sector advances which contributed to the growth of total priority sector NPAs during the period.

Murthy and Gupta (2012) examined the impact of easing on the non-performing assets of the four banking segments, namely, public sector, old private sector, new private sector, and foreign banks by studying the general trends in NPAs. They used the Structure-Conduct-Performance approach, showing the link between competition and conduct, concentration and growth in NPAs. They found that NPAs were declining at a CAGR of 13% p.a.

Paul et al (2011) measured the relative efficiency of Indian public sector banks based on overall financial performance. They argued that, given the very dynamic pace of restructuring of the financial services industry in India, it is imperative for banks to continuously monitor their efficiency on Non-Performing Assets, Capital Risk-Weighted Asset Ratio, Business per Employee, Return on Assets and Profit per Employee. They developed a framework for benchmarking efficiency wherein Non-Performing Assets is used as a negative financial indicator. This study analyses NPA management by public sector, private sector, and foreign banks in the Indian banking sector.

### Data and Methodology

The primary objectives of the study were to examine the trends in NPAs across the public sector, private sector, and foreign banks, to evaluate the impact of NPAs on the performance of banks, in terms of profitability and capital adequacy, and to understand the sector-wise contribution (agricultural, SSI, priority sector, non-priority sector, public sector units, and others) to NPAs.

The data for the study pertaining to NPAs, their composition, classification of loan assets, advances, and profits of various banks have been taken from the RBI online database and from the *Report on Trends and Progress of Banking in India*. The research period for the study was 2004-2013. The study is analytical in nature, applying the statistical techniques of ANOVA to examine differences in NPAs between different bank groups, and correlation and regression to examine associations between NPAs and other variables.

### Analysis

(a) **Classification of assets (standard, sub-standard, doubtful and loss) as a percentage of advances of all scheduled commercial banks and trends in NPAs:**

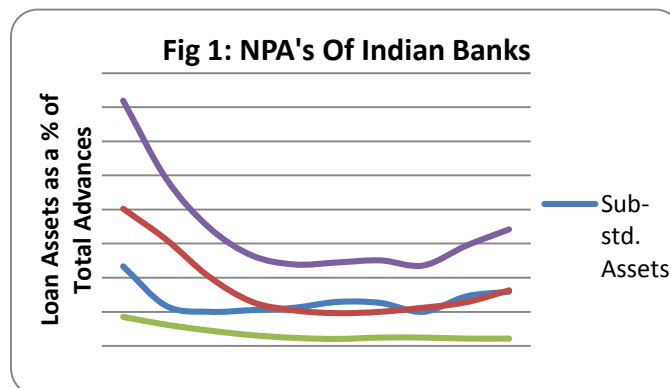


Table 1 shows the classification of assets as a percentage of total advances of all scheduled commercial banks. Figure 1 shows the

trend in NPAs (as a percentage of total advances) of all scheduled commercial banks.

**Table-1: Categories of Loan Assets (as a percentage of Total Advances)**

Year	Standard Assets	Sub-Standard Assets	Doubtful Assets	Loss Assets	Total NPAs
2004	92.81	2.33	4.02	0.85	7.19
2005	95.09	1.18	3.12	0.62	4.91
2006	96.52	1.00	2.03	0.45	3.48
2007	97.34	1.05	1.29	0.31	2.66
2008	97.61	1.12	1.04	0.23	2.39
2009	97.55	1.29	0.96	0.20	2.45
2010	97.49	1.26	1.00	0.24	2.51
2011	97.64	1.00	1.12	0.24	2.36
2012	97.06	1.45	1.28	0.21	2.94
2013	96.58	1.59	1.63	0.21	3.42

Source: Department of Banking Supervision, RBI

The trend of NPAs (sub-standard, doubtful, and loss assets) was declining in the period 2004-07, and stabilised in the period 2007-11, reaching a minimum in 2008; however, there was a slight increase in 2012-13. A similar pattern was reflected in the trends for sub-standard assets and for doubtful assets. On the other hand, the trend in loss assets has shown a consistent decline throughout the research period. These trends reflect the successful implementation of the Narasimham Committee recommendations, which caused great strain on the efficiency, productivity and profitability of the public sector banks and even some of them showed loss in the initial year. However, there is cause to worry about the apparent loosening of control in 2012-13.

Table 2 and Table 3 lists the gross and net NPA's of various groups of banks viz. all scheduled commercial banks, public sector banks, old private sector banks, new private banks, and foreign banks.

**Table-2: Group-wise Gross NPAs of Scheduled Commercial Banks (in Rs. billion; as a Percentage of Gross Advances)**

Year	Scheduled Commercial banks		Public sectors banks		Old private sector banks		New Private sector banks		Foreign banks	
2004	647.86	7.7%	515.38	7.8%	43.92	7.6%	59.63	5.0%	28.45	5.3%
2005	583.00	6.3%	473.25	5.7%	42.06	6.0%	45.76	3.6%	28.94	4.6%
2006	518.16	4.4%	421.06	3.7%	37.40	4.3%	40.42	1.7%	21.92	2.8%
2007	504.86	3.7%	389.68	2.7%	29.69	3.1%	62.87	1.9%	19.28	1.9%
2008	564.35	3.5%	405.95	2.2%	25.57	2.3%	104.26	2.5%	22.63	1.8%
2009	846.98	2.4%	599.26	2.2%	36.22	2.3%	140.17	2.9%	28.59	1.8%
2010	979.22	2.3%	746.14	2.2%	36.99	2.0%	145.41	2.3%	64.44	3.8%
2011	1423.00	2.5%	746.64	2.3%	36.00	1.9%	145.00	2.7%	71.33	4.3%
2012	1429.00	3.1%	1172.62	3.0%	42.00	1.8%	145.00	2.2%	50.00	2.5%
2013	1940.00	3.6%	1644.62	3.7%	52.00	1.9%	158.00	2.0%	62.00	2.6%

Source: Report on Trends and progress of Banking in India, relevant issues.

**Table 3: Group-wise Net NPAs of Scheduled Commercial Banks (in Rs. billion; as a Percentage of Net Advances)**

Year	Scheduled Commercial banks		Public sectors banks		Old private sector banks		New Private sector banks		Foreign banks	
2004	296.92	4.0%	248.77	4.5%	25.98	5.2%	13.65	1.5%	9.03	1.7%
2005	243.96	2.8%	193.35	3.1%	21.42	3.8%	19.86	1.7%	9.33	1.5%
2006	217.54	2.0%	169.04	2.1%	18.59	2.7%	23.53	1.9%	6.39	0.8%
2007	185.43	1.2%	145.66	1.3%	13.75	1.7%	17.96	0.8%	8.08	0.8%
2008	201.01	1.0%	151.45	1.1%	8.91	1.0%	31.37	1.0%	9.27	0.7%
2009	247.30	1.0%	178.36	1.0%	7.40	0.7%	49.07	1.2%	12.47	0.8%
2010	315.64	1.1%	211.55	0.9%	11.59	0.9%	62.52	1.4%	29.96	1.8%
2011	387.23	1.1%	293.75	1.1%	12.71	0.8%	52.34	1.1%	29.77	1.8%
2012	417.00	1.1%	360.00	1.2%	9.00	0.5%	34.00	0.6%	12.00	0.6%
2013	649.00	1.4%	591.00	1.7%	13.00	0.6%	30.00	0.5%	14.00	0.6%

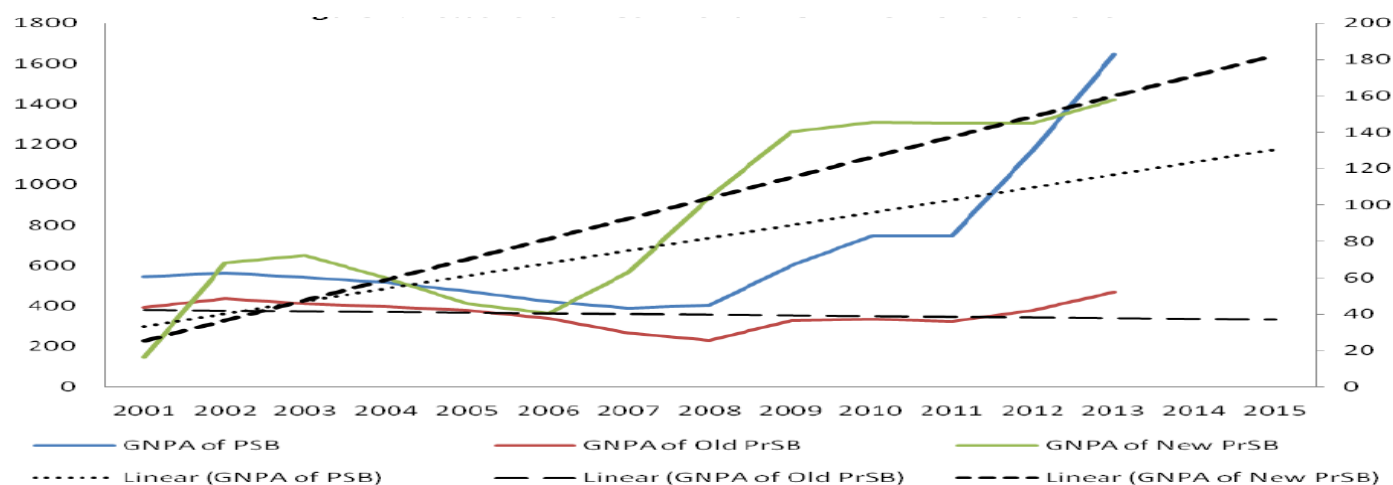
Source: Report on Trends and progress of Banking in India, relevant issues.

The analysis of NPAs of different banks groups indicates that the total amount of Gross NPA and Net NPA of public sector banks and private sector banks accounted more than 70% of total NPA of all scheduled commercial banks. Further, Gross NPA to Gross Advances for Scheduled commercial banks had declined till 2010 from 7.7% to 2.25%, but from 2011 to 2013, an increase in the percentage of Gross NPA to Gross Advances is a warning signal for Indian banking. As far as a comparison between public and private sector banks is concerned, the public sector banks seem to have higher Gross NPA ratio (on an average) than old and new private sector banks during the

period of study. In the same manner Net NPA to Net Advances for public sector banks was also higher when compared to old and new private sector banks and all scheduled commercial banks, which shows the inefficiency of public sector banks in managing NPA, and there is a fluctuation in the percentage of Gross NPA and Net NPA of foreign banks which is not a good sign.

Figure 2 below presents the linear trend analysis of Gross NPA in public sector banks and private sector banks across the research period.

**Fig-2: Linear Trend in Gross NPA of Public and Private Sector Banks**



Source: Report on Trends and progress of Banking in India, Relevant Issues

The Gross NPA of public sector banks and new private sector banks exhibit an increasing linear trend in the research period, while the Gross NPA of old private sector banks shows a decreasing linear trend.

The growth in Gross NPA of public and new private sector banks could be due to the continued recession in some industrial segments such as real estate, cement, textiles, and so on. In 2012-13, there was net addition to Gross NPA in public sector banks by Rs.472 billion, i.e. 4.02% of Gross NPA as on 31.03.2012, whereas the corresponding figure was 2.38% for old private sector banks and 8.96% for new private sector banks.

Old private sector banks were successful in reducing their Net NPA ratio from 2.3% in 2001 to 0.77% in 2013 with a minimum of 0.53% in 2011. Similarly, new private sector banks also showed a remarkable decline in their Net NPA ratio from 3.1% in 2001 to 0.42% in 2011-12, with a marginal increase to 0.45% in 2012-13. Net NPA of the public sector banks rose to 2.01% during 2012-13 as compared to 1.53% in 2011-12.

Table 4 presents the movement of NPAs of scheduled commercial banks in 2012-13.

**Table-4: Movement of NPAs of Scheduled Commercial Banks 2012 and 2013 (in Rs. million)**

Bank	Gross NPAs				Net NPAs		
	on 31/3/12	Increases	Decreases	Write-offs	on 31/3/13	on 31/3/12	on 31/3/13
SBI and its Associates	482146	425368	219147	60580	627785	202366	281007
State Bank of India	396765	319934	148857	55948	511894	158189	219565
State Bank of Bikaner & Jaipur	16515	16279	6966	4633	21195	9454	13041
State Bank of Hyderabad	20074	28168	16381	-	31860	10020	14487
State Bank of Mysore	15026	16584	10804	-	20806	7684	12088
State Bank of Patiala	18878	20338	14685	-	24530	8484	11942
State Bank of Travancore	14888	24066	21454	-	17499	8536	9886
Nationalised Banks	696247	772748	429260	17461	1022272	391546	619362
Allahabad Bank	20590	58919	28139	-	51370	10917	41268
Andhra Bank	17980	27417	8252	-	37145	7559	24092
Bank of Baroda	44648	68438	33260	-	79826	15436	41920
Bank of India	64709	75781	47394	-	93095	38425	60326
Bank of Maharashtra	12970	8076	9670	-	11376	4696	3929
Canara Bank	40318	58193	35909	-	62602	33863	52781
Central Bank of India	72730	51250	39420	-	84560	46000	49880
Corporation Bank	12742	17973	10233	-	20482	8694	14109
Dena Bank	9565	11198	6238	-	14525	5717	9172
IDBI Bank Ltd.	45514	27397	8411	-	64500	29109	31004
Indian Bank	18508	28925	11778	-	35655	11968	23843
Indian Overseas Bank	39201	56006	29127	-	66080	19074	40272
Oriental Bank of Commerce	35805	32133	26098	-	41840	24590	29027
Punjab and Sind Bank	7634	10936	3201	-	15369	5476	11104
Punjab National Bank	87196	86470	39009	-	134658	44542	72365
Syndicate Bank	31827	21420	23462	-	29785	11854	11248
UCO Bank	40862	51616	15005	6172	71301	22639	40693
Union Bank of India	54499	39738	19809	11288	63138	30250	33534

United Bank of India	21764	24848	16974	-	29638	10756	19700
Vijaya Bank	17185	16014	17869	-	15329	9980	9097
Old Private Sector Banks	41998	41833	30063	1674	52095	13357	20864
Catholic Syrian Bank	1829	1713	1434	-	2109	842	993
City Union Bank	1235	2234	1739	-	1731	540	964
Dhanlaxmi Bank	1043	5048	2288	-	3803	580	2610
Federal Bank	13008	8070	5424	115	15540	1990	4319
ING Vysya Bank	1495	1939	1531	689	1214	525	91
Jammu & Kashmir Bank	5166	4550	2408	870	6438	493	553
Karnataka Bank	6847	4135	4593	-	6389	4352	3778
Karur Vysya Bank	3210	2005	2357	-	2859	788	1087
Lakshmi Vilas Bank	3077	4002	2480	-	4599	1771	2838
Nainital Bank	310	574	212	-	673	-	-
Ratnakar Bank	331	409	481	-	259	84	69
South Indian Bank	2672	5301	3634	-	4339	765	2495
Tamilnad Mercantile Bank	1775	1854	1484	-	2145	626	1068
New Private Sector Banks	145680	86996	33719	40347	158610	30656	39079
Axis Bank	18063	20234	5843	8520	23934	4726	7041
Development Credit Bank	2418	753	1021	-	2150	302	491
HDFC Bank	19994	18592	3720	11520	23346	3523	4690
ICICI Bank	94753	35871	18088	16459	96078	18608	22306
IndusInd Bank	3471	4466	1919	1440	4578	947	1368
Kotak Mahindra Bank	6142	4643	1870	1334	7581	2374	3114
Yes Bank	839	2437	1259	1074	943	175	70
Foreign Banks	62964	41442	24137	501	79770	14124	26628
AB Bank	-	57	-	-	57	-	44
Abu Dhabi Commercial Bank	31	0	31	-	-	-	-
American Express Banking Corp.	234	681	469	-	446	176	319
Antwerp Diamond Bank	996	-	494	-	503	174	-
Australia and New Zealand Banking Group	-	281	-	-	281	-	-
Bank International Indonesia	-	-	-	-	-	-	-
Bank of America	7	-	7	-	-	-	-
Bank of Bahrain & Kuwait	277	491	245	-	523	176	234
Bank of Ceylon	15	-	0	-	15	-	-
Bank of Nova Scotia	96	668	185	-	579	-	350
Bank of Tokyo-Mitsubishi UFJ	82	5	-	-	87	8	8
Barclays Bank	5471	2769	2698	-	5543	1254	1473
BNP Paribas	275	-	26	86	163	41	-
Chinatrust Commercial Bank	163	393	34	-	522	92	268
Citibank	8464	10421	5298	-	13587	4238	7667
Commonwealth Bank of Australia	-	-	-	-	-	-	-
Credit Agricole	9	-	3	-	6	-	-
Credit Suisse AG	-	-	-	-	-	-	-
DBS Bank	2147	4236	148	415	5820	774	3290
Deutsche Bank	1348	371	175	-	1544	114	287
FirstRand Bank	-	220	-	-	220	-	-
Hongkong & Shanghai Banking Corporation	7201	1929	2722	-	6408	2203	1190
HSBC Bank oman S.A.O.G.	-	-	-	-	-	-	-
Industrial and Commercial Bank of China	-	-	-	-	-	-	-
JPMorgan Chase Bank	269	-	25	-	244	-	-
JSC VTB Bank	-	-	-	-	-	-	-
Krung Thai Bank	-	-	-	-	-	-	-
Mashreqbank	-	-	-	-	-	-	-
Mizuho Corporate Bank	63	1190	-	-	1253	-	877
National Australia Bank	-	-	-	-	-	-	-
Rabobank International	-	-	-	-	-	-	-
Royal Bank of Scotland	3465	535	1204	-	2796	933	365
Sberbank	-	-	-	-	-	-	-
Shinhan Bank	-	-	-	-	-	-	-
Societe Generale	12	-	4	-	7	-	-
Sonali Bank	7	9	2	-	15	2	4
Standard Chartered Bank	32122	17020	10341	-	38801	3868	10098

State Bank of Mauritius	210	166	26	-	350	71	154
Sumitomo Mitsui Banking Corporation	-	-	-	-	-	-	-
UBS AG	-	-	-	-	-	-	-
United Overseas Bank	-	-	-	-	-	-	-
Westpac Banking Corporation	-	-	-	-	-	-	-
Woori Bank	-	-	-	-	-	-	-

Source: annual accounts of banks.

The increase in quantum of NPA per se is not a serious problem, since every year a good amount is realized in NPA accounts. From Table 4, the SBI group of public sector banks had Gross NPAs of Rs.627,785 million and Net NPAs of Rs.281,007 million as on March 31, 2013, the difference amount of Rs.346,778 million representing provisions. For SBI alone the provision amount was Rs.292,329 million.

