EMPLOYEE VOICE BEHAVIOR IN ORGANIZATION: MEASURING THE INFLUENCE OF VOICE EFFICACY TOWARDS EMPLOYEE VOICE BEHAVIOR

Abhijeet Singh Chauhan

Research Scholar (Management), Jiwaji University, Gwalior

Naveen Sharma

Ph.D., Asst. Professor (Management), B.V.M College of Management Education, Gwalior

ABSTRACT

Although very few studies were conducted on voice efficacy but after going through the literature some evidences were found showing the direct & indirect effects of voice efficacy towards employee voice behavior. The present study was an effort to analyze the relationships among Voice efficacy & Employee voice behavior. The study was conducted on 120Service sector employees working at managerial levels from Madhya Pradesh region. Standardized scales for Voice efficacy & Employee voice behavior were utilized in order to collect the responses & Regression analysis was used to identify the causal relationship among voice efficacy & employee voice behavior. Results of the analysis showed positive relationships between Voice efficacy & employee voice behavior. The present study provides various suggestions for organizations to promote voice behaviors among their employees.

Keywords: Voice Efficacy, Employee Voice Behavior, Regression, Service Sector, Madhya Pradesh

INTRODUCTION

Employees as a part of any organization observe & analyze the organization in a better way which employers cannot, because the employees are the internal customers of the organization & they know what seems to be good & what seems to be bad for the organization. We know that customer feedback is the basis for the betterment of any product, similarly it applies to organizations too because

Employee voice behavior

Employee voice is the mechanism through which employees voice out their perspectives on business & Employment issues with management. It's the principle route through which employees can convey issues which affect them. Voice surmises that communication among management & employees is a two-way exchange that engages employees to express what is going on in the organization. Employees can have a voice straightforwardly, by giving association their points of view independent from anyone else, or in a roundabout way through a legitimate body (Marchington, 2008; Freeman et al, 2007).

LITERATURE REVIEW

There is dearth of literature in the field of Voice efficacy & Voice behavior as very few studies were conducted on them, but some researchers have identified its importance & relevance in promoting voice behaviors among employees.

Jiang, Gao & Yang (2018) conducted a study to measure the influence of Employee's critical thinking as well as leader intrinsic motivation on voice behaviors through the mediation effects of voice efficacy & findings of the study disclosed that critical thinking & leader intrinsic motivation are positively & significantly linked to employees voice behavior & voice efficacy also positively intervenes the link among employees' critical thinking, leaders' inspirational motivation, & employees' voice. Their study revealed voice efficacy as a driving force among the linkage between employee critical thinking, leader intrinsic motivation & Employee voice behavior.

Wang, Gan, Wu, & Wang (2015) emphasized on the importance of social learning theory among the connection between ethical leadership & employee voice behavior. The research was conducted on supervisors & subordinates from 9 organizations of People republic of china.

Results revealed that there is a positive connection among ethical leadership & Employee voice behavior & also a positive mediation effect of voice efficacy among the relationship between ethical leadership & employee voice behavior as voice efficacy bolsters the positive connection among Ethical leadership & Employee voice behavior.

Tian & Huang (2013) revealed a positive connection among Empowering leadership & employee voice behavior through the mediation effects of Voice efficacy & the mediation effects of OBST in the relationship empowering leadership & Employee voice behavior. They suggested that voice efficacy is important to maximize the positive influence of empowering leadership on Voice behaviors

while OBST is important for defining the relationship between Voice efficacy & empowering leadership."

Duan, Kwan & Ling (2014) performed a study to evaluate the relationship between general self-efficacy, perceived team servant leadership, & perceived organizational support on voice behavior.

It was revealed that voice efficacy enhances the effects of above mentioned constructs on employee voice behavior & it was observed that the effects of voice efficacy towards employee voice behavior are conditional only when there are high levels of organizational support.

Xie, Chu, Zhang & Huang (2014) revealed the positive effects of proactive personality on Employee voice behavior through the mediation effects of Voice efficacy & moderation effects of perceived delegation.

They suggested that personality is not the only factor which influences the voice behavior among employees but it requires voice efficacy which reduces the levels of fears, stress, vulnerability & threats of speaking up in the organization.

Duan & Wei (2012) conducted a study on the relationships between General self-efficacy, voice efficacy & Employee voice behavior. The results disclosed the positive mediation effects of Voice efficacy in the formation of relationship between general self-efficacy & Employee voice behavior.

Song, He, Wu & Zhai (2018) analyzed the connection among promotive & prohibitive voice & job satisfaction, through the intervening role of self-efficacy & the appeasing role of transformational leadership.

