This article reports a comparative case study of four joint ventures between partners from the United States and the People's Republic of China. The bargaining power of potential partners affects the structure of management control in a joint venture, which affects venture performance. Several informal control mechanisms interacting with formal control structure and influencing performance are identified. We also investigated the joint ventures' evolution over time. An integrative model of management control in joint ventures is presented.

International joint ventures are a rapidly growing organizational form that has received increasing interest from researchers in a variety of academic disciplines. Despite this attention, academic understanding of joint ventures is still limited in scope and in depth. Previous studies have reported high failure and instability rates among joint ventures (Franko, 1971; Harrigan, 1986; Kogut, 1989; Levine & Byrne, 1986), and the factors predictive of successful venture performance remain unclear (Geringer & Hebert, 1991; Parkhe, 1993a). In addition, the empirical studies that have been done to test existing conceptual models have either produced contradictory results or been difficult to compare because of differences in how variables were measured.

This study adopts an interpartner negotiations perspective on joint venture formation. We envisioned joint ventures as mixed motive games between partners who cooperate and compete simultaneously (Lax & Sebenius, 1986; Hamel, Doz, & Prahalad, 1989). According to the negotiations perspective, the relative bargaining power of each joint venture partner shapes the pattern of management control that a venture adopts. In addition, parent control is hypothesized to be a critical factor that determines performance. Although previous researchers have empirically investigated the first rela-
tionship (Blodgett, 1991; Fagre & Wells, 1982; Killing, 1983; Lecraw, 1984), the studies are difficult to compare because they have measured both variables differently. Research findings on the relationship between control and performance offer conflicting results (see Geringer and Hebert [1989] for a review). Lecraw (1984) noted that the relationship between parent control and performance generates continuing controversy in the international joint venture literature.

Additional problems with prior research also warrant further study. For example, (1) conflicting results have been obtained for joint ventures in developing and developed countries (Beamish, 1984, 1985, 1988); (2) longitudinal studies are underrepresented in research to date and, as a result, little is known about how joint ventures evolve over time; (3) most joint venture research on developing countries adopts the perspective of the multinational partner and excludes the views of the developing country partner; and (4) only two studies have examined the relationships between bargaining power and control and control and performance simultaneously (Killing, 1983; Lecraw, 1984).

In this research, we utilized a comparative case study approach to re-examine the relationships among bargaining power, control, and performance. We sought to overcome the limitations mentioned above in several ways. First, we looked at the relationships among all three variables in the same study. By adopting in-depth, comparative case studies, we tried to sort out the confusion and inconsistencies with respect to these relationships in the existing literature. By providing detailed explanations that survey methods miss, case studies offer the prospect of new insights into the connections among these variables (Eisenhardt, 1989; Glaser & Strauss, 1967; Yin, 1989). Second, we sought to improve on existing models by accounting for the dynamic aspects of joint ventures, a topic largely ignored in research to date (Parkhe, 1993a). By tracing the evolution of joint ventures, we identified changes in the ventures over time. In this respect, comparative case studies are useful because they are particularly appropriate for studying organizational changes (Van de Ven & Poole, 1990). Third, our data reflect the interpretations of both parents. Fourth, research on international joint ventures that has examined bargaining power, control, and performance has primarily focused on ventures created among developed country partners. In our study, we aimed at a deeper understanding of joint ventures in a developing country, the People's Republic of China, thus enriching the literature with the Chinese experience.

Recent research has focused on the rapid proliferation of international joint ventures in transformational economies (those in transition from central control to a market orientation) such as that of the People's Republic of China (Beamish, 1993; Child, 1991; Daniels, Krug, & Nigh, 1985; Davidson, 1987; Pearson, 1991; Pomfret, 1991). Virtually no research on the relationships among bargaining power, control, and performance in joint ventures in China has been reported. What research exists either focuses on the macro environments in China for direct foreign investment (e.g., Campbell, 1988;
Ho, 1990; Mathur & Chen, 1987; Shan, 1991; Tung, 1982) or is descriptive (e.g., Campbell, 1988; Eiteman, 1990; Hendryx, 1986; Mann, 1989; O'Reilly, 1988; Schneppe, Von Glinow, & Bhambrui, 1990). In-depth empirical research on the management and organizational issues in international joint ventures in China has been limited, though more studies have been done very recently (e.g., Beamish, 1993; Child, 1991; Lo, 1989; Newman, 1992; Pearson, 1991; Teagarden & Von Glinow, 1990). The applicability of research findings generated in the West to the Chinese setting remains an open question (Child, 1991).

The economic reforms in China have stimulated a wealth of joint ventures in the past decade. More than 20,000 international partnerships with a total investment of more than $26 billion were signed in the 1980s (U.S.-China Business Council, 1990). This rapid growth of Chinese joint ventures presents an interesting and challenging opportunity to study international alliances in a new institutional context (Child, 1991).

In the next section, we introduce the preliminary conceptual framework derived from the existing literature. Following Yin (1989), who argued that case studies should start with theoretical propositions, this research began with a theoretical framework linking bargaining power, management control, and performance. We then used analytic induction (Cressey, 1953; Glaser & Strauss, 1967; Robinson, 1951; Znaniecki, 1934) to analyze four U.S.-Chinese joint ventures.

THEORETICAL BACKGROUND

As noted earlier, we adopted a negotiations perspective to explain the distribution of control between the partners in a joint venture. The negotiations perspective suggests that the relative bargaining power of partners is a critical variable in determining patterns of control in joint ventures (Blodgett, 1991; Harrigan & Newman, 1990; Lecraw, 1984). Below, we develop the meaning of these constructs and provide support for the relationships among them.

Bargaining Power

Bargaining power refers to a bargainer's ability to favorably change the "bargaining set" (Lax & Sebenius, 1986), to win accommodations from the other party (Dwyer & Walker, 1981; Tung, 1988), and to influence the outcome of a negotiation (Schelling, 1956). Researchers investigating bargaining

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1 Yin's (1989) position that case studies should start with a priori theoretical propositions obviously contrasts with Eisenhardt's (1989) argument that case studies should start with a clean theoretical slate so that researchers are less likely to be bound by preconceived theoretical notions. However, a clean theoretical slate is virtually impossible to achieve (Parkhe, 1993a), given the accumulative nature of scientific inquiry (Kuhn, 1970), the education researchers have received from studying prior theories, and the potentially infinite number of variables affecting a phenomenon under study.
Advocates of bargaining theory have proposed that the stakes of the bargainers in a negotiation and the availability of alternatives influence their bargaining power (Bacharach & Lawler, 1984). A stake is a bargainer’s level of dependence on a negotiating relationship and on its outcomes. Stakes are negatively related to bargaining power. Alternatives available to negotiators specify the extent to which they can choose different arrangements for achieving the same goals sought in the negotiation. Thus, availability of alternatives is positively related to bargaining power. The bargaining partner who has more alternatives is more powerful because it can threaten to walk away from the current bargaining and exercise its best alternative to a negotiated agreement (Fisher & Ury, 1981). Since stakes and the availability of alternatives are associated with the context in which a negotiation occurs, we refer to them as sources of context-based bargaining power.

In another vein, resource dependence theory (Pfeffer & Salancick, 1978) suggests that the possession or control of critical resources constitutes power in interorganizational relations. If a firm contributes more critical resources to an interorganizational arrangement than its partner, it will be more powerful than the partner in the partnership between them. Put simply, the relative bargaining power of potential joint venture partners is determined by who brings what and how much to the venture (Harrigan, 1986). A partner gains bargaining power if the joint venture depends heavily on resources it contributes that are “costly or impossible for other partners to replace” (Root, 1988: 76) and critical to the venture’s success (Harrigan & Newman, 1990).

Management Control

Management control refers to the process by which an organization influences its subunits and members to behave in ways that lead to the attainment of organizational objectives (Arrow, 1974; Flamholtz, Das, & Tsui, 1985; Ouchi, 1977). Conceptualization of control in joint ventures is more problematic, however, because two or more parents may influence a venture’s activities. In this study, we focused on the structure of management control exercised by the sponsoring organizations in influencing a joint venture’s strategic decisions and regulating its important activities.

Geringer and Hebert (1989) characterized parent control in international joint ventures as composed of three parts: the scope, extent, and mechanisms of control. The scope of control specifies the areas of the joint venture’s operation in which control is exercised. The extent of control is the degree to which the parents exercise control. The mechanisms of control refer to the means by which control is exercised. Previous studies have each focused on a different dimension of control: Killing (1983) and Lecraw (1984) on extent, Geringer (1986) on scope, and Schaan (1983, 1988) on scope and mechanisms. Thus, their results are virtually noncomparable. Our multidimen-
A professional approach to management control enhanced comprehensiveness and comparability with other studies.

**Relationships Between Bargaining Power and Management Control**

Prior research has attempted to articulate the relationship between the bargaining power of the partners in a joint venture and the level of control they exercise. Lecraw (1984) found that three aspects of bargaining power—the technical leadership, advertising intensity, and export capability of the multinational partner—significantly contributed to control. In a study of 35 international joint ventures between developed countries, Killing (1983) reported that the partners’ respective contributions shaped the control structure of the joint ventures. For example, if one partner contributed technology while the other had expertise in marketing, shared control was the most feasible arrangement. Other studies (Blodgett, 1991; Fagre & Wells, 1982) have also reported a positive relationship between bargaining power and control, but in these studies, control was measured by ownership split between the partners.

