STRATEGIC ALLIANCE: AN INSIGHT INTO COST OF STRUCTURING

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Abstract

Several Problems associated with the beauty of inter-firm strategic alliance abounds. Some alliance results into structures that attract costs associated with uncertainty, poor stability, and performance. This study attempts to bring together these variables with a view to gaining insight into the implications of cost of structuring in an alliance. Data from 20 firms that have gone into alliances were used for analysis and findings supported the hypotheses suggesting the need to ascertain the difference between voluntary and involuntary inter-firm alliance.

Keywords: Strategic Alliance, Uncertainty, Opportunistic behavior, Non-recoverable Investments, Performance, Cost and Structuring

1. INTRODUCTION

Studies on alliances in industries have been carried out in the past two decades and the outputs of these studies have indicated a dramatic acceleration in the rate of formation of such alliances as well as their strategic significance to their parent firms' current and anticipated core businesses, markets, and technologies. Several firms have come to rely on alliances as strategic necessities for sustaining competitive advantage and creating customer value (Iyer, 2002) as well as assist them to acquire the means to compete within an ever complex and changing environment (Akkaya, 2007). According to Iyer (2002), alliances are interorganisational cooperative structures formed to accomplish strategic objectives of the partnering firms. Reports also revealed

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that such alliances in many cases can endanger individual members (Kolenak, 2007), and are frequently accompanied by problems of instability, poor performance, and collapse, with estimates of mortality rates ranging up to 65 % (Geringer & Hebert, 1991). In addition, the issue of structuring alliances to promote robust cooperation has become highly relevant for the growth and stability of firms going into alliances. Strategic alliance, as conceived by Telser (1980) is a voluntary inter-firm cooperative agreement, often characterized by inherent instability arising from uncertainty regarding a partner's future behavior and the absence of a higher authority to ensure compliance.

A growing body of theoretical research and empirical studies has addressed the issue of inter-firm cooperation. Several other studies have diagnosed the critical importance of alliance structure in promoting stable cooperation. However, most of these studies were not capable of identifying specific structural dimensions or specifying how those dimensions may be tied to the performance of alliance. In this article, three specific structural dimensions useful for effective cooperation are identified. These were suggested with the view to mitigating problems associated with previous research.

2. REVIEW OF RELEVANT LITERATURE

Hennart (1991) contends that cheating in cooperative ventures occurs because each partner finds it more advantageous to maximize his own gains at the expense of the venture. Kogut (1989), however, lamented the situation by saying that these circumstances create instability in alliance involving firms.

In supporting Kogut's lamentation on the state of instability in alliance Parke (1993) likened the game of alliance to two men suspected of a hypothetical major crime. These two men were locked up in a room and held incommunicado. Each must decide whether to cooperate or to defect, without knowing what the other will do. The authority posses evidence to hold them responsible for their offences. If neither of them squeals, both will draw a light punishment on the minor charge; this state of the game can be called a mutual cooperation (M) payoff. If one of them squeals and the other obstructs or impede progress intentionally, the squealer will go free. This is a situation of unilateral defection (U). The one who obstructs will, however, draw a very heavy punishment. This is a situation of unilateral cooperation (C). If both squeal, a moderate punishment will be meted on them. We call this mutual defection(D).

Each of these states of the game had preference ordering represented as U>M>D>C. It is obvious each person will be better off squealing than obstructing, no matter what his partner chooses to do, because U>M (this is the temptation to cheat) and D>C (this is the fear of being cheated upon). But if both defect, they would be worse off than when they cooperate (M>D). This will likely lead to an unfortunate situation. Such an unfortunate situation will create instability which can work against the strategy of reshaping the alliance structure to create the condition for robust cooperation. Reviewing this type of game situations Axelrod and Keohane (1996) identified three structural dimensions that can serve both as proximate explanations of cooperation and as targets of higher-order strategies to promote cooperation. These are the pattern of payoffs, the future situation,

and the size of players.

