

# A Transaction Cost Perspective on Foreign Market Entry Strategies of US and Japanese Firms

**Charles R. Taylor, Shaoming Zou, and Gregory E. Osland**

**A large scale survey of top US and Japanese executives is conducted in order to assess the power of transaction cost economics (TCE) in explaining a firm's choice of entry mode (e.g., joint venture vs. full ownership) when it enters a foreign market. Results suggest that several TCE tenets are useful in explaining US firms' choice of entry mode. However, TCE predictions were not supported by the entry mode choices of Japanese firms. Implications of these findings for researchers and managers are discussed. © 1998 John Wiley & Sons, Inc.**

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*Charles R. Taylor is Assistant Professor of Marketing at Villanova University, Villanova PA. Shaoming Zou is Assistant Professor of Marketing and International Business at University of Missouri, Columbia MO.*

*Gregory E. Osland is Assistant Professor of Marketing at Butler University, Indianapolis Indiana.*

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## INTRODUCTION

A firm's choice of the mode of entry into a foreign market is one of the most important strategic decisions made by international marketers (Shane, 1994: 627). The entry mode chosen affects the amount of control the firm enjoys over its business activities and the degree to which it succeeds in foreign markets (Erramilli and Rao, 1993: 19). Inappropriate entry mode decisions are difficult to change when long-term contracts and large resource commitments are made. Because of the importance of the modal decision and the accelerating pace of globalization in recent years, researchers have tested a wide variety of factors that may be associated with the choice of foreign market entry alternative. The need for a guiding theoretical framework in conducting this type of research has been widely recognized, as the development and advancement of theory helps us to better understand the phenomena being studied (Gomes-Casseres, 1990; Tallman and Shenkar, 1994).

To date, the dominant theory of entry mode choice has been transaction cost economics (hereafter, TCE). The large number of studies that have employed this theory (e.g., Williamson, 1981; Anderson, 1985; Davidson and McFetridge, 1985; Anderson and Gatignon, 1986; Anderson and Coughlan, 1987; Hennart, 1988, 1989, and 1991; Erramilli and Rao, 1993) suggest that it has become the most influential theory in this research area. The basic premise of TCE theory is that firms will attempt to minimize the combined costs of entering into a contractual arrangement and running and monitoring the system (Buckley and Casson, 1976; Williamson, 1985: 21–22). The theory is rooted in Coase's (1937) concept of internalization, and argues that in imperfect markets, firms have incentive to internalize activities (Buckley and Casson, 1976: 33). Recently, it has been argued that the TCE approach should be expanded to include additional variables, such as strategic and cultural factors (Dunning, 1990; Hill, Hwang, and Kim, 1990; Gomes-Casseres, 1990; Kim and Hwang, 1992). In keeping with this suggestion, this study employs an expanded TCE framework to investigate the impact of several factors on the entry mode choices of US and Japanese firms.

In spite of its dominance in the entry mode literature, very few studies have collected primary data aimed at testing the major TCE propositions. In fact, most of the data that has been reported on entry mode choice have been developed from analyses of secondary data from US-based firms (Agarwal and Ramaswami, 1992: 2). Given the complexity and latent nature of the TCE constructs, it can be argued that secondary data are limited in their ability to capture the

full domain of the constructs. Thus, primary data are required to enhance the accuracy of the test.

An additional limitation of prior research is that the generalizability of TCE propositions across cultures has not been fully addressed. TCE is a theory developed by Western economists and, hence, its applicability to other cultures has been questioned (e.g., Granovetter, 1985; Hill, 1995). North (1981), for instance, notes that the institutional structure of a society can have an impact on transaction costs associated with partnering. Hill (1995) adopts this view, suggesting that aspects of Japanese culture have led to institutions that tend to reduce the transaction costs associated with cooperation. Since questions such as these about TCE's generalizability (at least in its current form) persist, it is important to test the theory in a multicountry context.

The purpose of this article is to empirically examine the effectiveness of TCE theory in explaining the entry mode choices of US and Japanese firms. An additional goal is to identify the factors which US and Japanese managers view as having an important impact on the choice of entry mode. The identification of these factors and an understanding of how they influence choice of entry alternative also hold the potential to provide important insights to global managers. To achieve these goals, a large-scale survey of Japanese and US chief executive officers was conducted.

The remainder of the article will begin with a description of the alternatives available to firms seeking to enter a foreign market. This will be followed by a description of TCE theory. The major propositions of TCE are then used to develop hypotheses pertaining to major factors involved in modal choice decisions. Next, the methodology of the study is described. This is followed by presentation and discussion of the study's results. Finally, theoretical and managerial implications of the study are discussed and conclusions are drawn.