**Performance**

Configuration of performance has been a controversial topic in the organizational literature (see Goodman and Pennings [1980] or Lewin and Minton [1986] for a review). The controversy derives from the facts that performance can be evaluated in several ways and that few indicators of performance have been widely accepted. Performance evaluation becomes even more problematic in joint ventures because each party in the partnership is likely to adopt idiosyncratic criteria. The literature on joint venture performance reveals three areas in which major inconsistencies occur: (1) whose perspective (that of one parent, two parents, or the joint venture’s management) is used for performance measurement, (2) variation in performance measures, which may range from subjective judgments to financial indicators, and (3) variation in the appropriateness of different performance measures as a venture matures (see Yan and Gray [1994] for a review). These inconsistencies make cross-study comparisons and generalizations about joint venture performance particularly problematic.

Following Schaan (1983, 1988) and our earlier research (Yan & Gray, 1994), we adopted a multidimensional approach to joint venture performance and incorporated the perspectives of multiple players. Specifically, we used each partner’s assessment of the extent to which it had achieved its strategic objectives as a measure of performance.

**Relationship Between Management Control and Performance**

Studies of the relationship between parent control and performance have produced ambiguous results (Geringer & Hebert, 1989). In a study of international joint ventures between developed country partners, Killing (1983) found that ventures with one dominant parent outperformed those with shared management and that the relationship between control and
performance was U-shaped. Drawing from a sample of international joint ventures in a developing country, Beamish (1984, 1985) reported that dominant control by foreign firms was negatively related to performance. But when local partners dominated ventures, no such relationship was found. Beamish therefore suggested that the type of economy in which a joint venture operates may moderate the control-performance relationship. However, Lecraw’s (1984) study showed that the status of the economic development of a joint venture’s host country may not be as critical as Beamish suggested. Using a sample of joint ventures in five developing Asian countries, Lecraw found a positive, roughly linear association between control and performance, a finding consistent with Killing’s (1983) findings. Other researchers have noted that the control-performance relationship is indirect and thus subject to contingent factors (see Geringer and Hebert [1989] for a review). We argue that additional research is needed to sort out the conditions under which the relationship between control and performance is positive and that the type of economy in which a joint venture operates still deserves to be considered an important contingency.

**Structural Reconfiguration in International Joint Ventures**

Researchers have characterized joint ventures as transitional forms of organization (Davidson, 1982; Harrigan, 1986; Porter, 1990; Vernon, 1977). Though not all international joint ventures are necessarily transitional or unstable, they are far more dynamic than single, stand-alone organizations (Franko, 1971). Structural changes and reconfigurations in joint ventures are likely to occur over time for several reasons. First, international partnerships may be an expedient way for multinational corporations to enter foreign markets when conditions prohibit whole foreign ownership (Davidson, 1982; Fayerweather, 1982). Whenever such constraints are removed, joint ventures tend to become wholly owned affiliates (Contractor, 1990). Second, a joint venture can be phased out because its importance to one or both parents’ overall strategies depreciates (Bartlett & Ghoshal, 1986; Harrigan & Newman, 1990). A third predictable transition in joint ventures occurs when there is an “obsolescencing bargain” (Vernon, 1977: 151)—when substantial learning by one partner over time devalues the expertise or knowledge contributed by the other, thereby breaking down the initial bargaining relationship between them (Hamel, 1991). The obsolescencing bargain also occurs when the partners gain bargaining power over time as a result of environmental changes (Harrigan & Newman, 1990). Dymsza (1988) noted that in joint ventures between developed and developing country partners, the former’s contribution is likely to become less important over time; thus, it should turn major managerial responsibilities over to the developing country partner. Similarly, we noted in previous research (Gray & Yan, 1992), as did Hamilton and Singh (1991), that joint ventures need to reconfigure over time in response to changes in the partners’ relative bargaining power to ensure stability and overall performance.

However, the dynamic aspect of joint ventures has been understudied
and has received “the least amount of systematic attention in the existing literature,” representing “a critical omission in the development of a more complete theory of international joint ventures” (Parkhe, 1993a: 234). Previous studies on changes in joint ventures have focused on different dimensions and had varying perspectives. In particular, empirical findings on the dynamic characteristics of international partnerships have been very sketchy. With the case study reported here, we attempt to provide inductively generated accounts of how joint ventures evolve over time, what factors trigger their structural reconfigurations, and how parents deal with changes in their joint ventures.

Summary

The above review suggests that although many studies of bargaining power, management control, and performance exist, they suffer from inconsistent conceptualizations and noncomparable empirical results. In Figure 1, we offer a model that synthesizes past research on bargaining power, management control, and performance in international joint ventures. Although the main thesis of the model may apply to all joint ventures, the nature and strength of the relationships depicted may vary from international to domestic joint ventures and from ventures in developed countries to those in developing countries. This research investigated the model by focusing on international joint ventures in a developing country. Following Yin (1989), we used our theoretical model as a benchmark, comparing our data against the model using analytic induction.

METHODS

Case Selection

Researchers have called for rigorous case studies of international joint ventures (Parkhe, 1993a; Parkhe & Shin, 1991). In this study, we conducted case analyses of four joint ventures between partners from the United States and the People’s Republic of China. Table 1 summarizes the major characteristics of these partnerships. The companies and individuals are disguised to ensure confidentiality. (Detailed descriptions of each joint venture are available upon request.)
We considered several factors in selecting the cases. First, we limited our study to manufacturing ventures to minimize extraneous variation (Eisenhardt, 1989) that might be derived from differences between the service and manufacturing sectors (Chowdhury, 1988). Second, the ventures

<table>
<thead>
<tr>
<th>Characteristic</th>
<th>OfficeAid</th>
<th>IndusCon</th>
<th>DailyProduct</th>
<th>BioTech</th>
</tr>
</thead>
<tbody>
<tr>
<td>Product</td>
<td>Electronic office equipment</td>
<td>Industrial process control</td>
<td>Personal hygiene products</td>
<td>Pharmaceuticals</td>
</tr>
<tr>
<td>Length of negotiation in years</td>
<td>4</td>
<td>3</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>Total investment in millions of dollars</td>
<td>30</td>
<td>10</td>
<td>2.85</td>
<td>10</td>
</tr>
<tr>
<td>U.S.—China equity shares</td>
<td>51/49</td>
<td>49/51</td>
<td>50/50</td>
<td>50/50</td>
</tr>
<tr>
<td>Duration in years</td>
<td>30</td>
<td>20</td>
<td>20</td>
<td>15</td>
</tr>
<tr>
<td>Product market</td>
<td>Mainly local; small percentage for export</td>
<td>Local, import substitution</td>
<td>50% for export</td>
<td>Mainly local; small percentage for export</td>
</tr>
<tr>
<td>Parents’ objectives</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>United States</td>
<td>Market share</td>
<td>Business growth</td>
<td>Learn how to do business in China</td>
<td>Market Profit</td>
</tr>
<tr>
<td></td>
<td>Low-cost sourcing</td>
<td>Market penetration Profit</td>
<td>Establish credibility Profit</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Business expansion</td>
<td></td>
</tr>
<tr>
<td>People’s Republic of China</td>
<td>Technology and management</td>
<td>Import substitution</td>
<td>Profit</td>
<td>Technology Gain</td>
</tr>
<tr>
<td></td>
<td>Export for foreign exchange</td>
<td>Manufacturing technology</td>
<td>Export for foreign exchange</td>
<td>management expertise</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Upgrade suppliers’ technology</td>
<td>Technology Growth</td>
<td>Business expansion</td>
</tr>
</tbody>
</table>
were widely representative of U.S.–China joint ventures operating in various industrial sectors. Manufacturing ventures represent 69 percent of U.S.–China joint ventures (U.S.–China Business Council, 1990), and the four ventures included in this study represented the three industrial sectors in which about 50 percent of all U.S.–China manufacturing joint ventures were found. A third factor considered for case selection was that the joint ventures had to be in operation for a period of time so that data on their performance were available. A final and practical factor was access to informants. By design, we needed at least two parties from each partnership to agree to participate. The joint ventures eventually included in this study are among the first for which all parties involved agreed to interviews.

**Data Collection**

We collected data for this study from both interviews and archives. We conducted in-depth interviews with executives of both the U.S. and Chinese partners and the managers of the joint ventures following a predesigned interview protocol. Most of our informants (see Table 2) had personally participated in the initial negotiations for a venture or been involved in the venture’s management in its early stages. Each interview lasted an average of three hours; some informants were interviewed more than once. Interviews were tape-recorded unless informants objected. To assure the accuracy of the interview data, we conducted member checks (Lincoln & Guba, 1985) in which the original informants verified our tape transcripts or interview notes. All the interviews were conducted during the eight months between May 1991 and January 1992. In addition to interviews, approximately 20 pages of archival data were collected for each partnership, including the highlights of the joint venture contracts, the joint venture’s and the parents’ organizational charts, corporate brochures and annual reports, published case descriptions, and newspaper and magazine reports about the partnership.

**Data Coding**

Data from different sources were coded using typical content analysis procedures (Diesing, 1972; Lincoln & Guba, 1985; Strauss, 1987; Taylor & Bogdan, 1984). First, we coded all data into a number of categories according to the proposed theoretical model (Yin, 1989). These categories are (1) negotiation context factors, (2) strategic objectives of the partners for participating in the venture, (3) initial contributions of each partner to the joint venture, (4) the venture’s management structure when it was formed, (5) changes that occurred during the joint venture’s operation in each of the above areas, and (6) the extent to which each partner achieved its strategic objectives. Table 3 provides examples of data coding.