Firms can reduce behavioral uncertainty and enhance the robustness of cooperation by appreciating the role each dimension plays in partnerships and willfully altering the dimensions as necessary. This fundamentally affect prospects for the emergence and maintenance of cooperation for two major reasons. First, the driving force behind alliance formation is each participant's assignment of a net positive value to expected alliance outcomes. If a zero value is attached to the outcome of mutual co-operation when direct costs and collateral associated with alliances neutralizes benefits, the incentive for firms to cooperate will not be there. Second, although trust is a necessary condition for initial alliance formation, it is not sufficient to promote robust post-alliance cooperation and formation, in as much as the stability of a cooperative relationship is a function of the overall payoff structure. A payoff differences can be large or small and can increase or decrease, influencing prospects for cooperation through two paths. Shifts in preferences, either through deliberate strategies or through exogenous events can transform a situation from one class to another, thus altering the character of a relationship.

Strategic alliances are maintained as each firm compares the immediate gain from cheating with the possible sacrifice of future gains that may result from violating an agreement (Telser, 1980). The assumption here seems intuitively reasonable. Broken promises in the present will decrease the likelihood of cooperation in the future. In the same vein, cooperation in the current move can be matched by cooperation in the next move, and a defection can be met with a retaliatory defection thus, iteration improves

the prospects for cooperation by encouraging strategies of reciprocity. This bond between the future benefits a firm anticipates and its present actions is termed here as the "future situation." Cooperative performance is better promoted the longer the future situation, since forward-looking expectations of gains holds in check the loss toward agreement violations.

3.   TRANSACTION   COST   OF STRUCTURING

The transaction cost paradigm provides a useful means through which researchers can view essential aspects of alliances. One such aspect is suggested by Galanter (1981) as the private ordering that occurs in voluntary cooperative relationships. In private ordering, self-enforcing agreements are devised in such a way that if one party violates an agreement, the other party may have no choice than to terminate it. Such an arrangement implies high mutual interdependence and creates exposure to a partner's potential opportunism, since promises are not always kept and contracts are not always sacred (Freeman, 1987).

The real question is to differentiate opportunists from non-opportunists, a tasks rendered difficult by the opacity of opportunistic inclinations (Williamson, 1985). One obvious answer to that problem is for an alliance partner to rely on the records of its counterpart's cumulative past behaviour as a guide to future behavior, or to use reputation as a proxy for knowledge of opportunistic intentions. Hills (1990) suggested that actors will try to avoid entering an exchange with another actor who has a questionable reputation and, if avoidance is not viable, they will demand

that the potentially opportunistic party absorb bonding costs when they enter into an exchange with it. In addition, the other actors will have to bear monitoring costs in order to detect opportunism. The bonding and monitoring costs will absorb much of the expected benefit from the alliance, so that the value created by exchanges involving actors of questionable reputation is significantly reduced by the need to set up safeguards to limit opportunism.

A heightened perception of opportunistic behaviour would mobilize governance structures involving great coordination efforts and compliance costs including high outlays for drafting, negotiating, monitoring, and enforcing contingent claims contracts outlays collectively referred to as transaction costs. However, it should be noted that since transaction costs are the economic equivalent of friction in physical systems (Williamson, 1985), perceptions of high opportunism may lead to diminished performance levels. The first hypothesis of this his study hypothesis as stated below is:

Hypothesis 1: Strategic alliance is negatively related to the perception of opportunism on the part of parties involved.

The perception of opportunistic behavior, however, is not constant within a given relationship. Many theoretical perspectives that seek to explain its progressive diminution with a growing cooperative history centered on trust. Each partner has the opportunity to assess the willingness and ability of the other to abide by the letter and spirit of the partnership agreement. The better the match between expectations and past outcomes, the more confident a firm's decision makers will be in believing that a partner will follow through on its current promises. This study further hypothesized that:

Hypothesis 2: The level of perception of opportunistic behaviour will be negatively related to cooperation between the partners in a strategic alliance.

Fear of opportunism plays a pivotal role in alliance structuring until such trust develops, not because all economic agents behave opportunistically all of the time, but because some agents behave in this fashion and it is costly to sort out those who are opportunistic from those who are not (Williamson & Ouchi, 1981).

Perceived opportunism would lead to a pre-alliance contract in which numerous contingencies are recognized and appropriate adaptations are stipulated for each. After alliance formation, a continuing correspondence between ex post deterrents and perceived opportunism would be likely. Thus,

Hypothesis 3: There is a positive relationship between the extent of perception of opportunistic behavior and the level of contractual safeguards in a strategic alliance.

