

Impact of Organizational Size & Alliance Formations on Perceived Organizational Performance

Ajay K. Jain

This study examines the significance of the difference in the dimensions of organizational performance based on organizational size and alliance formations. The sample consisted of 250 middle level executives of two-wheeler manufacturing organizations located in northern part of India. The results of MANOVA analysis suggested that the collaborated small organizations had the high mean for organizational performance dimensions. The main effect and interaction effect were found to be significant for the organizational effectiveness dimensions. In the case of turnover intention, the mean of interaction effect was higher for collaborative large organizations. The implications of the study are discussed to understand the importance of globalization policy and establishing joint ventures in developing countries in future.

Ajay K. Jain is Associate Professor, Department of Human Behaviour & Organization Development, Management Development Institute, Gurgaon 122 001. E-mail: akjain@mdi.ac.in

Introduction

The present work is an empirical attempt to explore how organizational performance differs across the factors of organizational size and alliance formations within the context of two wheeler manufacturing organizations in the post-liberalization period in India. The impact of organizational size and alliance formations would be seen on the measures of organizational performance in terms of perceived organizational effectiveness, employee's morale, and turnover intentions. The auto industry in general and two wheeler organizations in particular is a good place to examine this question because liberalization and globalization of the economy has created environmental change for these firms. A recent work by Siggelkow and Levinthal's (2003) examined the firm's performance when competitive landscape shifts-a shock in the environment. Davis, Eisenhardt and Bingham (2009) found that 'the amount of structure' was central when the environment yielded a continuing flow of opportunities. The structure helps in achieving a dynamic fit between the organizational architecture and the environment (and other contingencies) which yields

good performance (Nissen & Burton 2011). Organizational size and alliance formations are two important parts of the organization's environment (Daft 2004) that may influence the internal functioning of the organization. Post-liberalization, the changing organizational environment has resulted in changes in organizational size and alliance formations status of Indian organizations. The present work explores the effect of firm size and alliance formations on organizational performance from the host country alliance partner's perspective.

Organizational Size

What should be the size of a firm for its better functioning has always been a critical issue (e.g., Baker & Cullen 1993, Friedman 1998). The size varies from large manufacturing organizations to modern service oriented small size software companies and boundaryless organizations (Fulk & Desanctis 1995). That organizational size is taken as one of the important contextual organizational dimensions (Daft 2003) underlie an organization's structure and work processes. For example, large organization size tends to create an organization that has greater formalization, specialization and centralization (Blau & Schoenher 1971, Blau 1971). The management, sociological and psychological literatures have provided the conceptualization of the development and implications of organizational structure (e.g., Pugh, Hickson, Hinings & Turner 1969).

Most of the studies using organizational size as a variable, define it as the

total number of employees (Kimberly 1976). Using the number of total employees as the measure of organizational size inherently mixes size with efficiency (Gupta 1980). Most of the evidences suggest that counting the total number of employees is as good as many other measures of size. For instance, one study found the correlation between number of employees and the organization's net assets to be .78 (Pugh, Hickson, Hinings & Turner 1969). Most scholars call organizations large when they employ more than fifteen hundred to two thousand employees (Robey 1986, Daft 1986). Organizations with fewer than fifteen hundred employees tend to be labeled "small".

In recent times, the nature and character of Indian organizations have changed because of technological advancements, severe market competition, rapidly changing preferences consumers, and integration with the world economy. Thus Indian organizations are moving from labour intensive to capital intensive organizations, from production to service organizations, from national to multinational organizations, from independent to interdependent organizations (Miles & Snow 1992), from large size to small or medium size organizations, from value creation inside to value creation outside the organization (outsourcing) etc. Indian organizations are also into their growth phase where the question related to size has gained importance in the post liberalization era.

The process of organizational transformation begins by examining the

organization's structure—the levels, jobs, reporting relationships, authority and power assigned to each job role, and so on. The restructuring would mean movement of people within the system or even out of it. This means that organizations have become more conscious of quality, customer expectations, size, de-layering, empowering employees, seeking strategic alliances with transnational and domestic companies, re-training workers and managers, and treating employees as the most important entities in an organization. Many Indian firms have also joined the downsizing movement, and shifting from large firms to smaller ones from cost-effectiveness point of view to increase organizational effectiveness.