Second, we created subcategories using classifications adopted in previous research when they were appropriate; for example, partner contributions in product design, special equipment, and production know-how were grouped into “technology.” Third, within each subcategory, if data collected from different sources were inconsistent, we reconciled differences either
TABLE 2  
Sources of the Interview Data

<table>
<thead>
<tr>
<th>Joint Venture</th>
<th>Interviewees</th>
</tr>
</thead>
</table>
| OfficeAid     | Manager for business strategy of the U.S. parent, member of the joint venture’s board of directors, former head negotiator of the U.S. team, and the first general manager of the joint venture  
               | Chairman of the board and general manager of the Chinese parent firm  
               | Deputy general manager of the joint venture, member of the joint venture’s board of directors, and former executive general manager and head negotiator of the Chinese partner  
               | Two department managers of the joint venture: a marketing manager who was on the Chinese negotiation team and a quality control manager |
| IndusCon      | Directing manager for international joint ventures of the U.S. parent, member of the joint venture’s board of directors, and former deputy general manager of the joint venture  
               | Deputy general manager of the joint venture, member of the joint venture’s board of directors, former member of the Chinese negotiation team  
               | Manager of marketing of the joint venture |
| DailyProduct  | Regional general manager for the China operation of the U.S. parent, vice chairman of the joint venture’s board of directors, one of the two members of the former U.S. negotiation team, former second general manager of the joint venture |
| BioTech       | Director of finance for the Asia-Pacific region of the U.S. parent, and active participant in the joint venture negotiations  
               | Vice president of the joint venture, former member of the Chinese negotiation team  
               | Director for general administration of the joint venture |

*a Each paragraph represents one individual.

with additional sources of data or through verification by the original informants. For example, interview data on viable alternatives available to IndusCon’s Chinese partner during the negotiation did not converge. We adopted the information provided by one of the informants because we found support for this source in archival data contained in a published report by a third, independent source. Overall, as Table 4 shows, triangulation across different data sources revealed a high level of consistency.

Data coding was conducted by both of us. First, we jointly developed the coding scheme and used it to analyze one case. Then, we divided the labor in coding the other three cases, with one of us coding the data while the other acted as an auditor (Lincoln & Guba, 1985). Auditing consisted of verifying both the process (the steps followed by the coder) and the product of data coding (the maps and tables derived from the interview data).

Case Analysis Method

The method adopted in analyzing the cases is analytic induction (Glaser & Strauss, 1967; Robinson, 1951; Znaniecki, 1934). In contrast to enumera-
TABLE 3
Examples of Data Coding

<table>
<thead>
<tr>
<th>Coding Category</th>
<th>Example</th>
</tr>
</thead>
<tbody>
<tr>
<td>Negotiation context</td>
<td>The Chinese were negotiating with a Japanese company the same time [while] negotiating with us.</td>
</tr>
<tr>
<td>Strategic objectives</td>
<td>Our goals? We went to China to earn money, no question about that. We went there also to develop a significant market share in China, and to develop a low-cost sourcing base.</td>
</tr>
<tr>
<td>Initial contributions</td>
<td>Most technology, about 80 percent, was imported from our American partner, but we contributed some equipment. Some of our equipment is still in use now.</td>
</tr>
<tr>
<td>Management structure</td>
<td>Management of the firm will be two-tiered. The board of directors will have 10 members with equal representation for each side. . . . The chairman of the board will be from the PRC, and [the U.S. parent] will name the vice chairman. The second tier of management, which will handle the day-to-day activities of the joint venture, also will be headed by the board chairman and vice chairman. The vice chairman, [the U.S. parent’s] man, concurrently will hold the post of president of the joint venture.</td>
</tr>
<tr>
<td>Achievement of objectives</td>
<td>[The U.S. firm] now is one company who knows how to do business in China. I think this objective has been definitely achieved . . . . We have established our credibility with the local people. . . . Profitability? We are very profitable today. Profit margin is 49 percent.</td>
</tr>
<tr>
<td>Changes and dynamics</td>
<td>In 1987, [the U.S. partner] shifted the production of this product to the joint venture, which significantly increased the joint venture’s export and generated additional foreign exchange for us.</td>
</tr>
</tbody>
</table>

It takes much longer than we expected to transfer management to the Chinese. . . . Though they have been pushing hard to cut the number of U.S. expatriates, . . . I would be reluctant to take any expatriates out in the first ten years of the joint venture.

Our first two objectives have been achieved. Low-cost sourcing [the third goal] has not. . . . So, from an emphasis standpoint, probably the three objectives are now getting equal emphasis.

tive induction, which relies on statistical methods to generate simple, aggregate, and stable mental rules, analytic induction is a method of extending or refining existing theories by constantly comparing them with crucial instances or typical cases (Glaser & Strauss, 1967; Lindesmith, 1947; Znaniecki, 1934). “The exceptional instance is the growing point of science. . . . Cumulative growth and progressive development of theory is obtained by formulating a generalization in such a way that negative cases
**TABLE 4**
**Triangulation of Data**\(^{a,b}\)

<table>
<thead>
<tr>
<th>Variables</th>
<th>Negotiation Context Factors</th>
<th>Strategic Objectives</th>
<th>Resource Contributions</th>
<th>Management Structure</th>
<th>Changes and Dynamics</th>
<th>Achievement of Objectives</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Timing of assessment</strong></td>
<td>Largely retrospective</td>
<td>Current and retrospective</td>
<td>Retrospective and current</td>
<td>Current and retrospective</td>
<td>Current and retrospective</td>
<td>Current</td>
</tr>
<tr>
<td><strong>OfficeAid</strong></td>
<td>Interviews with 1, 2, 3, and 4</td>
<td>Interviews with 1, 2, 3, and 4 and archival</td>
<td>Interviews with 1, 2, 3, and 4 and archival</td>
<td>Interviews with 1, 2, 3, and 4</td>
<td>Interviews with 1, 2, 3, and 4</td>
<td>Interviews with 1, 2, 3, and 4</td>
</tr>
<tr>
<td><strong>IndusCon</strong></td>
<td>High</td>
<td>Modestly high</td>
<td>High</td>
<td>High</td>
<td>High</td>
<td>Modestly high</td>
</tr>
<tr>
<td><strong>DailyProduct</strong></td>
<td>Interviews with 1 and 3</td>
<td>Interviews with 1 and 3 and archival</td>
<td>Interviews with 1 and 3 and archival</td>
<td>Interviews with 1 and 3</td>
<td>Interviews with 1 and 3</td>
<td>Interviews with 1 and 3</td>
</tr>
<tr>
<td><strong>BioTech</strong></td>
<td>High</td>
<td>High</td>
<td>Modestly high</td>
<td>High</td>
<td>High</td>
<td>High</td>
</tr>
</tbody>
</table>

\(^{a}\) Informants are coded as follows: 1 = U.S. parent representative, 2 = Chinese parent representative, 3 = American venture representative, 4 = Chinese venture representative.

\(^{b}\) High = All sources of data are in agreement; modestly high = at least two sources in agreement, others are not. Where no agreement is indicated, data were from single individual who was both a regional general manager of the U.S. parent and a general manager of the joint venture.
force us either to reject the generalization or to revise it” (Lindesmith, 1947: 12). Analytic induction involves the following steps:

First, a rough definition of the phenomenon to be explained is formulated. Second, an hypothetical explanation of that phenomenon is formulated. Third, one case is studied ... with the object of determining whether the hypothesis fits the facts in that case. Fourth, if the hypothesis does not fit the facts, either the hypothesis is reformulated or the phenomenon to be explained is re-defined, so that the case is excluded. ... Fifth, practical certainty may be attained after a small number of cases has been examined. ... Sixth, this procedure ... is continued until a universal relationship is established, each negative case calling for a redefinition or a reformulation. Seventh, for purposes of proof, cases outside the area circumscribed by the definition are examined to determine whether or not the final hypothesis applies to them (Cressey, 1953: 16).

Following this procedure, we started with one case study and compared the findings with the theoretical model shown in Figure 1. Then, we modified the model in view of the findings in the first case. This comparative process was repeated for each successive case. Parkhe (1993a) argued that the comparative case method is particularly appropriate for the study of joint ventures, given the need for rigorous theory development on the topic.

**RESULTS**

Although the logic of analytic induction was strictly followed—the cases were analyzed one by one in an incremental manner—because of space limitations, we report only the final revision of the model. However, research findings on the relationships among the variables and the dynamic aspects of joint ventures are presented case by case.

**Bargaining Power**

Across the four cases, we identified two context-based and seven resource-based components of bargaining power (see Table 5). For each case, we list only components that both partners acknowledged.

**Context-based.** Evidence supporting the importance of the two components of context-based bargaining power, stakes and availability of alternatives, was present in all four cases. The measure of stakes was the perceived strategic importance of the joint venture to the overall business of a parent. For example, BioTech was critically important to its U.S. parent because the latter regarded China as one of its worldwide strategic markets. For the U.S. parent in DailyProduct, on the other hand, because the joint venture was nothing more than an experiment to test the Chinese market, the stakes were only marginally important.