The belief that non-recoverable investments reduce a partner's gains from cheating may also induce trust and decrease one's own fear of exploitation (Schelling, 1980). This is done by signaling calculations of payoffs from mutual cooperation stretching well into the future. Thus, it is hypothesized that

Hypothesis 4: There is a negative relationship between non-recoverable investments in strategic alliances and the

perception of opportunistic behaviour.

Hypothesis 5: There is a positive relationship between commitment of non-recoverable investments in a strategic alliance and the length of time horizons.

Extending this logic, several authors have noted that alliances supported by a high degree of commitment of non-recoverable investments are more likely to be stable, high performers. Alliance-specific investments provide the credible commitments that buttress mutual assurances. They intimate long time horizons over which expected gains from mutual cooperation recoup current costs. The implied pledge of non-defection may in turn reduce the frictional effects of perceived opportunism, acting as a lubricant in lowering transaction costs and raising the efficiency of the governance structure of an alliance. Therefore,

Hypothesis 6: Performance will be positively related to the commitment of non-recoverable investments in a strategic alliance.

Credible commitments, however, are not necessarily inviolable commitments. Although they suggest a strategy of cooperation, they provide no guarantee of non-defection in the face of shifting circumstances, such as the gains of cheating growing to outweigh the loss of non-recoverable investments. The incentive alignment capacity of the pre measures in alliance structuring may therefore be augmented by post measures designed to cope with this behavioral uncertainty. The larger the potential losses from being exploited by a partner, the more a firm will be driven to protect its flanks and reduce its

vulnerability by resorting to post remedies in the form of a tight legal document that incorporates strong safeguards, Hence,

Hypothesis 7: There is a negative relationship between the extent of payoff from cooperation and the level of contractual safeguards in a strategic alliance.

On the other hand, frequent interactions, long time horizons, and high behavioural transparency can combine to lengthen the future situation. Under these circumstances, uncertainty regarding potential opportunism, is reduced and the necessity of formalizing understandings regarding potentially disputable matters between alliance partners through post deterrents is lessened, suggesting,

Hypothesis 8: There is a negative relationship between the extent of contractual safeguards in an alliance and the future situation.

4. SAMPLING TECHNIQUE

Three sample selection criteria were employed in this study. These are time period, industrial scope, and nature of participants. The first criterion was an attempt to capture the recent rapid growth of alliances and major trends of current and future relevance by selecting alliances formed between 1995 and 2005. The second criterion implied that certain industry were the most prolific in alliance activity and targeted these groups: chemicals and allied products, and the banking industries. The third criterion restricted the study to inter-firm, for-profit alliances. Taken together, these three criteria generated a domain of

inquiry that was relevant and significant and that met the needs of this research.

5. DATA COLLECTION TOOL

Structured questionnaire was used as main data collection tool. Of the 140 senior executives receiving questionnaires, 82 (58.57 %) responded. Seven responses were unusable because of missing data, leaving 76 (54 %) usable responses. This response rate was satisfactory considering the study's requirement for direct senior executive involvement and the sensitivity of some of the requested information. Approximately 60 percent of the usable responses came from the individuals most directly responsible for the alliances, usually functional executives: 21 % came from Deputy General Managers, and 9 % came from chairmen or Managing Directors.

6. MEASURES OF VARIABLES

(a) Performance. Two measures of performance were adopted for this study. The first measure is the fulfillment of major strategic needs. It represented the logic that when very important strategic needs are being met an alliance can be said to be performing well. The second measure involved the indirect performance indicators. Critical dimensions of alliance performance, including net spillover effects for the parent firms, relative profitability, and overall performance assessment were considered.
(b) Structure. Four factors constitutes the measure of structure in this study. These are behavioral transparency, frequency of interaction, and long time horizons. Behavioural transparency is a function of the

speed and reliability with which alliance partners learn about each other's actions. Speed was measured on a scale specifying four ranges ("over 1 month" to "within 1 week") and reverse-scored. Reliability was measured by asking about the source and accuracy of information regarding a partner's behavior, with a choice of sources typically used and a four-point range of accuracy ('never' to "always").
Frequency of interaction was assessed with two items, one asking the number of senior executive meetings occurring annually and the other assessing lower-level interactions. The two components were therefore weighted equally. The length of time horizons was measured as the product of two items, the intended duration of an alliance and the perceived likelihood of the alliance lasting through the intended duration.
(c) Control Variables. Three important control variables were used in this study. These are firm sizes, the primary product categories of alliance partners, and the geographic markets served by the partners. These variables are important because, for instance, alliance performance may be spuriously higher in large firms, be lower in industries that are suffering, or be a function of specific country or market conditions.
Firm size is defined as annual sales in millions of Naira. For primary geographic market, a dummy variable set equal to zero for the Nigerian market and set equal to one for market in other countries of the West African sub-region. Primary product category was replaced by four dummy variables coded as a zero, one for each industry studied.