The crucial requirements for success in a global economy are responsiveness and flexibility.

The proponents of small firm size perceive several advantages in being smaller in size, especially in the fast changing markets. The crucial requirements for success in a global economy are responsiveness and flexibility (Daft 2003). In the US, research shows that as global trade has accelerated, smaller organizations have become the norm. Since the mid-1960s, most of the large businesses that exist have lost market share world-wide (Friedman 1998). That is why a very good number of exporters are small businesses (Drucker 1997). The reasons attributed for the successes of smaller organizations are responsive, flexible, regional reach, flat organic structure, and simple niche finding entrepre-

neurs (Byrne 1989). Large size has the advantages of economies of scale but under stable market conditions. In India where market conditions are unstable and changing rapidly due to the process of globalization and liberalization, smaller organizations should be more flexible and responsive in adapting to the environmental changes. Size may have different consequences for a factor such as complexity, thus the increase or decrease in the number of occupational specialties will influence the need for programmed change in the organization to perform effectively and efficiently (Hage & Aiken 1970). Smaller organizations will have less complexity which will influence organizational effectiveness. Research shows that there is an inverted U shaped relationship between organizational size and organizational effectiveness. If an organization grows in terms of size beyond a certain point then effectiveness falls (Jones 2004). However, this finding is contingent on the nature of market conditions.

In the present Indian economic scenario, smaller organizations would be perceived as more effective compared to larger organizations because it will create condition of fluidity during the process of change. Evidence indicates that small organizations employed significantly lower levels of re-freezing activities and realized lower levels of implementation success relative to large organizations (e.g., Ford 2009). A critical question in the present study is whether small size has gained importance from organizational performance point of view. Indian two wheeler manufacturing organizations

are experiencing a period of rapid technological and market changes as they serve a vast Indian population in rural and urban areas. Based on the above discussion it is hypothesized that:

H₁: Organizational size will have significant negative correlation with the organizational performance.

Alliance Formations

Major economic reforms undertaken since 1991 have brought the Indian economy into a new phase of development directed towards becoming globally competitive through the opening of trade, foreign investment and technology advancement (Chadha, Pohit, Deardorff & Stern 1998). Investments from foreign multinational firms have played a vital role in market economy governed countries. A country like India depends on foreign direct investment as a means of improving their technological and economic competitiveness. Most often, the foreign investments occur through joint venture partnerships with local firms (Beamish 1994). Through alliance formations multinational firms hedge their risk in these relatively unfamiliar environments. Indian domestic firms see this as an opportunity to form alliances with multinationals to compete in terms of low cost and good quality. With the gradual opening up of various sectors of the Indian economy, many alliances have been formed between Indian and foreign companies. Examples from automobile industry include Ford-Mahindra, Hero-Honda, Escorts-Yamaha, Maruti-Suzuki, Hindustan Motors-Mitsubishi etc.

A strategic alliance involves at least two partner firms that remain legally independent after the alliance is formed; share benefits and managerial control over the performance of assigned tasks; and make continuing contributions in one or more strategic areas such as technology or products (Yoshino & Rangan 1995). Strategic alliances are developed and propagated as formalized inter-organizational relationships. These cooperative arrangements represent a new organizational formation that seeks to achieve organizational objectives better through collaboration than through competition (Todeva & Konke 2005).