## **ALTERNATIVE ENTRY MODES**

It is important at the outset to define the terminology that will be used to describe entry mode alternatives. Drawing on prior literature on entry modes (e.g., Root, 1994: 26; Tallman and Shenkar, 1994: 93), we distinguish between four general types of entry alternatives. The first of these alternatives is exporting, which involves a company selling its products which are manufactured outside the target country to the target country. The second type of entry mode

is licensing/franchising, which are both types of contractual arrangements (Root, 1994: 26–29; Shane, 1994: 632), involving nonequity associations between an international company and a party in the host country in which technology or management systems are transferred. The third type of entry mode is the joint venture. A joint venture requires the firm to enter into an arrangement where equity and control of the venture are shared with a partner from the host country. An equity investment is required in the joint venture, and can involve taking a minority or a majority stake in the venture. The fourth type of entry mode is full ownership of facilities in the target country, whereby the parent company takes a 100 percent equity stake in the operations in the host country. Full ownership can involve either acquiring an existing business in the target country, or investing in new facilities (often referred to as a *greenfield* venture).

It has been noted elsewhere that in testing theories (including TCE), of entry mode choice, exporting cases should not be compared to other modes of entry (Hennart, 1989: 215; Kim and Hwang, 1992; Erramilli and Rao, 1993: 20). One issue is that, unlike the other modes of entry, there can be a wide spectrum of the level of commitment and control for exporting firms. As will be discussed subsequently, the level of commitment and control is fairly standard for the other three alternatives, and plays an important role in choosing between them. For this reason, this study will confine its analysis to choices between contractual modes, joint ventures, and full ownership.

A major consideration in choosing among the three entry alternatives relates to the fact that they are associated with different degrees of risk and levels of control for the firm (Agarwal and Ramaswami, 1992: 3–4; Root, 1994: 28). The differences in risk and the level of control play a key role in a company's selection of an entry mode (Woodcock, Beamish, and Makino, 1994: 253–255). In general, both the level of risk and control increase as one moves from contractual arrangements to joint ventures to full ownership (Tallman and Shenkar, 1994: 93–94). While it has been suggested that there may be differences in the level of control of different types of joint ventures, it has been observed by prior researchers that such differences are often indistinguishable and sometimes in the opposite of the predicted direction (Lecraw, 1984: 27; Erramilli and Rao, 1993: 22). Additionally, TCE has proven to be more successful in describing choice among the general modes than it has in describing the choice within a general category (e.g., majority stake joint ventures vs. 50/50 joint ventures vs. minority stake joint ventures; see Klein, Frazier, and Roth, 1990: 198; and Erramilli and Rao, 1993: 22). Therefore, our analysis will be confined to the choice between the three general categories of entry modes.

## **TRANSACTION COST ECONOMICS (TCE) AND HYPOTHESES**

Transaction cost economics (TCE) suggests that the governance structure a firm chooses for a venture is driven by a desire to minimize the sum of transaction costs (Williamson, 1985: 21–22). Transaction costs refer to the costs of negotiating a contract, monitoring performance of the venture, and monitoring the behavior of those who entered into the contract. In the entry mode context, TCE predicts that firms internalize functions which they can perform at a lower cost than they could obtain by contracting with external partners or suppliers (Erramilli and Rao, 1993: 30–31).

Transaction cost economics assumes that markets are competitive, but imperfect (Buckley and Casson, 1976; Hennart, 1989: 213–215). TCE asserts that a firm will favor low control modes in competitive markets, since the threat of being replaced forces the venture partner to perform efficiently (Williamson, 1981: 1537). By allowing specialists to perform some of its functions, a firm is able to capitalize on economies of scale realized by the specialists and avoid some of the disabling forces associated with building intrafirm bureaucracies. Thus, low control modes are regarded as the *natural* state of affairs according to TCE. While its assumption of competitive markets leads TCE to predict a natural tendency toward low control modes, the theory acknowledges that, in practice, market imperfections can make high control options more appealing (Anderson and Coughlan, 1987: 72–74).

A review of the literature suggests that there are at least seven key factors associated with the TCE that have an impact on firm's entry mode choice. Three of these factors are based on forces which are external to the firm, and are collectively referred to as *market factors* hereafter.

1. The uncertainty of demand for the product in the host country
2. The overall attractiveness of the market of the host country
3. The level of cultural similarity between the firm's home country and the targeted host country

The remaining four factors are referred to as *firm-level* factors. These factors, which are governed by forces within the firm or the industry, are:

4. The specificity of the assets or technologies on which the firm's product and production processes are based

5. The ability of the firm to receive (what it perceives as) a fair price for the technology it intends to transfer
6. The frequency of transactions between the venture and the firm's other subsidiaries
7. The size of the firm making the modal choice

In the following sections, transaction cost economics is used to develop predictions for the impact of each of the market factors and firm-level factors on entry mode decisions. It should be emphasized that the development and testing of hypotheses based on the Western conceptualization of TCE is not meant to ignore critiques, such as those of Hill (1995), who believes that some of the Western assumptions of the theory make it less applicable to countries such as Japan. To the contrary, the testing of these hypotheses in two cultures will allow for an assessment of whether such critiques are borne out based on empirical evidence. If, for example, it were found that this conceptualization of TCE does not help predict the entry mode choices of Japanese firms, this would suggest a clear need to consider aspects of culture in future conceptualizations of TCE if it is to be generalizable across cultures.