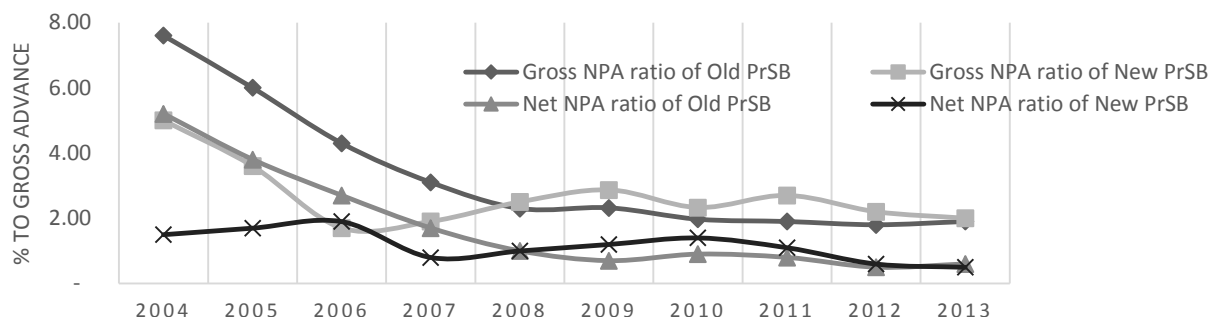
The nationalized banks under public sector banks together had Gross NPA of Rs.1,022,272 million and Net NPA of Rs.619,363 million, with provisions of Rs.402,910 million. Among nationalized banks, Punjab National Bank is leading, with a provision of Rs.62,293 million for NPAs followed by Bank of Baroda (Rs.37,906 million), Central Bank of India (Rs.34,680 million), Bank of India (Rs.32,769 million). The old private sector banks had Gross and Net NPA of Rs.52,095 million and Rs.20,864 million, respectively, with

foreign banks, respectively. Figure 5 presents the slippage ratio for the bank groups in the period 2010-13, and Figure 6 presents the provisioning ratio for the bank groups in the period 2010-13.

Though the Gross and Net NPA has increased in amount, the Gross NPA to Gross advances (Gross NPA ratio) and Net NPA to net advances (Net NPA ratio) have shown a declining trend for old and new private sector banks. Gross NPA ratio of public, old private, new private and foreign sector banks were 7.8%, 7.6%, 5.0%, 5.30%, respectively in March 2004 and declined to 3.68%, 1.9%, 2% and 2.60%, respectively by March 2013.

Net NPA to Net Advances of public sector banks was 4.5% as on March 2004. This had come down to 1.7% in 2013, with a significant reduction of 0.9% in 2010. The old and new private sector banks also revealed the similar pattern, and the level of reduction of net NPA

**Fig.3: Gross and Net NPA Ratio of Old and New PRSB**

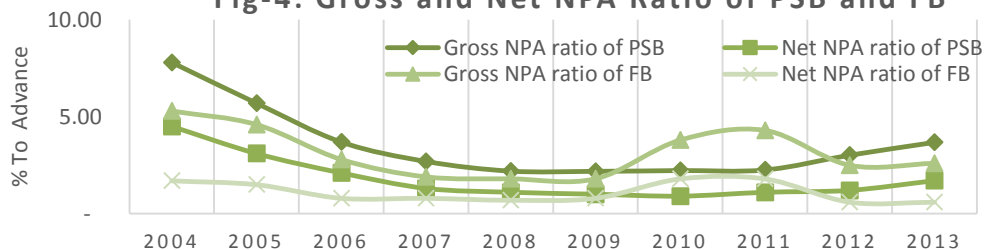


provisions of Rs.31,231 million. Among old private sector banks, the Federal Bank was leading with a provision of Rs.11,221 million.

Among the new private sector banks, ICICI bank was leading with a provision of Rs.73,772 million, followed by HDFC bank (Rs.18,657 million) and Axis Bank (Rs.16,893 million). Among foreign sector banks Gross and Net NPAs were Rs.79,770 million and Rs.26,628 million, respectively, with provisions of Rs.53,142 million.

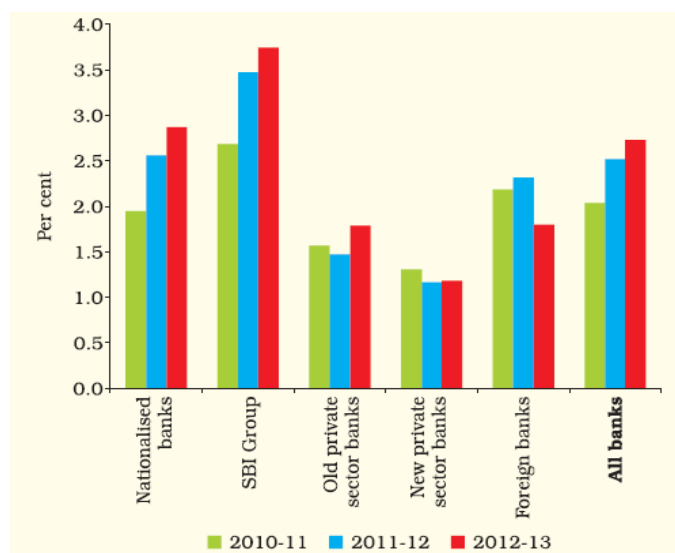
ratio was much more than the public sector banks. This is a positive sign, perhaps due to more provisioning as well as better recovery done by the banks during this period. In 2012-13, among the three channels for NPA recovery, viz., Securitisation and Reconstruction of Financial Assets and Enforcement of Security Interest Act (SARFAESI Act), Debt Recovery Tribunals (DRT) and Lok Adalats, the largest amount was recovered through the SARFAESI Act. NPA recovered through this Act accounted for about 80% of the total amount of NPA (according to RBI's *Report on Trends and Progress*

**Fig.4: Gross and Net NPA Ratio of PSB and FB**

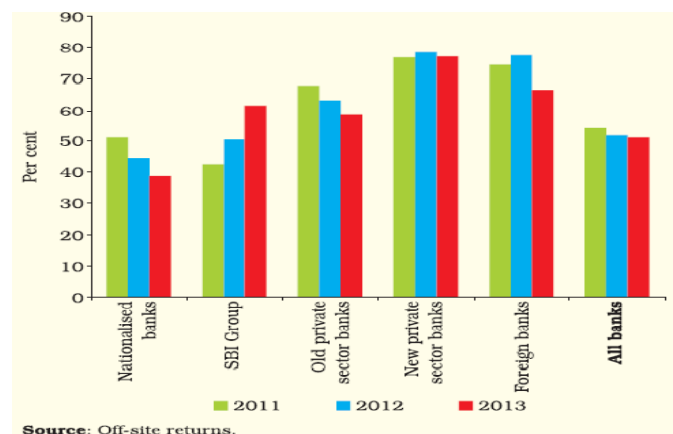


Figures 3 and 4 present the trend in Gross and Net NPA ratios for old and new private sector banks, and for public sector banks and

of Banking in India, 2012-13).

**Fig.-5: Slippage Ratio Bank Group-Wise**

Source: Report on Trends and Progress of Banking in India, 2010-2013

**Fig.-6: Provisioning Coverage Ratio across the Bank Groups**

Source: Report on Trends and Progress of Banking in India, 2010-2013

The slippage ratio, defined as additions to NPAs during the year as per cent of standard advances at the beginning of the year, also showed an increase during 2012-13. On the other hand, although there was a rise in the gross NPA ratio in 2012-13, the provisioning coverage ratio (PCR), defined as provisions for credit loss as per cent of gross NPAs, showed a marginal decline during the year 2013 at the aggregate level. The decline was most perceptible for nationalised banks. For the SBI group, however, there has been a steady improvement in PCR since 2011. This can be regarded as a positive development for this bank group against the backdrop of its rising NPA ratio during this period.

#### (b) Impact of non-performing assets on the performance of public sector banks:

In order to analyse the impact of NPAs on the performance of banks, the NPAs were analysed in terms of priority sector NPAs, non-priority sector NPAs, and public sector units' NPAs. Priority sector loans are advances given to agriculture, small-scale industries, and so on. Non-priority sector loans are advances given to medium- and large-scale industries and so on. Unfortunately, this data was available only for public sector banks for the period 2002-12. The components of NPAs along with the net NPA and net profit of public sector banks are presented in Table 5 and Figures 6 and 7 below.

**Table-5: NPAs of Priority Sector, Non-Priority Sector, and Public Sector Units to Net Profit**

Year	Priority Sector	Non-Priority Sector	Public Sector Units	Net NPA	Net Profit
2002-03	24939	26781	1087	24877	12295
2003-04	23841	25698	610	19335	16546
2004-05	21926	23249	444	16904	15784
2005-06	22374	18664	341	14566	16539
2006-07	22954	15158	490	14145	20152
2007-08	25287	14153	299	17726	26592
2008-09	24318	19251	474	21033	34394
2009-10	30848	25929	524	29644	57109
2010-11	41245	29803	278	36071	70331
2011-12	48524	34502	746	39423	81700

Source: Report on Trend and Progress of Banking in India, 2003-12  
(All values are in Rs. crore)



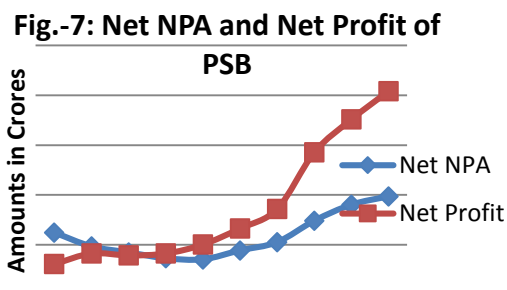
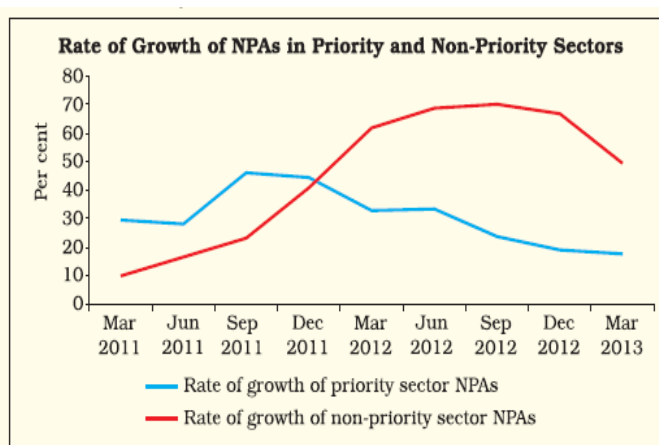
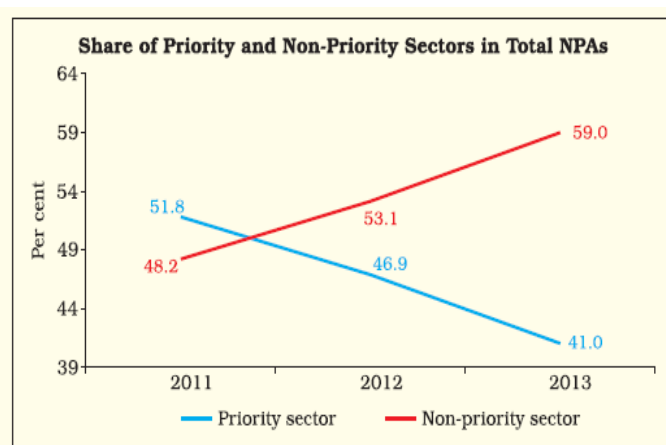


Fig.-8: Trend in Priority and Non-Priority Sector NPAs



Source: Report on Trends and Progress of Banking in India, 2010-2013

Although the NPA ratio in the priority sector was consistently higher than the NPA ratio in the non-priority sector, deterioration in asset quality in 2012-13 was primarily on account of the non-priority sector i.e. the non-priority sector is the major contributor of NPAs.

There was a low trend growth in net profit initially, which accelerated after 2008-09. In particular, there was significant positive correlation between net profit and priority sector NPAs ( $r = 0.9442$ ) and non-priority sector ( $r = 0.6575$ ), but insignificant correlation

net profit was significantly positively correlated with net NPA ( $r = 0.9081$ ). These correlations were corroborated through regression, as presented in Tables 6 and 7 below.

Table-6: Regression of Net Profit on NPAs of Priority Sector, Non-Priority Sector, and Public Sector Units

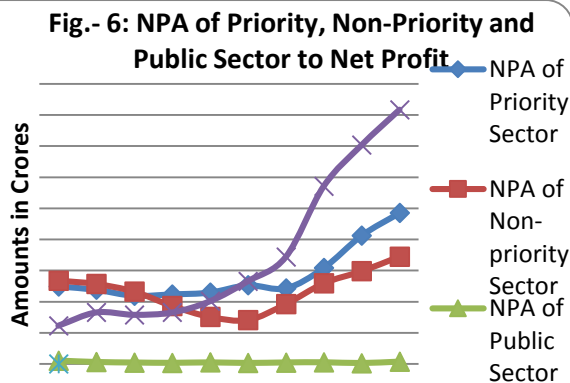
Particulars	Coeff.	Std. Err.	t Stat	p-value
Intercept	-	11185.7	-	-
Priority Sector NPAs	31528.83	4	2.8187	0.0304
Non-priority Sector NPAs	2.69	0.56	4.7786	0.0031
Public Sector Units NPAs	-0.03	0.88	0.0303	0.9768
	-18.31	15.07	1.2143	0.2702

$$R^2 = 0.9230, F \text{ Stat} = 23.9639, p\text{-value} = 0.0010^{**}$$

Table-7: Regression of Net Profit on Net NPAs of Public Sector Banks

Particulars	Coeff.	Std. Err.	t Stat	p-value
Intercept	-25021.13	10436.94	-2.3974	0.0434
Net NPAs	2.57	0.42	6.1321	0.0003

$$R^2 = 0.8246, F \text{ Stat} = 37.6031, p\text{-value} = 0.0003^{**}$$



between net profit and public sector unit NPAs ( $r = -0.0970$ ). Overall,



The regression results suggest that net profit is significantly positively impacted by NPAs, and priority sector NPAs in particular.

The capital adequacy of the public sector, private sector, and foreign banks is presented in Tables 8 and 9 below.

**Table-8: Capital to Risk-Weighted Assets Ratio under Basel I and II – Bank Group-Wise (Per Cent)**

Item / Bank Group	Basel I		Basel II	
	2012	2013	2012	2013
Public Sector Banks	11.88	11.31	13.23	12.38
Nationalized Banks	11.84	11.39	13.03	12.26
SBI Group	11.07	11.14	13.70	12.67
Private Sector Banks	14.47	15.10	16.21	16.84
Old Private Sector Banks	12.47	12.33	14.12	13.73
New Private Sector Banks	14.90	15.71	16.66	17.52
Foreign Banks	17.30	18.76	16.75	17.87
Scheduled Commercial Banks	12.94	12.77	14.24	13.88

Source: *Report on Trends and Progress of Banking in India, 2012-2013*

**Table-9: Component-Wise Capital Adequacy of Scheduled Commercial Banks**

(Amount in Rs. Billion)

Sl. No.	Item	Basel I		Basel II	
		2012	2013	2012	2013
1.	Capital Funds (i-ii)	7,810	8,906	7,780	8,879
	i) Tier I Capital	5,686	6,595	5,672	6,580
	ii) Tier II Capital	2,124	2,311	2,109	2,299
2.	Risk-weighted assets	60,376	69,742	54,621	63,969
3.	CRAR (1 as % of 2)	12.94	12.77	14.24	13.88
	Of which: Tier I	9.42	9.46	10.38	10.29
	Of which: Tier II	3.52	3.31	3.86	3.59

Source: *Report on Trends and Progress of Banking in India, 2012-2013*

The capital to risk-weighted assets ratio (CRAR) remained above the stipulated 9% norm both at the overall banking system and bank group levels in 2012-13, but showed a moderate decline. The core CRAR (Tier I) under Basel II also showed a slight decline. This decline in overall capital position was largely on account of deterioration in the capital positions of public sector banks.

Deteriorating capital positions of public sector banks is a matter of genuine concern given the fiscal implications of capital infusion in these banks. Though the capital adequacy of public sector banks remain above the statutory norm for CRAR according to Basel II, as they migrate to the advanced Basel III framework, both the quantity and quality (common equity) of capital will need to be improved, while meeting the growing credit needs of the economy and maintaining the floor for public ownership.

#### (c) Testing for Differences in NPAs between Bank Groups

The first test considered the difference in Gross NPAs between public sector, private sector, and foreign banks. The results of the one-way ANOVA test are presented in Table 10 below.

**Table-10: One-Way ANOVA for Gross NPAs between Bank Groups**

Source of variation	SS	df	MS	F	p-value
Between Groups	320332.6	3	1067775.00	25.6372	0.0000
Within Groups	149938.1	6	41649.46		
Total	470270.6	9			

There was found to be a significant difference in Gross NPA of public sector, private sector, and foreign banks. The bank group with highest mean level of Gross NPAs was the public sector banks (with mean Gross NPAs of Rs.711.46 crore), followed by new private sector banks (Rs.104.65 crore), foreign banks (Rs.39.76 crore), and lastly old private sector banks (Rs.38.19 crore). The two-way ANOVA test was subsequently applied to control for year-to-year variation. The results of the two-way ANOVA test are presented in Table 11 below.

**Table-11: Two-Way ANOVA for Gross NPAs between Bank Groups**

Source of variation	SS	df	MS	F	p-value
Bank groups	3203325.80	3	1067775.27	28.140	0.0000
Years	474914.75	9	52768.31	1.390	0.2400
Error	1024465.81	27	37943.18		
Total	4702706.35	39			

Again, there was found to be a significant difference in Gross NPA of public sector, private sector, and foreign banks, as in one-way ANOVA; however, there was no significant difference between years (across time).

The next test considered the difference in Net NPAs between public sector, private sector, and foreign banks. The results of the one-way and two-way ANOVA tests are presented in Tables 12 and 13 below.

**Table-12: One-Way ANOVA for Net NPAs between Bank Groups**

Source of variation	SS	df	MS	F	p-value
Between Groups	412198.70	3	137399.60	29.020	0.0000
Within Groups	170456.80	36	4734.91		
Total	582655.50	39			

**Table 13: two-way ANOVA for Net NPAs between bank groups**

Source of variation	SS	df	MS	F	p-value
Bank groups	412198.67	3	137399.56	29.310	0.0000
Years	43876.64	9	4875.18	1.040	0.4400
Error	126580.18	27	4688.15		
Total	582655.49	39			

There was found to be a significant difference in Net NPA of public sector, private sector, and foreign banks. The bank group with highest mean level of Net NPAs was the public sector banks (with mean Net NPAs of Rs.254.29 crore), followed by new private sector banks (Rs.33.43 crore), old private sector banks (Rs.14.24 crore), and lastly foreign banks (Rs.14.03 crore). On the other hand, however, there was no significant difference between years (across time).

The next test considered the difference in Gross and Net NPA ratios between public sector, private sector, and foreign banks. The results of the one-way and two-way ANOVA tests are presented in Tables 14, 15, 16, and 17 below.