Context-based bargaining power can also be derived from having alter-
<table>
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<tbody>
<tr>
<td>Context-based</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Alternatives available</td>
<td>Higher</td>
<td>Moderately lower</td>
<td>Equal</td>
<td>Equal</td>
<td>Higher</td>
<td>Higher</td>
<td>Equal</td>
<td>Equal</td>
</tr>
<tr>
<td>Strategic importance</td>
<td>Moderately higher</td>
<td>Moderately lower</td>
<td>Moderately higher</td>
<td>Higher</td>
<td>Equal</td>
<td>Equal</td>
<td>Equal</td>
<td>Equal</td>
</tr>
<tr>
<td>Resource-based</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Technology</td>
<td>Higher</td>
<td>Higher</td>
<td>Moderately higher</td>
<td>Higher</td>
<td>Moderately higher</td>
<td>Moderately higher</td>
<td>Moderately higher</td>
<td>Higher</td>
</tr>
<tr>
<td>Management expertise</td>
<td>Moderately higher</td>
<td>Equal</td>
<td>Equal</td>
<td>Equal</td>
<td>Higher</td>
<td>Higher</td>
<td>Equal</td>
<td>Equal</td>
</tr>
<tr>
<td>Global service support</td>
<td>Higher</td>
<td>Lower</td>
<td>Moderately lower</td>
<td>Higher</td>
<td>Equal</td>
<td>Equal</td>
<td>Equal</td>
<td>Equal</td>
</tr>
<tr>
<td>Local knowledge</td>
<td>Moderately lower</td>
<td>Lower</td>
<td>Moderately lower</td>
<td>Lower</td>
<td>Moderately lower</td>
<td>Lower</td>
<td>Moderately lower</td>
<td>Lower</td>
</tr>
<tr>
<td>Product distribution</td>
<td>Moderately lower</td>
<td>Moderately higher</td>
<td>Moderately higher</td>
<td>Equal</td>
<td>Equal</td>
<td>Equal</td>
<td>Equal</td>
<td>Equal</td>
</tr>
<tr>
<td>Material procurement</td>
<td>Moderately higher</td>
<td>Approximately equal</td>
<td>Approximately equal</td>
<td>Approximately equal</td>
<td>Approximately equal</td>
<td>Approximately equal</td>
<td>Approximately equal</td>
<td>Approximately equal</td>
</tr>
<tr>
<td>Equity</td>
<td>Approximately equal</td>
<td>Higher</td>
<td>Approximately equal</td>
<td>Higher</td>
<td>High</td>
<td>Approximately equal</td>
<td>Approximately equal</td>
<td>Approximately equal</td>
</tr>
<tr>
<td>Overall bargaining power</td>
<td>Higher</td>
<td>Approximately equal</td>
<td>Higher</td>
<td>Approximately equal</td>
<td></td>
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</table>
natives, such as other potential partners with whom to negotiate or other channels through which to accomplish the same mission the joint venture is to achieve. For example, the potential Chinese partner in IndusCon was simultaneously engaged in negotiations with a Japanese firm and the U.S. partner. This situation enabled the Chinese to choose between two mutually competitive foreign firms, thereby increasing their bargaining power in negotiating with the U.S. company. In DailyProduct, because the Chinese government had "assigned" the local partner to the U.S. parent, the latter had no alternatives. In another example, additional bargaining power accrued to the U.S. parent of OfficeAid because it had existing business channels in China that could serve as alternative outlets. The U.S. firm’s regional division in Hong Kong had previously exported to China, and doing so remained a viable alternative to forming the joint venture.

Resource-based. The components of resource-based bargaining power signify the resources and capabilities committed by the partners to a joint venture. These resource contributions are either explicitly specified in the joint venture agreements (contracts, memorandums, and licenses) or verbally recognized by both partners during negotiations. We saw a consistent, complementary pattern across all four cases with regard to the types of resource committed by the partners. Predictably, the foreign firms contributed more heavily than their local partners in the areas of technology (product design, manufacturing know-how, and special equipment) and global support (technical, marketing, and maintenance services), and the Chinese firms contributed more in the areas of knowledge about and skills for dealing with the local government and other institutional infrastructures. IndusCon’s U.S. parent’s comments were illustrative: "We have the technology and certain know-how. The Chinese partner knows how to make things happen in China. You put the two together right, it works.” In other areas, although both partners made contributions, apparent complementarity also existed. The U.S. partners tended to provide imported materials, channels for exporting the joint ventures’ products, and expertise in production management, and the Chinese partners contributed in areas of local sourcing, domestic distribution, and personnel management. In equity investment, both partners injected roughly the same amounts of capital in all four joint ventures.

Although both partners possessed bargaining power during the initial negotiations, the patterns of the relative bargaining power between the partners varied from one partnership to another. Since data with which to assess the relative significance of each component to bargaining power were not available, we assessed the relative bargaining power between the partners in each joint venture by assuming that all components contributed equally. In two of the four joint ventures (IndusCon and BioTech), bargaining power was balanced, or approximately equally shared between the partners. On the other hand, a significant imbalance in the partners’ bargaining power existed in the other two ventures (OfficeAid and DailyProduct), with much more bargaining power accruing to the U.S. partner. The bottom of Table 5 sum-
marizes the overall patterns of relative bargaining power in the ventures studied.

Management Control

Our data analysis revealed several unambiguous indicators of management control, which is congruent with the notion that control is multidimensional (Geringer & Hebert, 1989). Like Schaan (1983, 1988), we found that nominations of members of a venture's board of directors and general manager were important control mechanisms. Both interview and archival data supported the importance of the role played by the boards of directors in making strategic decisions for the joint ventures and solving critical problems regarding the partnerships in general. The following quotes provide some evidence:

We [the board] approve the annual budgets submitted by DailyProduct's management and decide everything important for its operation. When anything unexpected happens in China, I have to be there to talk to the Chinese chairman (vice chairman of DailyProduct).

The board of directors is empowered to discuss and take actions on all fundamental issues concerning the venture, namely, expansion projects, production and business programs, the budget, distribution of profits, plans concerning manpower and pay scales, the termination of business, the appointment or hiring of the president, the vice-president(s), the chief engineer, the treasurer and the auditors as well as their functions and powers and their remuneration, etc. (law of the People's Republic of China on joint ventures using Chinese and foreign investment).

The board of directors of each joint venture in this study met at least twice a year to set annual goals, review performance, and approve operational plans for the venture.

Our data also suggest that substantial power is associated with the position of general manager in joint ventures. In each of the four ventures in this study, the general manager had always been a board member and served as the executive officer of the joint venture. The general manager made important operating decisions for the venture and represented each parent in negotiations with the other partner on issues that arose unexpectedly. However, the difference in the decision power attached to the general manager and deputy general manager of a venture, each of whom is nominated by a different parent, varied significantly across our cases. In two joint ventures, OfficeAid and DailyProduct, the general manager exercised more control than the deputy general manager, but in the other two, the positions were roughly equal in terms of control. For example, the former general manager of OfficeAid, who was from the U.S. parent, stated:

Eighty percent of the time he [the Chinese deputy general manager] would say "yes" when I made a decision . . . because I was the general manager, he was the deputy. If we didn't agree on anything, I made the decision.
This pattern was confirmed by a Chinese manager at OfficeAid, who observed that “in the offices where there is an American manager, he will be in control though we have a deputy manager there.” However, the IndusCon and BioTech data suggest different patterns, as the following quotes reveal:

The Chinese general manager and I were equals, co-managers. Mutual consulting between us continued throughout my term. This relationship was passed on to me from by predecessor. And it’s true even today (IndusCon’s former deputy general manager, from the U.S. parent).

In organization design, our president [of the joint venture] should report to the Chinese chairman. However, in managing the joint venture, they are equally involved in making important decisions (representative of the U.S. parent of BioTech).

Joint venture parents also exercise control through the structure of a joint venture. We found that when the management system, decision process, and corporate policies of a joint venture were similar in structure to those of one parent, that parent exercised a higher level of control than its partner. In fact, the ability of a partner to replicate its way of managing in the joint venture reflected its level of control over the partnership, as the following quotes suggest:

Three weeks after we hired the senior staff, we started training them in our corporate principles. . . . We wanted to go through a process which is part of our management process, our management styles. . . . I created a culture at the joint venture (OfficeAid’s first general manager, from the U.S. parent).

We structure the joint venture in China exactly the same way as we structure our organizations in other countries. In comparing with the Chinese state-run enterprises, we don’t have the [Communist] party event and the union plays a very small role (vice chairman of DailyProduct, from the U.S. parent).

Our data also provide information about the overall control by each parent perceived by our interviewees. This indicator reflects both the scope and the extent of control (Geringer & Hebert, 1989). Although relying on subjective judgments, the measure of perceived overall control may capture some aspects of control that other, more objective measures could not capture. The following comments suggest that this indicator of control is important:

[The U.S. company] always considers the joint venture as one of their own children and uses their own “standard model” to format it. They try to control it in great detail (OfficeAid’s Chinese deputy general manager).

In making important decisions for BioTech, both sides make compromises. “Compromise” is the most appropriate word here (representative of BioTech’s U.S. parent).
Table 6 summarizes the degrees of control the partners exercised in each case on the above four dimensions. Overall, an imbalance in control favoring the U.S. parent occurred in OfficeAid and DailyProduct. In contrast, control in IndusCon and BioTech was approximately balanced between the parents.

