

Factors That Influence Multinational Corporations' Control of Their Operations in Foreign Markets: An Empirical Investigation

ABSTRACT

Keywords: international market entry, MNC control, foreign subsidiaries, global strategy, transaction cost analysis, bargaining power theory

Multinational corporations' (MNCs') control over their foreign operations plays an important role in implementing their global marketing strategy. In the past, transaction cost analysis and bargaining power theory have been widely cited to explain the degree of control MNCs exert over their foreign operations. However, research explicitly combining these two perspectives has been limited. To address the gap in the literature, the authors present a joint model that combines the two alternative theories to explain MNCs' control, and they compare their relative explanatory power. Using primary survey data, they perform an empirical test of the relative explanatory power of these two theories. The results suggest that three factors, two drawn from bargaining power theory and one from transaction cost analysis, are key factors in explaining MNCs' degree of control over their foreign operations. The article concludes with a discussion of the theoretical and managerial implications.

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When multinational corporations (MNCs) expand internationally and market their products across the country markets, it is critical that they carefully maintain a certain degree of control over their foreign operations. Indeed, the global marketing literature regards maintaining an appropriate degree of control over foreign operations as critical in implementing MNCs' global marketing strategy (Roth and Schweiger 1991). A major reason that MNCs' control over foreign operations is central to facilitating their global marketing success is that, without control, MNCs are not able to standardize, configure, coordinate, and integrate their marketing activities across the world, leading to competitive disadvantages in the global market (Zou and Cavusgil 2002). Thus, the issue of MNCs' control over their foreign operations is among the major research issues in the global marketing literature.

Although maintaining control over foreign operations is important for global marketers, it is also expensive to do so, both in terms of the initial investment (e.g., in a wholly owned subsidiary) and the sacrifice of the flexibility/autonomy of foreign operations. Because tough trade-offs exist with mixed advantages and drawbacks, firms often struggle to execute the right decisions. Moreover, after long-

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term contract and resource commitments are made to exert a certain degree of control, it is difficult to correct an inappropriate decision and alleviate its detrimental effects. Consequently, it is critical for international marketing managers to understand the factors that influence MNCs' control over their foreign operations.

Previous research has advanced transaction cost analysis (TCA) and bargaining power (BP) theory, among others, to help explain MNCs' degree of control over their foreign operations. These theories are based on different theoretical reasoning. On the one hand, TCA suggests that, in general, MNCs prefer a low-control mode unless the transaction costs associated with it are high. On the other hand, BP theory posits that MNCs' degree of control over their foreign operations is determined by the relative BP and negotiations with host governments. Although studies in this stream acknowledge that firms may prefer something other than whole ownership, these studies tend to focus on one side of the equation (Gomes-Casseres 1990).

The tendency in the current literature is to focus on only one of these two views at a time, and extensive research exists that investigates the predictive power of these two theories separately. However, few studies take a comprehensive approach to combine these theories into a joint model, leaving only partial explanations in the literature. In addition, little research exists that assesses the relative explanatory power of these two alternative theories systematically in the same study. Moreover, of the limited number of empirical studies that focus on the topic, most adopt secondary data in their analysis. Because secondary data may not be suitable for measuring some perceptual constructs of TCA and BP, it is important that key TCA and BP factors are measured and tested by primary data.

The purpose of the current research is twofold. First, we intend to combine TCA and BP into a joint theoretical framework to identify key factors that affect MNCs' degree of control over their foreign operations. Second, we focus on comparing the relative explanatory power of key factors drawn from the TCA and BP perspectives by using primary data collected from MNC executives. The remainder of this article is organized as follows: After a literature review that summarizes both TCA and BP theories, we develop a theoretical framework that identifies key antecedents of MNCs' degree of control over their foreign operations from the two theoretical perspectives. After describing our research methodology, we present the analysis and findings of our study. We conclude by discussing the implications of our research and its findings.

THEORETICAL MODEL AND HYPOTHESES

Degree of Control

Control refers to “the ability to influence systems, methods, and decisions” (Anderson and Gatignon 1986, p. 3). A firm’s control over its foreign operations has a critical impact on its success. Without control, a firm may find it difficult to coordinate actions, implement strategies, and resolve the disputes that invariably arise when each foreign operation pursues its own interests. A high degree of control over foreign operations can (1) facilitate the implementation of global marketing strategies, which emphasize standardization, integration, and coordination (Zou and Cavusgil 2002); (2) protect an MNC’s specific advantages, intellectual properties, and privacy; (3) improve operations and management (e.g., increasing operating efficiency, strengthening goal congruency); and (4) yield greater profits and higher returns (Anderson and Gatignon 1986). Control, though often desirable, does carry a high cost. To exercise control, on the one hand, a firm must assume the responsibility for decision making in an uncertain foreign environment, and on the other hand, it must commit resources, which can create switching costs, reduce the firm’s ability to change, and increase risks (Anderson and Gatignon 1986). Thus, assuming control can lead to both high returns and high risks.