Foreign partner involvement in the alliance formation can create value on a number of fronts. First and foremost, foreign partners can provide critical resources (e.g., product technology, operations, marketing) and influence on how resources are deployed (Inkpen & Beamish 1997). Such inputs may be essential for the early market performance and survival of a venture (Delios & Beamish 2001). Other sources of value creation through alliance formations may be by the transfer of knowledge from the parent to the joint venture (Argote 1999, Steensma & Lyles 2000), by developing new capabilities through tacit knowledge (Lane & Lubatkin 1998) and through reduction of transaction cost (Hennart 1991, Kogut 1988). This may create a need for programmed changes within the organization to perform effectively and efficiently. In the context of transitioning economies, Steensma, Tihanyi, Lyles, and Dhanraj (2005) have found that the value of foreign parent involvement for current

market performance and knowledge acquisition depends on the transition phase of the economy. Foreign parent involvement has a stronger influence on market performance in the early phase of an economic transition than in the later phase. In contrast, foreign parent resources had a stronger influence on knowledge for joint ventures in the later phase of the transition than in the early phase. In the context of R&D alliances, Sampson (2007) found that alliance organizational form more likely influences partner's ability and incentives to share information, which affects performance. Ahuja (2000) argued that alliances "serve as sources of resources and information" and demonstrated positive link between the extent of a firm's alliance activity and its performance. Based on the above discussion, it is hypothesized:

H₂: Alliance formations will have significant positive correlation with the organizational performance.

Organizational Size & Alliance Formations

At this point, we need to examine if home-country firms prefer small firms in the host country for alliance formation. As per literature, big firms possess distinct advantages which help them to go abroad (e.g., Friedman 1998). Now the important question is whether they collaborate with smaller partners in host country or big established firms. Bloodgood (2006) has seen the impact of organizational size and change in the financial performance of 129 public sector firms in the US and that the relatively

smaller organizations can increase their rate of change the most when their performance increases significantly. Larger organizations, on the other hand, tend to increase their rate of change the most when there is a significant reduction in financial performance. Thus the home-country alliance firms may prefer small firms in the host country for alliance formation because of the firm's readiness to change to increase the performance through international collaborations with a resourceful firm. A small firm has the advantage of flexibility and responsiveness during market shifts (Byrne 1989). They readily adjust in new emerging markets even with the needs and demands of their foreign partners.

A small firm has the advantage of flexibility and responsiveness during market shifts.

Another line of argument against forming alliances with large organizations may be related to "structural and cultural inertia" which exists in large size firms (Tushman & O'Reilly 1996). Old and large firms develop structural and cultural inertia over a period of time that resist the process of organizational change. As a result large firms may lack motivation and courage to go for foreign partnerships. Due to this reason, many foreign firms may prefer to work with smaller firms in the hope of future success. Otherwise it may lead to an early break up. Therefore, it means that small size will have positive interaction with alliance formation status. Based on the above discussion, it was hypothesized;

H₃: Small-Collaborated organizations will have better organizational performance compared to small non-collaborated, large collaborated and large non-collaborated organizations.

Participants & Procedure

The sample of the present study consisted of 250 male middle level executives from six two-wheeler plants such as Vespa, Piaggio, Lambretta, Innocenti of Italy and Honda of Japan belonging to the private sector, located in five different cities of north India. The employees were all males, 25- 45 years old and had spent at least one year in the same organization. Almost all of them were married and had a graduate degree or diploma in engi-

neering. The reason for choosing male executives for this study is that the organizations were motorbike manufacturing companies where females do not like to work or not given preference by the employer. The results of this study may not be generalized across females. The data were collected by administering questionnaires mainly during office hours with the consent of both the employer and the employee representatives. The response rate was above 80%. All questionnaires were in English and were adapted by using exploratory factor analysis and reliability analysis. The participants were chosen randomly from each organization and belonged to different departments of the organization. The summary of the sample characteristics is in Table 1.

Table 1: Summary of the Organizational Characteristics and Number of Respondents

Organization No.	Total No. of Employees (Size)	Alliance Formations	Respondents	Locations (Name of the Indian State)
1	5921 (Large)	Uncollaborated	53	Uttar Pradesh
2	1000 (Small)	Uncollaborated	56	Uttar Pradesh
3	3532 (Large)	Collaborated	40	Haryana
4	935 (Small)	Collaborated	36	Uttar Pradesh
5	1193 (Small)	Collaborated	43	Haryana
6	667 (Small)	Collaborated	22	Haryana

Measures

International Alliance Formation was considered to classify the sample organizations into collaborative and non-collaborative organizations. Two major collaborative ventures and two non-collaborative ventures are taken for the purpose of data collection. The collaboration was based on joint product and technological developments. The collaborative organizations are known by the joint organiza-

tional identity in the Indian market. However, non-collaborative organizations had purely an Indian identity.

