# TO DO OR NOT TO DO? NON-COOPERATIVE BEHAVIOR BY COMMISSION AND OMISSION IN INTER-FIRM VENTURES 

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#### Abstract

This paper adds to our understanding of the dynamics of inter-firm collaboration by examining the inter-partner relationship in terms of cooperative behavior. In particular, it focuses on the effect that a firm's perception of its partner's behavior can have on the firm's own behavior. We distinguish between non-cooperative behavior by commission and noncooperative behavior by omission. Using both qualitative and quantitative methodologies, we show that a firm's perception of its partner's behavior has a stronger association with the firm's own behavior when the partner is perceived to behave non-cooperatively by commission than by omission.


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## INTRODUCTION

Inter-firm collaboration is "a major topic of interest and relevance in the present organizational world" (Smith, Carroll, and Ashford, 1995). Research has focused on the economic rationale of collaborative venture (CV) formation either from a strategic (Harrigan, 1988) or from an efficiency (Hennart, 1988) perspective. The area is in need of grounded theory regarding the dynamics of the relationship among partners to a CV (Parkhe, 1993 b). Also, empirical evidence regarding the dynamics of CVs is still scarce (Parkhe, 1993 a; Yan and Gray, 1994; Smith, Carroll and Ashford, 1995). Notable exceptions to this lack of attention to the inter-partner relationship are the articles by Ring and Van de Ven (1994), Doz (1996), and Ariño and de la Torre (1997). Still, one particular aspect of the inter-partner relationship deserving more attention is the dynamics of cooperative behavior (Parkhe, 1993 b ). This paper addresses the research question of how a firm's perception of its partner's (1) cooperative behavior affects the firm's own cooperative behavior.

By "collaborative venture" we mean an explicit agreement between two (or more) (2) firms to collaborate in a limited aspect of their activity for a relatively long period, which may or may not result in a separate organizational entity. "Cooperative behavior" refers to the adjustment of a firm's behavior to the actual or anticipated needs of its partner (Axelrod and Keohane, 1986).

CVs present both cooperative and competitive aspects simultaneously (Khanna, Gulati and Nohria, 1994) because of the asymmetric goals the companies may pursue. Thus, the risk that the partner may not reciprocate hinders the adoption of cooperative behavior by a firm engaged in a CV. The companies need to learn how to behave cooperatively (Lane and Beamish, 1990). A firm will behave in this fashion if it has reason to expect that its partner will eventually reciprocate. Both economic and sociological conditions may provide the basis for this expectation. As the relationship unfolds, it provides a relational basis for the expectation of reciprocity (Doz, 1996). Our focus here is on these relational aspects.

[^0]Cooperative behavior is a multidimensional concept that may be manifested in a number of domains (Buckley and Casson, 1988). A firm may behave cooperatively in some domains and non-cooperatively in others (Heide and Miner, 1992). Non-cooperative behavior may take two forms: by omission, and by commission (Buckley and Casson, 1988) (1). While "omission" implies a failure to perform an action beneficial to the partner, "commission" means performing an action that is harmful to the partner. It is our contention that non-cooperative behavior by commission has a more intense informational value than non-cooperative behavior by omission. Thus, a firm will react more strongly if it perceives its partner as behaving noncooperatively by commission than by omission.

The paper is organized as follows. First, we review relevant literature on cooperative behavior, and discuss this concept in the context of CVs. Next, we introduce our research design, which consists of two phases. Phase I includes a longitudinal case study of a joint venture, which allows us to observe the partners' behavior. From the literature review and the Phase I study, we derive some propositions, which we test in Phase II. In this phase, we use regression analysis of a sample of 82 Spanish companies with venturing activities. After discussing the results, we end the paper with a conclusions section.

## COOPERATIVE BEHAVIOR

The need for cooperative behavior arises in situations where both conflict and interdependence are present (Schelling, 1960). In the absence of conflict, the problem would be one of coordination of actions; if there were no interdependence, the problem would be one of payoff distribution (Schelling, 1960). Conflict arises because individuals and organizations may have incongruent goals -goals that are mutually exclusive (Ouchi, 1980). Interdependence makes mutual accommodation necessary if the parties are to meet their incongruent goals (Schelling, 1960).

The emergence of cooperative behavior has been explained both from an economic and from a sociological perspective. More recently, a relational view has been introduced. Contributing literatures from the economic perspective include transaction cost economics (Williamson, 1975, 1985), game theory (Luce and Raiffa, 1957; Schelling, 1960; Axelrod, 1984), and the literature on team production (Alchian and Demsetz, 1972). The basic economic behavioral assumption is that individuals act seeking their own self-interest either openly (neoclassical economics) or with guile (transaction cost economics) (Williamson, 1985). The problem of cooperation is one of incentive alignment. Thus, cooperative behavior can be fostered through an appropriate design of the incentive structure (Milgrom and Roberts, 1992).

From the sociological perspective, relevant contributions are the literature on equity and the norm of reciprocity (Gouldner, 1960; Ouchi, 1980), and social exchange theory (Blau, 1964). These sociological perspectives share the behavioral assumption that people behave according to social norms. However, the bases for this assumption differ: fulfilment of a social expectation (Gouldner, 1960; Ouchi, 1980) vs. pure self-interest (Blau, 1964).

The main difference between the economic and sociological perspectives on cooperation is the mechanism invoked to promote cooperative behavior. From the economic perspective this mechanism -the incentive structure- is internal to the transaction. A transaction

[^1]designed so as to align the interests of the transacting parties leads to cooperative behavior because what is in the interest of one party is also in the interest of the other party. Thus, the parties' have an economic basis to expect reciprocity. In contrast, from the sociological perspective, that mechanism -social norms- is external to the transaction, insofar as the social mechanisms at play are embedded within the broader societal context.

Close to the sociological tradition, Granovetter (1985) claims the need to adopt an embeddedness approach that takes into account the particular social context -provided by the parties' relationship- in which economic exchange takes place. Otherwise, explanations of economic relationships may go under-socialized -just focusing on the economic aspects of the relationship- or over-socialized -looking for sociological explanations at the broader societal level. As the relationship evolves, an "internal" social norm of reciprocity emerges, which becomes the relational basis for the expectation of reciprocity.

## Cooperative behavior in collaborative ventures

As already stated, cooperative behavior is necessary when both conflict and interdependence are present (Schelling, 1960). CVs are an organizational form where both conflict and interdependence are mixed. Conflict comes in because each company may have different preferences for the possible outcomes of the CV. The asymmetric benefits accruing to each company (Porter and Fuller, 1986) stem from the asymmetric goals the companies hold. In addition to common goals that the two companies may share, each may have private goals for the CV that are not shared by its partner (Ariño, 1995). Interdependence is at the core of CVs, which combine several types of resources not belonging to the same firm. Each company, lacking some of the other's resources, would be unable to gain the outcomes of the CV independently (Contractor and Lorange, 1988).