**Venture Performance**

There were considerable differences in the strategic objectives of the partners (see Table 7). The Chinese partners focused on upgrading technology and management and earning foreign exchange through export, and the U.S. partners aimed at penetrating the local market and earning a profit in China. These divergent, though potentially complementary, objectives implied that significant bias would occur if performance were assessed from only one partner’s perspective or by simply using available standard financial indicators. Moreover, we found that the joint venture managements did not provide performance assessments independent of those of the parents because all the joint ventures operated under close parent control. A joint venture’s managers did not represent the partnership itself; rather, each acted as the representative of the parent firm of his or her own nation. Therefore, it was inappropriate in this study to count the joint venture managers’ assessments of performance as independent of their parents’, as previous researchers have suggested doing (Anderson, 1990; Killing, 1983).

The performance measure we used was the extent to which a venture’s partners had achieved their strategic objectives in initiating the joint venture. If an objective represented a long-term goal of a partner, we measured the extent to which satisfactory progress had been made. Using this measure fits well with the ways that partners actually evaluated performance. The following comments by a U.S. firm are representative:

> The only appropriate criterion for performance evaluation is whether or not the partners and their stakeholders are happy with the joint venture’s operation. The happiness for us is measured by its profitability and market share—the two most important goals we had. . . . Our stakeholders are happy with what we have done in China.

Table 7 presents information about performance assessment for the joint ventures.

**Relationship Between Bargaining Power and Management Control**

The theoretical framework in Figure 1 shows a positive relationship between the relative bargaining power of a venture partner and the management control it exercises. Data from all four of our cases support this relationship. The relative bargaining power of the partners in two joint ventures (OfficeAid and DailyProduct) was uneven: the U.S. parent had higher bargaining power than the local parent. Accordingly, in these two joint ventures, the U.S. partner exercised a higher level of management control than its Chinese partner for all indicators except representation on the board,
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</thead>
<tbody>
<tr>
<td>Percent of board membership</td>
<td>Equal</td>
<td>Slightly lower</td>
<td>Equal</td>
<td></td>
<td>Equal</td>
<td></td>
<td>Equal</td>
<td></td>
</tr>
<tr>
<td>Nomination of key personnel</td>
<td>Higher</td>
<td>Approximately equal</td>
<td>Higher</td>
<td></td>
<td>Higher</td>
<td></td>
<td>Slightly lower</td>
<td></td>
</tr>
<tr>
<td>Similarity of management systems to parents'</td>
<td>Higher</td>
<td>Approximately equal</td>
<td>Higher</td>
<td></td>
<td>Higher</td>
<td></td>
<td>Approximately equal</td>
<td></td>
</tr>
<tr>
<td>Perceived level of overall control</td>
<td>Higher</td>
<td>Approximately equal</td>
<td>Higher</td>
<td></td>
<td>Higher</td>
<td></td>
<td>Approximately equal</td>
<td></td>
</tr>
<tr>
<td>Overall pattern of management control</td>
<td>Higher</td>
<td>Approximately equal</td>
<td>Higher</td>
<td></td>
<td>Higher</td>
<td></td>
<td>Approximately equal</td>
<td></td>
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</tbody>
</table>
which was equal. For these two ventures, unevenly distributed bargaining power was associated with imbalanced management control. The partner who gained more bargaining power during the negotiations exercised more management control in the venture. In the other two joint ventures, IndusCon and BioTech, each partner possessed roughly even bargaining power and exercised equal management control over the venture. Overall, the pattern of partners’ relative bargaining power is consistent with, and positively related to, the pattern in which management control is shared between the partners (see Table 8).

### Relationship Between Management Control and Performance

In the theoretical model, we predict a direct, positive relationship between management control and performance. The bottom two rows in Table 8 depict the general patterns of management control and performance for each joint venture. Our findings suggest that the relationship between management control and performance was not as straightforward as was predicted. To better understand how the cases deviate from the prediction, we focus on each case in the “stepwise” manner Cressy (1953) suggested.

**OfficeAid.** As discussed above, OfficeAid’s U.S. parent exhibited more control than the Chinese parent. With regard to performance, the U.S. parent had achieved its two most important objectives, profit and market share, though its objective of building a low-cost sourcing base in China had not yet

### Table 7
Achievement of Strategic Objectives by Partners

<table>
<thead>
<tr>
<th>Strategic Objectives</th>
<th>Degree of Achievement</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>OfficeAid</td>
</tr>
<tr>
<td><strong>United States</strong></td>
<td></td>
</tr>
<tr>
<td>Profit</td>
<td>Yes</td>
</tr>
<tr>
<td>Market share</td>
<td>Yes</td>
</tr>
<tr>
<td>Growth</td>
<td>Yes</td>
</tr>
<tr>
<td>Local sourcing</td>
<td>No</td>
</tr>
<tr>
<td>Learning</td>
<td>Yes</td>
</tr>
<tr>
<td>Credibility with Chinese government</td>
<td></td>
</tr>
<tr>
<td>Overall</td>
<td>Largely achieved</td>
</tr>
<tr>
<td><strong>China</strong></td>
<td></td>
</tr>
<tr>
<td>Technology</td>
<td>Partially</td>
</tr>
<tr>
<td>Export</td>
<td>No</td>
</tr>
<tr>
<td>Growth</td>
<td></td>
</tr>
<tr>
<td>Import substitution</td>
<td></td>
</tr>
<tr>
<td>Up-stream technology</td>
<td>Yes</td>
</tr>
<tr>
<td>Profit</td>
<td></td>
</tr>
<tr>
<td>Overall</td>
<td>Largely not achieved</td>
</tr>
<tr>
<td>Variables</td>
<td>OfficeAid</td>
</tr>
<tr>
<td>---------------------------</td>
<td>-----------</td>
</tr>
<tr>
<td></td>
<td>U.S.</td>
</tr>
<tr>
<td>Relative bargaining power</td>
<td>Higher</td>
</tr>
<tr>
<td>Management control</td>
<td>Higher</td>
</tr>
<tr>
<td>Venture performance</td>
<td>High</td>
</tr>
</tbody>
</table>
been achieved (see Table 7). In contrast, the Chinese partner had only partially achieved one of its two equally important objectives, updating technology. Because the joint venture exported at a loss, the second Chinese objective, generating foreign exchange through export, had not been achieved. The significant imbalance at OfficeAid in achieving its parents’ strategic expectations hindered the overall performance of the venture, which was the lowest among the four joint ventures.

The OfficeAid data seem to support the positive relationship between control and performance reported by previous studies (Killing, 1983; Lecraw, 1984). In other words, the partner who exercises a higher level of management control achieves a higher level of performance from its own point of view.

**IndusCon.** In IndusCon, the strategic objectives of both partners were realized (Table 7). The U.S. partner had achieved its objectives of profitability and business expansion. IndusCon had been very profitable since its second year of operation. Because both partners reinvested all profit the joint venture earned in the first five years, the venture grew rapidly. Regarding market penetration, a representative of the U.S. parent made the following assessment:

> Probably a couple of companies are bigger than we are in terms of volume per year. I think, the market sees us as a quality company. . . . We are definitely the leader in quality. We are high enough up there in volume. I think, on overall basis, if you ask the most potential customers in China who they consider as the quality leader company, they would probably say “IndusCon.”

Nonetheless, the U.S. parent perceived IndusCon as still having room to grow because its market share was still below 10 percent and the Chinese market was far from saturated.

The Chinese partner had also achieved its three objectives. First, by manufacturing locally, the joint venture enabled the Chinese partner to reduce its imports of industrial control equipment, its principal objective. In the past ten years of operation, IndusCon had produced a variety of control systems installed in many key Chinese industries. Second, regarding the objective of updating technology, the Chinese were satisfied to the extent that IndusCon had become an important source of high-technology products in China. Third, IndusCon’s efforts to upgrade the technical capacity of the local suppliers had increased localization of material sourcing, creating a ripple effect throughout the Chinese economy. As a result, the Chinese government had twice selected IndusCon as one of the “best-run China—foreign joint ventures” in China in recent years. The Chinese partner was satisfied with the progress of technology transfer to date, though the U.S. partner still held the key technology. Overall, IndusCon stood as the best performer among the four ventures in this study because it had achieved the objectives of both of its parents.

In IndusCon, the partners exercised equal management control, and
both had achieved their strategic objectives. This finding contradicts previous studies’ prediction of inferior performance in joint ventures with shared management (Killing, 1983) but is consistent with Beamish’s (1984, 1985, 1993) findings that shared or split control is superior for international joint ventures in developing countries. The inconsistencies between the OfficeAid and IndusCon data suggest that the previously proposed relationship between control and performance (as being proportional for each parent) underspecified the relationship. The inconsistencies can be reconciled, however, if we raise the level of analysis from the individual-parent level to the between-parents level. In OfficeAid, a relatively unbalanced level of management control (control was unequally shared) between the parents was associated with unbalanced levels of performance (high for the U.S. parent but low for the Chinese parent). Similarly, in IndusCon, the balanced management control of the partners resulted in balanced levels of performance (both high in this case). To sum, then, balance or imbalance in partners’ management control is associated with a similar pattern of performance assessed in terms of the achievement of both partners’ strategic objectives.