**Table-14: One-Way ANOVA for Gross NPA Ratio between Bank Groups**

Source of variation	SS	df	MS	F	p-value
Between Groups	0.0004	3	0.0001	0.5396	0.6582
Within Groups	0.0091	36	0.0003		
Total	0.0095	39			

**Table-15: Two-Way ANOVA for Gross NPA Ratio between Bank Groups**

Source of variation	SS	df	MS	F	p-value
Bank Groups	0.0004	3	0.0002	1.8273	0.1660
Years	0.0071	9	0.0008	10.5450	0.0000
Error	0.0020	27	0.0001		
Total	0.0095	39			

**Table-16: One-Way ANOVA for Net NPA Ratio between Bank Groups**

Source of variation	SS	df	MS	F	p-value
Between Groups	0.0004	3	0.0001	1.3044	0.2879
Within Groups	0.0040	36	0.0001		
Total	0.0044	39			

**Table-17: Two-Way ANOVA for Net NPA Ratio between Bank Groups**

Source of variation	SS	df	MS	F	p-value
Bank groups	0.0004	3	0.0001	2.5364	0.0777
Years	0.0024	9	0.0003	4.7781	0.0007
Error	0.0015	27	0.0001		
Total	0.0044	39			

There was found to be no significant difference in Gross NPA ratio between bank groups, but there was a significant difference in Gross NPA ratio across time, with higher Gross NPA ratio in 2003-06 and lowest Gross NPA ratio in 2007-08 (2.20%). Similarly, there was found to be no significant difference in Net NPA ratio between bank groups, but there was a significant difference in Net NPA ratio across time, with higher Net NPA ratio in 2003-06 and lowest Gross NPA ratio in 2011-12 (0.73%), with a slight increase in 2012-13 (0.85%). This suggests that all bank groups - public sector banks, private sector banks, and foreign banks - are taking appropriate steps to reduce their Gross and Net NPAs in proportion to their respective Gross and Net Advances, respectively.

## Discussion

The problem of NPAs is a critical problem that the Indian banks are facing today. If the proper management of the NPAs is not undertaken it could hamper the business of the banks, leading to heavy potential losses and affecting the smooth functioning of the recycling of funds.

The results of the study show that there has been a reduction in the NPA ratios over the research period, which indicates improvement in the asset quality of Indian public sector banks, private sector banks, and foreign banks. There was significant improvement in the management of NPAs of the public sector banks. The stringent prudential and provisioning norms and other initiatives taken by the regulatory bodies have pressurized banks to improve their performance, and consequently resulted in reduction of NPA as

well as improvement in the financial health of the Indian banking system. The various steps initiated by the RBI and the Government of India in strengthening/improving the functioning of the Debt Recovery Tribunals, Lok Adalats, and SARFAESI Act as a comprehensive settlement policy certainly has resulted in improved recovery of NPA accounts. All these efforts have improved the efficiency and profitability of Indian banks, and have strengthened the financial position of the public sector banks and private sector banks. The study further reveals that despite the huge NPA level of public sector banks, they have been successful in reducing their respective gross and net NPA ratios at par with the private sector banks.

Some recommendations can be made on the basis of these findings and observations:

- New bodies such as Debt Recovery Tribunals should be established and their capacity should be enhanced.
- All banks should keep stringent check on advance being made to real estate and housing segments, as these had contributed significantly towards the NPA in 2009-10.
- Uneven scale of repayment schedule with higher repayment in the initial years normally should be preferred.
- Public sector banks should increase their non-interest income, as rise in NPA due to default in interest income may affect the profits drastically.
- Private sector and foreign banks should focus more on recovery of sub-standard and doubtful assets.

There are some limitations inherent in the study. The study is entirely based on secondary data, so that the limitations inherent in secondary data sources will also persist in this study. Also, there were some difficulties with data availability, with some data available for only two/three years for private sector banks and foreign banks. This prevented a thorough comparison of bank groups across all dimensions.

There is vast scope for further research in the area of NPA management. A more detailed break-up of NPAs needs to be performed in order to identify potential risks; particularly, priority sector lending must be analysed segment-wise to this end. Another area that offers scope is the effectiveness of the recovery processes. Also, the relationship between NPAs and other policy variables, especially capital adequacy and possibly CRR/SLR, should be examined and modelled - in fact, a model for NPAs is essential in order for policy makers to be able to assess the implications of NPAs and perhaps optimise the level of NPAs.

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### Appendix

#### Sector-Wise NPAs of Domestic Scheduled Commercial Banks 2011-13

(Amount in ₹ billion)

Bank group	Priority sector		Of which						Non-priority sector		Total NPAs	
			Agriculture		Micro and Small Enterprises		Others					
	Amt.	Per cent	Amt.	Per cent	Amt.	Per cent	Amt.	Per cent	Amt.	Per cent	Amt.	Per cent
Public sector banks												
2012	562	50.0	227	20.2	174	15.5	161	14.3	563	50.0	1,125	100.0
2013	669	42.9	280	18.0	284	18.2	105	6.7	890	57.1	1,559	100.0
Nationalised banks**												
2012	323	48.4	129	19.3	134	20.0	60	9.1	345	51.6	668	100.0
2013	405	42.2	156	16.3	178	18.6	70	7.3	554	57.8	959	100.0
SBI Group												
2012	239	52.3	98	21.4	41	9.0	100	22.0	218	47.7	457	100.0
2013	264	44.1	124	20.7	106	17.6	35	5.8	335	55.9	599	100.0
Private sector banks												
2012	51	27.9	22	11.8	17	9.4	12	6.7	132	72.1	183	100.0
2013	52	26.0	22	10.9	20	9.9	11	5.3	148	74.0	200	100.0
Old private sector banks												
2012	18	42.9	6	13.4	7	16.8	5	12.8	24	57.1	42	100.0
2013	19	36.8	6	12.2	7	13.9	6	10.7	33	63.2	52	100.0
New private sector banks												
2012	33	23.4	16	11.3	10	7.2	7	4.9	108	76.6	141	100.0
2013	33	22.2	15	10.4	12	8.5	5	3.3	115	77.8	148	100.0
All SCBs												
2012	613	46.9	249	19.0	191	14.7	173	13.2	695	53.1	1,308	100.0
2013	721	41.0	302	17.2	304	17.3	116	6.5	1,038	59.0	1,759	100.0

Source: *Report on Trends and Progress of Banking in India, 2012-2013*



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## Bridging Gap between Experience and Theory with Reference to the Triarchic Model of Education (Connecting Experience, Logic and Passion in the Teaching-Learning Process in B-Schools)

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### ABSTRACT

Nowadays, the industries are undergoing a tremendous transformation in terms of their interaction with the market and the competition level is also spurning due to multidimensional expectations from the consumer market. Consequently, the industries also expect their human resources to be highly prodigious as they constantly interact with the market or consumer and responsible for evaluating, understanding and synthesizing the consumer requirements. As a consequence, the B-Schools, the portals producing the quality human resource, in India has a prominent role in identifying the needs of Industry and customize their pedagogy in order to bridge the gap between industry expectations and the skill matrix of each budding professional. However, the teaching-learning processes is purely connected with cognition level of the students which differ from student to student. Further, one of the major challenges in postgraduate business education is not just the transfer of knowledge but evolve a passionate, diligent and virtuous professional in every postgraduate student. In this paper, the author propagates a new theory *Triarchic Model of Education*, which can be implemented in B-Schools. The theory is being trichotomic dimension which involves kinesthetic, intellectual and emotive training on the lines of contemporary industry expectations. Further, the theory deriving its essence from the Triarchic Model of Intelligence (Componential, Experiential and Practical) emphasizes on building a holistic individual who not only has loads of knowledge but also the passion to work, intellect to evaluate and physical health to drive.

### Introduction

The Cambridge dictionary defines education as “*the act or process of imparting or acquiring general knowledge, developing the powers of reasoning and judgment, and generally of preparing oneself or others*

*intellectually for mature life*”. In the light of this definition, it can be inferred that the education is a process that helps an individual to train his/her intellectual skills and gain sufficient knowledge to face day to day professional or personal challenges in life. Indeed, the role and the vitality of education has been perpetually debated and refined since the ancient ages of human civilizations. The oldest universities like Platonic (Plato) Academy in Athens, Peripatetic (Aristotle) school, Greece, Nalanda (India), Taxila (India), etc... have been significant learning centers for the pupils, wherein, the pupils were trained on various physical and social sciences based on the prevailing societal systems. In continuation, the same genre of education was carried forward across the ages while adopting some changes in curriculum and pedagogy.

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In addition, the education system that prevailed in the Vedic India was completely based on the Brahmanic Texts like Vedas, Upanishads, Aryankas and Smritis. Besides, the ancient intellectual texts like Manu's Manusmriti, Kautilya's Arthashastra, Patanjali's Yogasutras, etc... occupied a predominant position in terms of educating the pupils. The predominant goals of education during the ancient days were:

- Character Building
- Employable Skills
- Life skills
- Ensuring Discipline
- Cultivating Passion for work
- Infusing human and spiritual values

Furthermore, the ancient education was characterized by experience based teaching-learning process except in few areas like recitation of the *Vedic mantras* and the students were expected to be in close contact with the teacher. Hence, the teacher had wide scope of influencing the students' personality.

### Challenges in Present Education System

In India, the *Gurukula System of Education* emphasized on the importance of experiential and experimental learning which was embedded in their pedagogy. Wherein, every student was given the education which helped them to make their livelihood and gained applied intellectual knowledge. However, the education system in India underwent immense metamorphosis through adopting continental system of education during 19<sup>th</sup> century. In contemporary India, the demand for skilled human resource has been increasing to meet the competitive heights of business. As a result, there is a tremendous pressure on the academic field to produce the effective human resource with employable skills but not merely *quixotic human resource* or savants with full of theoretical erudition.

A close observation into the present education system reveals that there is a huge gap between the human resource produced by the academia and the industry requirements. Supporting this statement, the survey reports of The Confederation of Indian Industry (CII) reveal that 80% of the postgraduates of management studies (having the average score of 60% in their academics) are not fit for employment (2000-2011). However, this revelation also infers that there is a dichotomy between the students' academic proficiency and their work proficiency. Once Mahatma Gandhi quoted that the very purpose of education will be defeated if the education fails to earn livelihood for the pursuant. Indeed, this issue has been a major concern in the prevailing education system of India. Hence, the transformation or revolution should take place in terms of redesigning the curriculum and pedagogy in order to enable the students acquire employable and life skills.

In addition, the students of Management are well groomed over their external disposition and other cognitive intelligence; however, the students are naïve in terms of dealing with stress and work pressure which gradually hampers their zeal to work and their work effectiveness. It is quite palpable that most of the professionals suffer tragic breakdown in terms of their psychological and physiological well-being. As a result, their interpersonal relationships are strained and their leadership traits are handicapped.

### Objectives of the Paper

- To understand the applicability of Triarchic Model of Education with reference to the contemporary education system in Indian B-Schools

- To throw light on some training tools to execute the Triarchic Theory
- To make business education evolve holistic professionals at the academic portals

### Understanding Triarchic Model of Education

In the light of time-tested educational philosophies of the world and the empirical research that was undertaken in the field of Academic-industry domain, the author of this research paper presents and advocates Triarchic Model of Education which incorporates the components like Body, Mind & Soul. Besides, the author of this research paper refers to the *Triarchic Theory of Intelligence* by Sternberg in which he incorporates three components of intelligence like *Creative, Analytical and Practical Intelligence*. In this theory, Sternberg propagates that the knowledge gaining might happen through passionate inclination (Creative Intelligence), logical reasoning (Analytical Intelligence), and experiencing knowledge (Practical Intelligence).

In the light of Sternberg's theory of intelligence, the model infers that the process of education should involve and connect the trinity of an individual: Body, Mind and Soul. Once Plato rightly stated "*Knowledge which is acquired under compulsion obtains no hold on the mind*".

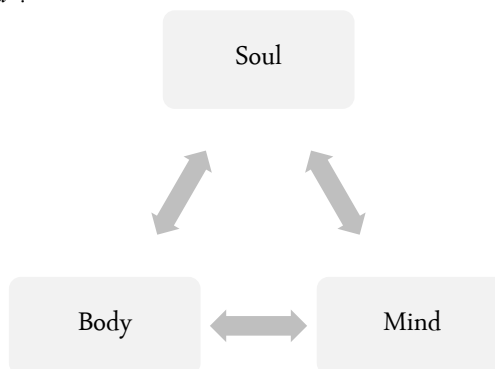


Figure: 1. Triarchic Model of Education

In this paper, the three components of the model have been defined in order to better understand the application of the theory:

1. **Soul:** the English dictionary defines soul as "*the emotional part of human nature; the seat of the feelings or sentiments*". In this research paper, Soul also refers to one's passionate inclination to gain knowledge or skills.
2. **Mind:** The Dictionary of Psychology defines Mind as "*the element, part, substance, or process that reasons, thinks, feels, wills, perceives, judges, etc.*" In this research paper, the author also refers to the analytical part of human brain has power of logical reasoning.
3. **Body:** Although the dictionary, in their definition, limits the body only for the physical essence, the author of this research paper defines body as "*an entity that reciprocates to the activities of neurons in the mind and consequently affecting the thought processes of the mind.*" As Descartes, French philosopher and mathematician rightly said that "*the mind and the body communicate with each other through a small structure at the base of the brain called the pineal gland.*"

The above definitions of the three components help in better understanding the model and its practical implications during the

process of education and it also guides an ideal teacher-student interface for the productive outcome of teaching-learning activity.

### Application of Triarchic Model of Education in the Contemporary B-schools

It is an evident fact that the knowledge transfer between teacher and student in the academic portals has been quite insipid. Moreover, the current pedagogical design brings in great intensity of compulsion on the students. As a result, the students lose their enthusiasm in learning or sharpening their skills. Indeed, the students' inertia towards learning will definitely lead to a great disaster wherein the *talent supply chain* might be greatly damaged as the students will turn out to be mere book worms. Hence, it is essential for the academia to design the curriculum and pedagogy that could enhance the learning spirit among the students and sharpen their employable skills.

The Triarchic Model of Education attempts to promote enthusiastic learning ambience by adopting the body-mind-soul concept. As Mahatma Gandhi opined "*True education must correspond to the surrounding circumstances or it is not a healthy growth*", the curriculum or pedagogy should aim at aligning the academic proficiency with the prevailing demands in the industry.

However, a teacher's role in achieving the objective of Triarchic Theory is very significant as the teacher is an indispensable personage in terms of realizing the prime objective of the prescribed model. Further, a teacher who is adopting this model in their curriculum delivery should be aware of the following existential facts and he/she may be accurately gauge the learning outcome of students:

1. **Body:** It is said that *healthy body is the sanctum of soul*. Here, the body that is perfectly tuned and sanctified can be repository of healthy mind. Moreover, the body plays an important role in terms of generating healthy emotions and producing healthy attitude towards life and the world around. Hence, the primary objectives of holistic education should also incorporate the knowledge enrichment aligned with physical activities. Body being the responding agent of mind, it can represent well the emotions or thoughts produced by the mind effectively. To quote Swami Vivekananda "*If there is no strength in body and mind, the Atman cannot be realized. First you have to build the body by good nutritious food—then only will the mind be strong.*" This statement emphasizes on the inter dependence between body and mind. Further, the education psychology with reference to the VAK (Visual, Auditory and Kinesthetic) theory of Neil Fleming propagates that the learning styles of students differ from person to person. In this theory, kinesthetic style has been one of the prominent styles that focus on physical aspects involved during the learning processes.
2. **Mind:** Swami Vivekananda had an immense faith in the absolute powers of human mind which can accomplish anything in this world. Therefore, he said "*All knowledge that the world has ever received comes from the mind; the infinite library of the universe is in our own mind.*" It is imperative that mind has the immense power within; however, the teacher plays an important role in making the students realize their power within. Hence, the education system instead of focusing on mere teaching or content download, it should help the students to realize their own potentials while incorporating appropriate pedagogical tools

involving knowledge enrichment, analytical abilities, industry oriented skills or job skills and life skills. Moreover, it will also help in generating positive emotions and fair outlook.

3. **Soul:** As it is defined, soul, in this context, does not have any theological references and it purely the psychological concept. Indeed, the soul is referred to the cognitive domain that emanates passion for doing or learning something. Once Albert Einstein stated "*It is the supreme art of education system to awaken joy in creative expression and knowledge.*" This statement justifies the author's notion that the academic experts should design their pedagogy such that it should generate passion in students for learning and gaining applied knowledge. As a result, the students may be more creative in their learning endeavours and passionate to gain knowledge or groom their skills in an academic ambience. Indeed, it is this passionate learning that differentiates between mere efficiency and effectiveness. If the ingredient called *Passion* or *Soul* is infused during the process of learning, definitely, it can create miracles.

### The Strategies Stimulate the Trinity

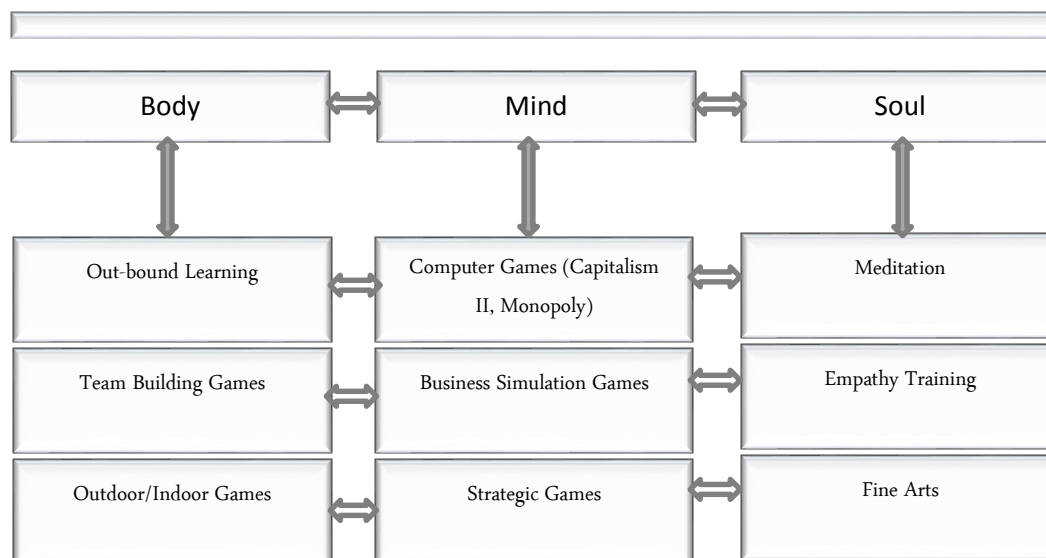
1. **Body:** As it is defined earlier, the physical essence of a student is being very much responsive to the information processing in the brain. The students who learn through kinesthetic activities feel a sense of rejuvenation and their cognitive receptivity will be high. Hence, the learning activities involving out-door learning and training games will be of great impact on the students.
2. **Mind:** The mind encompassing the right hemisphere of the brain is the seat of analytical/logical thinking and it is very much receptive when it is posed with analytical/intellectual challenges. The facilitator may adopt the strategies which may enable the students to think and generate solutions to the given challenges.
3. **Soul:** As it is inferred, Soul responds to the emotive actions or reaction in the classroom like empathy, encouragement and intrinsic rewards. Example: the facilitator may express his/her appreciation towards the best performance in the class and this piece of appreciation will help the students to take up the learning at higher levels with passion not by compulsion.