Although some degree of cooperative behavior is necessary for the good performance of a CV (Parkhe, 1993 a), cooperative behavior is not automatic. Hindrances to the adoption of cooperative behavior come from two sources: difficulties in ascertaining the partner's goals, and difficulties in monitoring the partner (Ariño, 1997). Thus, a firm will behave cooperatively to the extent that it may expect reciprocity from its partner.

Prior to engaging in a CV, both economic and sociological conditions may serve as the basis for that expectation. From an economic perspective, taking a mutual hostage position by investing in assets specific to the CV (Williamson, 1985; Parkhe, 1993 a) may serve as an interest-aligning mechanism. From a sociological perspective, cooperative behavior takes place in fulfilment of a social expectation to behave in this fashion (Gouldner, 1960; Ouchi, 1980). The reputational consequences of not fulfilling these expectations are greater in a domestic context than in an international one (Gerlach, 1990) Thus, there may be differences between the behavior of a firm transacting with a domestic partner and one venturing with a foreign partner.

Once the CV starts unfolding, learning about the partner begins (Mody, 1993). The firm observes how its partner fulfils the commitments and rules of action entailed in the agreement (Ring and Van de Ven, 1994). The partner's behavior acts as a signal to the firm regarding the partner's preferences for the outcomes of the CV. Rules of reciprocity emerge (Mody, 1993). From this, we may expect that:

Proposition 1: a firm's perception of non-cooperative behavior on the part of the partner shows a positive relationship with the firm's own non-cooperative behavior.

Doz (1996) provides evidence that a firm assesses its partner's behavior. However, we do not have evidence of whether the perception of non-cooperative behavior by omission and by commission has a similar effect on the firm's own behavior or not.

## RESEARCH DESIGN

This research project was carried out in two phases. In the first phase, a longitudinal case study tracks the evolution of the behavior of the partners to a joint venture (JV) between two multinational companies in the consumer products industry. From these qualitative data, we draw some additional propositions. In the second phase, we test our propositions by doing statistical analysis of a sample of 82 companies with venturing activities operating in Spain.

## Phase I: Methods

This phase was carried out jointly with De la Torre. A more detailed report of it can be found in Ariño and De la Torre (1997).

## Research site

JVCO is a $50 / 50$ JV owned by two multinational companies -the U.S.-based North American Company (NAMCO) and a French-based company (Hexagon, S.A.). NAMCO is active in various segments of the household products industry, including cleaning products, toiletries, and personal hygiene. Hexagon is a French company with high product diversity in three main fields: specialty chemicals, cosmetics, and pharmaceuticals. Despite this diversity, Hexagon has a star branded product in its "Hexa" cosmetic line. Table 1 summarizes the main features of the two companies.

NAMCO and Hexagon had been competing in Scandinavia with a marginal but profitable product that both had developed independently for the local market. The product was a new "ecological" cleaning liquid -applicable to both personal and household uses, made of natural ingredients, fully biodegradable, and appealing to the high levels of environmental consciousness of Scandinavian consumers. Both firms were interested in selling ecological cleaners in other world markets, but lacked the full complement of resources to do so on their own.

NAMCO had a strong manufacturing and distribution system worldwide, composed of a network of independent agents. Yet, the necessary technical capabilities were localized in its Scandinavian distributors, which made it difficult to develop the product on a world scale. Furthermore, NAMCO had no appropriate global brand name for such a product and had a history of failure in recent product introductions. Management was understandably wary of the risks involved in such a new product area. Hexagon, on the other hand, possessed strong technical capabilities in this area and had a powerful brand name with global recognition. However, it lacked the distribution system necessary to launch the product on a world scale, particularly in terms of access to specialized retailers.

Table 1
Description of JVCO's Partners

|  | NAMCO | HEXAGON, S. A. |
| :--- | :--- | :--- |
| Products | Household supplies (dominant) <br> Toiletries <br> Personal hygiene | Specialty chemicals <br> Cosmetics <br> Pharmaceuticals |
| Product diversity | Medium: dominant product line > 50\% of sales | High: multiple product lines (none > 10\% of sales) |
| International diversity | High: over 60\% of sales | Very high: over 80\% of sales, with Europe <br> accounting for about 60\% of total |
| Market developments | Rapid international expansion in recent years <br> Market for dominant product line very competitive <br> and with lower growth prospects | Long history of international expansion <br> Competitive markets |
| Competitive position | Market leader in most world markets in dominant <br> product line <br> Weak position in other product areas | Dominant position throughout Europe in traditional <br> products <br> Niche position in most global markets |
| Key strategic thrust | Reduce dependency on dominant product line <br> Rapid international expansion <br> Seek high margin niches in related fields | Grow its non-European business <br> Leverage its brand name to related health and <br> personal care products by investment or acquisition |

Beginning in the late 1980s, NAMCO's President of International Operations and Hexagon's Executive VP met on several occasions to compare notes on international market developments. Realizing their common interest in ecological cleaners and their complementary capabilities, they argued for the creation of a JV that would join resources and exploit this latent possibility. They eventually sold the idea to both companies' boards, signed a letter of agreement in November 1989, and concluded negotiations for the JV in March 1990. After nearly four years of joint operations, the JV was dissolved in December 1993.

## Data collection

We collected both archival and interview data. Archival data cover the entire life of the JV from its inception to the date the partners decided to dissolve it. The main archival source was the minutes of all the meetings of JVCO's Executive Board. These constituted about 180 pages of unusually rich and detailed information. These minutes had been read and approved by the board members shortly after each meeting, which guarantees a consensus among the parties that the minutes accurately reflect the participants' perceptions. Additional archival data include a large volume of management reports (including several dealing with the nature of the interpartner relationship prepared by the JV's CEO), organization charts, financial reports, internal newsletters, etc. Finally, we collected many press clippings and releases.

Interviews were employed to complement the archival data, serving as a means to triangulate the validity of our findings (Eisenhardt, 1989). We interviewed all the members of JVCO's management team, privately and face-to-face. We also held a meeting with the full team, as well as several informal meetings with the JV's CEO. The interviews were semistructured and ranged in length from 45 to 125 minutes; some informants were interviewed several times. The interviews were carried out between September 1993 and May 1994. Table 2 lists the managers that were formally interviewed, indicating their company of origin, prior years of service, and the number of times they were interviewed. Finally, the key JV executives read and commented on an early draft for accuracy.