**DailyProduct.** Three of the four strategic objectives of the U.S. partner, namely, learning how to do business in China, establishing credibility with the Chinese government, and earning a profit in operating the joint venture, had been completely achieved. The U.S. partner indicated that the joint venture achieved a 49 percent profit margin. With regard to the U.S. partner’s fourth objective, expanding the Chinese market for personal hygiene products, some progress had been made—the venture’s production had exceeded the planned capacity by 50 percent. However, their hope for market expansion had been achieved to only a limited extent.

The Chinese partner had achieved its three most important objectives: earning a profit, exporting for foreign exchange, and updating the manufacturing technology at the joint venture. The Chinese objective of growth had been achieved only to the extent that the volume of the existing products had been increased beyond the original expectation. However, since the U.S. partner had some reservations about transferring other products to the joint venture, the Chinese partner had not yet fulfilled the objective of expanding to its partner’s other businesses. Nevertheless, DailyProduct had been successful in meeting most of its parents’ expectations. Its overall performance was much higher than OfficeAid’s, though slightly lower than IndusCon’s.

The relationship between control and performance at DailyProduct somewhat differed from what we found in the two ventures previously described. Management control was unequally shared between the parents, but performance had been balanced, with both partners achieving their most important strategic objectives. In other words, at DailyProduct unbalanced control was associated with balanced and moderately high performance. This pattern forced us to reconsider the proposed direct relationship between balanced (unbalanced) control and high (low) performance.

Further examination suggested several factors that might have ac-
counted for the relationship between control and performance revealed by DailyProduct. First, unlike the previous two ventures, in which the partners had radically different strategic goals, the DailyProduct partners had some common objectives, such as profitability in hard currency. Thus, the achievement of one parent’s objectives meant the achievement of the other parent’s. Also, because the partners shared a common destiny, conflict over how to operate the business was less likely to occur. Common goals may serve as an informal control mechanism that renders the pattern of formal management control less critical than it is when partners’ objectives radically diverge.

A second factor that might have accounted for the control-performance relationship in DailyProduct is that the most important objectives of the Chinese (the low-control partner) were incorporated into the partnership’s operating plans, which were part of the joint venture contract. Both parties agreed that within the first 18 months after start-up, the joint venture should (1) achieve an annual capacity of 50 million units for product one and 4 million units for product two, (2) make a profit, (3) achieve surplus in foreign exchange, and (4) export 30 percent for product one and 70 percent for product two. These specific contractual stipulations probably served as an alternative means of control for the weaker partner to ensure that its goals were reached.

A third and probably most important factor was the high level of trust that developed between the partners in DailyProduct after the first 18 months of operation, when the joint venture’s plan had been realized. After that, “Trust was no longer a problem. They trust us and leave the business to us,” the U.S. partner’s informant observed. Therefore, mutual trust may be an important contingent or moderating factor in the control-performance relationship when the management control of partners is unequal.

BioTech. The U.S. parent of BioTech had achieved both of its strategic objectives, market share and profit. BioTech had been very profitable and acquired the highest market share of all international pharmaceutical joint ventures in China. The Chinese partner had achieved its first and second objectives: to update manufacturing technology and to learn advanced Western management techniques for running a high-technology pharmaceutical enterprise. The Chinese were satisfied with the venture’s business growth because it had continuously added new pharmaceutical products. However, this objective has been achieved to only a limited extent because the Chinese expectation of extending the business to the U.S. partner’s other products (e.g., nutrition products) had not yet been met. Overall, like DailyProduct, BioTech demonstrated strong performance in achieving most of its parents’ objectives.

The BioTech data provided confirmatory evidence for the relationship between management control and performance revealed in the previous cases: equal management control was associated with balanced and relatively high performance for both partners. In fact, BioTech’s control-performance relationships were very similar to IndusCon’s.
Dynamic Aspects of International Joint Ventures

The findings reported above are based on static analyses, but because joint venture arrangements do not necessarily remain static, we also secured information about how the joint ventures had changed since their formation to the date of the study. We sought to identify sources of change that had prompted shifts in partners' bargaining power and driven structural reconfigurations. The feedback arrows in Figure 2 indicate such changes. In the following subsections, we analyze the dynamic development of each joint venture and summarize the cross-case effects.

OfficeAid. Since the joint venture's inception, its Chinese personnel had acquired some management expertise, operational techniques, and production know-how associated with the existing products. At the same time, the Chinese engineers had become involved in the R&D process, thus making a technological contribution to the joint venture. These changes had a positive effect on the Chinese partner's bargaining power.

Changes also occurred in the U.S. partner's bargaining power. First, the U.S. partner had gradually become experienced in operating in the Chinese system. The former American general manager indicated that he made friends with several important officials in the local municipal government, including the mayor. Second, the U.S. partner continuously provided new product designs for the venture, therefore firmly maintaining its position as a principal contributor in technology. Third, since the ten-year technology transfer agreement was subject to renegotiation, the U.S. partner began using the renewal as leverage to gain additional bargaining power. All these factors had increased the bargaining power of the U.S. partner and offset the gains in the Chinese partner's bargaining power.

In addition, the growth of the partnership itself and changes in the local environment had altered the bargaining power of the partners. For example, the increase in local content and establishment of separate distribution channels enabled the joint venture to become less dependent on its U.S. parent for imported materials and on its Chinese parent for marketing skills, thus reducing the bargaining power of each parent. Additionally, because of the legalization of swap markets for obtaining foreign exchange in the mid-1980s, export became less necessary, and the U.S. partner's international distribution channels were less valuable to the joint venture than they had been.

No significant changes in the initial pattern of control in OfficeAid occurred. Despite a reduction in the number of U.S. expatriate managers from seven to five in the four years preceding our study, the remaining five

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2 In the mid-1980s, the Chinese government legalized swap markets for foreign exchange in some major Chinese cities, allowing companies to trade foreign currencies among themselves. Typically, however, a company pays a premium when it converts the Chinese currency (yuan) to a foreign currency—the conversion is made at a rate higher than the official exchange rate set by the Bank of China.
expatriates had the same scope of management responsibilities as their predecessors.

However, an undercurrent of struggle for control between the partners persisted in OfficeAid. The Chinese kept urging reductions in the number of U.S. expatriates and allocations of greater management responsibility to the Chinese staff. For example, the Chinese partner expected the next general manager of the joint venture to be Chinese. On the other hand, the U.S. partner continuously tried to enhance its control. In 1988, the U.S. partner proposed adding a nonvoting U.S. observer to the board, but the Chinese countered with a similar request to keep the balance. Subsequently, the U.S. partner proposed the following restructuring:

We have been hoping to go to a board of nine members instead of eight by adding a ninth from us. We were rejected, expectedly rejected. We may be able to throw in some sweeteners to make it more acceptable.

And with regard to potential shifts of management responsibilities to the locals, our informant from the U.S. partner said

We are absolutely convinced if we let them manage the operations tomorrow, things will fail six months from now. . . . I would be reluctant to take any expatriates out in the first ten years of the venture.
Several changes in the partners’ strategic objectives were reported. First, because swap markets became available for foreign exchange and the joint venture had been running a loss in export, the Chinese partner modified its original objectives. On a board meeting in December 1991, the Chinese directors proposed that the venture abandon export as a way to earn hard currency. Also, the Chinese partner added profit to its list of objectives, presumably as a result of the changes in government policies, which allowed Chinese companies to keep a substantial portion of their operational gains. Since the U.S. parent’s most important goals (profitability and market share) had been reached, low-cost sourcing increased in importance. As the informant from the U.S. parent noted, “From an emphasis standpoint, probably the three objectives are now getting equal emphasis.” Overall, OfficeAid’s record of unbalanced performance had induced mistrust between the partners. The Chinese partner attributed the loss in export to the low internal transfer price set by the U.S. partner and perceived the U.S. partner’s heavy intervention in the joint venture’s operation as taking the child away from its Chinese parent. The U.S. partner acknowledged the issue of mistrust, I don’t think we have, in all honesty, the level of trust between the parties that we should have. . . . There always has been such a level of distrust, always a level of suspicion, specifically from the Chinese, that the foreigners are trying to take advantage of them.

**IndusCon.** The Chinese partner in IndusCon, like its counterpart in OfficeAid, had gained some bargaining power by learning about management techniques and gaining technological know-how over the past 10 years. However, since technology in this industry is rapidly outdated and key production know-how was still kept at the U.S. partner’s headquarters, the U.S. partner retained significant bargaining power because the joint venture still heavily depended on it for up-to-date technology and new product designs. In 1987, the U.S. partner gained additional bargaining power by shifting production of a product marketed worldwide to China. This move significantly increased the joint venture’s volume of product for export and generated additional foreign exchange for the local partner.

Procurement and marketing changes prompted additional shifts in bargaining power. By the end of the study, IndusCon had its own procurement staff in the United States and no longer depended on its U.S. parent for imported parts. Second, with the increase in local content, the joint venture had become more dependent on the Chinese sourcing channels, which increased the Chinese partner’s bargaining power. Third, the Chinese partner’s bargaining power diminished significantly when one of its wholly owned companies was acquired by the joint venture. This company was the exclusive distributor for the joint venture’s products in the Chinese market.

The pattern of parents’ management control of IndusCon had not significantly shifted because changes in bargaining power occurred simultaneously to both parents and were relatively equal. More important, the
superior performance of IndusCon enhanced the level of trust between the partners and confirmed that its control structure worked well and that no changes were necessary. Because both parents’ strategic objectives were long-term, no changes in objectives were in evidence in IndusCon.