7. ANALYSES OF DATA AND RESULTS

Regression analyses were used as the major analytical tool in this study.

From Table 1 below, hypothesis 1 was supported after controlling firm size, primary product category, and primary geographic market. Thus, the study established that opportunistic behaviour has a negative effect on alliance performance. The perception of opportunistic behaviour and the set of control variables explained 0.36 of the variance in performance (adjusted R^2 = 0.31). The results also provide support for Hypothesis 6, with 0.29 of variance explained (adjusted R^2 = 0.19).

Results of regression analyses on contractual safeguards shown in Table 2 linked hypotheses 3 to the perception of opportunistic behavior, and negatively linked by Hypothesis 5 to the payoff from unilateral cooperation, and by Hypothesis 8 to the future situation.

From Table 2, Hypothesis 7 (model 2) was strongly supported by a highly significant, negative regression coefficient (β =-0.39, p <0.001), explaining 0.21 of the

variance (adjusted R^2 = 0.14). The results also recorded support for Hypothesis 8 (model 3), since regressing behavioural transparency, frequency of interaction, length or time horizons, and the control variables on contractual safeguards yielded a significant R^2 of 0.22 (adjusted R^2 = 0.12) and highly significant regression coefficients for behavioural transparency (β=-0.23, p <.01) and length of time horizons (β=-0.31, p<0.001).

Similarly, supported Hypotheses 2 and 4 which predicted that negative relationships would exist between the perception of opportunistic behavior and cooperation between the partners in a strategic alliance, and between the perception of opportunistic behaviour and non recoverable investments were supported. Regression analyses including the set of three control variables showed significant results for Hypothesis 2 (β =-0.19, p<0.01, adjusted R^2 =0.10) and Hypothesis 4 (β=-0.17, p<0.05 adjusted R^2 =0.08).

The results of these analyses is indicative that temporal consistency requires that the perception of opportunistic behavior that

Table 1. Results of Regression Analysis for Performance

| | **Hypothesis 1** | | **Hypothesis 6** | |
| | Fulfillment of Major Strategic | Indirect Performance | Fulfillment of Major Strategic | Indirect Performance |
Variables	Needs	Indicators	Needs	Indicators
Control variables				
Firm size	-.02	.11	.02	.09
Primary product category	.08	-.03	.02	.06
Primary geographic market	.02	.07	.05	.01
Perception of opportunistic				
Behavior	-.23**	-.21**		
Non-recoverable investments			26**	.17*
R^2	.36		.29	
Adjusted R^2	.31		.19	
F	5.87***		3.06**	

Entries represent standardized regression coefficients N = 111.

*   P < .05 ** P < .01 ***p < .001

Table 2. Results of Regression Analyses for Contractual Safeguards

Variables	Contractual Safeguards		
	Model 1	Model 2	Model 3
Control variables			
Firm size	.14+	.08	.17*
Primary product category	-.03	-.08	0.3
Primary geographic market	.04	-.02	.08
Perception of opportunistic behaviour	.18*		
Payoff from unilateral cooperation		-.39***	
Shadow of the future			
Behavioral transparency			
Frequency of interaction			-.23**
Length of time horizon			-.08
R^2	.10	.21	.22
Adjusted R^2	.06	.14	.12
F	2.42*	3.31*	3.13**

Entries represent standardized regression coefficients, N = 111.

  +p<.10   *p<.05 **p<.01 ***p<.001

shapes risky decision must also be assessed for a point before the alliance is formed.

Finally, the regression results that recorded a significant coefficient (β=0.33, p<0.001, adjusted R^2 =0.12) strongly support Hypothesis 5 which states that there is a positive relationship between the extent of perception of opportunistic behaviour and the level of contractual safeguards in a strategic alliance.