The management games suggested above for the students of MBA are not centralized for any one criteria instead the games are interlinked to trinity of concepts *Body-Mind-Soul*. However, the facilitator plays a major role in establishing a link among the concepts and the effectiveness of each game depends on how the facilitator brings out the learning outcome touching all the three areas. The teaching-learning strategies recommended above may be illustrative but not descriptive as there are many teaching aids like self-discovery methods, peer-interaction method, experience based learning strategies, brain simulation strategies etc.

Further, the suggested training tools have been empirically tested in the classroom scenarios of Manipal Academy of Banking (the academy that trains the probationary officers of various private and nationalized banks across India) wherein most of the tools are experimented as per the pedagogical design recommended by the Department of Training and Development.



### Suggested Training Tools for Implementing the Triarchic Model of Education



**Figure: 2. Training Tools for Implementing Triarchic Model**

#### Psychological Implications of the Training Tools

According to the learning theory VAK formulated by Fleming, the cognitive information processing differs from person to person. Hence, Dr. Fleming infers that the cognitive learning styles drastically differ in the classroom set up and the facilitator has to devise the methodology and tools that meet the learning style of each student of MBA. Further, Howard Gardner's Theory on Multiple Intelligences encompasses various cognitive styles of a student based on Body (Kinesthetic), Mind (Logical-mathematical) and Soul (Existential) concept.

Further, the teaching pedagogy may include some of the time tested psychological tools like Cognitive Behaviour Therapy, Self-hypnosis Strategies and Personal Counseling which are to be administered by an experienced psychologist. Indeed, these psychological tools help in crystallizing the young minds and the neutralization of mental ailments that hamper the effectiveness of learning.

According to the Self-determination Theory, the psychologists opine that the intrinsic motivation is a self-driven force within every individual to accomplish something and they opine that the intrinsic motivation is associate with the tasks that the individual is passionate to accomplish. In continuation, the *Triarchic Model* advocates on synchronizing the intrinsic motivation of the students with that of learning in the academic setup. Wherefrom, the learning process will be treated as monotonous task and in brief, the learning ventures become a celebration.

In the light of psychological deliberations on human cognition, the theory *Triarchic Model of Education* can be better administered in B-Schools by executing the suggested training tools that touch upon the preferred learning style of each student of MBA. Consequently, the training effectiveness will increase adding to the classroom effectiveness and the purpose of building holistic professional can be achieved.

#### Recommended Academic and Infrastructural Requisites

As discussed earlier, the Triarchic Model recommends the teaching pedagogy to be student-centric and aims incorporating

innovative teaching methodology with competent teaching fraternity with the right attitude. Therefore, the B-Schools must fulfill the following prerequisites for the application of the Triarchic model:

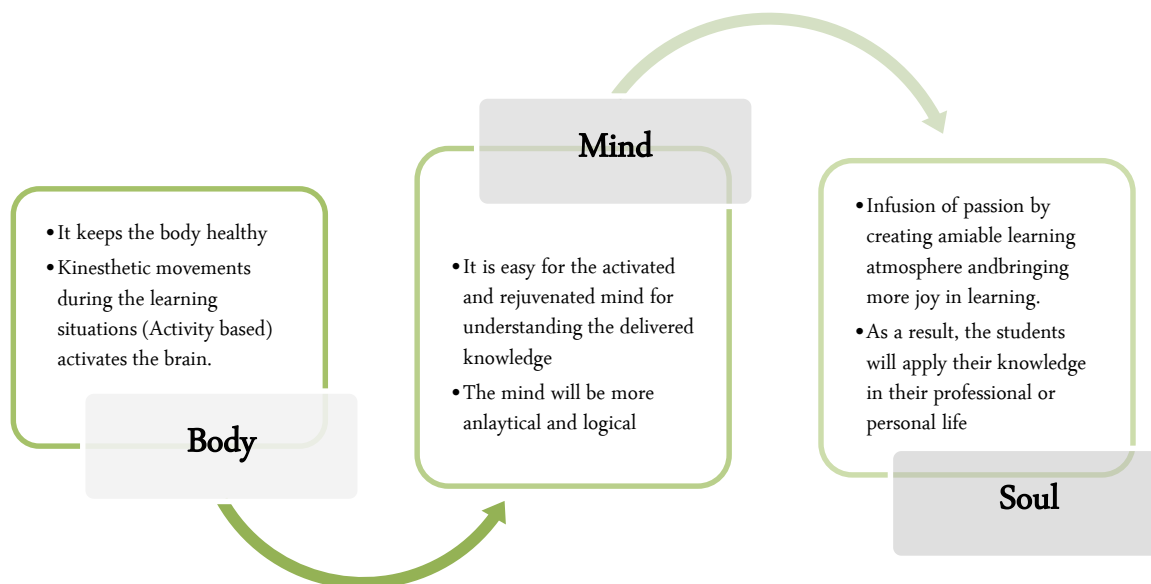
- The pedagogy should be on the lines of training or facilitation rather than mere classroom lecture
- The teaching fraternity with the holistic attitude and strong inner drive to transform the young minds
- The teacher and student ratio of 1:30 approximately
- Sufficient financial aid to carry out Out-bound-learning programs
- Smart Classrooms
- Ambience supporting the spiritual practices like yoga and meditation
- Well-equipped knowledge center
- A competent clinical psychologist / counselor
- The state-of-art infrastructure for promoting physical well-being

#### Conclusion

As it is reflected in figure 3, the Triarchic Model of Education is a triple edged tool that focuses at evolving healthy body, sound mind with high analytical thinking and positive attitude, and generating passion in the students during the process of learning that will help them to passionately pursue their studies and find the applicability of their learning in the real life situations. Moreover, the B-Schools may generate the holistic business professionals in their academic portals and gift such precious human resource to the industry.

In addition, this model will also help the teacher to frame their pedagogy in order to make their training/teaching sessions more ignited while helping the students to experience, logically correlate, and passionately apply their learning. The students also experience all the three dimensions of their intellect and groom their intellect to become a holistic professional. Since the Triarchic Model of Education aims at creating intrinsic motivation among the students to learn, the students will never feel the sense of monotony during the learning process. Therefore, learning never becomes a compulsion but celebration rather.





**Figure: 3. Advantages of Triarchic Model of Education in B-Schools**

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## Indian Stock Market and FIIs Investments – A Causality Study

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### ABSTRACT

With small beginnings in the early nineteenth century, Indian stock market has risen to great heights. The Government of India has formulated various policies to encourage the flow of foreign capital into India. The Indian stock market has witnessing an increasing participation of foreign institutional investors, which assumed to have steadily controlling the investment scenario of the stock market. The impact of huge capital flows by them in the Indian stock market has taken the attention of the policy makers and economists during the last decade. The present paper is an attempt to analyze the casual relationship (both long run and short run) between Indian Stock Market and FIIs investments.

### Introduction

India has emerged as one of the most favored destinations for global investment. This is evident from a sharp increase in the number of foreign institutional investors (FIIs) registered with SEBI from 18 in 1993 to 882 by March 2006 and reached to 1,757 by the end of March 2013. Indian economy is growing at a rapid pace and matching with this economic growth rate, India has also seen an incredible flow of investment by FIIs and in fact, the FIIs have been playing a key role ever since their entry into the country during the early 1990s. FIIs formed nearly 70 percent of foreign investment (FDI plus net portfolio equity flows) in India, whereas in China and Brazil the percent was 26 and 30 respectively for 2005 (Global Development Finance Report, 2006). According to MSCI Index, Indian stock market is one of the best performing market in the global emerging markets.

The growth of foreign institutional investors in the market possesses its own set of advantages along with certain problems. FIIs

carry a sense of ill repute since at the indication of crisis this flows into reverse direction. Dornbusch and Park (1995) and Richards (2002) disclosed about apprehension with the entry of FIIs in their studies suggesting that they are positive feedback traders i.e., the traders who purchase when the market increases and sell when the market falls, this act as destabilizing for the reason that the sales by FIIs lead to the stock market fall further and their buys increase the stock market. It is essential to analyze that whether the foreign institutional investors have a stabilizing or a destabilizing control on the stock markets. The unreliability of FIIs emanates from their very nature since the portfolio managers have the competence and ability to restructure and rebalance their portfolios dynamically across the countries (Hamilton, 2005). Gordon and Gupta (2003) found that causation running from FII inflows to returns in BSE and FIIs act as market makers and book profits by investing when prices are low and selling when they are high. Banaji (2000) emphasized on the fact that the capital market reforms like improved market transparency, automation, dematerialization and regulations on reporting and disclosure of standards were initiated because of the presence of the FIIs.

Thus, the increasing influence of foreign institutional investors forms an essential component of the Indian stock market behavior and it is essential to analyze that whether these foreign institutional investors have a stabilizing or destabilizing control on the stock market operations. Many research studies have examined the interaction between foreign institutional investors and Indian stock market with widespread econometric methods. A wide literature is available on

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causal relationship between foreign institutional investors' investments and Indian stock market returns but, most of the existing studies performed on Indian context were based on the different time segments and mostly on the basis of the returns of the stock market. There is dearth of studies examining the long run and short run causality between the foreign institutional investors' investments and the Indian stock market.

### Objective of the Study

The present study is an attempt to analyze the co-integration and consequently to disclose the both long run and short run causal relationship i.e., unilateral or bilateral between foreign institutional investors' investments and the Indian stock market.

### Hypothesis of the Study

The present study aims at testing the following hypothesis:

**H<sub>0</sub>:** There is no causality between foreign institutional investors' and Indian stock market.

**H<sub>a</sub>:** There is causality between foreign institutional investors' and Indian stock market.

### Data and Research Methodology

The study is based on the monthly time series data of Foreign Institutional Investors' (FIIs) investments and Advances to Decline Ratio (ADR) of BSE and NSE. Further the FIIs investments Purchase to Sales Ratio (PSR) are calculated by the following method:

$$FIIPSR_t = \log (P_t / S_t)$$

Where, FIIPSR<sub>t</sub> is the monthly purchase to sale ratio of foreign institutional investments and P<sub>t</sub> denotes the monthly FIIs purchases, whereas S<sub>t</sub> denotes the monthly FIIs sales. The calculated monthly purchase to sales ratio of foreign institutional investors' investments is represented by FIIPSR.

The breadth of the market is the term often used to study the advances and declines that have occurred in the stock market. Advances means the number of shares whose prices have increased from the previous day's trading and declines indicate the number of shares whose prices have fallen from the previous day's trading. The ADR captures the trend of the entire market in explicit manner. Therefore, the study uses ADR for empirical analysis instead of market returns.

The ADR for BSE and NSE have been calculated on the basis of monthly advances and declines of the respective stock exchanges through following value:

$$ADRT = \log (X_t / Y_t)$$

Where, X<sub>t</sub> is the monthly advances of the stock exchange and Y<sub>t</sub> denotes the monthly declines of the stock exchange. The calculated ADR of BSE is represented by BSEADR and that of NSE is represented by NSEADR.

The study covers a period from April, 2007 to December, 2013. To carry out the predetermined set of objective and to test the hypothesis the study uses the empirical tools such as Unit Root Tests, Co-integration Tests and Vector Error Correction Model (VECM) as part of research analysis.

### Test of Normality

Many of the statistical procedures including correlation, regression, t tests, and analysis of variance, namely parametric tests,

are based on the assumption that the data follows a normal distribution or a Gaussian distribution (after Johann Karl Gauss, 1777–1855); i.e., it is assumed that the populations from which the samples are taken are normally distributed.

Jarque-Bera (JB) test is used to test whether the variables under study follow the normal probability distribution. The Jarque-Bera test of normality is an asymptotic or large sample test. This test computes the skewness and kurtosis measures and uses the following test statistic:

$$JB = n [S^2/6 + (K-3)/24]$$

Where n=sample size, S= skewness coefficient, and K=kurtosis coefficient. For a normally distributed variable, S=0 and K=3, therefore the JB test of normality is a test of the joint hypothesis that S and K are 0 and 3 respectively.

### Unit Root Test (Stationarity Test)

Empirical research work based on time series data assumes that the underlying time series is stationary. Broadly speaking a data series is said to be stationary if its mean and variance are constant i.e., non-changing over time and the value of covariance between two time periods depends only on the distance or lag between the two time periods and not on the actual time at which the covariance is computed (Gujarati, 2003). A time series is not stationary in the sense that it is non-stationary time series when it has time varying mean or a time varying variance or both. Therefore, unit root tests are conducted to verify the stationary properties of the time series data under study. The stationarity condition has been tested using Augmented Dickey Fuller (ADF), Phillips – Perron (PP) and Kwiatkowski-Phillips-Schmidt-Shin (KPSS) Tests.

### Co-Integration Test

In order to verify the existence of co-integration between the variables under study, Johansen-Juselius (1990) Co-integration technique is used. The precondition for the conduct of Johansen co-integration test is that all the variables must be stationary. This method allows the empirical determination of the number of co-integrating relations and produces maximum likelihood estimators of the parameters of these relations. Two test statistics namely Trace Test Statistic and the Maximum Eigen Value Test Statistic are used to identify the number of co-integrating vectors. Finding of co-integration implies the existence of long-term relationship between the dependent and independent variables. If there is at least one co-integrating relationship among the variables, then the causal relationship among these variables can be determined by estimating the Vector Error Correction Model (VECM).

### Empirical Analysis

1. The Normality test has been conducted for BSEADR, NSEADR and FIIPSR. The Jarque-Bera Statistics are used for this purpose. The results are shown in Table 3-2 along with descriptive statistics. The skewness coefficient, in excess of unity is taken to be fairly extreme (Chou, 1969). High or low kurtosis value indicates extreme leptokurtic or extreme platykurtic (Parkinson 1987). Skewness value 0 and kurtosis value 3 indicates that the variables are normally distributed. As per the statistics of Table I, frequencies of all the three variables are normally distributed.

**Table-1: Descriptive Statistics**

Particulars	BSEADR	NSEADR	FIIPSR
Mean	-0.098436	-0.119869	0.035724
Median	0.000000	-0.105361	0.035657
Maximum	2.476538	2.351375	0.361191
Minimum	-2.302585	-2.302585	-0.280150
Std. Dev.	1.115463	1.003239	0.161463
Skewness	0.018013	-0.233677	0.157422
Kurtosis	2.663443	3.470023	2.197799
Jarque-Bera	0.386668	1.482779	2.506456
Probability	0.824207	0.476451	0.285581
Sum	-7.973293	-9.709354	2.893633
Sum Sq. Dev.	99.54062	80.51909	2.085633
Observations	81	81	81

The results are further supported by Jarque-Bera (probability > 5%) for the three variables under study. The null hypothesis of normality assumption cannot be rejected and concludes that all the variables under study are normally distributed. The standard deviation indicates that the FIIPSR is relatively less volatile as compared to that of other two variables. The BSEADR and NSEADR are more or less having experienced similarity in volatility.

2. Stationarity test has been conducted for BSEADR, NSEADR and FIIPSR. A time series is said to be stationary if its mean and variance are constant over time. ADF, PP and KPSS tests are performed to check the stationarity of the time series. The results are shown in Table 2 and Table 3.

**Table-2: Augmented Dickey-Fuller (ADF) Test and Phillips-Perron (PP) Test**

Variable	ADF Test Statistics	PP Test Statistics	Probability
BSE(ADR)	-6.951356*	-6.886075*	0.0000
NSE(ADR)	-6.693340*	-6.721198*	0.0000
FII(PSR)	-6.681872*	-6.691977*	0.0000

\*Denotes statistically significant at 1% and 5% levels

The critical value of ADF Statistics and PP Statistics are -4.076860 and -3.466966 at 1% and 5% level of significance respectively.

The results of ADF and PP unit root tests performed to confirm the stationary properties of the time series data shows that the absolute value of calculated ADF test statistic and PP test statistic is greater than its critical value at both 1% and 5% level of significance in the time series of all the three variables understudy. It indicates that the integration of all the series is of order I (0) and there is no unit root. Thus, the null hypothesis of non-stationary data cannot be established and hence all the three series are fit for further research.

**Table-3: Kwiatkowski-Phillips-Schmidt-Shin (KPSS) Test**

Variable	KPSS Test Statistics	Critical Value (1%)	Critical Value (5%)
BSE(ADR)	0.072777	0.216000	0.146000
NSE(ADR)	0.065191	0.216000	0.146000
FII(PSR)	0.054144	0.216000	0.146000

Further in order to verify the results obtained by the ADF and PP unit root test Kwiatkowski-Phillips-Schmidt-Shin (KPSS) test is applied. The results of KPSS test statistics for all the three variables understudy are less than the critical values at 1% and 5%. Therefore,

the null hypothesis of stationary is not rejected. So, all three series in the study viz. BSEADR, NSEADR and FIIPSR are stationary and fulfills the requirements for further research process.

3. Once it is accepted that the variables are stationary, we proceed to study whether the series under study are co-integrated or not. Johansen co-integration test is applied to examine the bond between the three variables. In order to conduct the co-integration test, the appropriate lag length of the model is determined by using Vector Auto Regression (VAR) model. Both Akaike Information Criterion (AIC) and Schwarz Information Criterion (SIC) have selected lag 1 as appropriate lag for the model. Therefore, for the present model lag 1 is selected as the appropriate lag for the conduct of the co-integration test and for running VECM.

The results of Johansen co-integration test is given in Table 4. The null hypothesis of r co-integrating vectors is given in column 1 of the table.

**Table-4: Johansen Co-integration Test between BSEADR, NSEADR AND FIIPSR**

Unrestricted Co-integration Rank Test (Trace)				
Hypothesized No. of CE(s)	Eigen value	Trace Statistic	Critical Value (0.05)	Probability
r = 0	0.407832	83.94920*	29.79707	0.0000
r = 1	0.283405	42.55593*	15.49471	0.0000
r = 2	0.185710	16.22966*	3.841466	0.0001
Unrestricted Co-integration Rank Test (Maximum Eigen value)				
Hypothesized No. of CE(s)	Eigen value	Max-Eigen Statistic	0.05 Critical Value	Probability
r = 0	0.407832	41.39327*	21.13162	0.0000
r = 1	0.283405	26.32627*	14.26460	0.0004
r = 2	0.185710	16.22966*	3.841466	0.0001

\*denotes statistically significant at 5%

The maximum Eigen value and trace statistics are used to deduce whether the null hypothesis of r = 0 is rejected at 5 % level of significance. The rejection of null hypothesis implies that there exists at least one co-integrating vector which confirms a long run equilibrium correlation between the three variables. We reject the null hypothesis that r, the number of co-integrating vectors if the test statistic is greater than the critical values specified. The results of multivariate co-integrating vectors discloses the rejection of null hypothesis of no co-integrating vectors under both the trace statistics and maximum Eigen value forms of test. The probabilities for different levels of number of co-integrated equations also confirm the rejection of null hypothesis. Therefore may infer that there is a presence of even more than two co-integrated equations among the three variables under study and which confirms a long run equilibrium correlation between the variables.