Outcomes from 88 employee– supervisor dyads showed that promotive & prohibitive voices totally mediated through job satisfaction. Besides, the connection between promotive voice & job satisfaction was completely mediated through self - efficacy, though the connection between prohibitive voice & job satisfaction was partly intervened through self- efficacy. Transformational leadership appeared the impact of prohibitive voice on self-efficacy.

After going through the literature on Voice efficacy & EVB It may be presumed that:

 H_{o} : "There is a positive relationship between Voice Efficacy & Employee voice behavior"

METHODOLOGY

The research paper was an Empirical study with survey method utilized to conduct the study. Population for the study was the Service Sector Employees working at managerial levels from M.P. Region (Gwalior, Bhopal, Indore, & Jabalpur). Non-Probability purposive sampling technique was utilized in order to decide the sample, whereas the initial sample size was 200 respondents but due to some reasons this did not happen, that's why the final sample size was 120 respondents. The data was collected using both online & off line survey methods. The standardized scale of Tangirala, Kamdar, Venkataramani & Parke, (2013) for Voice efficacy & standardized scales of Botero & Van Dyne, (2009) for Employee Voice. Data analysis was done using reliability (For checking the internal consistency among variables) & regression analysis (For checking the relationships among variables.

DATA ANALYSIS

Reliability analysis

Table 3: Reliability Statistics					
Variable	Cronbach's Alpha				
Voice efficacy	.727				
Employee voice behavior	.820				

The value of Cronbach's Alpha greater than 0.7 is considered good Nunnally (1978) indicating that both of the variables could be used for further data analysis.

Regression Analysis

Table 2: Model Summary							
Model	Model R R Square Adjusted R Square Std. Error of the Estimate						
1	.627a	.559	.658	2.47936			
a. Predictors: (Constant), Voice efficacy							

This table displays R; R squared adjusted R square & Standard Error. R is the correlation between the observed & predicted values of the dependent variables. The value of R ranges between -1 to 1. The sign of R indicates the direction of relationship (positive or negative). The absolute of R indicates the strength, with larger absolute values indicating stronger relationship. So here in the above table of model summary we have the R value .627 which lies between -1 to 1, showing a moderate relationship. R squared is the proportion of variation in the dependent variable explained by the regression model the value of R squared ranged from 0 to 1.

So here the value of R square which was found to be .559 indicating that voice efficacy as independent variable explained 55.9% variance on Employee voice behavior as dependent variable."

	Table 3: ANOVA									
M	odel	Sum of Squares	df	Mean Square	F	Sig.				
Regi	ression	5002.741	1	5002.741	813.82	.000ь				
Resi	dual	823.729	134	6.147						
Tota	1	5826.471	135							
a.	a. Dependent Variable: Emp voice									
b.	b. Predictors: (Constant), Voice efficacy									

The F statistics is the regression mean square divided by the residual mean square. Here F value is 813.820which is significant at 0% level of significant. This means that

final model significantly improves our ability to predict the dependent variables. Since the F value is coming out to be 813.820 which is significant at .000 level of significance. Therefore, the model is showing the good fit.

	Table 4: Coefficients								
Model		Unstandardized		Standardized	T	Sig.			
		Coefficients		Coefficients					
		В	Std. Error	Beta					
1	(Constant)	3.458	0.759		4.558		0		
	Voice efficacy	0.463	0.016	0.627	28.528		0		
a. De	a. Dependent Variable: Employee voice								

As per the Coefficients table, it was found that the voice efficacy significantly predicts the employee voice behavior among employees in service sector companies (β =0.463, p<0.05). It indicates that there is positive & significant relationship between Voice efficacy & voice behavior of service sector employees. Hence the hypothesis stating that "There is a positive relationship between voice efficacy & Employee voice behavior" was supported.

CONCLUSION, SUGGESTIONS & LIMITATIONS

Voice is kind of feedback, suggestion or a concern expressed by any employee for the betterment of the organization. Results of the study explained Voice efficacy as the facilitator of voice behavior among the employees. It reduces the fears, stress, & perceived threats of speaking out among employees as a result they engage themselves in voice behaviors in organization. The results showed a positive & significant relationship between voice efficacy & employee voice behavior which means that voice efficacy helps in the formulation of voice behavior among the employees. The voice efficacy is also dependent on various psychological factors such as psychological safety, organizational climate & support as well as the inherent personality traits of employees. It is not possible for all the employees to have voice efficacy then it is the responsibility of employers to create an organizational climate that is open to welcome the opinions of employees in the workplace i.e. "Open door policy" as a result they will feel more empowered & satisfied with their jobs which will be reflected in their performance also. The

present study contains several limitations which can be cover up through future researches like it was only focused on voice efficacy but there may be various mediators which may define the relationships between voice efficacy & employee voice behaviors. Another limitation of the study was the sample size as it was done on a small sample size & the population was also confined to service sector employees of Madhya Pradesh region only.