8. SUMMARY OF FINDINGS AND IMPLICATIONS

Contemporary business philosophy contends that firms increasingly engage in strategic alliances, which have at their core a set of issues such as mutual gain, interdependence, and vulnerability. The growing occurrence of potential opponents' nominal cooperation suggests greater emphasis on a subtler form of competition. It seems imperative, therefore, that studies on strategy should be given serious attention that can expand extant theory which will include mixed-motive relations.

Williamson (1985) noted, study of the institutions of contract and governance structures has occupied a low place on the research agenda, and consequently common incentive features incorporated in numerous types of alliances have gone undetected. But this study took a step toward by focusing on theory of transaction cost economics which permits an excellent vehicle for focusing attention on the structural aspects of voluntary inter-firm cooperation. The primary objective of this study, therefore is to highlight important features of the transaction cost derive empirical support for the predictions using data from actual partnerships.

The results of this study lead to new insights into the structuring of alliances and suggest that inter-firm cooperation is complex, embedded in various institutional arrangements, and at once forward-looking and backward-looking. The findings show that structure is related to performance, that the perceived potential for opportunism influences both structure and performance,

and that partners erect a variety of deterrent measures to stem possible losses from agreement violations.

The strength of the support across structural dimensions was mixed. The hypothesis that payoffs will be significantly related to performance found very marginal support. One possible explanation for the finding is that in certain cases reputation effects may significantly moderate the hypothesized effects of payoffs. Alliance partners know that they many deal with each other again in the future or, at a minimum that the cumulative effects of their past behaviors help build a reputation that influences their interactions with many constituencies within their broad environment. Thus, a firm's actions may be based on its partner's reputation and concern for its own reputation, as well as on the payoff structure, with the various influences combined in ways that are poorly understood.

The findings also reported strong support for the future situation hypothesis and to an understanding of how specific structural elements may help build superior alliance performance levels, by suggesting that high behavioural transparency, long time horizons, and frequent interactions promote reciprocal cooperation. Management can influence each of these elements, and each merits attention during both the design and implementation of an alliance.

Merging the positive findings on perceived opportunism, cooperation between partners in a strategic alliance (Hypotheses 1-8) evokes an interesting portrayal of the alienating process. It suggests that at the beginning of a cooperative relationship, when little shared history exists between alliance partners, the lack of transparency of opportunistic inclinations leads to low trust levels and high mutual fear of opportunism (Hypothesis 2).

There is thus an essential connection between the transaction cost notions of opportunism and asset specificity. This connection is at the root of Ouchi's (1980) fundamental problem of cooperation which integrates behavioral uncertainty with interdependence and vulnerability in the pursuit of self-gain through joint action. Without committed assets, a new, untested partner has no way of knowing the other's intentions, raising the prospects of short-term exploitation and agreement collapse. These risks of exposure to the other party's possible opportunistic withdrawal may be counterbalanced by both partners' commitment of non-recoverable investments, which in turn alters the alliance structure and promotes goal congruence between partners.

The implication of these situation shows that successful inter-firm cooperation may rest on two basic building blocks:

− (1) initiation of a mutually beneficial relationship, catalyzed by favorable calculations of discounted future payoffs from mutual cooperation and culminating in the commitment of some credible, significant non-recoverable investments on both sides (Hypotheses 5 and 6)

− (2) The fading of the fear of opportunism as the partners build a cooperative history and fledging mutual trust develops between them (Hypothesis 2). This process may gradually lead to a reduction in coordination efforts and compliance costs (Hypothesis 3) and a dynamically declining role for non recoverable investments and contractual safeguards as deterrents to opportunism (hypothesis 8) as the partnership takes on more hierarchical and fewer market characteristics.

СТРАТЕШКЕ АЛИЈАНСЕ: УВИД У ТРОШКОВЕ СТРУКТУИРАЊА

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Извод

Обично се јавља више проблема везаних за појаву интер компанијских стратегијских алијанси. Неке алијансе резултују са структурама које повећавају трошкове изазване неизвесношћу, ниском стабилношћу, и перформансама. Ова студија покушава да повеже те варијабле са циљем добијања увида у импликације трошкова структуирања алијанси. У анализи су коришћени подаци 20 фирми које су ушле у стратегијску алијансу и резултати су подржали хипотезе, сугеришући потребу истицања разлике између добровољне и присилне алијансе између фирми.