As the most important determinant of both risk and return, control is the focus of the entry mode literature (Anderson and Gatignon 1986). Four main entry alternatives are associated with different degrees of control for a firm (Taylor, Zou, and Osland 1998): exporting, licensing/franchising, joint venture, and full ownership. In general, the level of control increases as an organization moves from contractual arrangements to joint venture to full ownership (Tallman and Shenkar 1994; Taylor, Zou, and Osland 1998).

Alternative Theories of Degree of Control over Foreign Operations

Two approaches often are cited to explain firms’ degree of control over their foreign operations (Gomes-Casseres 1990): TCA suggests that a low level of ownership is preferable unless proved otherwise (Anderson and Gatignon 1986), and BP states a natural preference of high control unless the government of the host country has greater BP (Gomes-Casseres 1990).

Using the TCA approach, organizations combine elements of industrial organization, organization theory, and contract law to weigh the trade-offs in vertical integration (and, by extension, degree of control) decisions (Anderson and Gatignon 1986). The TCA approach involves firms choosing to transact according to the criterion of minimizing the sum of production and transaction costs when they are entering the foreign markets (Williamson 1981b). Thus, minimizing the sum of transaction costs is the key criterion/driver for a firm’s governance structure decision (Williamson 1981a). Transaction costs refer to the costs of negotiating a contract, monitoring performance of the venture, and monitoring

other parties in the contract (Taylor, Zou, and Osland 1998). The TCA approach involves considering markets as competitive but imperfect (Hennart 1989).

According to TCA, the answer to the question of how much control a firm chooses over a foreign business entity lies in the diseconomies of acquisition. The necessary condition for choosing a low degree of control is that the production cost achieved through internal development or acquisition is significantly higher than external sourcing for at least one of the parties. The TCA approach predicts that MNCs gravitate toward a low degree of control in foreign markets because of market competitiveness; in other words, the threat of being replaced forces the partners to perform efficiently (Williamson 1981b). However, market imperfections may make high control more appealing when transaction costs are high (Anderson and Coughlan 1987).

Many studies have employed TCA theory (e.g., Anderson and Gatignon 1986; Brouthers 2002; Erramilli and Rao 1993; Hennart 1989, 1991; Williamson 1981b) to study entry mode choice. Researchers have identified a set of environmental and transaction-specific factors that play central roles in influencing entry mode choice. For example, Anderson and Gatignon (1986) provide a review and integration of early entry mode literature within a transaction cost framework. More recently, Zhao, Luo, and Suh (2004) have conducted a meta-analysis to summarize the literature quantitatively with respect to TCA-related factors in determining the entry mode choice.

Another theoretical perspective emerging in the literature is BP theory, which considers MNCs' degree of control over their foreign operations as an outcome of negotiations between the MNCs and host governments (Taylor, Zou, and Osland 2000). Although the BP framework is well grounded theoretically, it has been adopted somewhat less extensively than TCA in the context of entry mode choice. Taylor, Zou, and Osland (2000, p. 150) define BP as "a bargainer's ability to set the parameters of the discussion, win accommodations from the other party, and skew the outcome of the negotiation to the desired ownership alternative." The BP approach includes three key perspectives. First, the degree to which a firm can exercise control over foreign operations depends on the relative BP of the firm and the host government (Tallman and Shenkar 1994). If the firm has low BP, it may need to accept a low degree of control, though high control is preferred. Second, both parties involved in a negotiation are long-term oriented and attempt to achieve an outcome that is in their best interests in the long run (Taylor, Zou, and Osland 2000). Third, the most ideal outcome representing a firm's long-term business success is to have dominant control over its foreign operations, considering the important

role of control in business operation. Thus, BP suggests that a firm has a preference for high control.

A number of stakeholders in the host country may get involved in the negotiation (Tallman and Shenkar 1994). By virtue of the interdependencies they create in the environment, stakeholders, such as local firms, suppliers, and the host government, can affect the negotiation outcome without necessarily participating directly in the bargaining process (Tallman and Shenkar 1994). Among them, host government and local partners are the two major stakeholders interacting with the MNCs. The sources of BP for the host government include its ability to control market access (Lecraw 1984), to own scarce resources (Lecraw 1984), and to offer or withdraw incentives for the investment project (Tallman and Shenkar 1994). In contrast, the power of the firm stems from its “ownership (firm-specific) advantages,” or the ability to employ people and contribute to the local economy (Taylor, Zou, and Osland 2000). Fagre and Wells (1982), Lecraw (1984), Gomes-Casseres (1990), and Taylor, Zou, and Osland (2000) are examples of studies that examine the antecedents of entry mode choice on the basis of power interaction between the firm and the host government.

Although extensive work has been done on each side of the equation, researchers have made limited attempts to examine the two theories in a combined framework and to compare their relative explanatory power. It is unclear whether the decision regarding type of institutional arrangement made by the MNCs is due to the effect of TCA factors, BP factors, or a combination of both. It remains unknown which theory would play a stronger or even dominant role in a firm’s decision making with regard to the degree of control over its foreign operation. For example, if a firm decides to choose a high degree of control (e.g., whole ownership), it could be because of the high transaction cost emerging from great demand uncertainty. As an alternative, this choice could be attributed to the strong BP of a firm resulting from the firm’s extensive resource commitment to the foreign operation. Some researchers (e.g., Fagre and Wells 1982; Lecraw 1984) are aware of this problem and have made attempts to control one effect (e.g., BP) when testing the other effect (e.g., TCA). However, this work is far from complete and adequate, as Gomes-Casseres (1990) indicates. To address the gap in the literature, we intend to develop a joint model and empirically examine and compare the effectiveness of these two theories in explaining MNCs’ control. Furthermore, with primary data to measure management perceptions directly, we endeavor to minimize measurement error and provide a more accurate and comprehensive explanation of MNCs’ degree of control over their foreign operations.