4. When there is a co-integration between series, it confirms that there exists a long-term equilibrium relationship among the variables. The Vector Error Correction Model (VECM) can be applied only when there is at least one co-integration equation between the variables. As the Johansen Co-integration test revealed that there is co-integration among the variables understudy, we can apply VECM in order to evaluate the short run properties of the co-integrated series. The structure lag is chosen on the basis of Vector Auto Regression (VAR) model using maximum criterion rule. To maintain consistency, the same lag length has been chosen as used for co-integration test.

In order to find out the long run and short run causality between the three variables viz. FIIPSR, BSEADR and NSEADR three models of VECM are applied.

**Model A:** BSEADR as dependent variable and NSEADR and FIIPSR as independent variables.

**Model B:** NSEADR as dependent variable and FIIPSR and BSEADR as independent variables.

**Model C:** FIIPSR as dependent variable and BSEADR and NSEADR as independent variables.

**Table-5: Results of VECM for Models A, B & C**

Model	Coefficient of First Co-integration Equation C(1)	Std. Error	t-Statistic	Prob.
Model A	-1.000235	0.187885	-5.323643	0.0000*
Model B	-0.690614	0.170413	-4.052582	0.0001*
Model C	-0.045502	0.039785	-1.143686	0.2565

\*denotes statistically significant

Coefficient of first co-integration equation (C1) is considered to find the long run causality between dependent variable and independent variables. The null hypothesis of no long run causality among the variable can be rejected when the C (1) has negative value and is significant i.e., the corresponding probability is less than 0.05. As per the results disclosed by the VECM for Model-A, B & C, (C1) for both the Models A and B has negative value and its corresponding probability is significant i.e., less than 0.05. Therefore, the null hypothesis of no long run causality is rejected and it is confirmed that there is long run causality running from independent variables to dependent variable i.e., both NSEADR and FIIPSR cause BSEADR, and FIIPSR and BSEADR cause NSEADR.

Coefficient of first co-integration equations (C1) has negative value for Model C, but its corresponding probability is more than 0.05, which is insignificant. Therefore, the null hypothesis of no long run causality cannot be rejected and hence confirmed that there is no long run causality running from BSEADR and NSEADR to FIIPSR.

In order to analyze the short run causality from the independent variables to dependent variable Wald test is employed. Lagged Coefficients of independent variables in the Model A i.e., NSEADR and FIIPSR are represented by C (4) and C (5) respectively, whereas C (4) and C (5) in the Model B represents that of lagged coefficients of FIIPSR and BSEADR respectively. For Model C Lagged coefficients of independent variables BSEADR is C (4) and NSEADR is C (5). The null hypothesis of no short run causality from independent variables to dependent variables is denoted by C (4) =0 and C (5) =0. The null hypothesis is tested with the use of Wald test, the results of which are presented in Table VI.

**Table-6: Results of Wald Test for Models A, B & C**

Model	Null Hypothesis	Test Statistic Value	Probability
Model A	C(4)=0	-1.376788	0.1728
	C(5)=0	1.530870	0.1301
Model B	C(4)=0	2.473027	0.0157
	C(5)=0	-0.146570	0.8839
Model C	C(4)=0	0.074071	0.9412
	C(5)=0	0.633281	0.5285

The null hypothesis of no short run causality between the variables can be rejected when the Wald test statistic is significant (less than 0.05). As per results disclosed in the Table VI the test statistic for C (4) of Model B is less than 5% and the null hypothesis can be rejected. Hence, the alternate hypothesis of short run causality is accepted. Therefore, it confirms that there is short run causality from FIIPSR to NSEADR. Whereas, the results of the test statistic for all the three models except C (4) of Model B, is more than 0.05, and the null hypothesis cannot be rejected. Therefore, it confirms that there is no short run causality from independent variables to the dependent variables under the three models. It can be concluded that FIIPSR cause NSEADR in the short run and there is no short run causality running from BSEADR and NSEADR to FIIPSR.

## Conclusion

This study examined the dynamic interaction between FII's Investments and Indian Stock market. The statistical analysis reveals that there is a co-integration between foreign institutional investors' investments and the Indian stock market; this implies that the variables are coupled together for long term association. The Vector Error Correction Model (VECM) reveals uni-directional causality running from foreign institutional investors' investment to Indian stock market in both long-run as well as in the short-run, which implies that the FII's are influencing the price changes in the Indian stock market, but they are not influenced by the later. Whereas, there is bi-directional causality running between BSE and NSE in long-run, but there is no short run causality between them.

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## Effectiveness of Creativity and Innovation in Advertising - An Empirical Analysis towards Changing Market Attitude

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### ABSTRACT

Creativity and innovation are the two words attached directly to the field of advertising. Advertising has a very important role in image building and marketing of products in a rapidly competitive world. Advertisement establishes a strong link between the message & the products so that, remembering the commercial means remembering the product. Designing, writing, storytelling etc. are at the heart of advertising creativity and technology is the centre of advertising innovation. Creative advertising adds new perceptions towards a product and innovative advertisements attract the interest of customers to fulfil their psychological, marketing and corporate requirements. The advertisement does not work if it does not motivate the consumer. The advertisement is also not creative and innovative unless it sells. The aim of the study is to identify the creative and innovative aspects of advertising and to critically analyse the impact of creative and innovative advertisements on the changing market attitude. The study concludes that creative and innovative advertisements are more effective than conventional advertisements.

### Introduction

Advertising in business is a form of marketing communication used to encourage, persuade, or manipulate the audience (viewers, readers or listeners; sometimes a specific group) to take some action. This communication is usually through various forms of paid media; TV and radio commercials, print ads, billboards etc. Ads are placed where advertisers believe they will reach the largest, most relevant audience. Commercial businesses use advertising to drive the consumption of their product, while non-profit organizations may place ads to raise awareness or encourage a change in behaviour or perception. Industry experts argue that advertisements have to be more creative and

innovative to break through the greater media clutter and develop an impression for the brand.

### Creativity & Innovation: The Concept

Creativity is an aid to memorability; it can plant associations so deeply that people simply cannot forget them. Creativity means being novel and appropriate. It is the ability to generate fresh unique and appropriate ideas that can be used as a solution to a communication problem.

Innovation is not creativity. "Creativity is thinking up new things. Innovation is doing new things." (*Theodore Levitt, Professor, Harvard Business School*). Innovation is finding new and better ways to solve problems and opening up new opportunities. Innovation is a new way of doing something or "new stuff that is made useful". Innovation may be defined as something original, new, and important that breaks into or obtains a foothold in a market or society.

### Creative Aspects in Advertising

There are three different stages of creativity in advertising namely, create, creation and creative. (*Vide Ref 11.9*)

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**Create:** *It means to bring something in to being and originate a new and unique idea.*

**Creation:** *After the process of creating or originating, create a new idea original product of human invention or imagination leads to creation.*

**Creative:** *In order to understand the creativity or being creative can be translated into seeing same thing as everybody else but thinking differently.*

For advertising being, creative three aspects are universally most accepted:

**The creative process.** It means receiving most of attention, focusing on mechanism & phases involved during the process one partakes in a creative act.

**The creative person.** This relates to the personality traits of creative people who are responsible and central to this process.

**The creative situation.** In this situation, the criteria & characteristics of creativity are considered to provide workable, acceptable and practical aspects of the situation.

### Innovation in Advertising

Innovation in advertising provides advertising, communications, consultation, branding, ad designing, web development, media production, and ad placement. It is more fundamentally; about how media businesses approach the way, they work with clients. With the demands of the modern marketers changing and B2B buying habits shifting dramatically, media teams need to be very innovative in the way they engage their clients. The three trends as most important in the ideation of innovative advertising concepts are participatory culture, platform thinking & brand utility. (*Vide Ref 11.3*)

**Participatory Culture:** It is about social connections with people. Prizes are not the only way to make people feel their contributions matter. *Participation should be valuable for everyone.*

**Platform Thinking:** It refers to a non-linear but holistic approach to storytelling. When assessing the importance of platform thinking, one must consider that the internet is now everywhere. The current media landscape is experiencing a rapid divergence in the types of devices we use, but the content spread across these devices is similar, yet packaged differently. The day will soon come when our devices will be smart enough to detect content and automatically fit it for the particular device it is being accessed from.

**Brand Utility:** In a world of infinite alternatives, even *quality* can become a *commodity*. Brands that push out products of similar quality to their competition need to find new ways to differentiate. This fact challenges marketer to ask the question, "What more can I do to add value?"

### Review of Literature

Piyush N. Marthak (2013) attempted to explore the relationship among the creative advertisements and advertisement effectiveness in India. He analysed that Creative advertisements developed greater purchase intent for the advertised brands than control group of advertisements.

Poonam Singh and Mrinalini Pandey (2013) in their paper observed that innovative and interactive advertising campaigns leave a deeper impact on the consumer and hence overall augmented reality is currently providing brands a new exotic way of interacting with their

users and gives them great mobile marketing experience through smart phones. Finally concluded that Augmented Reality advertising can be excellent tools for establishing a two way contact with the customers.

Werner Reinartz and Peter Saffert (2013) empirically studied 437 TV advertising campaigns and found certain dimensions of creativity are more effective than others in influencing purchasing behaviour and that many companies focus on the wrong dimensions in their campaigns. They also observed that the relative effectiveness of adding creativity to a campaign could vary significantly and in the real world, the longer a creative ad is aired, the more impact the creativity has on sales.

Pramod Thapliyal (2013) discussed about the growing market innovations which results in falling business ethics. He suggested that global fundamental marketing ethics and principles should be applicable to all markets.

Sangvikar and Anjali Chaudhari (2013) attempted to link between television advertising and its influence on children and their family spending patterns. They found that advertising influences children's demand for everything right from toy to snack food. These demands create an environment of child-parent conflict.

Sangapa Rampure (2012) made an attempt to express an innovative idea for the Outdoor Advertising Industry, by using passenger cars on Indian roads. Here in this article the author likes to minimize the advertising cost to the companies and to create annual revenue to the car owners. The study concluded with making advertisements on cars will lead to maximum market coverage of ads at various places in terms of economy and effectiveness.

### Objectives

1. To know the creative and innovative aspects of advertising
2. To analyse whether creativity and innovative aspects enhances the effectiveness in advertising
3. To identify which aspect has highest market potential

### Hypotheses

H1: Highly creative advertising has more communication-effect in terms of advertising effectiveness.

H2: Creative and innovative aspects are effective tools in changing the market attitude.

### Research Design & Methodology

**Research Design:** Research design of the present study is descriptive

**Sample Design:** The sample design of the present study comprises of the following elements.

1. **Sample Element:** Respondents from Sambalpur district have been chosen for the present study.
2. **Sampling Technique:** Judgement Sampling Technique has been used to collect the data.
3. **Sampling Unit and Sample Size:** Sampling unit of the present study consist of 150 respondents under consideration.

**Research Approach:** Survey (Primary data collected through self-structured questionnaire) .The respondents viewed 10 advertisements which was officially declared by Google India as the most viewed ads on YouTube of 2013. Accordingly, questionnaires have been made on the creative and innovative aspects of the respective ads. 5-point Likert scale has been used to measure the



responses. The data were collected and then analysed through Chi Square Test & Sample Mean Score.

#### Limitations of the Study

1. The study is confined to Sambalpur district; hence, it may not be suitable for other districts.
2. The Sample size is limited to 150 respondents only.

#### Analysis & Interpretation

**Table-1: Age Group-Wise Classification of the Respondents**

Sl. No.	Age Group	Frequency	Percent
1	Below 25 years	66	44
2	25 – 35 years	19	12.7
3	35 – 45 years	33	22
4	45 – 55 years	22	14.7
5	Above 55 years	10	6.7
6	Total	150	100

$$\chi^2 = 63 ; df = 4 ; \chi^2 (0.5) = 9.49$$

It is clear from the table that 44 % of the respondents are under 25 years of age, 12.7 % are between 25 and 35 years of age, 22 % of them are between 35 and 45 years of age, 14.7% of them are between 45 and 55 years of age and 6.7% of the respondents are above 55 years. Thus, majority of the respondents belong to the age group of below 25 years. Further, the test of significance using chi square test revealed that the respondents differ significantly based on age.

**Table-2: Gender-Wise Classification of the Respondents**

Sl No	Gender	Frequency	Percentage
1	Male	107	71.3
2	Female	43	28.7
Total		150	100

$$\chi^2 = 27.307 ; df = 1; \chi^2 (0.5) = 3.84$$

It is evident from table 2 that, 71.3% of the respondents are male and the remaining 28.7 % of the respondents are women. Thus, the majority of the respondents are male. Further chi square test reveals that the respondents differ significantly by gender.

**Table-3: Profession/Occupation-Wise Classification of the Respondents**

Sl. No	Occupation	Frequency	Percentage
1	Student	61	40.7
2	Employed	80	53.3
3	Retired Person	9	6
Total		150	100

$$\chi^2 = 54.04 ; df = 2; \chi^2 (0.5) = 5.99$$

It is clear from the table that 40.7% of the respondents are students, 53.3% are employed and the remaining 6% of the respondents are retired persons. That is a majority of the respondents are employed. Chi square test reveals that the respondents differ significantly by their occupation.

#### Advertisement No 01:

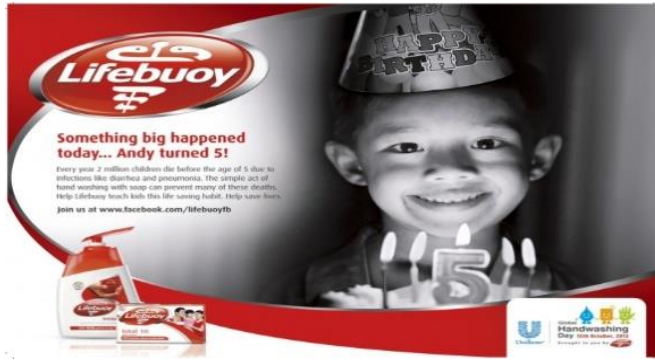


- Dove: The Real Beauty Sketches
- Published on 14<sup>th</sup> April 2013
- Duration : 3 min
- Ad Agency: Ogilvy & Mather
- Views: **64,783,619** (10<sup>th</sup> Nov 14)

Particulars	Very Strong(5)	Strong(4)	Average(3)	Weak(2)	Very Weak(1)	Mean Score
Concept Design	41	49	32	19	9	3.62
Message	15	29	61	20	25	2.92
Punch line	31	25	36	41	17	2.96
Characters/Personalities	25	35	49	34	7	3.24
Graphics/VFX	46	53	29	16	6	3.78
Colour Combination	60	39	21	22	8	3.80
Voice over	42	57	21	25	5	3.70
Emotion	31	35	41	23	20	3.22
Text/Font/LOGO	21	35	41	36	17	3.04
Purchase Intention	42	41	32	16	19	3.47

#### Inference

From the above table it is revealed that among various creative aspects, the mean score of colour combination and graphics are at the higher side i.e 3.80 and 3.78 which clearly shows that the reason behind its popularity. However, the voice over of this ad is also quite impressive. The respondents gave least score to the message, as the message is neither clear nor properly communicated.

**Advertisement No 02:**

- **Lifebuoy: Help a Child reach 5**
- **Published on 18<sup>th</sup> Feb 2013**
- **Duration: 3.16 min**
- **Ad Agency: [Lowe, India](#)**
- **Views: 19,069,635 (10<sup>th</sup> Nov 14)**

Particulars	Very Strong(5)	Strong (4)	Average(3)	Weak(2)	Very Weak(1)	Mean Score
Concept Design	73	32	29	9	7	4.03
Message	74	42	19	8	7	4.21
Punch line	47	51	28	21	3	3.78
Characters/Personalities	54	47	23	17	9	3.80
Graphics/VFX	17	28	65	32	8	3.09
Colour Combination	19	31	68	18	14	3.15
Voice over/Dialogue	48	38	21	33	10	3.54
Emotion	71	39	17	10	13	3.96
Text/Font/LOGO	22	18	39	49	22	2.79
Purchase Intention	53	47	32	12	6	3.86

**Inference**

The results of the above table shows that mean score of ad message is highest i.e. 4.21 followed by concept designing 4.03. Respondents have also liked the emotional aspect (3.96) strongly. The ad was based on health awareness. Statistics shows that every year, 2 million children fail to reach their fifth birthday because of diseases like diarrhoea and pneumonia. Lifebuoy is on a life saving mission to spread the importance of good hand washing habits around the world. Most importantly, that will help more children reach their 5th birthday.

**Advertisement No 03:**

- **Kit Kat Dancing Babies**
- **Published on 17<sup>th</sup> Jan 2013**
- **Duration :45 sec**
- **Ad Agency: JWT India**
- **Views: 3,731,338 (10<sup>th</sup> Nov14)**

Particulars	Very Strong(5)	Strong (4)	Average(3)	Weak(2)	Very Weak(1)	Mean Score
Concept Design	54	39	37	11	9	3.78
Message	33	23	45	32	15	3.14
Punch line	49	52	15	18	16	3.67
Characters/Personalities	59	45	32	11	3	3.97
Graphics/VFX	67	48	21	9	5	4.08
Colour Combination	54	49	28	7	12	3.84
Voice over	52	31	27	15	5	3.33
Emotion	65	38	29	11	7	3.95
Text/Font/Logo	59	28	27	23	13	3.64
Purchase Intention	41	39	21	26	23	3.32

**Inference**

It is clear from the table that the respondents gave their highest score to graphics and VFX. They also liked the aspect emotion (3.95) as this ad features very small babies. In the ad, a hardworking doctor takes a Kit Kat break during his work shift. As he is enjoying his candy bar, he notices a roomful of babies who break into a dance routine. This particular advertisement tries to say, "Good things happen when you take a KIT KAT break".

**Advertisement No 04:**

- **Old Spice India: Mantastic Man**
- **Published on: 8 October, 2013**
- **Duration: 1:16 min**
- **Agency: [Wieden+ Kennedy Portland](#)**
- **Views: 2,282,259 (10<sup>th</sup> Nov 14)**

Particulars	Very Strong(5)	Strong (4)	Average(3)	Weak(2)	Very Weak(1)	Mean Score
Concept Design	23	18	29	53	27	3.87
Message	33	48	31	20	18	3.14
Punch line	52	49	18	15	16	3.70
Characters/Personalities	65	43	22	18	2	4.00
Graphics/VFX	23	31	54	23	19	3.10
Colour Combination	15	22	48	25	40	2.64
Voice over/Dialogue	69	45	17	11	8	4.04
Emotion	9	18	45	41	37	2.47
Text/Font/LOGO	12	13	36	68	21	2.51
Purchase Intention	52	49	15	16	18	3.67

### Inference

From the table, it is quite clear that the reason behind the popularity of new old spice ad is due to the use of celebrity aspect and dialogue delivery, as the mean score figures show 4.04 and 4.00 respectively in comparison to other creative aspects. Old Spice has introduced a new integrated campaign that employs the services of 'Milind Soman' to launch its line of Old Spice Deodorants. Therefore, the celebrity impact worked and the ad clicked.