Organizational size was measured through the number of full time members of the organization. The present study adopted the criterion of 2000 employees for making the difference between small and large size organizations. Those with 1500 (or less) employees are treated as small size firms. The criteria were

adopted by keeping the change coming in employee size after liberalization.

Perceived Organizational Performance

Researchers have little consensus as to what constitutes a valid set of performance criteria (Cameron 1981, Lewin & Minton 1986) and have suggested the use of multiple criteria (Cameron 1986, Hitt 1988, Daft 2004). Therefore, the criteria of perceived organizational effectiveness, employee's morale and turnover intentions are taken as the criteria of measuring organizational performance in the present study.

Organizational Effectiveness was measured through a 22-item questionnaire taken from Sinha (1992) and based on the work of Sutton and Ford (1982). Four significant factors were derived through exploratory factor analysis, namely: (1) Profit and Growth Oriented Organizational Effectiveness ($\alpha = .95$), (2) Resource Acquisition Related Organizational Effectiveness ($\alpha = .93$), (3) Perceived Overall Organizational Effectiveness ($\alpha = .87$), (4) Human Resource Acquisition Related Organizational Effectiveness ($\alpha = .92$). One item was deleted because of low factor loading.

Employee's Morale was measured through a five-item scale based on the work of Spreitzer and Mishra (1999). One item was removed because of poor factor loading and one significant factor was yielded based on factor analysis which is termed as Employee's Morale ($\alpha = .81$).

Turnover Intention was measured by using a 3-item scale from Cammann, Fichman, Jenkins, and Klesh (1979), which also had a single factor called "Turnover Intention" ($\alpha = .88$). It consisted of three items whereas only two items were found relevant for the purpose. The measures used in this study were borrowed from their original sources and adapted to the Indian work setting by using exploratory factor analysis technique. All survey items were rated on a 5-point Likert type scale ranging from 1 (true to almost no extent) to 5 (true to a very great extent). Results of factor analyses were based on Principal Factoring and oblique rotations using the SPSS-X statistical analysis package program. Factors were extracted by factor analysis according to the criterion of factor loadings = .30 and Cronbach's alpha reliability coefficient = .70 (Nunnally 1978).

Statistical Analysis

The principal method for analyzing the data was multivariate analysis of variance (MANOVA; Tabachnick & Fidell 1996). MANOVA is simply an analysis of variance with several dependent variables measured on a metric scale while independent variables are many with several levels and measured on a non-metric scale. The main objective of using MANOVA is to determine if the dependent variables (perceived effectiveness, employee's morale, turnover intention in the present case) are altered by the variations in the independent variables (size and alliance formation). MANOVA answers several questions like: What are

the main effects of independent variables? What is the interaction effect of independent variables on several dependent variables? And so on.

Results

An attempt was made to explore the effect of organizational size and alliance

formation status on perceived organizational effectiveness variables. The descriptive statistics pertaining to the variables appear in Table 2 and the MANOVA results in Tables 3-5.

The zero order correlations are consistent with first two hypotheses. Organizational size had significant negative

Table 2 Intercorrelations, Means, Number of Items, Standard Deviations, Croanbach's Alpha Reliability Coefficients Pertaining to Variables

No	Variable	Mean	SD	1	2	3	4	5	6	7	8
1	OSZ	2390	1950	NA							
2	AFS	1.56	.49	-.21**	NA						
3	PGOE	25.14	7.6	-.35**	.25**	.95					
4	RAOE	21.87	4.88	-.20**	.26**	.68**	.93				
5	POE	13.38	3.48	-.14*	.15*	.62**	.59**	.87			
6	HROE	9.99	2.99	-.33**	.13*	.69**	.72**	.52**	.92		
7	EM	12.85	3.47	-.03	.05	.33**	.18**	.18**	.16*	.81	
8	TI	5.65	2.23	-.04	.07	-.23**	-.10	-.30**	-.13*	-.45**	.88