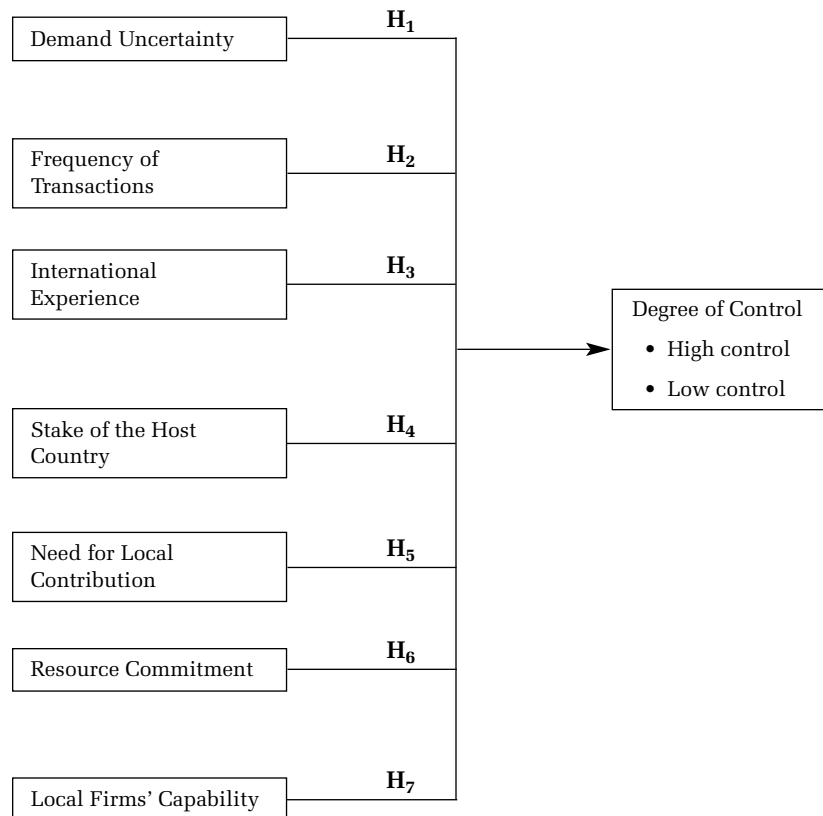
Among the various factors advocated by TCA, three are identified as principal factors that make market-mediated exchange inefficient (Klein, Frazier, and Roth 1990). Demand uncertainty and international experience indicate the external and internal uncertainty surrounding the exchange, respectively (Klein, Frazier, and Roth 1990). Frequency of transactions refers to the distinction between one-time and recurrent market exchanges (Klein, Frazier, and Roth 1990). All three factors are perceived as dominant determinants of control, which is the focus of the current research.

The factors typically identified by BP in previous literature are derived from two perspectives (Yan and Gray 1994). One group of researchers asserts that the stakes of the bargainers in a negotiation and the availability of alternatives are primary influences on BP (Bacharach and Lawler 1984). A second view draws heavily on resource dependence theory and suggests that the need for and scarcity of the resources offered by the two parties are the main determinants of BP in interorganizational relationships (Fagre and Wells 1982). Drawing from these perspectives, BP suggests that the following four factors are critical determinants of MNCs' degree of control: stake of the host country, need for local contribution, resource commitment, and the local firm's capability. Figure 1 shows the theoretical model.

TCA Factor: Demand Uncertainty. As one of the most important forms of external uncertainty, demand uncertainty is defined as the extent to which future sales of a firm's products or services in the host country are difficult to predict (Taylor, Zou, and Osland 1998; Williamson 1981b). Williamson (1981b) posits that when transactions are conducted under conditions of uncertainty or complexity, it is costly and perhaps even impossible to complete the full decision tree because of bounded rationality. To respond to a highly uncertain and volatile environment, managers must engage in longer and more difficult negotiations, and this process increases transaction costs. Furthermore, high demand uncertainty also would make it difficult for managers to predict future contingencies. Thus, it would be challenging and expensive to write contracts that foresee all the possibilities and cover as many solutions as possible to adapt to the changed circumstances (Klein, Frazier, and Roth 1990). Therefore, demand uncertainty increases transaction costs, which in turn increases the need for control. Thus, we hypothesize the following:

- H₁: There is a positive relationship between demand uncertainty and MNCs' degree of control over their foreign operations.