### Advertisement No 05:



- **Evian Baby and Me: Live Young**
- *Published on 19 April 2013*
- *Duration: 1:17*
- *Ad Agency: BETC, Paris*
- *Views: 95,293,812 (10<sup>th</sup> Nov 14)*

Particulars	Very Strong(5)	Strong (4)	Average(3)	Weak(2)	Very Weak(1)	Mean Score
Concept Design	57	39	28	15	11	3.77
Message	51	69	7	15	8	3.93
Punch line	48	38	27	20	17	3.53
Characters/Personalities	78	41	17	9	5	4.18
Graphics/VFX	72	52	9	8	9	4.13
Colour Combination	49	39	28	17	17	3.70
Voice over/Dialogue	35	25	35	42	13	3.18
Emotion	11	15	22	64	38	2.31
Text/Font/LOGO	35	69	23	18	5	3.74
Purchase Intention	53	43	34	7	13	3.77

### Inference

From the above table the mean score of character/personality aspect and graphics/VFX are more than other creative aspects (i.e. 4.18 & 4.13 respectively). Evian water is specially marketed to adults as a premium brand, making the connection of Evian water with a healthy lifestyle. Therefore, for the first time Evian used babies for their ad. The reason behind the success is universal appeal of babies, use of humour and high-end graphics.

### Advertisement No 06:



- **Kajol reacts to Lifebuoy's Help A Child Reach 5 campaign**
- *Published on 27 August 2013*
- *Duration: 1:27*
- *Ad Agency: Lowe, India*
- *Views: 1,759,885 (10<sup>th</sup> Nov 14)*

Particulars	Very Strong(5)	Strong (4)	Average(3)	Weak(2)	Very Weak(1)	Mean Score
Concept Design	51	47	32	13	7	3.81
Message	61	59	10	9	11	4.04
Punch line	53	43	21	22	11	3.70
Characters/Personalities	76	41	11	15	7	4.09
Graphics/VFX	24	33	41	25	27	3.01
Colour Combination	28	29	36	41	16	3.08
Voice over	65	40	15	22	8	3.88
Emotion	66	51	21	8	4	4.11
Text/Font/LOGO	18	27	36	44	45	2.92
Purchase Intention	59	41	21	18	11	3.79

### Inference

From the table the mean score of message (4.04), celebrity (4.09) and emotion aspects (4.11) are at a higher side than the other aspects. Here 'Kajol' urged people to join her in supporting the cause of hand washing with the Lifebuoy's 'Help a Child Reach 5' campaign, which aims to eradicate diarrhoea, one village at a time. The ad carries a very strong message and celebrity impact made this ad more popular & successful.

**Advertisement No 07:**

- **New 5 Star Ad - Ramesh, Suresh return home**
- **Published on 8th August 2013**
- **Duration: 45 sec**
- **Ad Agency: [Ogilvy & Mather India](#)**
- **Views: 1,544,383 (10<sup>th</sup> Nov14)**

Particulars	Very Strong(5)	Strong (4)	Average(3)	Weak(2)	Very Weak(1)	Mean Score
Concept Design	25	35	46	23	21	3.13
Message	22	37	43	39	9	3.26
Punch line	19	38	46	19	28	3.00
Characters/Personalities	62	34	24	23	7	3.80
Graphics/VFX	19	46	39	22	24	3.09
Colour Combination	24	29	42	27	28	2.96
Voice over	21	45	42	37	5	3.26
Emotion	24	43	31	26	26	3.00
Text/Font/Logo	23	24	61	22	26	3.09
Purchase Intention	51	22	33	23	21	3.30

**Inference**

The above table reveals that the characters used in this ad have scored highest (3.80), however the message and punch line also impressed the respondents with a mean score of 3.26 each. The viewers of this ad have also a strong intention to consume it (3.30). The reason is obvious as because of the impact of an old brand i.e. 'Cadbury' and introduction of two humorous characters namely Ramesh & Suresh. However, the other creative aspects were found comparatively weaker.

**Advertisement No 08:**

- **Sony Xperia Z**
- **Published on 7<sup>th</sup> Jan 2013**
- **Duration: 2.07min**
- **Ad Agency: [McCann Erickson London](#)**
- **Views: 10,907,309 (10<sup>th</sup> Nov 14)**

Particulars	Very Strong(5)	Strong (4)	Average(3)	Weak(2)	Very Weak(1)	Mean Score
Concept Design	31	21	49	32	17	3.11
Message	35	37	33	40	5	3.38
Punch line	23	45	38	20	24	3.15
Characters/Personalities	42	55	31	16	6	3.74
Graphics/VFX	68	48	18	12	4	4.09
Colour Combination	53	49	28	13	7	3.85
Voice over/Dialogue	55	43	25	15	12	3.76
Emotion	8	16	33	45	48	2.27
Text/Font/LOGO	51	38	25	21	15	3.59
Purchase Intention	71	53	12	10	4	4.18

**Inference**

For Sony Xperia Z, the respondents gave a mean score i.e. 4.09 to graphics and VFX. As a very attractive and high end graphics has been used for explaining the features of the product. It also successfully created an impact on the purchase intention (4.18) of the consumers.

**Advertisement No 09:**

Samsung  
GALAXY S4



- **Samsung GALAXY S4: Life Companion**
- **Published on 14<sup>th</sup> March 2013**
- **Duration: 4.23min**
- **Agency: [Jelitta Publicity](#)**
- **Views: 18,697,765 (10<sup>th</sup> Nov 14)**

Aspects	Very Strong(5)	Strong (4)	Average(3)	Weak(2)	Very Weak(1)	Mean Score
Concept Design	21	39	45	30	15	3.14
Message	23	34	39	24	30	2.97
Punch line	31	27	59	16	17	3.26
Characters/Personalities	-	-	-	-	-	-
Graphics/VFX	63	37	22	20	8	3.84
Colour Combination	59	26	39	18	8	3.73
Voice over	-	-	-	-	-	-
Emotion	-	-	-	-	-	-
Text/Font/LOGO	58	45	37	7	3	4.1
Purchase Intention	68	41	22	10	9	3.9

**Inference**

The above table reveals that the respondents gave very strong response to the Logo (4.1), Graphics (3.84) and colours (3.73). In addition, they have also a strong purchase intention (3.9) towards the



product. The brand was promoted as a life companion for a richer, simpler and fuller life. However, the other aspects were found comparatively weak. The respondents leave characters, voiceovers and emotion field blank, as these aspects had not been used in this ad.

#### Advertisement No 10:



#### Google Search Reunion

Published On 13<sup>th</sup> Nov 2013

Duration: 3.33 min

Ad Agency: [Ogilvy & Mather India](#)

Views: 12,327,043 (10<sup>th</sup> Nov 14)

Aspects	Very Strong(5)	Strong (4)	Average(3)	Weak(2)	Very Weak(1)	Mean Score
Concept Design	57	35	21	23	14	3.65
Message	55	41	19	21	14	3.68
Punch line	21	35	53	31	10	3.17
Characters/Personalities	61	30	21	29	9	3.70
Graphics/VFX	32	23	58	30	7	3.28
Colour Combination	25	34	49	27	15	3.18
Voice over/Dialogue	34	57	22	5	32	3.37
Emotion	68	41	18	13	10	3.96
Text/Font/LOGO	51	39	24	15	21	3.56
Purchase Intention	32	45	40	21	12	3.42

#### Inference

The above table reveals that emotion scored highest (3.96) among other creative aspects. As the advertisement explains, how the two friends are brought together, again by their grandchildren using Google searches. This Google ad has moved people to tears across India and Pakistan. The Reunion ad touches upon the sensitive issue of partition and how it separated friends and families. (Survey by Afaqs News Bureau, New Delhi)

YouTube is turning out to be a favourite destination for creative agencies and brand campaigns that are made to engage the audiences online. With the growth of the internet users in India, brand managers and creative agencies are releasing the true potential of YouTube. A survey was made on the "most engaging" commercial content on YouTube in 2013.

Longer duration ads give more freedom to creative minds as they have the freedom of going beyond 30 seconds limit for establishing open communication with the consumer and inspiring people to share the ads with their circle of friends. Creative professionals are

experiencing a new height in the era of digital platforms, which is unshackling the talent of highly skilled advertising professionals in India.

Humour appeal ads, ads with emotional buying motives, high tech ads are the vital aspects that rule the market. Cadbury 5 star ad featuring funny duo of Ramesh and Suresh, Google reunion campaign which reunites friends split by partition have shown the success of emotional ads on YouTube. Evian and Nestle Kit Kat baby ads captured the imagination of netizens. (Vide Ref. 11.5)

#### Findings

1. Highly Creative advertising has more communication effect in terms of advertising effectiveness when compared to conventional advertising, as the ads reached views in millions. Hence, our H1 is true and accepted.
2. Consumer Purchase Behaviour is significantly more favourable towards advertised brands, which have aspects that are more creative. Hence, our H2 is also true and accepted.
3. Emotion is the most creative and graphics/VFX is the most innovative aspect of advertising now a days, so most of the top selling advertisements have given primary concentration to it.
4. The use of celebrity personalities can have a huge impact on a brand. In this study, ads like 'lifebuoy' and 'old spice' gained popularity for the use of celebs. There is a certain correlation between successful celebrity branding and brand endorsements.
5. Use of special characters, small babies can create humour or emotion in the mind of the consumers, which can also give an impact on the changing market attitude.
6. Advertising message has also a great impact on the consumers, provided it should be properly planned, designed and communicated.
7. The other aspects of creativity like voice over, use of special fonts, logo, colour combination, punch line etc are comparatively less effective than graphics, use of celebrities, ad message etc.
8. Analysis done by Afaqs News Bureau, New Delhi also had the same findings as they concluded their survey with, ads with humour, emotions, use of small babies & use of technology have a great potential of ruling the market.

#### Suggestions

1. The professionals in advertising agencies should not underestimate the value of creativity in its effectiveness and should give due consideration for this aspect in advertising.
2. Advertising strategists can choose such a strategy as a viable option considering all of the performance concerns thereto.
3. The creativity norms used in the study provide clear benchmarks for advertisers to judge the success of their advertisements. The findings also offer some insights to those who must develop their own guidelines concerning the use of creativity in advertising.
4. Based on this study, advertisers can interpret how consumers form attitudes towards the ads and for their brands.

## Conclusion

The empirical results show that intensity of advertising creativity and innovation are the contributing factors in the effectiveness of an ad. These results also confirm strong, positive relationships among creativity in advertising, and purchase behaviour. Highly creative and innovative advertising has more communication effect in terms of advertising effectiveness which leads to higher advertising response in terms of consumers' purchase intention.

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## Mergers and Acquisitions and Corporate Performance: A Critical Review

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### ABSTRACT

The age of globalization has witnessed some major trends in the corporate scenario and one of the most promising strategies has been Mergers and Acquisitions (henceforth referred as M&A). The M&A has been taking a fundamental area of the corporate strategy and after the liberalization of 1991 has acquired a new dimension in the global economy. Major reasons of such M&A activity has been attributed to the enhancement of the market share, higher profitability and attainment of economies of scale. The functional importance of Mergers and Acquisitions has been undergoing a sea change since liberalization in India. **Synergy is the reason for mergers.** It implies a situation where the combined firm is more valuable than the sum of the individual firms combining. It refers to benefits other than those related to economies of scale. This paper is an explanatory attempt for examining the different studies that have been carried out in the field of M&A which is one of the most widely applied techniques of corporate restructuring. The study includes 40 papers by various researchers and the earliest study enumerated here dates back to 1983. The latest paper in the study is in 2010. Mainly the papers try to focus on the motives of the mergers and acquisitions.

### Introduction

The age of globalization has witnessed some major trends in the corporate scenario and one of the most promising strategies has been Mergers and Acquisitions (henceforth referred as M&A). The ever growing economies of the globe have increased manifold by merging with the firms of the same discipline or with related sectors. The M&A has been taking a fundamental area of the corporate strategy and after the liberalization of 1991 has acquired a new dimension in the global economy. The major reasons of such M&A activity has been attributed to the enhancement of the market share, higher profitability and attainment of economies of scale. The functional importance of

Mergers and Acquisitions has been undergoing a sea change since liberalization in India. The amendments of the MRTP Act and other legislations have ensured that companies resort to this stratagem for growth. Further The SEBI (Substantial Acquisition of Shares and Take over) Regulations, 1994 and 1997, have been notified. Indian companies are selling off their non-core businesses to achieve core competency. The economies are having an exceptional growth trajectory and a decline in interest rates have made financing of out-bound deals cheaper. There have been areas where the Ministry of Finance has introduced certain key modifications which have opened up new avenues for companies to carry out their acquisition schedule. One of them is the overseas investment strategies.

### Theoretical Framework

Business firms engage in a broad range of activities including expanding, shrinking and otherwise restructuring asset and ownership structures. The various activities may be grouped into the following categories:

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- Expansion-Mergers and acquisitions, Tender Offers and Joint ventures
- Sell-offs-
- Spin-offs: Split-offs and Split-ups
- Divestitures: Equity carve-outs
- Corporate control: Premium buy-backs, Standstill agreements, antitakeover amendments and Proxy contests.
- Changes in ownership structure: Exchange offers, Share repurchases, going private and leveraged buy-outs.

The terms Merger, Acquisition and Takeovers are used interchangeably but they all have different meanings and various legal impacts on the firms participating in such restructuring activities.

Amalgamations can be through merger of companies pertaining to the provisions of the Companies Act. Acquisitions can be through takeovers which are governed by SEBI. In case of cross border transactions, international tax considerations also arise. Amalgamation signifies the transfer of all or some part of the assets and liabilities of one or more existing companies to another existing company(s) or to a new company of which the transferee company or all the members of the transferor company(s) become, or have the rights of becoming, members. In most cases such amalgamation is coupled with voluntary winding-up of the transferor company(s). Under an Amalgamation, merger or takeover, two or more companies are merged *de jure* through consolidation of their undertakings or *de facto* through acquisition of their controlling interest in the share capital of one by the other or of the capital of both by the new company.

From the perspective of business structures, there can be a number of categories. According to the relationship between the two companies that are merging mergers are of the following types:

- Horizontal merger – it involves two firms operating in the same kind of business activity. Two companies that are directly competitive sharing same product lines and markets may merge together.
- Vertical merger – this merger involves different stages of production operations. For example merger might take place between a customer and company or a supplier and company.
- Conglomeration – This involves firms engaged in unrelated type of business activity. When two companies that have no common business areas merge together, it is called conglomerate merger. There are mainly three types of conglomerate mergers which are as discussed below:
  - Geographic Market-extension merger – **involves two firms whose operations have been conducted in non-overlapping geographical areas.**
  - Product-extension merger – **this merger broadens the product lines of the firm.** Two companies selling different but related products in the same market might merge.
  - Pure conglomerate merger - involves unrelated business activities that would not qualify as either product-extension or market-extension mergers.
- According to the financing methods, mergers may be categorized into the following. Each has certain implications for the companies and the investors involved:
  - Purchase Mergers - This kind of merger occurs when one company purchases another and the purchase is

made with cash or through the issue of some kind of debt instrument. In this case the sale is taxable under law. Acquiring companies often prefer this type of merger since it ensures them tax benefit. Acquired assets are written-up to the actual purchase price. The difference between the book value and the purchase price of the asset is shown as annual depreciation thereby reducing the total tax liability of the acquiring firm.

- Consolidation Mergers – This form of merger brings into existence a brand new entity with both the firms combining into this new firm. Tax terms are identical to the purchase merger.

## Indian Scenario

The first wave of M&As was from 1990 to 1995 where the Indian companies started to prepare themselves or facing the foreign competition since the market opened up to foreign entry. The second wave since 1995 witnessed a significant involvement of multinational firms. The macroeconomic policy changes in India facilitated the third wave of merger movement since 2000 – overseas acquisitions by the Indian firms. A large number of mergers were between firms belonging to the same business groups and product lines with a view to increase their respective controlling blocks and market power.

## Paper Reviews

There has been extensive research in this area and the following papers try to bring into focus the various inferences that have been drawn by the papers and enumerate the different schools of thoughts regarding the M&A activity. The papers examine both the performance of the acquiring firms and the target firms. There are three approaches followed in the literature for examining the performance of M&A transactions, of which the significant one being the investigation of gains and losses to shareholders around the deal announcement date. The second approach is the comparison of the pre-merger and post-merger operating performance ratios for the entire sample set of mergers. The final approach is scrutinizing the actual improvement in the synergy levels of the companies in the long term scenario in the post-merger era.

One of the earliest studies in this area has been done by *Healy Palepu and Rubak* (1990). For their paper titled “Does corporate performance improve after mergers?” they studied 50 major public industrial firms. This paper compared the operating performance through accounting data even though it was considered that the accounting data is an imperfect measure, as it can be affected by managerial decisions. The pre –tax operating cash flows of the company was also considered and therefore the industry performance was used as a benchmark for the post-merger improvement in the firm. The firms mainly use purchase method of transaction. Again post acquisition earnings are also effected by method of financing i.e. if it is a debt financing or a cash financing, but since the operating income had been used (before interest payments and short term investment incomes further deflated by market value of assets), the choice of financing was not a detrimental factor for measurement. Most importantly, they had excluded the change in equity values of the target and acquiring firms at the merger announcement from the asset base in the post-merger year. Also, the industry adjusted results proved that there was an improvement in the post-merger performance, whereas the unadjusted results give a diametrically opposite view. The “industry related” has also been checked for any anomalies. There was evidence that the pension per employee had declined after the merger.



The overall findings suggested that the operating performance had improved after the merger. Also, the results showed that the post-merger operating cash flows did affect the abnormal stock returns. Another vital observation was that stock price reaction to mergers were driven by anticipated economic gains after the merger.

Another paper *Andrade; Mitchell & Stafford (2001)*, titled “*New evidence and perspectives on Mergers*” mainly expressed that the merger was clustered in a particular industry. This paper also tried to capture the merger effects of the publicly traded shares of the US firms. Here both the target and acquirer were US concerns. The merger studies concentrated around the type of merger and evidences showed that method of merger in 1980 was different from 1990, the latter being done through stock purchases. The hostile takeovers are non-existent in the 1980's. In case of a particular industry, it was observed that mergers happened in a wave i.e. for one decade they were active and in another they were dormant. Another key reason was deregulation which brought down the barriers to trade. This paper was able to bring out the evidences that the event studies were used for three days before and after the merger. The relation is positive and suggested that mergers create value for the shareholders but the target firm shareholders enjoyed a bigger positive return from the merger activity. According to this paper, a target firm shareholder would earn a return equal to earnings in a 16 month period within that three day event window. This paper also suggested that the method of financing the merger should be considered. It was observed that the target firms performed positively if there was no equity financing. The combined performance of stocks with equity financing does not outgrow the same, if done through non-equity financing. If the long term returns from the mergers were considered, then this paper suggested that the mergers of the small acquirers happened to be the most robust of all. According to the paper the previous studies were not able to precisely enumerate the amount of abnormal returns from the merger and the time frame considered was also not sufficient. The study also revealed that the factor efficiency increased after the merger, if the basis of consideration was productivity. Some researchers argued that the mergers created value for only the target firms as there was proper resource allocation and optimum utilization. Ultimately, it showed that there was zero or negligible difference between the merger decision performance and performance through any other investment decisions.