**DailyProduct.** As in the previous cases, at DailyProduct the local partner had gained power by acquiring technical know-how and management techniques. However, the U.S. partner’s bargaining power had increased more significantly overall. Its contribution in management expertise, though initially not valued by the Chinese partner, was now acknowledged as a critical asset. Additionally, because the U.S. firm had achieved its strategic objectives (learning how to operate in China and building credibility with the Chinese), the partnership’s strategic importance to it had decreased significantly. These two changes, coupled with the more open foreign investment policy in effect in China since 1984, enabled the U.S. partner to launch negotiations for a majority joint venture in another Chinese city. Finally, high performance levels satisfied the Chinese partner’s most important objective and thereby strengthened the U.S. parent’s dominance. As the venture’s American vice chairman observed,

> Over time, decision-making process has changed. In the beginning we had to argue on some issues, but now, they would just let us make decisions though it is still a 50:50 joint venture.... They absolutely trust us. They know that we can make money for them.

**BioTech.** The Chinese partner in BioTech gained bargaining power by gaining Western management techniques and technical know-how and through increased local content in the joint venture’s products. However, the bargaining power of the U.S. partner increased substantially through its contribution in marketing expertise. When BioTech was formed, all its products were purchased and distributed by the local partner. As China was transforming its economic system from reliance on central planning to a market orientation, the original distribution networks collapsed in 1986 when the U.S. partner was informed that its former Chinese partner had been dismantled and that the local government would no longer buy any products from the joint venture. Since the local partner was not familiar with selling in a free market, the U.S. partner’s contributions in building a distribution network and in training the venture’s marketing staff increased its relative bargaining power.

These changes in the partners’ bargaining power produced only a slight adjustment in control, the nomination of one more expatriate manager responsible for marketing. As in IndusCon, a key factor that might have stabilized the pattern of control in BioTech was its superior performance.

In short, several factors appear to prompt shifts in partners’ bargaining power and trigger structural reconfigurations in joint ventures over time. They are summarized below.

**Partners’ learning.** Previous researchers have noted that joint venture partners learn from each other. Vernon (1977) coined the term obsolescing
bargain to capture the impact of learning on bargaining power. More recently, Hamel (1991) argued that the effective learner in an international joint venture will raise the "price" for its continued participation in the partnership. We observed this learning effect in all our cases for both partners. However, our data suggest that the Chinese partners did not significantly gain bargaining power through learning. They probably did not gain because the U.S. partners were cautious in transferring their technologies to their joint ventures and kept the key technological secrets firmly in their own hands or because these technologies were low in transparency, raising high barriers to learning (Hamel, 1991).

**Growth of a joint venture's own capacity.** Over time, international joint ventures accumulate their own bases of knowledge and skills, becoming less dependent on their parents (Prahalad & Doz, 1981). However, if this accumulation is accomplished in an unbalanced manner, by acquiring knowledge or skills only from one parent, this parent’s contribution will eventually be devalued. As a result, changes in the existing pattern of bargaining power between the parents will occur. OfficeAid exemplified this type of change when it adopted the Chinese parent’s distribution channels and developed the network for its own use.

**Localization.** Our data suggest that material procurement channels for a joint venture constitute a source of bargaining power for the partner who provides those channels. Since both partners have inherent, though different, motivations for increasing local content—the local partner wants to cultivate domestic suppliers, the foreigner wants to reduce cost, and both want to save foreign exchange—this change can diminish the bargaining power of the partner, typically the foreign partner, on whom the joint venture depends for imported materials. Bargaining power changes resulting from localization were observed in all our case studies.

**Environmental changes.** Changes in a venture’s local environment, particularly in government policies, can trigger structural reconfigurations in joint ventures. Relaxation of the prohibitions on direct foreign investment enabled IndusCon to acquire the sales and service company formerly owned by its Chinese parent. Similarly, this policy change afforded DailyProduct’s U.S. parent the opportunity to form a new majority joint venture and thus reduced the strategic importance of DailyProduct to that parent. More strikingly, the collapse of the state distribution network caused by the macro system transformation induced the U.S. partner in BioTech to contribute its marketing expertise, thereby increasing its bargaining power. These findings support the theoretical prediction that environmental changes can shift the original bargaining agreement between partners (Harrigan & Newman, 1990; Sharfman, Gray, & Yan, 1991), thereby reconfiguring a venture’s structure.

**Performance.** The ongoing performance of joint ventures has an important feedback effect on the partners’ relative bargaining power and the existing structure of control. Killing (1983) noted that joint venture parents enhance or loosen control over ventures as a response to their performance, but our data suggest that performance also shapes the relative levels of bar-
gaining power and the pattern of the sharing of management control between
the parents. Superior performance creates an additional bargaining chip for
the partner currently in control (the situation in DailyProduct) or reinforces
the extant control pattern (in the other three ventures). In addition, perfor-
mance may also have a feedback effect on moderating variables, especially
the trust between partners. Superior performance enhances interpartner
trust over time, as was shown in all the joint ventures except OfficeAid, and
mediocre or poor performance, like the significantly unbalanced perfor-
mance of OfficeAid, will cause distrust between the partners, which can in
turn depress a ventures’ long-term performance (Killing, 1983).

Toward an Integrative Model of Bargaining Power, Control,
and Performance

Figure 2, an integrative model, summarizes our findings regarding bar-
gaining power, management control, performance, and the dynamic aspects
of international joint ventures. The consistent evidence generated across all
the case studies suggests a direct, positive relationship between bargaining
power and management control. Though our data are not sufficient to allow
a test of the relative importance of each component of bargaining power in
shaping joint venture structure, they suggest that the overall pattern of the
partners’ relative degrees of bargaining power is highly related to how they
share control. In addition, the pattern of management control in joint ven-
tures is directly related to venture performance. When the partners’ control
is even, each partner’s performance, as assessed from its own perspective, is
equal. When control is unevenly shared by partners, the prediction of per-
formance is less straightforward. The data suggest that three alternative con-
trol mechanisms moderate the relationship between formal management
control and performance: the level of trust between the partners, the com-
monality of their strategic objectives, and the level of institutionalization of
those objectives—whether or not they are contractual. When these moder-
ating variables are present, management control is less predictive of perfor-
mance. In addition, the relative bargaining power of two partners changes
over time as a result of their learning, the growth of a joint venture’s own
capacity, localization of the joint venture’s operation, and environmental
changes. The ongoing performance of the partnership exerts an important
feedback effect on the partners’ bargaining power, the pattern of manage-
ment control, and the quality of the cooperative relationship between the
partners. The following propositions summarize the relationships discussed
above and depicted in Figure 2:

Proposition 1: The bargaining power of a potential joint
venture partner will be positively related to the extent of
its management control over the joint venture’s operation.

Proposition 2: The structure of the sharing of manage-
ment control between joint venture parents will be related
to the pattern of venture performance.
Proposition 3: Relational characteristics of joint venture partners, including trust, commonality of strategic objectives, and institutionalization of goals, will moderate the relationship between parent control and performance.

Proposition 4: Changes in partners' bargaining power prompted by a joint venture's environment, their strategies, and the venture's maturity will trigger reconfigurations of the venture's management control structure, which will in turn cause changes in performance.

Proposition 5: Changes in the performance of a joint venture will alter the balance of the partners' bargaining power, the current structure of control, and the trust relationship between the partners.

DISCUSSION AND CONCLUSIONS

Ownership and Management Control

Our findings lead us to question the validity of previous studies' use of ownership as a proxy for management control in joint ventures (Blodgett, 1991; Fagre & Wells, 1982; Stopford & Wells, 1972). By and large, all four joint ventures in this study were equally owned. However, although two of them showed balanced management control, the other two demonstrated an unbalanced, one-parent-dominant pattern of control. Within each joint venture, we found that the ownership split was consistent with only one dimension of control, board membership. With respect to other dimensions, no consistent relationship was observed.

The results of our study also challenge the assumptions prevailing in the literature that all potential joint venture partners prefer 100 percent ownership and that the equity split between the partners is an outcome of negotiation representing the relative power of participating interests (Blodgett, 1991; Fagre & Wells, 1982). Our data tell a different story. In all four joint ventures studied, ownership structure was voluntarily decided between the partners at the outset of the negotiations. As our interviewee at OfficeAid's U.S. parent noted, "We could go wholly owned but I am against it. I don't see we have a brilliant future in China with a wholly owned foreign enterprise. You go there as a foreign company and you really have nothing to work with." Moreover, potential partners see agreement on an ownership split as

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3 Most international joint ventures formed in the early 1980s in China adopted relatively equal ownership structures or foreign minority ownership, though this pattern has been changing in recent years as a result of the more open attitude of the Chinese government toward foreign investment in China. However, Chinese joint venture laws dated July 1, 1979, and April 7, 1990, specify only a lower limit (25%) of the level of foreign ownership in joint ventures. In fact, foreign majority partnerships and even wholly owned foreign subsidiaries were possible prior to 1985 (Pearson, 1991), though only a few such ventures were actually formed.
a threshold to cross before the serious start of negotiations. As one of our interviewees noted, “You either accept it, at least in principle, to start the negotiation; or you reject it. Then, negotiations will never happen.” This evidence is consistent with previous reports that the ownership pattern in international joint ventures in China reflected both partners’ needs and did not pose a major issue in joint venture negotiations (Davidson, 1987; Pearson, 1991).