Table 2
JVCO's interviewees

| JVCO position held in 1994 | Number of <br> formal interviews | Company <br> of origin | Prior years <br> of service |
| :--- | :---: | :---: | :---: |
| Chief Executive Officer | 3 | NAMCO | 30 |
| V.P. / G.M. North America | 2 | Hexagon | 11 |
| V.P. / G.M. Latin America | 1 | NAMCO | 6 |
| V.P. / G.M. Pacific and Europe | 2 | NAMCO | 16 |
| V.P. Technical \& Operations | 1 | NAMCO | 22 |
| V.P. Finance and C.F.O. | 2 | Hexagon | 10 |
| V.P. Human Resources \& Public Affairs | 3 | NAMCO | 12 |
| V.P. - Legal Counsel | 2 | NAMCO | 9 |

We followed Miles and Huberman's (1984) suggested procedure for analyzing qualitative data, whereby data reduction, data display, and conclusion drawing/verification are interwoven before, during, and after data collection. Though uncommon in economic studies of organizations, this sort of field-based dynamic research provides a useful complement to broader population studies (Hagedoorn, 1995) and allows us to bridge the gap between research on the economic and relational aspects of CVs (Larson, 1992).

## Phase I: Research setting: Products, resources, and incentives

For an explanation of the products involved, the resources contributed by the partners, and the incentive systems, see Table 3 . The initial thrust and primary objective of JVCO was the international extension of the ecological cleaning products originally developed for the Scandinavian market. Two other product areas were added to JVCO's portfolio in order "to exploit economies of scope and take advantage of the parents' distribution and technical resources, while providing a more diversified portfolio to the venture". One was a new line of hypoallergenic soaps and skin care products for the mass market, based on similar products traditionally distributed by Hexagon to the pharmacy channels in Europe. The third area of activity was to consist of ready-to-drink dietary substitutes, based once again on Hexagon's pharmaceutical trade products. All of these products differed from the traditional ones on which they were based in two basic dimensions: they were aimed at the mass market and they represented a "convenience" item relative to the more specialized positioning and channels associated with the traditional formulations. The venture would have worldwide rights, except for Scandinavia, where both companies would continue to compete with their respective products.

Table 3
Joint venture characteristics

| Products | Ecological liquid cleaners (for personal and household use) <br> Hypoallergenic soaps and skin care products <br> Dietary substitutes |
| :--- | :--- |
| Resources contributed <br> by the partners | NAMCO:Access to its network of company-owned and independent <br> distributors/manufacturers <br> Hexagon:Trademarks (Hexa, Hexa-Kleen, and Hexa-Care); product and production <br> technology and know-how; dietary substitutes (never transferred) <br> Incentive systems <br> $50 / 50$ profit and loss split <br> Cost reimbursement for the use of corporate resources <br> Cost reimbursement plus fee for new developments |

Hexagon's contributions included its trademarks -"Hexa", "Hexa-Kleen" and "Hexa-Care"- and its production technology and know-how. NAMCO would contribute its own corporate trademark and access to its global manufacturing, packaging and distribution system, and would assist JVCO in demonstrating to its independent distributors the advantage of introducing and aggressively promoting JVCO's products. Distribution of Hexa-Kleen would require investments in point-of-sale promotional equipment, to be funded by JVCO or by the distributors, independently or jointly with JVCO.

The incentive system was conceived to reflect these economic contributions. Both partners would receive royalties at $4 \%$ of net sales for the use of their respective trademarks. JVCO would reimburse the parent companies for all activities subcontracted to them at cost plus a reasonable margin (generally 10\%). The specifics of this reimbursement would be the object of a manufacturing or service contract between JVCO and Hexagon or NAMCO. Finally, all the JV's profits and losses would be split between the partners on a $50 / 50$ basis. It was expected, however, that initially most profits would be retained within JVCO to finance its international expansion.

Figure 1 depicts JVCO's organizational structure and indicates the various options available for it to carry out its functional activities. The partners made it clear to the JV management team that they should avoid duplicating the partners' respective infrastructures. R\&D would be subcontracted to Hexagon, and most product bases would be bought from Hexagon. Manufacturing and packaging of final products would be done either at Hexagon facilities, at those of NAMCO's distributors (including company-owned distributors), or by unrelated third parties. JVCO's management retained the option to invest in production facilities. Hexa-Care products could be manufactured through two distinct processes: one involved high-temperature sterilization, whereas the other made use of certain chemical additives and preservatives. Hexagon had always favored the former as resulting in a healthier and more natural product, consistent with its products' positioning and image. Most of NAMCO's distributors, however, did not have the equipment to produce Hexa-Care under the high-temperature process. For them to do so would have required costly investments and training in new manufacturing techniques.

Sales and distribution would normally take place through NAMCO's distribution system (including its network of independent agents all over the world, as well as NAMCO's Retail Division in North America), but could also be carried out independently, or eventually through JVCO's own distribution system. Whereas the JV agreement did not require JVCO to seek approval from NAMCO in order to access the latter's distribution system, the partners recognized from the beginning a mutual benefit in requiring JVCO to work through NAMCO's divisional and regional offices (particularly in North America) when making contact with its distributors.

Figure 1
JVCO's organization chart and subcontracted activities


-     -         - activities subcontracted and to whom they are subcontracted
----- hierarchical relations
* NAMCO's distributors performed both manufacturing and distribution functions


## Phase I: Findings

We report here the basic findings of our longitudinal case study research. A full version can be found in Ariño and De la Torre (1996).

## 1990: The kick-off

The first product launch of Hexa-Kleen was scheduled for Germany in September 1990. In August, the Executive Committee agreed to the transfer of Hexagon's pre-existing Hexa-Care business in North America to JVCO. As of January 1991, Hexa-Care would be distributed by NAMCO's distributors to their wholesale and retail channels, and by NAMCO's Retail Division to the beauty salon/hairdresser channel. It was agreed that NAMCO's distributors would be engaged only in the distribution of Hexa-Care, whereas all manufacturing and packaging operations would be carried out by Hexagon or by third parties. A manufacturing contract between JVCO and Hexagon was concluded in August 1990, and a formula for calculating transfer prices was established.

In the meantime, the launch of Hexa-Kleen in Germany did not go off without hitches. Hexagon's original product formula proved inadequate and difficult to modify for the German market. After several ill-fated attempts, the product was launched on schedule thanks to the adoption of NAMCO's Scandinavian formulation, which proved better suited to German tastes.