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CORPORATE GROWTH THROUGH ACQUIREMENT: WHETHER SUSTAINABLE?

Syeda Shabnam Nishat

Research Scholar, Dept. of Commerce, Vidyasagar University, Midnapore (W), syeda.shabnam786@gmail.com

Tagar Lal Khan

Professor, Dept. of Commerce, Vidyasagar University, Midnapore (W) tagarkhan@yahoo.com

ABSTRACT

In contemporary worldwide situation, Mergers and Acquisitions (M&A) has become a typical technique for corporate to develop. At the point when organization needs quick development, this strategy may be perhaps the best alternative for them, since it (M&A) gives the moment result. In countless events M&A has substantiated itself as a genuine way to develop, and to make the ideal progress. M&A makes the extent of development for the organization which causes it in making investors' wealth, to go into the new market just as to extend in existing business sector and to improve the money related outcomes.

M&A may empower organizations to appreciate various advantages like, getting talented and quality staff, getting to in worldwide market, catches undiscovered local market, lessen risk from contenders, increment income and some more. This paper looks at the effect of M&As, in Indian situation, on their financial exhibition considering pre and post-merger situation, and furthermore analyzes whether such execution be taken as supportable. A few noteworthy exhibition (money related) financial ratios of the organizations, their market size, development and profitability have been evaluated to fill the need.

Keywords: Mergers and Acquirement, Corporate Growth, Performance Ratio, Sustainability

INTRODUCTION

To be successful and consistent in business, corporate development is important and a requirement for business firm. M&As are considered as one of the popular

corporate strategies for achieving faster and unwavering growth. M&A is also accepted as a means that companies adopt to accomplish the benefit of best managerial expertise, bigger market share in a competitive environment, increase profitableness, hold market leadership, increase their capital base and so many. It is an external outgrowth strategy that has become now-a-days a popular phenomenon in several countries around the globe probably causing from increased pressure through denationalization, deregulation, globalization, intensive competition, economic disappointment etc.

The common motives behind M&As for the corporate are to achieve desire growth and sustain profitableness. M&As are considered as one of the most popular avenue of corporate restructuring or business combination which might play a pivotal role in the external growth of companies. According to Thomson Reuters M&As deals reached on a pick in 2006 grasping \$4 trillion globally. However, it slowed down worldwide in 2007-08 largely due to global financial crisis and down act of the security market around the world. According to the Grant Thornton Report, Global M&As activity again recovered in 2010, with a 3.8% increase in the number of announced transactions.

Even though M&As are planned sensibly there might have some integration problem between the acquirer and the target and this may be due to their conflicting soul objectives, different attitude and culture of the acquirer and the target, clients attitude toward the merged or acquired company and so on. According to Harding & Rouse "The success of most acquisitions hinges not on dollars but on people". (Harvard Business Review, 2007).

Under the above background, the focus of this paper is to examine whether M&As of the Indian corporate are mostly successful and how much it serves for sustainable growth for them.

REVIEW OF LITERATURE

Ample studies have been conducted on M & As from time to time throughout the globe. Brief follow-up of some of such important studies in India and abroad are given below:

Kiymaz and Kilic (2004) examined the cross border M&As and its impact on the stock price behaviour of target and acquirer companies. The researchers analysed stock price behaviour around event day by applying the jump diffusion model and then compared result of the model with the pure diffusion model to measure the performance of firms. The authors found that the jump diffusion model was better for measure the wealth effects of M&A on foreign targets and bidder. Even in case of multiple announcements of mergers the authors found that the jump diffusion model had been consistent and was better appropriate than the diffusion model, especially when there had been information leakage.

Lin and Chen (2006) investigated job performance of employee affected from mergers from the view point of business moral principles. The researchers focused on employee related ethics which helped in merger and acquisition a success. The authors considered employment security, justice, and caring practices by employer that driven the employees towards their ethical behaviour. The authors found job performance of the employees and the acceptance of new environment created by M&A was bestowed upon their commitment towards their mother organization, which also enhanced their ethical behaviour towards the organization.