Note: Coefficient alphas are reported along the diagonal. Sample Size is 250. Means and standard deviations are based on a 5-point scale. * $p < .05$, ** $p < .01$. OSZ = Organizational size, AFS = Alliance Formation Status, PGOE = Profit and Growth Oriented Effectiveness, RAOE = Resources Acquisition Related Organizational Effectiveness, POF = Perceived Overall Organizational Effectiveness, HROE = Human Resource Acquisition Related Organizational Effectiveness, EM = Employee's Morale, TI = Turnover Intention

correlation with factors of organizational effectiveness but did not show significant relationship with measures of employee's morale and turnover intentions. Furthermore, results also showed that alliance formation status had positive relationship with organizational effectiveness but did not show significant relationship with employee's morale and turnover intentions. It clearly appears that employee's morale and turnover intention have not shown a significant relationship with any of the independent variables. The Table also shows significant relationship among

different indicators of perceived organizational effectiveness.

MANOVA Results

Independent variables were alliance formations (collaborative and non-collaborative organizations), and organizational size (small and large). The ANOVA results for all measures of organizational effectiveness showed either the significant main effect of organizational size and alliance formations or the interaction effect of both.

Table 3: Multivariate Test of Significance for Effect of Organizational Size and Alliance Formations on Perceived Organizational Effectiveness

Multivariate Tests(b)						
Effect		Value	F	Hypothesis df	Error df	Sig.
Size	Pillai's Trace	.156	7.412(a)	6.000	241.000	.000
	Wilks' Lambda	.844	7.412(a)	6.000	241.000	.000
	Hotelling's Trace	.185	7.412(a)	6.000	241.000	.000
	Roy's Largest Root	.185	7.412(a)	6.000	241.000	.000
Alliance Formations	Pillai's Trace	.096	4.265(a)	6.000	241.000	.000
	Wilks' Lambda	.904	4.265(a)	6.000	241.000	.000
	Hotelling's Trace	.106	4.265(a)	6.000	241.000	.000
	Roy's Largest Root	.106	4.265(a)	6.000	241.000	.000
Size *						
Alliance Formation	Pillai's Trace	.119	5.410(a)	6.000	241.000	.000
	Wilks' Lambda	.881	5.410(a)	6.000	241.000	.000
	Hotelling's Trace	.135	5.410(a)	6.000	241.000	.000
	Roy's Largest Root	.135	5.410(a)	6.000	241.000	.000

(a) Exact statistic

(b) Design: Intercept + Size+ Alliance Formation + Size

* Alliance Formations

Table 4: Result of Analysis of Variance for Effect of Organizational Size and Alliance Formations on Perceived Organizational Effectiveness

Tests of Between-Subjects Effects						
Source	Dependent Variable	Sum of Squares	df	Mean Square	F	Sig.
Size	Profit and growth related organizational effectiveness	1244.610	1	1244.610	27.506	.000
	Resource acquisition related organizational effectiveness	123.654	1	123.654	5.660	.018
	Perceived overall organizational effectiveness	36.112	1	36.112	3.175	.076
	Human resource acquisition related organizational effectiveness	209.872	1	209.872	26.882	.000
	Employee's Morale	1.145	1	1.145	.095	.758
	Turnover intention	3.582	1	3.582	.724	.396
	Alliance Formations	Profit and growth related				

	organizational effectiveness	191.755	1	191.755	4.238	.041
	Resource acquisition related organizational effectiveness	239.331	1	239.331	10.955	.001
	Perceived overall organizational effectiveness	15.636	1	15.636	1.375	.242
	Human resource acquisition related organizational effectiveness	.339	1	.339	.043	.835
	Employee's Morale	1.648	1	1.648	.137	.711
	Turnover intention	13.192	1	13.192	2.668	.104
Size Alliance Formations	Profit and growth related organizational effectiveness	1066.705	1	1066.705	23.575	.000
	Resource acquisition related organizational effectiveness	35.353	1	35.353	1.618	.205
	Perceived overall organizational effectiveness	115.193	1	115.193	10.127	.002
	Human resource acquisition related organizational effectiveness	59.816	1	59.816	7.662	.006
	Employee's Morale	34.329	1	34.329	2.859	.092
	Turnover intention	20.923	1	20.923	4.231	.041
Error	Profit and growth related organizational effectiveness	11130.995	246	45.248		
	Resource acquisition related organizational effectiveness	5374.226	246	21.846		
	Perceived overall organizational effectiveness	2798.179	246	11.375		
	Human resource acquisition related organizational effectiveness	1920.551	246	7.807		
	Employee's Morale	2953.476	246	12.006		
	Turnover intention	1216.452	246	4.945		