## 1991: A series of unanticipated events

A series of events in 1991 brought to the surface differences in the partners' interpretation of the JV contract.

Market opportunity or unexpected cannibalization. The competitive environment in the market for Hexa-Kleen differed markedly from that for Hexa-Care. After the difficulties and slow start associated with Hexa-Kleen in Germany, JVCO saw Hexa-Care's development in North America as a wonderful opportunity for rapid growth and profits. Driven mainly by JVCO's management, a shift in emphasis from ecological cleaners to specialized toiletries was formalized in October 1991: the Hexa-Kleen project would not be abandoned, but it would receive less attention from the management team than Hexa-Care.

As this shift in emphasis developed, NAMCO grew increasingly aware that its underlying incentive structure had changed. The sale of Hexa-Kleen through NAMCO's distribution system did not result in any conflict of interest since it appealed mainly to a different market segment. Hexa-Care, on the other hand, utilized the same distribution channels and point-of-sale equipment, competing for shelf space and consumer attention with many of NAMCO's other products. At the May 1991 Executive Board meeting, Jim Sharp, NAMCO's CFO, argued that a more specific agreement concerning the availability of the NAMCO distribution system was necessary: NAMCO's operating units could not be expected to push JVCO's products if they were cannibalizing their own: cost reimbursement was not enough compensation, and an additional incentive had to be negotiated. This depended, of course, on Hexagon's willingness to accept this view.

Divergent contractual interpretations. An event in early 1991 made Hexagon sceptical of NAMCO's commitment to the venture. Since the early 1980s, BigName -a
company that had entered the market with an already strong brand name in a related business- had been manufacturing and packaging its own line of hypoallergenic products in the facilities of certain NAMCO distributors. These contracts were between BigName and the distributors, and were generally renewable on a yearly basis. They included a clause by which, if BigName were to cancel unilaterally, it would be obligated to exit the market for comparable products for one year.

Once JVCO was formed, BigName cancelled its contracts with NAMCO's distributors and established a joint venture modelled on JVCO with Rival Corporation, NAMCO's strongest North American competitor in the household products line. BigName then approached a number of NAMCO distributors with which it had agreements and offered $\$ 1.5$ million to compensate them for the contract cancellation, provided the latter lifted the one-year non-competition clause. American Distributors, a large regional distributor in which NAMCO owned a minority equity position, was the first to accept BigName's offer. Others soon followed, thus allowing BigName to re-enter the market immediately and not lose competitive position relative to Hexa-Care.

The partners' interpretations of these events differed. In Hexagon's view, the incident signalled a lack of commitment to JVCO on the part of NAMCO. As one executive put it, "How could they (NAMCO) let our most formidable competitor back in the market for a lousy $\$ 1.5$ million?" The issue was aggravated by the fact that NAMCO owned a significant share of American Distributors, and that Jim Sharp, NAMCO's CFO and a member of JVCO's Executive Board, was a member of American Distributors' Board of Directors. Furthermore, once BigName retired its product from American Distributors, the latter had not embraced the introduction of Hexa-Care as rapidly as Hexagon thought they should have. From NAMCO's perspective, there was little they could do to prevent American Distributors' action. NAMCO could not control their decisions since they had only a minority shareholding in the company. Furthermore, it was NAMCO's policy not to interfere in the distributors' operational decisions.

These different interpretations affected Hexagon's willingness to review the contractual terms regarding compensation for NAMCO's regional offices. From Hexagon's perspective, the incident revealed NAMCO's passive unwillingness to avoid a behavior they considered outside the contractual boundaries. From NAMCO's perspective, the incident was within the contractual boundaries because they lacked control over the distributors' decisions. From this point on, Hexagon became considerably more sceptical of NAMCO's commitment to the JV.

## 1992: Escalating divergence and undermining of the relationship

Additional circumstances arose during the year that were to test the commitment of both partners. Some resulted from unresolved prior issues, while others were the consequence of continuing changes in the nature of markets and competitors.

Resolving the controversy over compensation to distributors. By mid-1992, the shifting logic of the JV was affecting each company's interpretation of the spirit of the agreement. In June, JVCO's CEO Howard Taylor described the partners' views as follows:
"Hexagon held the view that access to the NAMCO distributor system meant that the regional and divisional offices of NAMCO would sell-in and manage the Hexa-Care brand with the distributor as if it were a NAMCO brand. From the

NAMCO side, they viewed their obligation as introducing JVCO representatives to the distributors and recommending that the distributors introduce Hexa-Care into their territory; JVCO would be responsible for selling-in and managing the products. If JVCO elected to subcontract that activity to an operating division of NAMCO, it would (have to) be on a cost-plus incentive basis."

An agreement was reached in August with regard to the distribution service contract. NAMCO was willing to allow JVCO access to services sourced from its regional and divisional offices at cost. NAMCO would also offer its offices an administrative credit representing NAMCO's share of local JVCO margins. JVCO could offer personal incentives -such as prizes and sweepstakes- directly to NAMCO personnel in these regional offices.

JVCO also arrived at an agreement with NAMCO's Retail Division regarding HexaCare distribution to the beauty salon/hairdressers channel. JVCO and NAMCO's Retail Division would operate on an "open book" basis and share equally any profits generated by sales of Hexa-Care to this channel. JVCO's management agreed to this exceptional treatment in order to maintain the relationship with this division of NAMCO, which had a strong position in the beauty salon channel, one not easily replicable.

From Hexagon's perspective, however, this last concession breached the $50 / 50$ split agreement. If NAMCO's Retail Division was to get $50 \%$ of the profits from its sales, and then the $50 \%$ accruing to JVCO was to be divided equally between NAMCO and Hexagon, then NAMCO's share of the JV's profits would exceed Hexagon's share. To Hexagon, this made the relationship clearly inequitable. Not only was NAMCO under-committing resources (in their view), but they would also get a greater share of the pie.

Hexagon appeared to test NAMCO's commitment by removing one of NAMCO's stated obstacles to their cooperation and adopting the following Guiding Principle for JVCO:
"Access to the distributors system by JVCO means that NAMCO and its distributors [will] deal with JVCO products on a basis equal to NAMCO corporate products. For example, provided that JVCO contributes to investment in additional distribution equipment, the current distribution space will be equally available to JVCO products."

Hexagon's assent to contribute to buy new equipment was seen by NAMCO as a return to the initial spirit of the JV.