Bertoncelj and Kovac (2007) inspected the key element of success (hard and soft) of M&As. The authors considered five basic components, namely, growth, resourcefulness, optimization, economic value and stakeholders' value for judging the success of M&As. Among soft factors learning, management team, intelligence, managerial traditions, communication, and in hard factor acquisition search, diligence, financial resourcefulness, added value potentials (synergies) and post-acquisition integration plan had been considered. The authors found that tough success factors were more sensitive to elastic success aspect for M&As to be successful.

Mantravadi and Reddy (2007) searched on the success of Indian firms due to involving towards M&As. main direction in the subject area was firm-size. Acquirers' performance ratios indicated size of the absorbing firms had impacted considerably on their operating consequences. Rakshit and Chatterjee (2008) studied how companies restructure their business through M&As. The authors also examined whether this strategy of corporate restructuring had positive or not. The authors considered a period of 10 years from 1995-96 to 2004-05. The authors considered ICICI Bank Ltd in order to conduct the research. To measure the performance and effectiveness of bank the authors applied EVA. The authors did SWOT analysis to provide the logic of this strategy of corporate restructuring. The authors found that ICICI Bank not gain that much profit immediately after the merger. Due to improper asset management the company face some loss in the in the years 2001-02 and 2002-03. Lastly, the authors could not draw a clear conclusion regard to corporate restructuring.

Kale (2009) studied the increasing trend of overseas acquisitions by the Indian firms. The author found that the reasons were in many fold. It helped the firms to have an access in the global market more easily in a quicker pace, it enhanced the technological efficiency of the acquirer and achieved skilful and talented employees of international focus. These achievements helped the Indian firms to face the global threat of competition and to create shareholders' value. Egle and Rima (2009) analysed the reasons for involvement in M&As. The writers considered growth and expansion as primary and synergy, access to intangible assets, diversification etc as secondary motives for M &As. They concluded that restructuring the capital was the prime reason for M &As.

Mishra and Chandra (2010) made a research on results of M&As on financial performance of Indian pharmaceutical companies based on 52 selected firms from the industry. Variables like Firm Size, Market Size, and intensity of Export and Import, sales, R&D expenses, advance technology had been examined as significant factors of mergers. The study documented that firm size, export and inland selling efforts had acted favourably on firm profitability. From the empirical results the authors found that firms those had larger market share suffered from lower profitableness in long run, which clash with general perception.

Sieage and Simons (2010) examined the effects of M&A on firm performance, productivity, as well as on the compensation and career development of workers. The writers evaluated the impact of M&As on the firm- performance considering the changes in short-run stock prices (through event study), long-run stock prices as well as accounting net profit. The paper found that plant productivity was raised more in partial acquisitions as compared to full acquisitions. Regarding firm performance the writers found that profit gain through M&A had not sufficient as expected. Other ways, the writers documented that mergers had upbeat on the career of workers.

Leepsa and Mishra (2012) investigated Financial Performance of Indian manufacturer in merged period. Event Study methodology had imposed for assessing the acquiring performance. Paired-t test was adopted to inspect the changes in economic performance due to M&As. The authors considered 3 prior and post years in the window. Paired-t test outcomes documented that earning of the companies had some incrementing trend when measured by ROCE and decreasing trend when measured by RONW in merged period. In a paper Popovici and Turliuc (2014) examined the efficiency of European banks in post-merger period. They found that due to M&As the total productivity of banks increased around 2.5% for positive change in technological efficiency. The authors argued that M&As remained beneficial to the banking sector and thus mergers served in a positive way to fulfil the purpose of banks to grow and to earn more profit.

Cherkasova and Zakharova (2016) examined the problems of suboptimal investment decision (under or over investment) involved in the process of acquisitions of targets. The researchers studied not only the level of investment in target companies but also examined whether investment decision in this regard had been changed resulted from such takeover. The researchers found that there involved suboptimal investment problem (underinvestment or overinvestment) in 74 out of 145 sample cases. Fuad and Sinha (2018) searched entry time and success of early movers' in merger-waves. With simulation analysis, the waves in 8 industry houses over 2000-2014 were observed. Tobin's regression was applied to study entry-timing within M&As waves and impact of entry-timing was measured on financial outcomes. Business groups belonging firms doing international business were found as early movers in the wave. The research found entry advantage in terms of performance was reaped by the early movers.

STUDY OBJECTIVES

- 1. To evaluate the financial functioning of firm during pre- and post-acquisition stages.
- 2. To examine whether the performance has enhanced in post-acquired time.
- 3. To search if size of acquiring companies has any impact on performance.

HYPOTHESIS

Null Hypothesis

H01: Financial functioning of firm during post-acquisition stages has not enhanced H02: Size of acquiring companies does not have impact on performance in post-acquired time.