Overall, our findings provide additional evidence that equity structure is not equivalent to management control. Rather, as a type of resource committed by the partners, equity investment constitutes a source of bargaining power that in turn contributes to management control. Once the equity structure is agreed on, it delineates the relative positions of the partners and sets a tone for the successive negotiations on control.

Each Partner Versus the Partnership

This research provides consistent evidence across the four cases that the way bargaining power is shared between partners varies with patterns of management control. It is important to note, however, that this positive relationship exists only at the interpartner level, when the patterns of bargaining power and control are examined from both partners’ perspectives and the relationship between the partners is the unit of analysis. This finding helps explain the conflicting results regarding the relationship between bargaining power and control in previous studies examining this relationship from only one partner’s perspective (Beamish, 1984; Lecraw, 1984). Our data suggest that control in joint ventures is not unilaterally chosen by one or the other partner, but is a result of bargaining. Our approach also helps reconcile the inconsistencies suggested by previous studies in the relationship between control and performance (Geringer & Hebert, 1989). A positive control-performance relationship does not hold at each partner’s level in our results. We suggest that the prevailing assumption that the higher the level of control by a partner, the higher the level of performance from this partner’s point of view is incomplete at best. Instead, the positive relationship between control and performance exists only at the interpartner level when the patterns of control between the partners and performance from both partners’ point of view are examined.

Furthermore, our findings are consistent with those of previous researchers who have argued that the control-performance relationship is not always positive and direct (Geringer & Hebert, 1989). However, the indirect effects identified in this study (interpartner trust, the commonality of goals, and institutionalization of goals) are different from those previously identified, which include the multinational parent’s strategy (Franko, 1971), strategy-structure fit (Geringer & Hebert, 1989; Janger, 1980), and fit between the areas of control and control mechanisms (Schaan, 1983, 1988). The variation between our results and those of previous research again reflects the different unit of analysis adopted in this study, the interpartner relationship instead of the multinational partner. Since previous studies have typically not
shared versus dominant control

With respect to findings on the impact of different control types (Gray & Yan, 1992; Killing, 1983), this study also differs from previous work. According to Killing, shared control is the most problematic type of control and often leads to inferior performance. Our data suggest the opposite: the joint ventures with equally shared control, IndusCon and BioTech, demonstrated superior performance. This inconsistency may reflect differences between the two sets of joint ventures studied; Killing looked at ventures between two developed countries, but we examined ventures with a partner from a developing country. In developing country joint ventures, the management control exercised by the foreign and the local partners may be more differentiated and complementary, and thus less likely to prompt struggles and conflicts between the partners than in ventures between developed country partners. In this respect, our findings are consistent with those of Beamish (1988, 1993), who recommended a shared management structure for international partnerships in less developed countries. However, our case data do not consistently support the negative relationship between foreign parent dominant control and performance that Beamish (1984) found. Rather, our findings suggest that such a relationship holds only when alternative means of control (reflected by the moderating variables) are absent. When a high level of mutual trust exists between partners, or they share objectives, or those goals are highly institutionalized, joint ventures in which the foreign parent is dominant can still satisfy both partners’ needs. This finding supports Beamish’s (1988) and Koenig and van Wijk’s (1991) arguments that interpartner trust is critical to venture success and Thorelli’s (1986) observations that trust may supplant contractual arrangements in Asian cultures (cf. Parkhe, 1993b). The moderating variables revealed in this research suggest that the use of both formal and informal means of control is necessary to predict joint venture performance. These conclusions are suggestive at best given our methodology, but they do offer insights that clarify the inconsistencies emerging from previous research on the control-performance relationship.

the imprinting effect

These in-depth case studies also enabled us to explore the dynamic aspects of international joint ventures. We identified several factors that prompted changes in the bargaining power of partners. However, we did not observe structural reconfigurations in these four joint ventures. Significant shifts in the partners’ levels of management control did not occur. This structural stability seems to suggest the imprinting effect organization theorists (Scott, 1987) have noted. Since each organization requires a particular
combination of economic, technical, and social resources during its formation stage, the building of such resource bases may set the organization on a course from which it is difficult to deviate (Stinchcombe, 1965). Scott (1987) argued that once an organization is established, it tends to retain the basic characteristics present at its founding for a long time. Although our data revealed no shifts in management control patterns, we observed changes in the components comprising the bargaining power of both partners in each joint venture. However, in none of the cases did the relative bargaining power of the parents shift significantly. In each venture, the foreign partner’s resource contributions increased over time, but it did not experience a commensurate increase in control, probably because its bargaining power diminished over time (Dymsza, 1988), particularly when the local partner was learning-oriented (Hamel, 1991). This diminishing effect may be also attributable to sunk costs, or the fixed, highly specific investment the foreign partner makes in a joint venture (Smith & Wells, 1975; Williamson, 1983). Therefore, the U.S. partners’ increased resource contributions to the partnerships simply replenished their naturally depleted power or offset increases in the Chinese partners’ bargaining power resulting from their learning. Thus, an overall balance of bargaining power and control was preserved.

Conclusions

The findings of this comparative case study provide confirmative evidence that the relative levels of joint venture partners’ bargaining power has a significant impact on the pattern of parent control in the venture’s management. By adopting a negotiations perspective focusing on the partners’ interdependence, we were able to unpack some of the complexities of joint venture formation, management, and performance and to clarify the reasons for some of the conflicting or incomplete results of previous studies, which have focused on the multinational partner’s perspective only. By identifying factors that induce changes in the partners’ bargaining power, our analyses also provide insight into the dynamic development of international joint ventures.

Are theories initiated in the West applicable in China? Our findings suggest the answer is yes. The key relationships in the theoretical model (Figure 1), which was primarily based on the works of Western researchers, received significant support from our Chinese data. In addition, our findings on the relationships among the key variables, the variables moderating the relationship between parent control and performance, and the dynamic evolution of international joint ventures enrich the current literature and provide new clues for future research on joint ventures in other countries, particularly on partnerships formed between developed and developing country sponsors.

Some special characteristics of Chinese joint ventures are noteworthy. First, significant differences existed in the strategic objectives of the foreign and the local partners. Multinational firms form joint ventures in China primarily to penetrate the local market and to pursue financial goals. To
them, market share and profitability are important measures of venture performance. In contrast, for Chinese partners the overwhelming goal for cooperating with the West is to learn the more advanced Western technology. These strongly contrasting objectives, though they may be complementary, give both partners strong incentives to exercise control over a venture’s operation because both will perceive control as the most critical means of fulfilling their strategic intentions. Second, in the interest of learning, the Chinese expect from the outset that management will be shifted from the foreigners to themselves over time. As a result, in order to maintain control, the foreign partner will have to make continuing commitments of resources to maintain the original balance of bargaining power. Therefore, in Chinese joint ventures management control is a long-term issue, about which continuing renegotiations between the partners should be expected.

**Limitations.** Several limitations of the study should be acknowledged. First, the empirical research reported here was based on data from U.S.–Chinese joint ventures. Characteristics idiosyncratic to Chinese joint ventures, such as government influence and the seemingly strong complementarity of partner objectives, might have affected the research results. Therefore, generalization of our findings to other joint ventures should be made with caution. The resultant model of this study needs further testing on a larger number of Chinese joint ventures and on joint ventures in other countries. Second, Chinese joint ventures necessarily have short histories, which limits our analysis of the dynamic evolution of these international alliances. Additional research using longitudinal data is needed to clarify how joint venture structural reconfigurations prompt changes in venture performance over time. A third limitation is associated with the homogeneity of the firms studied, most of which were relatively strong performers. Although the firms studied may be representative, because Chinese joint ventures have in general been more successful than their counterparts in other countries (Beamish, 1993), our performance variable may not have had enough variance to ensure that we captured all potential factors affecting venture performance. Fourth, the analyses conducted in this study were partially based on retrospective data, which might have introduced an additional source of bias as a result of faulty memory or retrospective sense-making on the part of our informants. This problem is not critical, however, because in most cases and for most variables multiple sources of data were available and data triangulation among these sources revealed a high level of consistency. A final limitation may be related to sampling. This study is restricted to manufacturing joint ventures. Future work on Chinese joint ventures needs to investigate the applicability of the model to international partnerships in service industries.

**Future research directions.** Finally, we offer several suggestions for future research that will extend this study and overcome several of its limitations. (1) Regarding international joint ventures in countries like China, in which the local government plays a role, greater specification of the functions performed by the government and the local company is needed. Ad-
ditional research should investigate whether the achievement of the individual Chinese partner's objectives supersedes those of the Chinese government in newly formed joint ventures. (2) This study suggests that formal and informal control mechanisms interact and jointly affect venture performance. Future research should pay more attention to the informal aspects of control, particularly, the interpartner trust relationship, partners' long-term commitment, and joint development of partner competence, and their impact on performance. (3) Valuable insights into the dynamic relationship between bargaining power and management control can be gained from studies that trace formation processes in detail over time. Doing so may further clarify the causal relationships between the two phenomena and the relative importance of the contextual power and resource-based power of partners. It would also shed light on the intriguing question of whether characteristics of joint venture formation imprinted at birth ultimately determine the success and failure rates of international partnerships. (4) The model derived from this research needs to be tested by using larger samples and joint ventures created by partners from different countries. In order to capture the dynamic characteristics of joint ventures, investigations using longitudinal, repeated-measures designs are needed.

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