A paper by *Seth, Song & Pettit, (2002)* titled “*Value creation and destruction in Cross-Border Acquisitions: An empirical analysis of foreign acquisitions of U.S. firms*”, described the investigation of the sources of gains in cross-border acquisitions wherein decision-making was taken to be a function of different behavioral assumptions. The paper distinguishes between cross border acquisitions that are characterized by:

- the hubris hypothesis -acquisitions occur because managers make mistakes in evaluating target firms, and the takeover premium merely reflects a random error. Assumption is that the valuation of the target is a random variable whose mean is the current market price.
- the synergy hypothesis -proposes that acquisitions take place when the value of the combined firm is greater than the sum of the values of the individual firm
- the managerialism hypothesis advocates that managers will knowingly overpay in takeovers. The managers embark on acquisitions to maximize their own utility at the expense of the shareholders of the acquiring firm.

The sample is of all cross-border acquisitions of U.S. industrial corporations from 1981-90. The data was consistent with the expectation that multiple sources of value creation existed in synergistic cross-border acquisitions like asset sharing, reverse internalization of valuable intangible assets, and financial diversification. The data thus provided shows evidence for multiple theories of FDI, suggesting that it is important to use the malfunctional approach to understand performance difference in a case like this. For value-destroying acquisitions that are expected to be driven by managerialism however, it is observed that the data are consistent with only one of the sources of value destruction, i.e., risk reduction. In these acquisitions, the evidence also suggests that large relative size of the target to the bidder mitigates the negative effects of risk reduction.

Another paper prepared by *Carline, Linn & Yadav (2003)* titled “*Can the stock market systematically make use of firm- and deal-specific factors when initially capitalizing the real gains from Mergers and Acquisitions?*” studies the impact of firm-specific and deal-specific factors on the change in industry-adjusted operating performance around corporate mergers and acquisitions. The sample taken is domestic UK mergers. It shows that mergers in the UK during this period were associated with improvements in operating efficiency and the total abnormal revaluations of bidder/target pairs are both positive. The results further suggest operating performance improvement depends on whether the merger was friendly or hostile. Here, operating performance means EBT (+ depreciation & goodwill + net interest income). The study shows that the industry adjusted cash flows, improve in the post-acquisition period. Some of the conclusions drawn are, the larger the deal the smaller is the gain. Secondly, the performance is worse if there is a bigger Board of directors. It is found that stock offers and hostile offers are associated with smaller changes than are cash or non-hostile offers and another observation is the larger offers tend to be associated with lower gains.

The paper by *Rosen (2003)* titled “*Merger momentum and investor sentiment: The stock market reaction to merger announcements*” examine whether the market reaction to a merger announcement depends on the recent merger history of the overall market and of the bidding firm. The paper analyses three different theories that are each consistent with merger momentum.

- The neoclassical theory of mergers - managers act to maximize shareholder value. Under this theory, merger momentum may result from shocks that increase synergies for a group of mergers.
- A second theory is that there are managerial motivations for mergers. If managerial objectives drive merger decisions, then acquisitions during waves may be worse than other mergers.
- The third theory examines that momentum results from overly optimistic beliefs on the part of investors and possibly managers.

The data set on mergers and acquisitions by U.S. firms announced between 1982 and 2001 as given in the Securities Data Corporation (SDC) database suggests momentum in merger markets. Mergers announced during hot stock markets tend to get a better reaction from the market than those announced in a cold market. Evidence proves that the short-run reaction to an announcement is reversed in the long run. Acquisitions announced in hot merger markets lead to long-run declines in the bidder's stock price while there is some evidence that acquisitions announced in hot stock markets are associated with long-run returns that are not higher, and possibly lower, than those announced in cold stock markets. There is even some evidence that,

holding all else equal, the short-run reaction to an announcement is fully reversed over the next three years. If investors expect a broad range of mergers to create synergies, then they react positively to merger announcements. When investor expectations are based more on optimistic expectations than reality, the short-run boost in price caused by a merger announcement are reversed in the long run as the track record of the merger becomes known. Studies have noted that mergers often cluster within an industry and follow industry wide or economy-wide shocks. If these shocks increase the synergies available for mergers, then they could lead to merger momentum. But, synergistic shocks alone cannot explain the market reaction to mergers. The long run reversal in the returns to bidding firms' stock requires something additional. A third explanation for mergers is that they result from managers acting in their private interests. Managerial motivations can spark a defensive merger wave. If so, then mergers during waves should be worse than mergers at other times. We find evidence consistent with this, especially for the merger wave of the 1990s. Overall, there is some evidence that the long-run return to a merger is worse if the merger was made during a wave.

Another important paper titled *"Towards understanding the merger – wave in the Indian corporate sector: A comparative perspective"* by Beena (2004) tries to understand the motives and implications of the merger wave in the second half of the nineties. The analysis was conducted by dividing the firms into two categories: Indian owned and Foreign owned. The motives of mergers are based on certain theories and they are: i) efficiency enhancing measures ii) concentration and monopoly enhancing iii) driven by macroeconomic changes and iv) driven by financial motives. The sample consists of 115 actual mergers which accounts for 22% of the total number of M&As that occurred in the Indian manufacturing sector in the time frame of 1995-2000. The sample includes only MNE related firms already operating in India as foreign subsidiaries. The performance has been measured in terms of price –cost margin, rate of return, shareholder's profit, debt-equity ratio, export intensity, R&D intensity and capacity utilization. The study also tested the significance of their mean difference between pre and post-merger phase by using t-statistic. It has been observed that foreign –owned acquiring firms have been performing better than Indian owned acquiring firms. Also the return on shareholder's equity has increased after merger. The paper argues that the main motive was to increase the equity size, which could be further used to borrow resources for modernization. As far as export intensity and R&D intensity are concerned, they showed mixed results and no substantial conclusions could be drawn. The study could not locate any significant data of efficiency-related actors being the chief stimulant of M&A that took place in the Indian corporate sector during the second half of the nineties. It has also been noticed that the firm's growth in terms of asset-size, market share and intensification of the controlling bloc acts as a defense mechanism against takeover bids. The behavioral pattern of the acquiring companies rings a bell for reviewing and establishing a desirable and workable Competition policy and corporate governance regime for the economy.

The paper by Calderon (2004) titled *"Greenfield foreign direct investment and Mergers and Acquisitions: Feedback and macroeconomic"* states that FDI boom has also raised two major concerns. The first one involves the uncertain future prospects of FDI to developing countries. The second concern relates to the growth impact of FDI flows, which has attracted renewed interest in the wake of the FDI boom. The purpose of this paper was to address these concerns by examining the link between the two components of FDI flows – Greenfield and M&A -- and their respective relationship with aggregate investment and growth in a large cross-country time-series data set. An expansion of M&A is indeed followed by an increase in

Greenfield FDI. The paper explains that an increase in M&A by 1 percent of GDP leads to a rise in Greenfield FDI by about 1 and 1.5 percentage points of GDP in industrial and developing countries, respectively. Second question addressed in the paper was the causality (in the sense of time precedence) between the two forms of FDI and domestic investment and economic growth. Therefore, economic growth, as the most important indicator of domestic rates of return, serves as an effective "pull" factor for foreign investment; and in turn, FDI helps increase domestic investment in the future.

The focus of the paper by Chari, Ouimet & Tesar (2004) titled *"Cross Border Mergers and Acquisitions in emerging markets: The stock market valuation of corporate control"* is on the stock price reaction, an inherently ex-ante measure, to news of an acquisition as a summary statistic to capture the gains and losses from an acquisition. The paper uses the Securities Data Corporation (SDC) Thompson's International Mergers and Acquisitions database to identify merger and acquisition events in emerging markets over the period 1988-2003. DataStream and Bloomberg are the sources used for stock price information. The benchmark results from firm level panel data estimations suggest that, target firms in emerging markets experience positive monthly returns when a cross border acquisition is announced. The rate ranges from 5.05% to 6.68%. The results in this paper show that monthly returns for acquirer firms show a statistically significant increase of 1.65% to 3.05%. This paper uses the stock price reaction of acquiring and target firms to the announcement of an acquisition as a summary statistic for value creation through foreign acquisitions. The stock price reaction of both firms to the announcement of an acquisition shows:

- the potential wealth creation from the merger
- how the gains and losses from an acquisition are assigned to the acquiring and target firms.

The results from panel data estimations suggest that the stock market anticipates significant value creation from the merger for the target and the acquiring firms. The benchmark results indicate that target firms benefit from the acquisition, experiencing monthly returns. The paper also compares acquirer returns for US firms when the acquisition is announced in a developed market rather than in an emerging market. The data suggest that positive acquirer returns are specific to acquisitions in emerging markets, and that gaining corporate control is the key feature of transactions that deliver positive returns. Overall, the results in the paper suggest that the boom in FDI flows to emerging markets in the late 1990s led to a transfer of control to foreign acquirers. Also it results in substantial gains to shareholders of both the acquiring and the target firms.

Subramaniam (2004) in his article titled *"Option pricing on stocks in Mergers and Acquisitions"* stated that there are a lot of pending deals in the stock markets which tend to affect the stock option prices of the involved firms. The studies reveal that the options are able to reflect the market reaction towards a successful deal or a pending deal. The model used by the researcher is an extension of the Black-Scholes constant volatility model. The data set used consists of daily stock and option price data for each company involved in a stock for stock merger deal announced during 2001 where both the target and the acquirer have traded options. The paper presents an arbitrage-free and complete framework to price options on the stocks of firms involved in a merger or acquisition deal with the possibility that the deal might be called off thus creating discontinuous impacts on the prices of one or both stocks. The study models the stock price processes as jump diffusions and derive explicit relationships between the parameters of the stock price processes.

The study done by *Savor and Lu, (2004-05)* titled “*Do stock mergers create value for Acquirers?*” suggests that the stock financed mergers are more costly for the acquirer. The main goal of this paper is to determine whether stock-financed bids create value for the acquirer’s long-term shareholders. Stock acquisitions serve the interests of bidder’s long-term shareholders. The market-timing theory of acquisitions predicts that stock-financed mergers benefit the acquiring firms long-term shareholders by converting overvalued equity into (less overvalued) hard assets. The comparison between successful and failed acquirers indicates that, despite the negative announcement and post-event returns for stock acquirers, their long-term shareholders are still better off than they would have been without these deals. The evidence presented is consistent with the hypothesis that stock-financed acquirers create value for their long-term shareholders and that one mechanism by which they do so is their use of overvalued equity to purchase hard assets at an effective discount. It is found that unsuccessful stock bidders underperform successful ones in an economically meaningful and statistically significant way. This underperformance increases with the length of the holding period. The motives behind the various managers’ actions are:

- a) It creates a strong incentive for firms to artificially boost their stock price, even though this effect might be costly and purely temporary. Some affected firms might ultimately not be successful in executing an acquisition, but this does not necessarily make the stock price manipulation irrational from an ex-ante perspective (with respect to the interests of long-term shareholders).
- b) Managers might pursue deals where the joint fundamental value of the acquirers and targets assets is reduced by combining them in a single firm. As long as market-timing gains outweigh the costs of this inefficiency, long-term shareholders will profit from the merger.

The key aim of this paper prepared by *Ferrett (2005)* titled “*Greenfield investment versus Acquisition: Positive Analysis*” is to explain the Greenfield/ acquisition choice by building a model where the form of FDI (Greenfield-FDI vs. acquisition-FDI) is endogenously selected. The stimuli driving the paper are:

- Greenfield / acquisition distinction is quantitatively important in empirical data (on both flow values and project numbers): neither type of FDI is ever reported as being trivial.
- Second, intuition suggests that the distinction is also qualitatively important: at least in the short run, it is reasonable to expect acquisition-FDI to result in a more “concentrated” market structure than Greenfield-FDI, which implies that the welfare effects of the two forms of entry may differ markedly.

First, it was found that, relative to Greenfield-FDI, acquisition-FDI is a “soft” response by the incumbents to the entry threat: in intermediate-sized markets, acquisition- FDI provokes, but Greenfield-FDI deters entry. It was seen that if both incumbents invest in process R&D, the effect of changes in the trade cost on the incentive for acquisition-FDI depends crucially on the R&D technology: if the probability of R&D success is small (large), then trade liberalization (i.e., falls in the trade cost) discourages (encourages) acquisition-FDI.

Managers may want to make acquisitions to increase their firm’s size and hence reduce the likelihood that it is taken over. If managers do not care very much about private benefits of control, only profitable acquisitions occur. However, if managers care very much about private benefits of control, they may engage in unprofitable defensive acquisitions that preempt some profitable acquisitions. The

profitability of acquisitions tends to decrease in the acquirer’s size. Large acquirers overpay while small acquirers tend to engage in profitable acquisitions. Firms of intermediate size sometimes engage in profitable and sometimes in unprofitable acquisitions. Also the paper explains the three stylized facts about mergers. They are mentioned as follows – first, that acquirers, on average, lose money. Second, mergers concentrate in industries in which regime shifts can be identified and third mergers come in waves. The study shows that industry structure (the size distribution of the firms in the industry) is an important factor for merger dynamics. Industries in which many firms are similar in size to the largest firm with profitable acquisition opportunities are prone to defensive merger waves. This happens if managers care a lot about private benefits of control. Quite opposite is the case where firms are of different sizes. They are prone less to unprofitable acquisitions. Here the relation of profitable acquisitions is inversely proportional with the care of managers for private benefits of control. In industries in which some but not all firms are of similar size, merger waves are most likely, because they occur if private benefits are either low or high. The profitability of acquisitions tends to decrease in the acquirer’s size. Large acquirers overpay while small acquirers tend to engage in profitable acquisitions. Firms of intermediate size sometimes engage in profitable and sometimes in unprofitable acquisitions. The theory can explain why mergers are concentrated in industries for which a regime shift can be identified. At the same time, it can explain why acquirers lose money, on average, and why mergers often occur in waves. All these were studied in detail in the paper by *Gorton, Kahl & Rosen (2005)* titled “*Eat or be eaten alive: a theory of merger and merger waves*”.

The same idea that target firms enjoy better gains as compared to acquirers has been proved by *Baxamusa (2006)* in his paper titled “*Mergers That Create Value*”. The study included 423 acquisitions from 1994 to 1999. It has also been observed that mergers done by well governed acquirers are profitable and by badly managed acquirers though destroy value but increases the operating performance. This paper tries to know how the performance increases for the former. It documents the operating mechanisms that generate post-merger efficiencies. The researcher compares the operating ratios of the combined firm pre and post-merger. The G index of acquirer and target is compared to combined firm. Repurchases, purchases of minority stakes, self-tenders and recapitalizations are excluded and the firms are publicly traded. The measure of value creation is the free cash flows and the performance ratios are considered. The friendly mergers perform the best, followed by hostile merger and lastly neutral mergers. It can be concluded that post-merger performance of the firm is high if the corporate governance is higher and also, if the managers are able to exploit the inefficient market effects. In general, this paper demonstrates the benefits of better corporate governance in the context of mergers.

The paper by *Francis, Hasan & Sun (2006)* titled “*Financial market integration and the value of global diversification: Evidence for US acquirers in cross-border mergers and acquisitions*” examines how differences in financial market integration across nations impact the performance of firms that diversify globally. It proposed that when a pair of merging firms come from two countries with different degrees of financial market integration (a proxy of average firms’ ability to access foreign capital in a particular country), the benefits of the newly created internal capital market will be larger than those created by a pair of merging firms from countries with similar degrees of financial market integration. The sample used is 1,491 US bidders. Results demonstrate that the financial market integration status of targets’ home countries has a statistically significant relation with the announcement effects for US bidders. And this relation is driven

primarily by unrelated transactions. There is a positive relationship between post-merger operating performance and the bidders' abnormal returns. It is argued that the value of global diversification varies with the target countries' capital market integration. The findings from both the post-merger operating performance and stock price reaction support the inference that the performance of the merged firm is enhanced when the merging firms are from countries or markets with different or opposite financial market integration status. Firms in segmented capital markets may be able to resolve their capital constraints since more capital may be available or maybe transferred internally from firms based in integrated markets to them. This renders the above argument as conceivable.

The paper by *Betrand, Hakkala and Norbäck (2007)* titled "*Cross-Border Acquisition or Greenfield Entry: Does it Matter for Affiliate R&D*" investigates empirically whether the choice of entry mode of FDI, that is M&A or Greenfield entry, is of importance for affiliate R&D activities. Data is collected from Research Institute of Industrial Economics about Swedish multinational firms. It is found that acquired affiliates are more likely to do R&D and have a higher level of R&D intensity than Greenfield affiliates. There is no evidence that R&D in acquired affiliates is terminated, or to a higher degree reduced over time than in affiliates created through Greenfield entry. In terms of policy implications, these results show that restricting cross-border acquisitions in order to favor Greenfield investments may lead to a reduction in MNEs' technology transfers to the host countries. Another main finding is that the gap in affiliate R&D performance between the entry modes is explained by differences in parent, affiliate and country characteristics, but also by the fact that affiliate R&D performance reacts differently to these characteristics. Findings suggests that R&D activities of acquired and Greenfield affiliates follow different statistical relationships. The latter result provides support for the new and fast-growing literature on cross-border acquisitions, emphasizing that Greenfield entry and cross-border acquisitions are likely to be driven by different strategic motives.

According to *Doeswijk, (2007)* his paper titled "*Mergers and Acquisitions in the Dutch stock market*", mentions that for the relative stock-price performance of mergers and acquisitions, it is important to make a clear distinction between the abnormal return around the announcement date and the long-term abnormal returns. The shareholders of takeover targets are the main beneficiaries around the announcement date, while the picture for acquirers and/or mergers is less clear. The data size is 11 mergers and therefore too small to attach any statistical significance. The study has excluded takeovers of foreign companies by Dutch firms. Share prices of companies involved in a merger usually show a run-up in the period leading up to the announcement. Market rumors of a potential deal can push up prices. In the long term, the shares have not shown any signs of improvement in this study. Monday is popular because deals are often finalized at the weekend when the financial markets are closed and when rumors or information leaks cannot influence the stock price.