Alternatives hypothesis

HA1: Financial functioning of firm during post-acquisition stages has significantly enhanced

HA2: Size of acquiring companies has significant impact performance in post-acquired time.

DATA AND METHODOLOGY

The study is based on the secondary data of manufacturing companies in India that involved in M&As. The data are collected from Capitaline data base package provided by Capital Market Publisher India Ltd. Data also being collected from the websites of respective companies. For conducting the study we have taken a sample of 60 companies out of 426 listed manufacturing companies engaged in M&As during the period 2005-2012 and considered 5 years in pre-merger period and 5 years in post-merger for assessment purpose.

Here, our actual study period is confined to 2002-2017. A systematic sampling procedure has been followed dividing companies engaged in M&As into four quartiles on the basis of their asset size and after that top 15 companies from each quartile is represented for better reflexion. In order to assess the merger performance we have considered financial ratios such as return on capital employed, return on net worth, earning per share, as well as other parameters for example sales growth, total debt etc. We have made descriptive analyses on different financial parameters in pre- and post- merger period on the total sample, on large mergers and on medium and small mergers. Applying paired- t test we have examined whether there is any major upswing in performance of acquiring companies in post-merged time.

ANALYSIS AND FINDINGS

The study compares pre- and post-merger performance of a sample of 60 amalgamating companies. We have computed average values of different financial parameters and their fluctuations (SD) for five years before and five year after merger (excluding the year of merger) which are shown in the following table.

Table - 1: Mean and S. D. of Profitability of the acquiring firms in pre-and post-merger period

		M	ean	Standard	Deviation
		Pre-merger	Post-merger	Pre-merger	Post-merger
EPS	Full Sample	6.265	14.047	9.213	15.212
	LargeAcquirer	7.756	21.799	9.151	21.283
	Small Acquirer	4.773	6.294	9.275	9.140
RONW	Full Sample	12.976	13.965	10.896	16.031
	Large Acquirer	12.703	16.672	11.157	12.245
	Small Acquirer	13.248	11.257	10.635	19.816
ROCE	Full Sample	14.285	15.817	10.227	14.659
	Large Acquirer	14.916	17.571	10.280	12.137
	Small Acquirer	13.654	14.062	10.173	17.181
INT-COV	Full Sample	13.102	14.135	35.454	30.567
	Large Acquirer	13.543	16.474	43.077	28.642
	Small Acquirer	12.661	11.796	27.830	32.491

Authors' computation; Data source: Capitaline Database.

Table- 1 shows that mean EPS of companies has been increased to 14.047 in post-amalgamating period in comparison to 6.265 in pre- amalgamating period. Thus, there has a considerable increase in EPS of companies in post- amalgamating period. However, the fluctuation of EPS in post- merger period has also been increased which shows higher inconsistencies in EPS of the companies in post-merger period. The observation for full sample as well as for large acquirer regarding EPS change does not match with the observation for small acquirer. For small acquirer the EPS of the companies is more stable in post-merger period compared to the pre-merger period.

On the other hand though RONW and ROCE of companies have been increased in post-merger period, the magnitudes of increase are not that much. RONW for the small acquirers has been decreased in post-merger period (13.248 to 11.257). The data also exhibit considerable increase in the inconsistency of the parameters in the post-merger period. Change in interest coverage ratio in post-merger period is more or less in the same line of RONW and ROCE except it is less fluctuating in post-merger period. Next, we have compared the average changes in the performance parameter *viz*. EPS, RONW, ROCE and Interest Coverage in post-amalgamation period with their pre- amalgamation counterparts and tested whether the improvements in performance parameters in post- amalgamation period are statistically significant. For this purpose we have applied paired- t test

and the results are depicted in Table-2 below:

Table - 2: Results of Paired - t test

Parameters		Paired Diff.		Con	np. value ar	nd Sig.
		Mean	Std. Error	t-value	df	Sig. (2-
			Mean			tailed)
EPS: Post- Pre	Full	6.90	2.171	3.178**	59	.002
	Sample					
EPS: Post- Pre	Large	12.269	3.860	3.179**	29	0.004
	Acquirer					
EPS: Post- Pre	Small	1.537	1.519	1.011	29	0.320
	Acquirer					
RONW: Post- Pre	Full	<i>7</i> 51	1.892	397	59	.693
	Sample					
RONW: Post- Pre	Large	3.422	2.509	1.364	29	0.183
	Acquirer					
RONW: Post- Pre	Small	-1.919	2.790	-0.688	29	0.497
	Acquirer					
ROCE: Post- Pre	Full	1.478	1.614	916	59	.364
	Sample					
ROCE: Post- Pre	Large	2.598	2.359	1.101	29	0.280
	Acquirer					
ROCE: Post- Pre	Small	0.358	2.226	0.161	29	0.873
	Acquirer					
INT-COV: Post- Pre	Full	0.819	7.049	0.143	29	0.887
	Sample					
INT-COV: Post- Pre	Large					0.804
	Acquirer	2.296	9.157	0.251	29	0.004
INT-COV: Post- Pre	Small					0.926
	Acquirer	-0.657	7.049	-0.093	29	0.920

^{**}Significant at 1 level.