Figure 1.
Theoretical Framework



TCA Factor: Frequency of Transactions. Frequency of transactions refers to the number of transactions needed between a firm and its foreign subsidiary, partner, or distributor to maintain and operate the venture. The basic premise of TCA is that the firm internalizes activities when the production cost of conducting the activity itself is low and favors market activities when other parties have advantages and transaction costs are low. Higher costs of contracting externally are associated with greater incentives to internalize transactions (Klein, Frazier, and Roth 1990; Williamson 1981a). When the frequency of transactions between one foreign subsidiary and the MNC or other foreign subsidiaries is relatively low, a firm may perceive less need to negotiate the contract frequently. Thus, the firm is more likely to prefer market exchanges and opt for a low degree of control. However, when the frequency of transactions is high, the firm is better off seeking a high degree of control to minimize the costs associated with frequent negotiations (Taylor, Zou, and Osland 1998).

H₂: There is a positive relationship between frequency of transactions and MNCs' degree of control over their foreign operations.

*TCA Factor: International Experience.*¹ International experience refers to the degree of experience the firm has in international operations. In the international setting, firms with little international experience are uncertain of how to monitor and assess inputs appropriately and thus are unlikely to overcome internal uncertainty (Gatignon and Anderson 1988). Moreover, in a competitive environment, firms inexperienced in international markets are prone to suffer serious errors and inefficiencies if they try to exert control before they know how to apply it appropriately. Therefore, a low degree of control becomes especially advantageous if the firm with little international experience cannot manage an integrated structure properly (Gatignon and Anderson 1988). Hennart (1991) empirically demonstrates that when firms have little local experience, they tend to choose joint venture over wholly owned subsidiary, favoring a low degree of control. Gomes-Casseres (1990) notes a similar finding: MNCs prefer the high-control mode (e.g., whole ownership) when they have rich experiences. Thus, we hypothesize the following:

H₃: There is a positive relationship between international experience and MNCs' degree of control over their foreign operations.

BP Factor: Stake of the Host Country. In general, a stake is "a bargainer's level of dependence on a negotiating relationship and on its outcomes" (Yan and Gray 1994, p. 1481). Stake of the host country refers to the extent to which the host government perceives a compelling need to attract the investment (Taylor, Zou, and Osland 2000). The stake of the host country in a negotiation is directly and negatively related to its BP (Yan and Gray 1994). When the host country is in great need of technology or financial investment from the MNCs (e.g., global high-technology giants), it has an important stake in attracting the foreign investment and is willing to offer various incentives to encourage investment. In that case, the host government is in a weak negotiating position, and the BP of the MNCs increases (Gomes-Casseres 1990). This is especially likely to happen when the host government perceives great pressures to attract foreign capital and technologies to spur its national economic growth or is seeking a good match with its political policies (Yan and Gray 1994). Therefore, we expect that when the host country's stake is high, its relative BP is weakened, increasing the likelihood for MNCs to exert a high degree of control over their foreign operations.

H₄: There is a positive relationship between stake of the host country and MNCs' degree of control over their foreign operations.

BP Factor: Need for Local Contribution. Need for local contribution refers to the degree to which a firm needs local capital, technology, or other resources to ensure its success in the foreign markets (Taylor, Zou, and Osland 2000). Just as the need for and the scarcity of the resources offered by two parties influence their relative power, access to capital, technology, or marketing skills might contribute to a relatively stronger bargaining position (Fagre and Wells 1982). According to BP theory, the motivation for an MNC to seek partners in a foreign market is not merely an anticompetitive maneuver but rather a means to seek complementary resources and capabilities from local partners to establish competitive advantages in the foreign markets.

For example, MNCs usually provide the product and technology, and local firms provide local expertise that is primarily tacit knowledge (Tallman and Shenkar 1994). With a strong need for local commitment, a firm relies heavily on the host country for its success, increasing the BP of the host government. Thus, the firm would need to accept a low degree of control in its foreign operation. Gomes-Casseres (1990) reports that MNCs prefer low-control modes (e.g., joint venture) when they must rely on local resources or inputs. Lecraw (1984) finds that the BP of the MNCs would increase with enhanced dependence of the subsidiaries on the MNCs. Thus, we expect that the BP of MNCs would decrease as a function of increased dependency on local firms. Therefore, we propose the following:

H₅: There is a negative relationship between need for local contribution and MNCs' degree of control over their foreign operations.

BP Factor: Resource Commitment. Resource commitment refers to the resources that a firm expects to commit to establishing its foreign operation in the host country. The power of a firm to negotiate with the host government depends on the resources the firm has available to commit in the foreign market (Lecraw 1984). A small and fast-growing firm or a firm that wants to launch a variety of products in multiple markets might not have excess financial and managerial resources for investment in a single foreign market. In both cases, a firm's overall resource contribution to foreign operations is limited, subsequently limiting its BP relative to the host government. In such a case, the firm must settle for a low degree of control. Indeed, the low degree of control associated with licensing and franchising may be desirable because the firm may be able to take advantage of a local partner's complementary expertise in such engagements (Lecraw 1984) and save its scarce resources to support its operation in other markets (e.g., domestic market). In contrast, with a greater resource commitment to the foreign mar-

kets, the MNC enjoys stronger BP and exercises a high degree of control. Thus, we propose the following:

H₆: There is a positive relationship between MNCs' resource commitment and the degree of control over their foreign operations.