Manufacturing process and product portfolio. NAMCO had also suggested that a different manufacturing process would encourage its distributors to push Hexa-Care. NAMCO held the view that if its distributors could perform both the production and packaging as well as the distribution functions, they would be more motivated. As a result, Hexagon agreed to produce Hexa-Care in the NAMCO facilities using the lower temperature, chemical-additives process and to develop an adequate formula. Members of JVCO's management team asked whether it would be an issue for Hexagon to use the Hexa-Care brand on a product manufactured with preservatives. Hexagon's representative responded that he did not believe so, "provided NAMCO's distributors would back up this product as vigorously as the competitors were pushing theirs." However, according to JVCO's management, Hexagon delayed solving the low-temperature formula problem, frustrating their ability to introduce a new version of Hexa-Care to the market.

In August 1990, at Taylor's request, it had been agreed that JVCO would also become a vehicle for dealing with ready-to-drink diet products. In May 1992, JVCO's management asked Hexagon to transfer the rights to one particular kind of diet product to the JV. Hexagon declined to do so, advising JVCO's management team to concentrate on ecological cleaners and hypoallergenic soaps and skin care products instead. Once these products were well introduced in the market, JVCO was told, they could make their request again. But at the August Executive Board meeting, Hexagon's representatives asked that the possibility of transferring diet products to JVCO be removed from the Guiding Principles document.

In December, Oscar Thibault -head of Hexagon's global liquid cleaners strategic business unit and a member of JVCO's Executive Board- addressed a request to Howard Taylor. One of Hexagon's operating units in Asia wanted to approach NAMCO's distributors in that country directly and ask them to handle local distribution for one type of dietary product. Taylor, after consulting with NAMCO's senior executives, transmitted the message that such a request would be outside the spirit of the JV agreement. Thibault then asked Taylor what would he think if Hexagon approached the local distributor of Rival Corp. for this service, to which Taylor replied, "that would be clearly against the intent and best interests of the JV".

## 1993: The dissolution of the joint venture

NAMCO's representatives suggested at the May meeting the possibility of starting production of a new kind of skin care product using traditional Asian ingredients, a product with significant potential in Asian markets. The shareholders would discuss this issue during the following months. In the course of their conversations, it became increasingly obvious that their interests were diverging. Hexagon wanted to pursue the ecological cleaners project, while NAMCO was more interested in opening the Asian-style skin care category in that continent. Hexagon had acquired a U.S.-based cosmetics company that could provide Hexagon with a good distribution system in North America and Europe for Hexa-Care, reducing the relative value of NAMCO's contribution. Also, Hexagon's brand weakness in the Asian-style product category diminished its relative value to NAMCO. As a result of their discussions, the partners announced in September their decision to dissolve the JV as of December 1993. It had become clear to both parties that an equitable relationship was no longer feasible.

## Phase I: Discussion

JVCO's history shows how a firm's perception of its partner's cooperative -or rather, non-cooperative- behavior affects the firm's own behavior.

Initially, the underlying incentives were conducive to cooperative behavior in that both NAMCO and Hexagon perceived their contributions to the JV as yielding positive results to both companies. The 50/50 distribution of profit and losses, along with the negotiated cost reimbursement contracts, made the JV seem a fair deal to both companies. Thus, both were willing to bring into JVCO the resources necessary to make it work. Their willingness to step in when the other partner failed (as NAMCO did in providing a product formula for Germany or Hexagon in manufacturing Hexa-Care for North America) contributed to strengthening the bonds between the partners at this early stage of the venture's life.

During the second year, Hexagon perceived: first, that NAMCO retreated from its initial commitment to provide access to its distribution system; and second, that NAMCO allowed BigName -JVCO's main competitor- to remain in the market. NAMCO's complaints about the unexpected cannibalization and its subsequent reluctance to provide access to the distributors could have left some doubts regarding its commitment to the JV. From the outside, it seems rather clear that the JV's shift in goals altered substantially the incentive structure for NAMCO, calling for contract renegotiation. However, the incident with BigName made Hexagon become very suspicious about NAMCO's interest in the JV. Hexagon's reaction was to agree to compensate NAMCO for shelf space, as a way to remove what NAMCO claimed to be obstacles. In this way, Hexagon would be able to check whether NAMCO's difficulties to contribute the expected resources were real difficulties or excuses for a lack of interest in the JV.

Despite this, Hexagon was increasingly discontented with NAMCO's behavior. The agreement between JVCO and NAMCO's Retail Division to split profits from the Division's sales was clearly against Hexagon's interests. Hexagon's subsequent reaction was to delay key work in product formulation, and to back out from promises by denying JVCO the rights to diet products. Eventually, Hexagon threatened to approach NAMCO's main competitor's distributor to handle one of Hexagon's diet products.

As Hexagon became increasingly aware that NAMCO was performing actions that were harmful to Hexagon, they first failed to perform actions beneficial to NAMCO, and then performed actions harmful to NAMCO. Initially, both behaved cooperatively, as the experience of the first launch in Germany shows. Then, Hexagon began to perceive that NAMCO was omitting cooperative actions (failure to commit resources to the JV). However, what turned Hexagon on was its perception that NAMCO also committed non-cooperative actions (the BigName incident). So as to clear away any doubts, Hexagon's initial reaction was to behave somewhat cooperatively (agreeing to compensate NAMCO for use of shelf space). As time went on, Hexagon built up the perception that NAMCO was committing noncooperative actions (profit split between JVCO and NAMCO's Retail Division). Hexagon began omitting cooperative acts (delay in key work; back out from promises). Eventually, Hexagon also committed non-cooperative actions (threat to strike deals with NAMCO's main competitor's distributors).

The results of this phase of the study suggest that the message conveyed by the commission of a non-cooperative action is stronger than the message transmitted by the omission of a cooperative action. In the case of non-cooperative behavior by commission, the firm receives a signal that the partner is pursuing its own interests at the expense of the firm. We would expect to see the firm reacting and reciprocating with similar behavior. Conversely, if non-cooperative behavior takes the form of omission, the signal is not so clear. The firm cannot be sure whether such behavior is caused by an unwillingness or an inability on the partner's side to do better. Thus, we propose that:

Proposition 2: a firm's perception of non-cooperative behavior on the part of the partner has a stronger relationship with the firm's own behavior when noncooperative behavior takes the form of commission than when it takes the form of omission.

Next, we present the second phase of this project. We offer a statistical test of Propositions 1 and 2.