Authors' computation using SPSS 23.0

The paired- t test results show that EPS has significantly improved in post-merger period at 1% level for full sample as well as for the large acquirer. However the improvement of EPS for small acquirer is not statistically significant. Though there are improvements in RONW and ROCE in post-merger period, such improvements are not statistically significant. Additionally, the increase and decrease in interest coverage ratio for both large acquirers and small acquirers are not statistically significant.

Observing Table 1 and Table 2 we can say that in most cases though there is an increase in earnings of the acquiring companies in post-merger period, the increase is proportionate to the increase in capital employed or net worth. For this reason we are unable to find any significant change (increase or decrease) in average RONW or ROCE in post merger period. Ratio of earnings to interest liability is also found to be proportionate leading to insignificant change in interest coverage ratio in post-merger period. However, in case of large acquirer as we find significant increase in EPS in post-merger period, the result indicates that the large acquirers might have better liquidity strength that enabling them of acquiring the target by settling their

claims by cash and not by increasing the equity base and that is not similar for small acquirer.

Sales Growth

Like earlier, we have computed averages of sales growth of the selected companies of year on year basis in pre- and post-merger period and computed their standard deviations, and shown in Table 3.

Table-3: Mean and S. D. of Sales Growth of acquiring firms in pre and post-merger period

		M	ean	Standard	Deviation
		Pre-merger	Post-merger	Pre-merger	Post-merger
Sales Growth	Full Sample	-0.033	0.046	0.274	0.210
	Large Acquirer	-0.027	0.017	0.262	0.169
	Small Acquirer	-0.039	0.082	0.285	0.250

Authors' computation; Data source: Capitaline Database.

Results in Table 3 shows that the average sales growth in pre-merger period was negative and this negative growth has changed to positive growth in post-merger period. The sales growth in post-merger period has increased by 7.75% compared to the pre-merger period. The fluctuation in sales growth in year on year basis is also low in post-merger period compared to the pre-merger period. Thus, we can say that merger has good effect on the corporate as regards to the market share and its growth.

Next, we have applied paired-t test for testing whether the improvement in sales growth in post-merger period is statistically significant or not.

Table - 4: Results of Paired - t test

		Paired Differences		rired Differences Comp. value and Sig		ind Sig.
		Mean	Std. Error Mean	t	df	Sig. (2-tailed)
Sales Gr: Post-Pre	Full Sample	0.079	0.034	2.287**	54	0.026
Sales Gr: Post-Pre	Large Acquirer	0.045	0.036	1.247	29	0.222
Sales Gr: Post-Pre	Small Acquirer	0.109	0.059	1.922*	24	0.067

^{**}Significant at 5% level, * significant at 10% level.

Authors' computation using SPSS 23.0

Note: in case of small acquirers, sales growths of 5 companies are excluded for data inconsistency.

The result of paired t rest documents that the improvement in sales growth in post-merger period is statistically significant at 5% level for full sample. The sales growth in case of large acquirer in post-merger period is found to be statistically insignificant. However, there has been a significant improvement (at 10% level) in sales growth of small acquirer in post-merger period.

From the observation of Table 3 and Table 4 we can say that the possibility of hostile merger in case of large acquirer is more and the mergers might be unfriendly. Moreover, for large acquires their domestic market may be saturated and this might be the possible reason of their incapability to make significant positive growth in sales in post-merger period.

But for the small acquirer the acquisitions are more need based and friendly. For the small acquirers market opportunity existed which they gripped better through such mergers and hence, the result documented significant increase in sales growth for small acquirer.

Debt Changes

Sometimes companies force other companies to merge (forced merger) or takeover others from some market compulsions. Even the financial strength of the acquiring company is not up to the mark; they borrow huge amount of loan from the market with higher interest rate to acquire, which sometimes reflect adversely to the companies' financial performance. In this backdrop we have considered the average debt change (in amount) of the acquiring companies in post-merger period compared to the pre-merger period.