The paper on stock split *Guo, Liu & Song (2007)* "*Stock Splits as a Manipulation Tool: Evidence from Mergers and Acquisitions*" examines whether some firms use stock splits as another tool to perhaps manipulate their stock price before an acquisition. Acquiring firms are more likely to split their stocks before acquisition announcements than after acquisition announcements. It was observed that the value of the firm's earnings and the probability of stock split are inversely related to each other. The target firm should be confident about the acquirer and its performance. The larger the deal, the higher the probability of a stock split and moreover if the deals are stock financed, the chances are even higher. The paper proposed to expect

that the lower the quality of a firm's earnings before the acquisition announcement, the more likely the acquirer was prone to use stock split as a tool to manipulate its equity value. The empirical evidence supported this prediction. The study found that firms with lower earnings quality were more likely to split their stocks before acquisition announcements compared to otherwise. Results suggest that target shareholders should be cautious when evaluating proposed merger offers. Target firms may consider such information when discriminating among acquirers to ensure that stock prices are not being manipulated and that exchanges are conducted on fair terms. It is to be checked whether they have recently conducted a stock split and how high their discretionary accruals are.

The paper by *Kumar and Rajib (2007)* titled "*Mergers and corporate performance in India: An empirical study*" tries to capture the variations in the operating performance of the merged firms from 1995 to 2002. The sample consists of 57 large mergers. There are mainly two main research approaches which rationalize Mergers and acquisitions profitably. The event studies examine the abnormal returns to shareholders in the period surrounding the announcement date such activity. The accounting studies examine the reported financial results of the acquirers or the new firm before and after such activity to establish the positive or negative changes in the financial performance. Three alternative methodologies were used in the study. The cash flows were deflated by the market value of the assets, book value of assets and the sales value. Of the three alternatives, the model using the market value of the assets does not support the hypothesis that performance improves after mergers. The other two approaches show that it does. The market based measure of cash flow returns explained in the paper has a limitation. An efficient market capitalizes the value of any expected post restructuring improvement in the acquirer's performance at the takeover announcement date. If the equity revaluations are included in the asset base, then cash flow routine would not reflect any abnormal increase even though the merger results in an increase in the same. A cross-sectional regression approach is used to compare the performance of the firms before and after the merger.

In contrast to all the other studies the paper by *Luybaert (2007)* titled "*Determinants of Growth through Mergers and Acquisitions: Empirical Results from Belgium*" tries to enumerate the effects of mergers on economies, industry growth, and deregulation. Also, the countries considered in the study are not US or UK firms; rather they are the continental Europe. Multivariate logit results show that unlike earlier other research, internal cash flow generation and the stock of cash slack do not affect the M&A decision in a typical Continental European setting. Firms that are relying more heavily on bank loans are less likely to initiate M&As. M&As are more likely in industries where incumbents are operating at a relatively low scale. Besides, M&As have a higher probability of occurrence in industries that are less concentrated and that were recently deregulated. Also, larger firms are more likely to go for M&As as external financing is easily available. Aggregate financial market conditions, however, do not affect the M&A decision. The sample data included all the deals that were announced, even though they were not concluded. The synergies are not one of the main reasons why there is a trend of external growth.

The paper by *Mantravadi & Reddy (2007)* titled "*Relative Size in Mergers and Operating Performance: Indian Experience*" aimed at analyzing the post-merger operating performance for acquiring firms in Indian industry. The period is post-reform period, from 1991-2003. The post-merger operating performance of acquiring firms for different relative sizes (of acquiring and acquired firms) were analyzed. The objective was to observe if differences in sizes of

acquiring and acquired firms can cause a different impact on the outcome compared to general results of merger studies. The analysis of pre- and post-merger operating performance ratios for the acquiring firms in the sample seems to indicate that relative size does make some difference to the post-merger operating performance of acquiring firms. These results suggest that where the relative size of the target firm is more than the acquiring firm, there is no impact on the post-merger operating performance compared to the pre-merger performance. However, in such cases, there has been a significant decline in returns on net worth and capital employed, and a marginal increase in financial leverage. In case of a different size ratio, results suggest that where the merging and merged firms are of relatively the same size by market capitalisation, there is no impact on the post-merger operating performance compared to the pre-merger performance, i.e., that mergers cause no change in operational efficiency of acquiring firms in similar size mergers. The paper mentions three distinct trends in the M&A activity in India after the reforms in 1991.

- In the initial period, a consolidation wave was witnessed and intense investment. Companies tried to prepare for the potential aggressive competition in domestic and overseas markets, through acquisitions and mergers, to achieve economies of scale and scope.
- In the second trend, from 1995, there was increased activity in consolidation of subsidiaries by multinational companies operating in India, followed by the entry of several multinational companies into Indian markets. Indian companies focused on capital and business restructuring, and cleaned up their balance sheets. There was consolidation in the domestic industries such as steel, cement and telecom.
- The third wave of mergers and acquisitions in India, evident since 2002, is that of Indian companies venturing abroad, and making acquisitions in developed and other developing countries, for gaining entry into international markets.

The study done by Samitas & Kenourgios (2007) titled “*Impact of mergers and acquisitions on stock returns of tramp shipping firms*”, focuses on the tramp shipping companies which are members of NASDAQ & NYSE. The event study analysis has been done through bootstrap method. The results clearly indicate that the event studies bring positive returns to the firms and the stock returns are also positive.

Srinivasan & Mishra (2007) in their article titled “*Why do firms merge/acquire: An analysis of strategic intent in recent M&A activity among Indian firms*”, tried to analyze the motives of M&As among the Indian firms. The number of companies is 30. In their paper they did “content analysis” of the statements made by the top management of the firms involved in the media to analyze the intent. Content analysis is “a research technique for making replicable and varied inferences from data according to their context.” It is done at two levels: manifest content and latent content. Some of the propositions that have emerged from the study are:

- Market entry may be a dominant motive of MNCs to acquire domestic firms.
- On the other hand, domestic firms’ sell-off may help to generate cash and increase growth opportunities.
- Another purpose is to wipe out the accumulated loss and this can be done by selling loss-making firms to more efficient management.

- MNCs may offer higher premiums for acquisition as compared to domestic ones.
- The more the intent between the two parties is complementary, the more the synergy is likely to be leveraged.

This paper does not consider the issues of taxation and regulation and the propositions can be extended over a higher sample size and can be validated for three to five financial years.

Ashenfelter and Hosken (2008) in their paper titled “*The effects of mergers on consumer prices: Evidence from five selected case studies*” studied the effect of mergers from a different point i.e. the consumers instead of investors. In the late 1990’s, the U.S. economy witnessed the largest merger wave in its history. The number of merger filings doubled in 1999 as compared to 1994 yet the number of people employed as economists and lawyers in antitrust agencies was fairly constant. Given the huge surge in workload, the agencies had to make difficult choices in deciding which of the cases it wanted to pursue during this time period. Five mergers were taken as a case study and showed that four of them witnessed a rise in prices. Also, the study does not study the effects if the mergers are rejected, even though they would be favorable. The study does not focus on the post-merger performance of the financial statistics of the firm.

The paper titled “*Trends and Perspectives on Corporate Mergers in Contemporary India*” by Beena (2008) states that out of the total sample cases chosen for this study, around 70 per cent were horizontal M&As, 11 per cent were vertical M&As while 18 per cent were conglomerate mergers. Product-groups in which there has been incidence of at least one merger or acquisition during 1995-2000 were considered and were divided into 52 categories. The main objective of this paper is to examine whether there is any significant difference in their performance between pre- and post-merger phases and if there is any significant difference in the performance of acquiring firms during 1990-2005 as compared to the average performance of the manufacturing sector as a whole. Evidence suggests that the new economic environment of the 1990s has facilitated M&As between companies under domestic or foreign ownership. Firms under the same business groups and similar product lines dominated the merger wave. The average performance of acquiring firms based on all indicators during 1990-2005 was relatively better than that of the manufacturing sector as a whole.

The study done by Diecidue (2008) titled “*Shareholders’ expectations, aspiration levels, and mergers*” show that shareholder expectations, captured as aspiration levels in stock prices, can motivate managers to favor mergers, even when the expected value of takeovers is lower than alternative investments. This merger seeking behavior increases in stock momentum, particularly in overvaluation. Also, managers opt for riskier mergers in order to meet shareholder optimism. In this paper the researcher also analyzed the merger decision making behavior of a better informed manager. In the model, the key idea is that shareholder expectations, as expressed in firm valuation, constitute an aspiration level for management. The paper has certain limitation and they are:

- The decisions taken by managers are considered since individual decisions are governed by predictive behavior. The manager’s behavior was modeled as a decision problem, abstracting entirely away from all strategic interactions with other players. In reality, other market players such as the target firm will react taking into account the motives behind the manager’s decision.

- Secondly, in the model the manager is uniquely motivated by the aspiration level. In practice, managers will not be so insensitive to other factors, in part because owners of firms will give other incentives than firing the manager in case of disappointing results.

The paper titled “*Stock returns in mergers and acquisitions*” by Hackbarth and Morellec (2008) develops a model for the dynamics of the stock returns. There are two endogenous variables, the timing and the terms of takeovers and they result from value-maximizing decisions. The sample taken is 1086 takeovers of publicly traded U.S. firms between 1985 and 2002. The paper presents a theory and also examines the implications of that theory. In the model, the more inefficient firm sells its asset to the less inefficient firm and thus employed the resources to their best use. In the model, investment decisions have two vital characteristics. Firstly, there is uncertainty regarding their benefits and secondly these decisions are at least moderately irreversible. The paper shows that beta does not exhibit significant change prior to the takeover and drops moderately after a merger announcement for the full sample. If the sample is split into two sub-groups of a higher and lower pre-announcement beta with their targets, then the patterns of the beta of acquiring firms are coherent with the model’s predictions.

Another paper by Mantravadi & Reddy (2008) titled “*Type of Merger and Impact on Operating Performance: The Indian Experience*” emphasizes that the mergers are in trends. The first trend being within the nation where small firms consolidated to face the competition from the foreign players while the second phase started from 1995, witnessing the coming of multinationals to acquire the Indian subsidiaries. The third trend shows that Indian companies going abroad and acquiring the developed markets. The main objective of the study was to enumerate the method of mergers which improves the performance at the maximum. The measures of performance are Operating profit margin, G.P. margin, N.P margin, RNW, ROCE, D/E ratio. Sample includes the listed companies at NSE/ BSE. According to the findings, it has been established that mergers do not improve the performance as the measures of performance did not give any positive returns. The negative effects were greater in case of RNW and ROCE. Comparison of post- vs pre-merger operating ratios, for the different types of mergers suggested that horizontal mergers had caused the highest decline in the operating performance of the merging companies, followed by conglomerate and vertical mergers respectively. The declines were more prominent in terms of returns on net worth and capital employed, and to a lesser extent on net profit margin, among all types of mergers. The declines in profitability margins at the operating and gross level were not significant among the various types. The differences between different combinations of mergers however, were not statistically significant, leading to the conclusion that merger outcomes were similar for all merger types.

The paper by Mehrotra, (2008) titled “*Impact of Japanese Mergers on Shareholder Wealth: An Analysis of Bidder and Target Companies*” examines whether rescue mergers occur in Japan and what role the main bank plays in these mergers. The study was carried on in Japan and it was found that the second merger wave in Japan was caused by economic shocks. The paper takes 91 mergers between listed companies in the period 1982-2003 and examines whether the main bank was involved in mergers in which a failing firm was involved. For target and bidder companies with a main bank the study measured leverage as *main bank loans divided by total debt*. Test period starts 50 days prior to the announcement date and stops 50 days after. It is found that the stock price of the target company starts to rise

as early as fifty days before the announcement. The findings are enumerated as follows:

- The corporate control market in Japan reacts differently from that in the U.S. It is seen that in stark contrast to the pro-cyclical U.S. merger waves, mergers in Japan are counter-cyclical. This is true in terms of the general economy and with respect to stock market valuations.
- Second, it is observed that a significant fraction of Japanese mergers are coordinated by the main banks and therefore a striking pattern emerges. When the main bank is the same for the bidder and Target Company, its involvement does not create shareholder wealth. The performance of at least one of the merging companies is strong, indicating that the same main bank is primarily motivated to protect its own interests as creditor. This was especially evident in the period after the stock price bubble burst and the same main bank arranged mergers of weak borrowers with a financially strong buyer. In the entire period the same main bank’s involvement in mergers between two weak companies is low.
- The positive pre-announcement returns accruing to both bidders and targets, with bidders capturing approximately half the gains that accrue to target firms.

Most of the merger literature mainly focuses on the operating performance of the firms. A study by Ramakrishnan (2008) titled “*Long term post-merger performance of firms in India*” proves this fact. This paper tries to validate if the long term post-merger performance of the firms improves. The basis of performance is the operating cash flow-scaled by the assets, operating margin and sales turnover. It says that on an average the merging firms have performed better in India as compared to their pre-merger performance. It says that the operating performance has improved due to the merger. The study did not consider the cross-border mergers, financial sector mergers. The time frame used is -3 to -1 for pre-merger year, though the year of the merger is excluded from the analysis. The 3 year period post-merger witnesses a growth in the operating performance. Another observation is that, the sales turnover of the firms does not change after the merger. The mergers are mainly studied from the standpoint of US firms and the global implications, if considered, would also affect the Indian manufacturing sectors.

The study done by Kumar & Panneerselvam (2009) titled “*Mergers, acquisitions and wealth creation: A comparative study in the Indian context*” tries to explore the stock market reaction to M&A announcements on a comparative basis. Some of the questions that were addressed in this paper were whether the stock prices of the merging firms reflected the information on mergers immediately, was there any abnormal return, both positive and negative. If yes, then how these returns were apportioned between the target and the bidder firms? The market efficiency was also measured. The results are as follows:

- The announcement date highest returns are for target firms involved in mergers, followed by acquirer firms in mergers. The third in the line are acquirer firms in acquisitions.
- The gains of target firms are higher in all time windows for merger activity than any other one.
- The overall gain in wealth in case of mergers is much higher as compared to acquisitions.
- The analysis also shows that the efficient market hypothesis is accepted as the prices of the stock incorporate the changes in the structure of the company due to M&A.

- The study also documents that the stockholders of the acquiring firms gain more as compared to the target firms in acquisitions. The case is reversed in case of mergers.
- Finally based on the study it can be concluded that mergers are a better value creating tool as compared to the acquisitions process.

A paper by Saboo & Gopi (2009), titled “*Comparison of post-merger performance of acquiring firms (India) involved in domestic and cross – border acquisitions*” aimed at reviewing the operating performance of firms advancing the M&As path for their expansion plans in the Indian corporate scenario post 2000. It was also an attempt to test whether there were any variations in the outcome due to mergers in domestic market as compared to those in overseas market. The results of the analysis show that the performances of the acquiring firms have been impacted negatively after the foreign merger. The decrease was observed when the results were analyzed for performance ratios of pre and post 1-year of merger and pre and post 2 –years of mergers. The hypothesis that Merger of cross – border firms has improved the operating performance of the acquiring firm was rejected. Another point which has emerged from the analysis is that merger has different effect when a domestic firm is acquired or when a cross- border firm is acquired. Therefore, the hypothesis that Merger effect does not depend on whether it is cross border acquisition or domestic acquisition is also rejected. There are certain limitations of the study and the different samples are not of the same characteristics. Another factor which may cloud the real effect is that the sample period is 2000- 2007 and there have been two bubble bursts- the dot com bubble and the real- estate bubble during this time frame.

The paper by Saraswathy (2010) titled “*Cross-border mergers and acquisitions in India: extent, nature and structure*” focuses on the merger wave in the overseas economies where the M&A is the favorite mode of corporate restructure as compared to Greenfield investment. The paper uses firm level data for identifying three distinct phases of merger activity of India. The pre mid 1990s merger scenario was dominated by domestic deals, followed by an increasing number of cross-border deals within the country since the mid-1990s. Finally, the last stage of overseas deals during the post 2000 period shows that the economy is shaping gradually for merger motives. The study shows that the service sector mergers are the major force of the world FDI movement. It was concluded that 35% of the mergers and acquisitions deals occurred in India during 1978 to November 2007 were cross-border. It significantly increases only after mid-1990s. Sector-wise, manufacturing has been the largest seller, whereas the service sector made the majority of the purchases. The share of primary sector share remained to be insignificant. Within manufacturing, Drugs and Pharmaceutical industry, other chemicals, domestic appliances, automobiles were the dominant sectors and within services it was banking and finance. The value analysis shows that majority of the deals were small but there was a considerable number of mega deals which accounted for the 87% of the value involved. Another interesting dimension of M&A scenario is the recent increase both in terms of number and value of the acquisitions by the Indian companies as a part of their market expansion strategy. They account for a much higher share than the inbound deals. This phenomenon emphasizes the acquisition spree of the Indian firms. During the time span of 1994 to November 2007, there were 563 such deals of which the majority took place after 2000. A gradual shift from foreign investment to Brownfield investment can be observed which would eventually lead technology spillovers and thereby higher productivity and efficiency. The incidence of large number of horizontal deals principally the cross-border deals raises another issue -foreign control. The data also

shows that maximum of the deals are mega deals and are frequently engaging in consolidation strategies in order to grow faster. Thus the current rush in cross-border deals should be viewed in a multi-factor dimension involving the push factors from home country such as market constraint, need for low priced factors of production, increasing global competition as well as the pull factors from foreign countries such as the wider market, technology, efficient operation.

### Concluding Remarks

This paper is an explanatory attempt for examining the different studies that have been carried out in the field of M&A which is one of the most widely applied techniques of corporate restructuring. The study includes 38 papers by various researchers and the earliest study enumerated here dates back to 1983. The latest paper in the study is in 2010. Mainly the papers try to focus on the motives of the mergers and acquisitions. Some papers measure the performance changes in the pre and post-merger scenario while others measure the gains of the shareholders of the participating firms. All the above papers though are not exhaustive but mainly emphasize on the mergers and its effects. Maximum of the papers show that the target firms are more beneficial as compared to the acquirers. The Indian merger scenario took a quantum jump after the post liberalization period. One interesting phenomenon is the comparison of the Greenfield Investment and the Merger, both having the same source of Finance i.e. the FDI flows. It is seen that the mergers in Indian economy is in the third phase of its development and mostly the firms are venturing abroad for acquiring the firms. Since the former involves mainly new capital assets, while the latter is just a transfer of existing ones. Greenfield FDI would affect growth more through increased physical investment, while M&A FDI would be more likely to do so through enhanced productivity growth. **Synergy is the reason for mergers.** It implies a situation where the combined firm is more valuable than the sum of the individual firms combining. It refers to benefits other than those related to economies of scale. The combination of two firms will yield a more valuable entity than the value of the sum of the two firms if they were to stay independent:

$$\text{Value (A + B)} > \text{Value (A)} + \text{Value (B)}$$

Mergers and Acquisitions are an important sphere of the corporate strategy and after the liberalization of 1991 have acquired a new dimension in the Indian economy. Even though it is difficult to count the deals since most of them are not declared in public and many are anonymous but the trend shows that M&A are coming up in the world economy in a big way. With the changing economic structure, mergers could well be a major driving force.

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I have been a MBA faculty from the year 2007 and have been part of various B-schools. Presently I am pursuing my Ph.D from the Department of Commerce, University of Calcutta and working in the finance background and my area of research is Mergers and Acquisitions. The present work is a review paper of the existing literature in this area and it is an attempt to design the platform of my doctoral thesis which would be reviewing the performance of the merged firms in the post-merger era.





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