Table 5: Newman-Keuls Test for Internal Mean Comparisons of the Means of Perceived Organizational Effectiveness Dimensions as a Function of Organizational Size and Alliance Formation

	Mean	Organization	CL	NCL	NCS	CS
Profit and Growth related Organizational Effectiveness	20.27	CL				
	22.79	NCL				
	22.79	NCS				
	29.37	CS	*	*	*	
			CL	NCS	NCL	CS
Perceived Overall Organizational Effectiveness	12.23	CL				
	12.50	NCS				
	13.13	NCL				
	14.47	CS	*	*	*	
			CL	NCL	NCS	CS
Human Resources Acquisition Related Organizational Effectiveness	8.18	CL				
	9.13	NCL				
	10.04	NCS	*			
	11.15	CS	*	*	*	
			NCL	CS	NCS	CL
Turnover Intentions	5.30	NCL				
	5.53	CS				
	5.66	NCS				
	6.40	CL	*			

Note. * = Significant at $p < .05$

NCL= Non-collaborative-Large Organizations, NCS= Non-collaborative-Small Organizations, CL= Collaborative-Large Organizations, CS= Collaborative-Small Organization

The results of MANOVA for organizational size, alliance formations and the interaction on the measures of organizational effectiveness were highly significant. Out of 6 outcome variables measured as function of size, alliance formations, and interactions, 2 interaction results namely, resource acquisition related organizational effectiveness and employee's morale did not yield the significant F-ratios. A two-way analysis of

variance of the profit and growth related organizational effectiveness, perceived overall organizational effectiveness and human resources acquisition related organizational effectiveness showed significant interaction effects. The internal mean comparison for the interaction effect showed that collaborated small organizations were found to be high on the mean of all the three dimensions of organizational effectiveness (Table 5).

These results support our third hypothesis. A two-way analysis of variance for the turnover intention (Table 4) showed that collaborated large organizations were high on the mean of turnover intention compared to non-collaborated large organizations.

Discussion

This research was designed to explore how the organizational performance variables differ across the factors of alliance formation and organizational size. The organizational performance variables were: perceived organizational effectiveness, employee's morale, and turnover intention. The ANOVA results for all of these dependent measures showed that either the main effects of organizational size and alliance formations or the interaction effect of both have turned out to be significant. These results lend support to all the three hypotheses.

The two-way ANOVA showed significant results for organizational effectiveness and turnover intention but not for employee's morale. The two-way analysis of variance for the profit and growth related organizational effectiveness, perceived overall organizational effectiveness and human resources acquisition related organizational effectiveness had shown the significant main effect and the interaction effect. The internal mean comparison for the interaction effect showed that collaborated small organizations were high on the mean of these three factors of organizational effectiveness compared to collaborated large, non-collaborated large and non-collaborated

small organizations. The results were consistent with the third hypothesis.

The result clearly shows that profit and growth and human resources acquisition were higher in collaborated small organizations. The reason may be that collaborated small organizations might have acquired modern ways of production and advanced form of managerial knowledge through their partner organizations. Being small in size they may have a positive attitude towards learning and have flexibility and responsiveness to current market shifts. They would have done restructuring through work force reduction, by adopting new technology, and developing new models of production etc. It is more likely that growth and profit might be high in collaborated small organizations. The reason may be that these organizations always require skilled and good quality human resource for the expansion of their plant capacity or establishing new plants elsewhere. They would have been able to attract and retain talented people. The result showed that human resources acquisition was also high in small-collaborated organizations. These results can further be understood by following different arguments given on the benefits of international alliance formations (e.g., Inkpen & Beamish 1997, Delios & Beamish 2001, Argote 1999, Steensma & Lyles 2000, Kogut 1988).