Table- 5: Mean and S. D. of debt of acquiring firms in pre -and post-merger period

		M	ean	Standard	Deviation
		Pre-merger	Post-merger	Pre-merger	Post-merger
Debt Changes	Full Sample	486.194	225.406	1128.219	276.261
	Large Acquirer	885.551	417.180	2094.811	512.900
	Small Acquirer	86.836	33.632	161.626	39.621

Authors' computation; Data source: Capitaline Database.

From Table 5 we observe that the average debt of acquiring companies in post-merger period has been reduced compared to pre- acquisition period, which is a positive sign for the acquiring companies. The fluctuation in loan amount has also been reduced in post-merger period for full sample, large acquirers as well as for small acquirers.

To test whether decrease in average debt in post-merger period is statistically significant or not we have again applied paired-t test and the result is shown in the following table:

Table-6: Results of Paired-t test

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		Paired Differences		Comp. value an		nd Sig.	
		Mean	Std. Error	t	df	Sig. (2-	
			Mean			tailed)	
Debt Change: Post Pre	Full	-260.788	159.017	-1.640	59	.106	
O	Sample						
Debt Change: Post Pre	Large	-468.371	321.463	-1.457	29	.156	
	Acquirer						
Debt Change: Post Pre	Small	-53.204	27.284	-1.950*	29	0.061	
	Acquirer						

Authors' computation using SPSS 23.0

Table 6 shows that though there has been a decrease in average loan in post-merger period in most of the cases, such a decrease in average loan of the companies is not statistically significant. The decrease in average loan in 5 year post-merger period is only significant at 10% level for the small acquirers.

Thus, our observation is supporting the proposition that the Indian companies are not taking unbridled loans for managing their M&As and in making such event successful.

CONCLUSIONS AND SUGGESTIONS

Based on the above findings we may conclude that mergers of Indian corporate have in general added the earnings available to the equity shareowners. The management of the companies are involved in efficient management of financing and they are not taking random loan from the market for necessary infusion of fund to make the mergers and takeovers effective.

M&As have also increased significantly sales growth for the Indian companies in the post-merger period. Though the companies failed to increase their returns in terms of ROCE and RONW in post-merger period but the event made them to be capable to maintain their earlier profitableness.

Thus, it may be said that the scheme of M&As by the Indian corporate by and large help them to increase the market share in the industry, increase the earnings of shareholders, and to maintain profitability and sustainable growth. Lastly, we may say that similar analysis with a larger section may also be conducted to draw better inferences.

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Annexure: List of Sample Companies

Sl. No.	Acquirer Co.	Industry	Target Co.	Yr. of Merger
1	ACC	Cement- Major- North India	Damodhar Cement & Slag Ltd	2005
2	AmrutanjanHealt	Pharmaceuticals Indian- Formulations	Siva's Soft Drinks Pvt Ltd	2005
3	Arvind Ltd	Textiles- Denim Fabric.	Arvind Fashions Ltd	2005
4	Atul	Dyes And PigmentsLarge	Amal Ltd	2006
5	BalkrishnaInds	Tyres- Large	BKT Moulds Ltd	2005
6	BannariAmm.Sug.	Sugar- Integrated	Maheswara Sugars Ltd	2005
7	Birla Corpn.	Cement- Major- NorthIndia	Talavadi Cements Ltd	2005
8	Bliss GVS Pharma	Pharmaceuticals Indian- Formulations	GVS Labs	2005
9	Carborundum Uni.	Abrasives and Grinding Wheels	ProdoriteAnticorrosives Ltd	2005
10	CEAT	Tyres- Large	Ceat Holdings Ltd	2005
11	Esab India	Electrodes Welding Equipment	Esab Welding & Cutting System Limited	2006
12	Excel Crop Care	Pesticides / Agrochemicals Indian- Large	TML Industries Ltd	2010
13	Firstobj. Tech.	Computers Software- Medium / Small	Tractel Solutions Inc., USA	2010
14	Firstsour. Solu.	IT Enabled Services / RevIT Systems Pvt Ltd Business Process Outsourcing		2010
15	Fischer Chemic	IT Enabled Services / Business Process Outsourcin	Rev IT Systems Pvt Ltd	2008
16	G S Auto Intl.	Fasteners	GS Automotives Pvt Ltd	2006
17	GallanttIspat	Steel - Sponge Iron	GallanttUdyog Ltd	2011
18	Ganesh Housing	Construction Housing Medium / Small	Ganesh Infrastructure Pvt Ltd	2007
19	Gayatri Sugars	Sugar- Others	GSR Sugars Pvt Ltd	2010
20	Graphite India	Electrodes Graphites	GKW Ltd	2005
21	Kamanwala	Construction Housing	Doongursee Diamond	2008
	Housing	Medium / Small	Tools Ltd(merged)	
22	Kanishk Steel	Steel - Medium / Small	Avanti Oil and Steel Industries Pvt Ltd	2008
23	Kavveri Telecom	Telecommunications Equipment Medium / Small	Kavveri Telecom Infrastructure Ltd.	2008
24	Keerthi Indus	Cement- Mini - South India	Hyderabad Flextech Ltd(merged)	2006
25	Kellton Tech	Computers Software- Medium / Small	Tekriti Software Pvt Ltd	2005
26	Kerala Ayurveda	Pharmaceuticals Indian- Formulations	Katra Healthcare Pvt Ltd	2010
27	Konark Synth	Textiles- Texturising	Excel Synthetic Pvt Ltd	2010
28	KPIT Tech.	Computers Software- Medium / Small	KPIT Cummins Infosystems (Bangalore) Pvt Ltd	2007
29	HCLTechnologies Computers Software- Large (Mum		HCL Technology (Mumbai) Ltd & BPO Services Ltd	2009
30	Precot Meridian	Solvent Extraction Large	Girdharilal Sugar & Allied Industries Ltd	2007