BP Factor: Local Firms' Capability. The BP of local firms is influenced by their distinctive capabilities (Lecraw 1984). These capabilities are critical, intangible resources the MNCs actively seek in the foreign markets. A local firm in possession of strong marketing and/or technology capabilities obtains BP by showing that the MNC's success is likely to depend on the local contributions that are costly or impossible for other partners to replace. Thus, the greater the distinctive capabilities of local firms, the greater is their BP and the higher is their level of local ownership (Lecraw 1984). According to BP theory, the MNCs must settle for a low degree of control over their foreign operations in such a case. Thus, we propose the following:²

H₇: There is a negative relationship between local firms' capability and MNCs' degree of control over their foreign operations.

Because most prior literature has used secondary data when investigating firms' control over foreign operations and proxy variables to measure inherently latent factors, the validity of the measures is undermined. In this research, we collected primary survey data from executives of MNCs to address the measurement limitations in the literature. Because there are significant differences between service industries and manufacturing industries (Erramilli and Rao 1993), we chose MNCs in the manufacturing industries for this study. We further limited the participants to continuous process manufacturing firms to enhance the homogeneity of the sampling frame.

In line with the total design approach that Dillman (1978) proposes, a large-scale survey was sent to approximately 2000 senior executives in manufacturing industries with a three-wave mailing. These executives, which we identified using Dun & Bradstreet's *American Corporate Families* and Dun's *Asia/Pacific Key Business Enterprises*, consisted of those from U.S. and Japanese MNCs. We chose these two countries because they represent the two largest economies in the world and they provide a robust test of the theory among countries at a high level of economic development. The directories listed each firm's annual sales, its number of employees, and the name and address of the key executives such as chief executive officers, presidents, or vice presidents of international operations. These executives were

METHOD

Data Collection and Sample

responsible for or involved in decisions with regard to entering and operating in foreign countries and thus would be familiar with the questions that we solicited in the survey. We included only MNCs with at least 100 employees and \$20 million in annual sales.

The executives were asked to answer a series of questions pertaining to their firms' recent foreign market operation experience. This approach allows for direct measurement of the degree of control and the various related factors investigated (Erramilli and Rao 1993). In the initial mailing, each participant was sent a package that included a cover letter, questionnaire, and return envelope with prepaid postage. The cover letter promised that participants would receive a copy of the summary of research findings, if requested. Strict confidentiality was guaranteed as well. Five weeks after the initial mailing, a reminder mailing along with a replacement copy of the questionnaire was sent to participants who had not responded. A third mailing was also sent to the nonrespondents four weeks later. The survey was sent to MNC executives in both the United States and Japan, and the respondents returned completed questionnaires directly to the researchers by using the postage-prepaid business-reply envelopes. At the completion of the data collection, we received 340 responses, yielding a response rate of approximately 17%. Of the 340 responses, 269 had complete and usable responses.

The mean of annual sales for the responding firms is \$2.1 billion, and the mean number of employees is 852. Regarding previous foreign operations, the survey indicated that exporting (34.1%) is still the dominant mode, and wholly owned startup subsidiary (21.5%) and minority-owned joint venture (13.7%) rank second and third. Next are majority-owned joint venture, licensing/franchising, and acquisition of existing local firms.

Questionnaire and Measurement

We initially developed the questionnaire in English. We followed this with a translation and back-translation process to ensure that the Japanese version was equivalent to the English version. We further pretested the questionnaires by interviews with four U.S. and three Japanese executives.

The dependent variable degree of control indicates the degree to which the MNCs have control over their foreign operations. We measured control with direct indexes from two perspectives: strategic control and operational control. Strategic control implies the level of control of the MNCs over the strategic decisions of their foreign operations, and operational control focuses on the level of control of the MNCs over the operational decisions in the foreign markets. We created a composite index to measure the overall degree

of MNCs' control by averaging the ratings on strategic control and operational control.

Because most prior empirical studies in this field have used secondary data-based measures, we developed measures for the independent variables on the basis of a review of previous literature on TCA and BP. We developed several statements that were intended to capture the TCA and BP factors in this study. We pretested the statements and made necessary modifications. We measured all the variables except international experience using five-point Likert-type reflective scales ranging from "strongly agree" to "strongly disagree." Participants were asked to indicate their perceptions regarding the investigated concepts. We measured three factors—demand uncertainty, frequency of transactions, and local firm's capability—at the overall level with single items. In our pretest interview with MNC executives, we found that the executives had a concrete and single idea about these constructs. Following Rossiter's (2002) recommendation, we preferred to use single-item measurement for these constructs. Bergkvist and Rossiter (2007) find that both a single-item scale and a multi-item scale for such concrete constructs yield the same predictive validity. We developed two and three items to measure need for local contribution and resource commitment, respectively. We measured stake of the host country using two items that indicated the degree of importance of the foreign investment to the host country. In addition, we measured international experience using a rating scale of the number of years the MNC had been operating internationally. Table 1 shows the content of the scales.

We screened data for accuracy, missing data, outliers, nonresponse bias, and common method variance bias. We observed no systematic distribution of missing data. We used a mean-substitution technique for the missing data and detected no outliers.