## Phase II: Methods

## Sample

The sample for this study was drawn from Spanish firms that appeared in the Funk and Scott's (F\&S) Countries Index-Europe (1986-1992) as having announced their engagement in venturing activities. The selected time period begins with Spain's accession to the European Community (1986), and concludes with the establishment of the Single European Market (1992), a period that can be expected a priori to present a high level of venturing activity. The Single European Market represented an opportunity to some Spanish companies, and a threat to others. Opportunities came from the opening of a vast market to which Spanish companies would have easier access than before. The flip side of the coin was that companies from other European countries would also have easier access to the Spanish market, creating more intense competition for domestic companies. European companies generally perceived the creation of the Single European Market as a deadline for getting ready to secure a new competitive position, or at least defend their current one. CVs became an important tool in this context. The time constraint was relaxed: in a few cases, contacts in the companies in the sample brought our attention to CVs that were formed outside our chosen time period, and these were included, as we did not expect to find anything peculiar in their behavior. Due to time and financial constraints, we selected as target industries those with the highest number of CVs (see Table 4). This gave a total of 346 known firms involved in CVs. The selection process may have given the sample a certain bias towards CVs involving at least one large company; caution is therefore called for in generalizing the results.

Table 4
Industries and responses

| Industry description | No. of <br> responses | $\%$ of <br> responses | Questionnaires <br> mailed | $\%$ of <br> total mailed |
| :--- | :---: | :---: | :---: | :---: |
| Energy (petroleum and electricity) | 6 | $6.6 \%$ | 19 | $10.1 \%$ |
| Chemicals | 14 | $15.4 \%$ | 15 | $7.9 \%$ |
| Machinery except electrical | 5 | $5.5 \%$ | 7 | $3.7 \%$ |
| Electronic equipment | 4 | $4.4 \%$ | 7 | $3.7 \%$ |
| Transportation equipment | 4 | $4.4 \%$ | 5 | $2.6 \%$ |
| Transportation | 6 | $6.6 \%$ | 8 | $4.2 \%$ |
| Communications | 0 | $0.0 \%$ | 2 | $1.1 \%$ |
| Financial services | 37 | $40.6 \%$ | 95 | $50.3 \%$ |
| Other services | 15 | $16.5 \%$ | 31 | $16.4 \%$ |
| TOTAL | 91 | $100.0 \%$ | 189 | $100.0 \%$ |

The target informant was the person in each firm most directly related to the CV. Sacrificing quantity for quality, we sent out questionnaires only to those firms in which we were able to identify this person. Of the 189 mailed questionnaires we received 91 ( $48 \%$ ) back. We attribute this rather high response rate to the care taken in identifying the target respondent and in following up the questionnaires. For the follow-up process we adopted the procedure suggested by Dillman (1978), supplemented with phone calls. More than $63 \%$ of the informants had been involved in negotiating their firm's CV, and on average they had been involved with the CV for 4.9 years. Some $35 \%$ (32) of the partner companies were either domestic Spanish companies, or Spanish subsidiaries of multinational companies, and $65 \%$ (59) were foreign companies.

Seven of the returned questionnaires were incomplete for the purpose of this study. In four cases, we received answers from each side of the CV dyad. To insure independent data points we dropped out one of the parties to each CV, selecting it randomly by the flip of a coin. This left a final sample of 82 questionnaires for this study.

## Instrument

Preliminary versions of the questionnaire were checked with business scholars to ensure face validity. The questionnaire was then translated into Spanish and reviewed by two Spanish-speaking researchers. A pilot study was conducted with six Spanish executives experienced in CV management. Some changes were made at this point, and the new Spanish version was reverse translated by a party unfamiliar with the research, which revealed a high correspondence between the new English and the new Spanish versions.

## Measures

Dependent variables. The dependent variable in this study is cooperative behavior -or its reverse, non-cooperative behavior. In the introduction to this paper, we mentioned that cooperative behavior is a multidimensional concept that may be manifested in different domains (Buckley and Casson, 1988), and that a firm may behave cooperatively in some domains and non-cooperatively in others (Heide and Miner, 1992). Non-cooperative behavior may take the form of commission in some domains, and of omission in others (Buckley and Casson, 1988). Veracity -the extent to which a firm is truthful in its relations with its partner and with the CV's management- and commitment -the extent to which a firm exerts the necessary effort to make the CV work- are two domains of cooperative behavior (Ariño, 1995). In the case of veracity, non-cooperative behavior takes the form of commission: being untruthful -namely, lying- implies performing an act that is harmful to the partner. In the case of commitment, non-cooperative behavior takes the form of omission: not exerting effort to make the CV work implies failing to perform an action beneficial to the partner. Thus, we use two operationalizations of cooperative behavior as dependent variables:

Veracity is a four-item scale measuring the informants' assessment of the degree to which their firm is truthful in its relations with its partner and with the CV's management $($ alpha $=.62)(1)$. Using factor analysis, the items were selected from a broader set of items aimed at measuring opportunistic behavior previously used by John (1984), Provan and Skinner (1989), and Parkhe (1993 a) (see Appendix, question 1, items a-d).

Commitment is a two-item scale measuring the informants' assessment of the degree to which their firm exerts the necessary effort to make the CV work (alpha .53). The items were adapted from Anderson and Weitz (1992) (see Appendix, question 1, items e-f).

Independent variables. The independent variable of interest is perceived noncooperative behavior by commission and by omission. The operationalizations are developed in a similar fashion to the dependent variables:

Perceived veracity is a four-item scale measuring the informants' assessment of the degree to which their partner is truthful in its relations with the firm and with the CV's management $($ alpha $=.82)$.
(1) Nunnally (1967) suggests using .50 as a cutoff point.

Perceived commitment is a two-item scale measuring the informants' assessment of the degree to which their partner exerts the necessary effort to make the CV work (alpha =.44). This low alpha value calls for some comment.

Commitment and perceived commitment are based on the same items: commitment items ask about the informants' perceptions of their own firms, while perceived commitment items ask the same questions about the informants' perceptions of their partner firms. The same applies in the case of veracity and perceived veracity. Interestingly, the alpha for perceived commitment is lower than the alpha for commitment, while this drop does not occur in the case of perceived veracity relative to veracity. This suggests that the low alpha of perceived commitment may not be due to an insufficient reliability of the measure, but rather to the nature of this variable. The signal that the partner's commitment transmits is not as strong as the signal sent by the partner's veracity. Thus, it would take a longer time for a firm to build a consistent perception of its partner's commitment than of its partner's veracity. Therefore, one could expect informants from firms involved in younger CVs to show greater inconsistency in their answers about perceived commitment than informants involved in CVs that have been in operation for a longer period of time, while this would not hold in their answers about perceived veracity. To test this, we split the sample into two groups -CVs in their first or second year of operation and CVs in operation for a longer time- and recalculated the alpha of perceived commitment and perceived veracity for each group. As Table 5 shows, perceived commitment shows sufficient reliability in the group of older CVs, while perceived veracity is reliable in both groups. Thus, the low alpha of perceived commitment for the full sample may be due to the effect of younger CVs, where a firm's information about its partner is not enough for the firm to have a consistent perception of the partner's commitment.