31	Prism Johnson	Solvent Extraction-Medium / Small	Prima Agro Ltd	2006
32	Proto Developers	Computers Software- Medium / Small	First Citizen Infrastructure Ltd	2010
33	PTL Enterprises	Tyres- Medium / Small	Artemis Health Sciences Ltd	2006
34	Quintegra Soln.	Computers Software- Medium / Small	Quintegra US Inc	2006
35	Rajapalayam Mill	Textiles- Spinning/Cotton/Blended Yarn- Ring Spg	Rajapalayam Spinners Pvt Ltd	2010
36	Rama Petrochem	Petrochemicals Others	Rama Fertilizers Private Ltd	2010
37	Regency Ceramics	Ceramics– Tiles	Regma Ceramics Ltd	2006
38	Eastcoast Steel	Steel - Medium / Small	Mind Factory Entertainment Pvt. Ltd.	2006
39	PratibhaInds.	Construction Civil / Turnkey - Medium / Small	One Metro India Pvt Ltd	2006
40	DIL	Pharmaceuticals Indian- Bulk Drugs	WhiteStripes Entertainment Ltd	2005
41	Chettinad Cement	Cement- Major - South India	Alagappa Cements Pvt Ltd	2005
42	DIC India	Chemicals- Speciality-	Rohit (Printing Inks &	
		Medium / Small	Paints) Industries Pvt Ltd	2005
43	Clariant Chemicals	Chemicals- Speciality- Large	BTP India Pvt Ltd	2005
44	Computer Point	Computers Peripherals /	Computer Point Education	
	1	Accessories	Ltd	2005
45	GHCL	Chemicals- Inorganic- Medium / Small	Colwell & Salmon Communications (India) Ltd	2007
46	gokakind	Textiles- Spinning/Cotton/Blended Yarn- Ring Spg	Forbes & Company Ltd	2011
47	Ginni Filaments	Textiles- Cotton Yarn 100% EOUs	Abhinav Investment Pvt Ltd	2011
48	Glodyne Techno.	Computers Software- Medium / Small	Broadllyne Technologies Ltd	2010
49	Godrej Inds.	Personal Care Indian- Large	Godrej Consumer Biz Pvt Ltd	2007
50	Sabero Organics	Cement- Mini - South India	Amareswari Cements Ltd	2008
51	Sagar Cements	Cement- Mini - South India	Amareswari Cements Ltd	2008
52	SahyadriInds.	Cement Products	Swastik Roofing Ltd (merged)	2008
53	Saksoft	Computers Software- Medium / Small	Synetairos Technologies Ltd	2010
54	Tata Chemicals	Textiles-Spinning- Synthetic / Blended	Wyoming 1 (Mauritius) Pvt. Ltd	2007
55	Tata Motors	Chemicals Inorganic Medium / Small	TataFinance Ltd(Merged)	2006
56	Tatia Global	Automobiles LCVs/HCVs	Tatia Stocks & Options Ltd	2008
57	Tech Mahindra	Textiles- Hosiery / Knitwear		2008
58	Technocraf. Inds.	Computers Software- Large	Danube Fashions Ltd	2006
59	EID PARRY	Sugar- Integrated	Santhanalakshmi Investments Pvt Ltd	2005
60	Sangamindia	Textiles-Spinning- Synthetic / Blended	SPBL Ltd(merged)	2010