In addition to the translational equivalence of the measures, we tested the measurement equivalence between U.S. and Japanese subsamples. Specifically, we performed two-group confirmatory factor analyses (CFAs) to assess measurement invariance of multi-item scales between the U.S. and Japanese subsamples (Baggozi and Yi 1988). We fitted a two-group CFA model with the same factor structure and with all factor loadings constrained to be equal across countries to the data and compared with another two-group CFA model without constraints. We found that the overall fit of the CFA model with constraints fit the data well (Bentler–Bonnett non-normed fit index [BBNFI] = .980, comparative fit index [CFI] = .987, incremental fit index [IFI] = .987, McDonald fit index [MFI] = .982, and root mean square error of approxi-

RESULTS

Data Screening and Preparation

Table 1.
Measurement Model

Constructs/Item	Standard Loading	R ²	t-Value
DV: Degree of Control			
1. What level of control does your company have over the strategic decisions of your recent venture into this foreign market?	.889	.791	
2. What level of control does your company have over the daily operations of your recent venture into this foreign market?	.730	.532	7.527*
IV1: Stake of the Host Country			
1. Our investment in this foreign market is extremely important to the host country.	.739	.546	
2. To the host country, the cost of not winning our investment there is very high.	.604	.365	7.139*
IV2: Need for Local Contribution			
1. Local capital is needed in order for us to enter this foreign market.	.734	.539	
2. Local technology is crucial to the success of this venture.	.479	.230	5.516*
IV3: Resource Commitment			
1. Our business unit has made (or will make) a huge capital commitment to this venture.	.850	.722	
2. We have hired (or will hire) a large number of employees for this venture.	.814	.663	7.367*
3. The venture is expected to generate a considerable amount of sales.	.594	.353	8.024*
IV4: Demand Uncertainty			
The demand in this foreign market for our product is very uncertain.			N.A.
IV5: Frequency of Transactions			
We need to maintain frequent transfer of goods between this venture and our operations in other countries.			N.A.
IV6: International Experience			
In how many countries does your business unit have international business operations? (1) 1; (2) 2–5; (3) 6–10; (4) 11–20; (5) 21–50; (6) 51 and more			N.A.
IV7: Local Firm's Capability			
Local firms have adequate skills to run a joint venture with us.			N.A.
χ^2 (d.f. = 58, $p = .045$)	34.339		
BBNFI	.995		
CFI	.997		
IFI	.997		
MFI	.996		
RMSEA	.019		

* $p < .01$.

Notes: N.A. = not applicable.

mation [RMSEA] = .040) and that the chi-square difference between the two models was 7.765 with 5 degrees of freedom, which was not significant at $p < .05$, suggesting full metric invariance (Steenkamp and Baumgartner 1998). In another analysis, we compared the two-group CFA model with all factor variances and covariances constrained to be equal between two subsamples with the one without constraints. We found that the chi-square difference between the two models was 18.099 with 10 degrees of freedom, which is not significant at $p < .05$, suggesting that the factor variances and covariances are invariant across the subsamples (Steenkamp and Baumgartner 1998). Finally, Box's M test further concurred with the findings from the two-group CFA analysis. Box's M was not significant ($p = .192$), demonstrating the equality of the covariance matrices of the factors in two samples. On the basis of the findings of metric invariance and factor variance and covariance invariance, as well as the Box's M test, we combined the U.S. and Japanese subsamples into an overall sample to test the hypotheses.

Assessment of Nonresponse Bias. We assessed potential nonresponse bias in two ways. First, we compared the responding firms with the nonresponding firms in terms of annual sales and number of full-time employees, the only comparative data available for both responding and nonresponding groups. On the basis of these factors, the t-tests indicated that responding firms are not statistically different from nonresponding ones. Second, using Armstrong and Overton's (1977) extrapolation method, we examined the differences between early and late responses to estimate the magnitude of nonresponse bias. We performed multiple t-tests for all the independent variables and the dependent variable. For all the independent variables, we detected no significant difference between early and late responses, except in terms of frequency of transactions ($t = 2.98$, $p < .01$), as late respondents reported less frequent transactions. Considering that we identified no significant differences for the dependent variable and most of the independent variables, we concluded that nonresponse bias did not yield a serious concern in the data.

Common Method Variance Bias. In this study, because we collected the data for the independent and dependent variables from the same respondents, concern about common method variance bias could arise (Podsakoff et al. 2003). Common method variance is defined as the overlap in variance between two variables due to the type of measurement used, rather than due to a relationship between the underlying constructs. We conducted Harmon's one-factor test (Podsakoff et al. 2003) to assess the potential common method variance bias in this study. We entered all the

variables into a factor analysis. Three factors emerged with the first factor, accounting for 22.72% of the variance in the variables. Because more than a single factor emerged from the factor analysis and no general factor accounted for the majority of the variance in those variables, we saw no evidence to suggest the presence of common method variance bias. In addition to the Harmon's one-factor test, we performed the partial correlation procedure to further test the existence of common method variance bias. Specifically, we computed the partial correlations between all variables with the first principal component partialled out. We found significant partial correlations between some of the predictor variables and criterion variables, suggesting no evidence of common method variance bias (Podsakoff et al. 2003). Thus, we concluded that there is no evidence to suggest the concern of common method bias in our data.