Table 5
Alphas of measures of independent variables

|  | CVs 1 or 2 <br> years old <br> sub-sample | CVs 3 or more <br> years old <br> sub-sample | Full <br> sample |
| :--- | :---: | :---: | :---: |
| Perceived commitment | .50 | .56 | .44 |
| Perceived veracity | .88 | .72 | .82 |

Control variables. As discussed earlier, a firm behaves cooperatively when it can expect reciprocity from its partner. In addition to relational considerations, economic conditions -such as the level of investment in assets specific to the CV- and sociological conditions -such as whether the partner is a domestic or a foreign company-may provide the basis for this expectation. We therefore need to control for their effect on a firm's cooperative behavior. Also, some respondent bias may be expected. In fact, as we will show in what follows, non-survivors are over-represented in the sample. We also need to control for this effect. We use the following control variables:

Asset specificity is a six-item scale measuring the informants' assessment of their firm's level of investment in assets specific to the CV (alpha .73) (Question 2 in Appendix). The items were adapted from Heide and John (1988).

Nationality is a dummy variable that equals 1 if the partner is a domestic firm or the subsidiary of a multinational company in Spain, and 0 if it is a foreign company.

Survival is a dummy variable that equals 1 if the CV is still in operation, and 0 otherwise.

## ESTIMATION AND RESULTS

Table 6 shows the descriptive statistics of all the variables in the study, and Table 7 contains the correlations of the independent and control variables. Individual correlations in the table do not suggest the obvious problem of pairwise collinearity that would preclude the use of some variables in the models.

Table 6
Descriptive statistics for all variables

|  | Mean | Standard deviation | Minimum | Maximum |
| :---: | :---: | :---: | :---: | :---: |
| Commitment effort to make CV work | 3.91 | . 76 | 1.84 | 5 |
| Veracity truthfulness in relationship | 4.06 | . 63 | 2.6 | 5 |
| Perceived commitment partner's effort to make CV work | 3.56 | . 83 | 1.38 | 5 |
| Perceived veracity perceived partner's truthfulness in relationship | 3.67 | . 87 | 1.48 | 5 |
| Asset specificity investments in assets specific to CV | 2.68 | . 38 | 1.92 | 3.33 |
| Nationality <br> $1=$ partner is a domestic company <br> $0=$ partner is a foreign company | . 42 | . 50 | 0 | 1 |
| Survival <br> $1=\mathrm{CV}$ in operation <br> $0=\mathrm{CV}$ terminated | . 76 | . 43 | 0 | 1 |

Table 7
Correlation matrix for independent and control variables

1. Perceived veracity
2. Perceived commitment
3. Asset specificity
4. Nationality
5. Survival

| 1 | 2 | 3 | 4 | 5 |
| ---: | ---: | ---: | ---: | ---: |
| 1.00 |  |  |  |  |
| .37 | 1.00 |  |  |  |
| .43 | .60 | 1.00 |  |  |
| -.02 | .05 | -.05 | 1.00 |  |
| .23 | .11 | .02 | .03 | 1.00 |

It could be felt that self-reported assessments of some aspects of cooperative behavior might bias the results upwards. Following Dillman (1978), we tried to minimize this possibility by formulating the questions in such a way that the respondents' perception of a socially desirable answer is reduced. The use of a lengthy introduction to the question, stating that different CVs may work with very different patterns of behavior from the partners, fulfils this objective.

We might expect differences in the degree of willingness to answer the questionnaire between informants who were satisfied with their CV and those who were dissatisfied. It is not feasible to conduct a direct check for non-response bias of this sort. On the assumption that late respondents are more similar to non-respondents than early respondents (Armstrong and Overton, 1977), we checked for differences between early and late respondents across all the variables used in the study, as well as for potential survivor bias. One-way betweengroups ANOVA was used for the continuous variables, and likelihood analysis for the dummy variables. These tests were done with the 91 questionnaires we received. The results of these tests are reported in Table 8. Significant differences (. 05 level) between early and late respondents were found for veracity and survival. Table 9 contains the means of these variables for early and late respondents. Late respondents were significantly less veracious than early respondents. Also, there were significantly more survivors among late than among early respondents. This means that although the number of non-survivors in the sample is low relative to survivors, our sample includes a significantly high proportion of non-survivors. These biases need to be considered when interpreting the results.

Table 8
Results of tests for early/late respondent bias

|  | F | Chi-sq | p |
| :--- | :---: | :---: | :---: |
| Veracity | 4.12 | - | .05 |
| Commitment | 0.86 | - | .36 |
| Perceived veracity | 0.18 | - | .67 |
| Perceived commitment | 0.12 | - | .74 |
| Asset specificity | 3.69 | - | .06 |
| Nationality | - | 0.05 | .83 |
| Survival | - | 4.95 | .02 |

Table 9
Means of variables with early/late respondent bias

|  | Early <br> respondents | Late <br> respondents |
| :--- | :---: | :---: |
| Veracity | 4.15 | 3.82 |
| Survival | 0.35 | 0.10 |

Table 10 summarizes the results of ordinary-least-squares regression analyses for veracity and commitment. Perceived veracity is significant at least at the $p<.001$ level in both equations. In the case of veracity, it takes the positive sign; unexpectedly, it takes the negative sign in the case of commitment. In contrast, perceived commitment is non-significant both in the equation for veracity and in that for commitment. As for the control variables, asset specificity is significant ( $\mathrm{p}<.001$ ) and positive in both equations. Survival is also significant ( $\mathrm{p}<.05$ ) in both equations; it takes the negative sign in the equation for veracity, and the positive sign in the equation for commitment. That is, firms whose CVs are still in operation are less veracious and more committed than firms whose CVs did not survive. This result
may be influenced by the fact that our sample is somewhat biased towards non-survivors and towards more veracious firms.

Table 10
Regression models for veracity and commitment

|  | Veracity | Commitment |
| :---: | :---: | :---: |
| Perceived veracity | . 36 *** | $-.24 * * *$ |
| Perceived commitment | . 01 | . 13 |
| Asset specificity | . 64 *** | 1.62 *** |
| Nationality | . 12 | -. 03 |
| Survival | -.25 * | . 24 * |
| Intercept | . 93 | . 10 |
| R -squared | . 52 | . 70 |
| Adjusted R-squared | . 48 | . 68 |
| F | 16.12 *** | 35.08 *** |
| $\mathrm{N}=82$ |  |  |
| $\begin{aligned} & * \quad \mathrm{p}<.05 \\ & * * \mathrm{p}<.01 \\ & * * * \mathrm{p}<.001 \end{aligned}$ |  |  |

## Phase II: Discussion

In interpreting our results we need to exercise caution because of possible nonrespondent bias that could skew the sample towards non-survivors and towards more veracious firms.