In comparison, collaborated large, non-collaborated small and non-collaborated large organizations were not found as effective. This may be due to the lack of taking initiatives in adopting modern

means of production. Theoretically, it is argued that large size firms develop structural and cultural inertia which prevent them to change their structure and culture in the changed market conditions. However, they could have been successful under stable market conditions (Tushman & O'Reilly 1996).

Results did not show significant effect on employee's morale. The reason may be that experimentation, innovation, morale and conflict are influenced by other individual and organizational variables than the size and alliance formations, for instance, culture, climate, structure etc. can play more important role compared to size and alliance formations.

A two-way analysis of variance for the turnover intention showed that both the main effects were non-significant. However, the interaction effect was significant. The internal mean comparison for the interaction effect showed that the collaborated large organization was higher on the mean of turnover intention compared to non-collaborated large organizations. The reason may be that collaborated large organizations have to comply with the new set of work values and culture of its collaborator. In the present case, an Indian domestic firm collaborated with a Japanese automobile-manufacturing firm. Japanese work values are significantly different from those in India (Sinha 1998). Collaborated large organizations have been going through the process of restructuring and re-engineering. The share of the collaborator in ownership has increased significantly in the recent past. Because of a new set of

work rules, they were rationalizing their work force. The employees were working in this firm since last more than ten years. Now they have been asked to leave or to take voluntary retirement. In comparison, non-collaborated large organizations were domestic firms with typical Indian style of management and work values where reducing manpower is considered an organizational stigma. It is only in the post liberalization period, Indian organizations have started talking about the process of laying-off the workers. A typical Indian manufacturing organization has reduced the hierarchical levels from 14-17 to 7-8 which further resulted into high turnover of employees in the case of collaborated large organizations.

Earlier studies on size have not much focused on the interactive effect with alliance formation status, however this study shows the importance of size and alliance formations status in determining organizational performance. The research evidence shows that small size is more effective compared to large ones under unstable market conditions. Scientists have noted several problems that arise from sheer number of people involved in a collective enterprise. These problems involve loss of primary group (face to face interaction), inadequacies and error in communication, difficulty to utilize wide range of skills, experience, and specialized knowledge, and the problem of social congestion and traffic (Katz & Kahn 1978).

Furthermore, this study has found the significant positive impact of alliance formations on organizational effectiveness

and significant interaction effect with size. This aspect has been ignored in many early researches on organizational size. This may be a good extension of Blau and Schoenherr's (1971) thesis on organizational size, who commented that size is the most important condition affecting the structure of organization. The result clearly indicates that size is not the only determinant of effectiveness but collaborative relationship with a multinational organization may also contribute to their overall effectiveness. Collaborative venture status is another structural variable which gives a good exposure to these organizations in terms of best management practices.

Liberalization has benefited the Indian economy in two ways. First, it has given the opportunity to collaborate to learn and grow in terms of the best production practices. Second, these multinational firms worked as a benchmark (model firm) for the rest of the domestic public or private firms. After liberalization public sector firms have also shown significant growth; for example, NTPC (power), SAIL (steel), ONGC (oil exploration), IOC (oil distribution) etc have also achieved profitable growth during these years and developed foreign collaborations. Another implication of the study may be for those large and successful firms who are planning to form alliances in a host country and can go for a smaller firm for the best results compared to large size firms if other things are remaining the same.

The major limitation of this work is the use of perceptual indicator of orga-

nizational effectiveness. In the future studies, the work can be extended by including real financial indicators of organizational performance like profitability, market capitalization, etc. In future work, we can also add the component of sustainable development as the measure of organizational performance. The present study used a sample from two-wheeler manufacturing organizations. A more varied sample of different organizations like four-wheeler automobile firms, pharmaceutical firms, and consumer electronics firms etc. can be used in future studies.

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