CFA

We used a two-step approach to analyze the data in this study. In the first stage, we performed a CFA using the EQS for Windows program (Bentler 1995) to assess the measurement model. The assessment included examination of both construct reliability and convergent and discriminant validity. In the second stage, we conducted logistic regression to test the hypotheses. We performed the CFA on the three independent variables measured by multiple items and on the dependent variable degree of control. Table 1 presents the standardized factor loadings, R-square, and the corresponding t-statistics for all the factors, as well as the model fit indexes.

To assess the fit of the measurement model, we followed the multistep procedure that Bagozzi and Yi (1988) recommend. First, we used elliptical reweighted least square to estimate the model because the data had some relatively high kurtosis values. Second, the model converged properly without any report of anomalies (e.g., condition codes, improper solutions). Third, the chi-square test was significant ($\chi^2(58) = 34.339, p < .05$). Because three problems have been identified with the chi-square test (unknown power, inadequate measurement of goodness of fit, and sensitivity to sample size [Fornell and Larcker 1981]), we evaluated additional model fit indexes, as Bagozzi and Yi (1988) recommend. The model exhibited an excellent fit (CFI = .997, IFI = .997, MFI = .996, BBNFI = .995, and RMSEA = .019). Error variances and variances of the factors were positive and significant. Fourth, we examined the internal structure of the measurement model and the convergent validity of the factors. We found that the standardized factor loadings of all the items were positive, high in magnitude, and statistically significant. Combined, these findings strongly indicate that the internal structure of the CFA model was sound and that all factors possessed strong convergent validity. Fifth, we made six

pairwise comparisons between one- and two-factor models among four factors to test their discriminant validity. Discriminant validity was evidenced by the significantly better fit of the two-factor model than the one-factor model for all pairwise comparisons. In conclusion, all factors possessed both convergent and discriminant validity, and the CFA model fit the data well.

We used logistic regression to test the hypotheses. We chose this analytical approach because it is appropriate for the testing of the proposed model and it is in line with the extant literature (e.g., Gomes-Casseres 1990). Adopting the same analytical approach makes it easier to compare the current findings with those of prior studies. We obtained the dependent variable by medium-splitting the overall control into two levels: low control (0) and high control (1). Increased value of the dependent variable represents an increase in the level of control. We computed factor scores by taking the sum of variables (after we reverse-coded any negative-loading variables) for all four multi-item independent factors.

We performed a direct logistic regression analysis on control and the seven independent variables. Table 2 presents the results of the logistic regression, and Table 3 shows the classification results.

A test of the full model with all seven predictors against a constant-only model was statistically reliable ($\chi^2(7) = 50.737$, $p < .001$, $-2 \log\text{-likelihood} = 321.343$), indicating that as a set, the predictors reliably distinguished between the two groups. The overall model accounts for 17.2% of the variance (Cox and Snell $R^2 = .172$) in explaining the degree of control of MNCs over their foreign operations.

According to the Wald criterion, MNCs tend to exert a high level of control over their foreign operations when they have more international experience (in support of H_3) and when they have a high level of resource commitment (in support of H_6). In contrast, companies tend to have a low level of control over their foreign operations when their need for local contribution is high (in support of H_5). The effects of demand uncertainty, frequency of transactions, stake of the host country, and local firms' capability are not significant (no support for H_1 , H_2 , H_4 , and H_7). When we used the regression coefficients for classifying the cases, 68.8% of the cases were correctly specified, far surpassing the proportional chance rate of 50% (see Table 3).

In summary, we found support for three hypotheses. These findings lend some support to our proposed theoretical model and shed light on how factors suggested by TCA and BP influence MNCs' level of control over their foreign subsidiaries.

Hypothesis Testing

Table 2.
Results of Logistic Regression

Theory	Predictors	B	Significance
TCA			
	Demand uncertainty (H ₁)	.059	.657
	Frequency of transactions (H ₂)	.127	.325
	International experience (H ₃)	.231*	.044
BP			
	Stake of the host country (H ₄)	.002	.983
	Need for local contribution (H ₅)	-.114*	.032
	Resource commitment (H ₆)	.286**	.001
	Local firm's capability (H ₇)	.133	.311
χ^2 (d.f.)		50.733 (7)	
-2 log-likelihood		321.343	
Cox-Snell R ²		.172	
Significance level		.001	
* <i>p</i> < .05.			
** <i>p</i> < .01.			

Table 3.
Classification Table

Actual Group	Predicted Group Members		Percentage Correct
	Degree of Control		
	Low	High	
Degree of Control			
Low	83	44	65.4
High	40	102	71.8
Overall Percentage			68.8
Notes: The cutoff value is .500.			