The firm's perception of its partner's veracity is positively associated with the firm's veracity and negatively associated with the firm's commitment. Thus, Proposition 1 -that a firm's perception of non-cooperative behavior on the part of its partner shows a positive relationship with the firm's own non-cooperative behavior- receives partial support. The different effect of the firm's perception of its partner's behavior on the firm's veracity and on the firm's commitment may be due to the different nature of veracity and commitment. As we discussed earlier, non-cooperative behavior by commission is more likely to be detected, and when detected it sends a stronger signal than non-cooperative behavior by omission. If a firm perceives its partner as showing a high level of veracity, the firm may reciprocate by behaving veraciously, while taking advantage of its partner in a domain where non-cooperative behavior is less likely to be detected. This explanation is consistent with the fact that non-survivors are more veracious and less committed than survivors (see Table 10). However, we need to take caution in generalizing the result because of the possible respondent bias towards nonsurvivors and more veracious firms.

A firm's perception of its partner's veracity shows a significant relationship both with the firm's veracity and with its commitment. In contrast, a firm's perception of its
partner's commitment to the CV shows no significant relationship either with the firm's veracity or with its commitment. These results point to support Proposition 2 -that a firm's perception of non-cooperative behavior on the part of the partner has a stronger relationship with the firm's own behavior when the partner's non-cooperative behavior takes the form of commission than when it takes the form of omission. The results suggest that there may be informational differences contained in non-cooperative behavior by commission and by omission. Our previous discussion with respect to Proposition 1 also provides some additional support for this contention.

Overall, the results of this study suggest that a firm's response to its perception of the partner's behavior depends on the informational value of this behavior. Consequently, a variety of reciprocity rules may emerge. For instance, when a firm perceives its partner as behaving cooperatively, the firm will reciprocate if non-cooperative behavior can be easily detected. However, even if the firm perceives its partner to behave cooperatively, the firm may still behave non-cooperatively if this behavior is likely to go unnoticed. When a firm perceives its partner as omitting actions that would benefit the firm, it may delay its response until it finds out whether those omissions are intended or not. However, when a firm perceives its partner as committing actions that harm the firm, it is more likely to reciprocate with similar actions, or at least to omit actions that would benefit the partner. Also, the firm may believe that a partner that behaves cooperatively is less likely to assign a bad intention to the firm's omissions than if the partner behaves non-cooperatively. This belief may also influence the firm's behavior.

## CONCLUSIONS

This study contributes to the literature by attempting to show that non-cooperative behavior is not a homogenous concept and that we need to distinguish between the omission of cooperative actions and the commission of non-cooperative ones. This distinction, already traced in the literature (Buckley and Casson, 1988), has received little attention. The qualitative evidence in this study suggests that non-cooperative behavior by omission has less effect than non-cooperative behavior by commission on the firm's own non-cooperative behavior. The quantitative evidence points in this same direction.

The results suggest that the different informational value contained in non-cooperative behavior by commission and by omission may result in a variety of reciprocity rules. The emergence of these rules may be path-dependent in that the firm may react diversely to different patterns of evolution of its partner's perceived behavior. Controlling for this path-dependence effect in future studies would contribute to our understanding of the evolution of CVs.

Additionally, this work may be extended in a number of ways. It would be interesting to study how cooperative behavior is affected by differences in inter-partner learning that may dynamically alter the relative dependence of one company on the other. Relatedly, the nature of the resources contributed to the CV by each company might also influence their behavior. Whether and how this occurs is worth studying.

Throughout this study, we have assumed that the informant's view coincides with that of the firm as a whole. Underlying this assumption is the idea that the goals of the managers and those of their firms are aligned; thus, agency problems are assumed away. However, the managers involved in a CV may have personal goals that are achieved through behaviors that are different than those which would lead to the achievement of the firm's goals. Future research might benefit by taking into account the effect of agency problems on cooperative behavior.

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## Appendix

## Questionnaire items

1. The parent firms' behavior varies in different collaborative ventures. Suppose there exists an OUTSIDER -for instance, an industry expert, or a consultant- who has a deep knowledge of this venture. If this OUTSIDER were asked about the frequency with which YOUR FIRM adopts each of the following behaviors, what do you think the OUTSIDER would answer?

Never Rarely Sometimes Often Always
a. In this company they present facts to their partner in such a way that they look good $\qquad$ 1
b. In this company they promise things even if they cannot do them later $\qquad$ 1
c. In this company they provide the venture's management team with a truthful picture of their business $\qquad$ 1

2
3
4
5
d. In this company they alter the facts $\begin{array}{lllllll}\text { slightly in order to get what they want } & 1 & 2 & 3 & 4 & 5\end{array}$
e. In this company they dedicate whatever people and resources it takes to help the venture's management team .............. 1

3
4
5
f. In this company they are tolerant with the venture's management team when the latter makes mistakes that cause them trouble $\qquad$ 1

2
3
4

## Appendix (continued)

2. Collaborative ventures vary in the amount of resources required in terms of time, staffing, and financial resources. Indicate how you would rate each of the following possible contributions by YOUR FIRM to this venture:

Negligible Low Medium High Substantial
a. Our investment in dedicated personnel specific to this venture is $\qquad$ 1
2
3
4
5
b. Our investment in dedicated facilities to this venture is $\qquad$ 1
2
3
4
5
c. If we decided to stop this venture, the difficulty we would have in redeploying our people and facilities presently serving the venture to other uses would be $\qquad$ 12

3
4
5
d. The time required to learn about our partner's style has been $\qquad$ 1

2
3
4
5
e. The time and effort of coordination with our partner required to perform our tasks in the venture have been .... 1

2
3
4
5
f. If this venture were to dissolve, our non-recoverable investments in equipment, people, etc. would be ...... 1

2
3
4
5

| IESE |  |  |
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[^0]:    (1) So as to avoid confusion, we refer to the focal firm as "the firm", and to the focal firm's partner as "the partner".
    (2) For the sake of simplicity in the exposition, we shall focus on collaborative ventures between only two companies, although the argument could be applied to ventures involving a larger number of companies.

[^1]:    (1) This distinction recalls Williamson's (1975) strong and weak forms of opportunistic behavior.