Кључне речи: Стратешке алијансе, Неизвесност, Опортунистичко понашање, Неповратне инвестиције, Перформансе, Трошкови и структуирање

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Appendix

Definition of Measures

1) Performance

Strategic needs (16 items α =0.79). "Firms enter into strategic alliances to fulfill a variety of needs. Was each need listed below Not important. Somewhat Important, or Very Important in your firm's decision to enter into this strategic alliance"" Examples include the need to co-opt or block competition, through a "defensive strategic alliance to reduce competition". Or an "aggressive strategic alliance to increase costs or to lower market share for a third company" (3= very important. 2 = somewhat important, 1 = not important). Fulfillment of needs was measured on a five-point scale: 5 = very well. 4 = well. 3 = average . 2 = poorly. 1 = very poorly.

Indirect performance indictors (3 items. α= 0.87). (1) Spillover effects. "Many alliances result in 'spillover' effects for their parent firms. For example, positive, spillover effects may occur when know-how that is gained from alliance activities can be applied profitably to non-alliance operations as well. Negative spillover effects may occur from competition between the alliance and other parent firm operations, such as when geographical markets overlap. In the present alliance, are the net spillover effects for your firm:") 5= strongly positive, 1 = strongly negative). (2) Relative profitability. "Using the most significant indicator of profitability in the context of this alliance (such as return on investment, return on sales, or return on equity), the profitability of your alliance relative to the profitability of the industry of which the alliance is a part would be". (5= far lower. 1 = far greater, reverse-sectored). (3) Overall performance assessment. "In your overall assessment, how has the alliance performed as compared to your expectations" (5= very well;1 = very poorly).

2) Perception of Opportunistic Behavior (6 items, α =0.88)

"As you know cooperative relationships are sometimes subject to opportunistic behavior. That is, one firm may not abide by the terms of the agreement in order to exploit the other for short-term gain. Examples of opportunistic behavior are withholding or distorting information. Shirking or failing to

fulfill promises or obligations, appropriation of the partner firm's technology or key personnel, late payments, and delivery of substandard products. With respect to your partner firm in the present alliance: (1) they have always provided us a completely truthful picture of their business (reverse-scored): (2) complete honesty does not pay when dealing with my partner: (3) sometimes my partner alters the facts slightly in order to get what they need; (4) my partner carries out their duties even if we do not check up on them (reverse-scored); (5) my partner has sometimes promised to do things without actually doing them later; (6) they seem to feel that it is OK to do anything with their means that will help further their firm's interests" (1= strongly disagree. 5 = strongly agree).

3) Structure

Behavioural transparency (3 items, α =0.81); (1) "After how much time does your firm typically learn about changes in your partner firm's behaviour (such as compliance or non-compliance with the agreement) related to your firm and the alliance?" (1= within 1 day, 4 = over 1 month; reverse-scored); (2) "Usually, what is your source of such information?" (1 = partner firm 2 = alliance itself, 3 = own firm's employees); (3) "How often is this information accurate"" (1 = never, 2 = seldom 3 = usually, 4 = always).

Frequency of interaction (2 items, interitem correlation = 0.87). (1) "How many times do senior executives from your firm and the partner firm typically met per year?" (2) " At lower levels (for example , R&D at one firm. Manufacturing at another), how frequently does communication take place (by any means)?" (1= never, 4 = frequently).

Time horizon (2 items, interitem correlation = 0.64). (1) Intended duration "Some alliances are envisioned to last an indefinite period of time, while others are created explicitly with short-term goals in mind, such as fadeout agreements. At the time it was launched, what was the intended duration of this alliance?" (1=short term, 1-3 years; 3 = long term, over 5 years); (2) Perceived likelihood, "In your estimation, what is the likelihood that the alliance will actually last for the intended duration?" (1 = low, 5 = high).

4) Pattern of Payoffs

"Please provide a quantitative assessment of the impact of four different behavior patterns, as pictured below. In this question, 'cooperative behavior' means full cooperation in the letter and spirit of the agreement, and 'opportunistic behaviour' means one firm acting to maximize its gains, even if this involves heavy losses for the partner and a breakup of the alliance. If your firm's payoff from Scenario II is assumed to be N1.00. what would be the relative payoff in Scenarios 1,III and IV?

5) Cooperative History

"Has your firm been engaged with your partner firm in alliances other than the present one? (0= no. 1 = yes). If YES: How many others? ___ alliances. For how many years" _____ years."