DISCUSSION AND IMPLICATIONS

The degree of MNCs' control over their foreign operations is an important determinant of how effectively the MNCs can pursue a global marketing strategy. To seek standardized products and marketing programs, concentrate and coordinate value-adding activities, and integrate competitive moves across the world (Zou and Cavusgil 2002), MNCs must be able to exert control over their foreign operations so that directives and mandates will be followed by their subsidiaries (Roth and Schweiger 1991). In the current literature, TCA and BP are proposed to explain the degree to which MNCs exert control over their foreign subsidiaries. However, these theories have been used separately in prior studies, leading to partial explanations of MNCs' control. To fill the gap in the literature, in the current study, we develop a joint model that combines the two alternative theories and tests the relative predictive power of these theories on MNCs' control over their foreign operations. Using primary survey data, we have obtained several worthwhile findings.

We proposed seven key factors drawn from two theoretical perspectives to explain the degree of control of MNCs over their foreign operations. Using primary survey data, we performed an empirical test of the joint theoretical model. Notably, of the three factors that were significant predictors of the degree of control, two came from the BP perspective and one came from the TCA perspective. This is supportive of our proposed joint theoretical model and suggestive of the value of combining multiple theoretical perspectives in research examining MNCs' control over their foreign operations.

This research provides several contributions to the international marketing literature. First, our study advances a joint theoretical model to explain MNCs' control over their foreign operations, filling a gap in the literature. Our findings suggest that future global marketing researchers should take a more comprehensive view of factors that affect MNCs' control over their foreign operations by combining multiple theoretical perspectives. A single theoretical perspective is likely to lead to partial and incomplete explanations of MNCs' control. Second, we found significant effects of factors from both theories that influence the MNCs' control. These findings suggest that MNCs' control over their foreign subsidiaries is a complex phenomenon that involves multiple considerations. Multinational corporations are concerned not only about the need to minimize their transaction costs but also about their relative BP in interactions with local countries. Thus, further research should attempt to identify the boundary conditions in which each type of MNCs' concerns is more important. This could extend our knowledge about MNCs' control over their foreign operations. Third, among the significant factors, two are drawn from BP and one from TCA. Although both perspectives are important, BP seems to exhibit a relatively greater explanatory power than TCA in our data. Given the support for both perspectives, further research should work to theoretically integrate these frameworks, thereby providing more comprehensive theoretical understanding. Fourth, our study demonstrates the value of using primary data to test TCA and BP theories whose constructs are latent in nature. Researchers should build on the current study to further develop measures for other relevant TCA and BP factors and test their effects on MNCs' control with primary data. Additional directions for further research include the need to use a longitudinal research design to enhance the causal attribution of the observed effects, the need to collect data from multiple sources to rule out potential common method variance bias, and the need to test the joint theoretical framework herein in different contexts.

From a managerial perspective, our study has several implications. At a broad level, our findings suggest that managers

need to consider a complex bundle of factors and balance their desire to minimize the costs with their desire for control when deciding how much control they should exert over their foreign operations. It is worth examining the factors that were directly predictive of a firm's desired level of control when entering a foreign market. It makes intuitive sense that the two factors drawn from BP theory that were significant—need for local contribution and resource commitment—help reliably distinguish between high control and low control. This result is consistent with much prior research that suggests that if an MNC relies heavily on local capital, technology, or other business skills, it has less BP and is more likely to settle for a low-control mode. Thus, from the results of this and other studies, need for local contribution appears to be an important determinant of desired level of control. When firms need a partner to contribute something that is essential to the success of the venture, such as local market knowledge, they are willing to give up some control in exchange for the local contribution.

It also makes sense that when firms devote a high level of resources to a foreign venture, they are more prone to wanting to control the venture. From a BP perspective, the high resource commitment is indicative of a high stake in the venture, which in turn leads managers to want a higher level of control. From a managerial viewpoint, these results suggest that the degree of resource commitment and the need for local contribution are important forces that affect the decisions of a firm entering a new market. If the firm has made a full commitment, it will be more likely to resist possible joint ventures with firms in the host market. In contrast, if there is a significant need for a local contribution, potential joint venture partners will have more room to bargain.

This study proves that international experience, drawn from the TCA perspective, also has a significant effect. This suggests that possible foreign firms will likely have less opportunity to negotiate control with more experienced MNCs. The exception to this is likely to be a situation in which the need for local contribution is high.

Several limitations of the study should be acknowledged. First, because we used a cross-sectional survey in this study, the results must be interpreted as correlational. Second, we collected the data from a single source; therefore, common method bias might be a concern. Although we performed Harmon's one-factor test and the partial correlation test, the results still must be explained cautiously. Third, the firms included in this study are MNCs that have at least 100 employees and \$20 million in annual sales. Therefore, it is not clear whether the results can be generalized to smaller firms.

1. It should be noted that we do not measure asset specificity directly in this study for two reasons. First, certain transaction-specific investments (e.g., facilities, intellectual properties, human resources, relationship with locals) are often undertaken by MNCs entering foreign markets (Gillespie, Jeannet, and Hennessey 2006). Second, other than some proxy variables developed from secondary data (e.g., research-and-development intensity), there are no established measures of asset specificity. In this study, we assume that certain levels of transaction-specific investments exist and examine other TCA factors' effects on control.
2. Some TCA factors might interact with BP factors. However, there is no theoretical basis to advance such hypotheses, and our empirical results did not show any significant interaction.

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NOTES

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