## **Market Factors**

***Uncertainty of Demand.*** Uncertainty of demand is defined as the extent to which future sales of a firm's products or services in the host country are difficult to predict (Williamson, 1975: 21–26). The TCE prediction of the impact of demand uncertainty on entry mode choice is rooted in the concepts of bounded rationality and shirking. Williamson (1975) notes that because managers' knowledge is bounded they are often unable to predict future contingencies. Thus, high external uncertainty makes it very expensive to use low control entry modes since writing and enforcing contracts that specify eventualities and consequent response will be quite expensive. Similarly, when demand uncertainty is high, the firm must also be concerned with the potential cost of shirking on the part of a local partner (Caves, 1982). If demand falls below expectations, a partner may have limited incentive to carry out the functions it is supposed to perform. Thus, TCE suggests that firms will guard against high contractual costs and possible costs of shirking in situations of high demand uncertainty by opting for high control modes.

It is notable that non-TCE perspectives have challenged the idea of a positive relationship between demand uncertainty and choice of a high control entry mode. For example, Harrigan (1983) suggests that firms may not be willing to make the high level of investment

required by a high control entry mode under conditions of oscillating demand, instead preferring to maintain a level of strategic flexibility. Kim and Hwang (1992) tested this proposition empirically on a sample of 96 US firms, and found that, counter to their prediction (but consistent with the TCE prediction), demand uncertainty was positively correlated with choice of a high control entry mode. Thus, based on TCE theory, it is expected that:

- H1. There is a positive relationship between the uncertainty of demand a firm faces and a firm's choice of a high control entry mode.

**Market Attractiveness.** Market attractiveness refers to the size and growth potential of the foreign market. According to TCE, the potential risks associated with shirking, particularly in the form of a local partner leaking sensitive information, are higher in attractive markets, since such information is more valuable to competitors (and potential competitors) (Gomes-Casseres, 1990). Thus, in order to reduce the risk of shirking, TCE suggests that firms should choose a high control mode of entry. A second reason why TCE theory predicts a preference for high control arrangements in attractive markets is that there is more opportunity to achieve economies of scale in such markets. It is also the case that the firm itself may wish to engage in opportunistic behavior if the market is so attractive as to be important to its operations on a global scale. For these reasons, a firm may be reluctant to enter into a partnership arrangement in situations where the market to be entered is attractive. Thus:

- H2. There is a positive relationship between the attractiveness of the foreign market in the host country and a firm's choice of a high control entry mode.

**Cultural Similarity.** Similarity between the cultures of the host country and the home country leads to lowered transaction costs associated with market transactions. This is because, when market transactions are used, there are costs associated with acquiring information about local firms and monitoring their performance (Erramilli and Rao, 1993). When cultures are similar, these costs are reduced since the firm is dealing with a country whose values and customs are similar to those in the home country. According to the TCE framework, consequently, the firm would prefer to use low control modes (e.g., licensing/franchising) to enter a foreign market that is culturally similar to the home market. The empirical evidence on the relationship between cultural similarity and entry mode choice

is inconclusive, however. Kogut and Singh (1988) found that as cultural distance between the home and host countries increased, the preference for joint ventures over full ownership increased. Similarly, Kim and Hwang (1992: 40–41) found that when perceived cultural difference between the home and host country is great, firms tend to favor lower control modes. Erramilli (1991: 494) and Erramilli and Rao (1993: 32–33) found cultural similarity to be related to modal choice; however, they also found the relationship is mediated by level of experience and asset specificity. Nevertheless, TCE logic leads to the following hypothesis:

- H3. There is a negative relationship between the cultural similarity of the home and host country and a firm's choice of a high control entry mode.

## **Firm-Level Variables**

**Asset Specificity.** One of the major assertions of TCE is that high control modes tend to be favored in situations in which the firm has to make investments in assets and technology that are specific to the transactions (Williamson, 1981: 1537). When specialized technology and investments are necessary for transactions to take place, the market has limited ability to ascertain the fair value of the technology and assets. Thus, to facilitate transactions, the firm has to set up an internal hierarchy (a high control entry mode) to exercise its control. On the other hand, when asset specificity is low, firms may refrain from high control modes because the benefits of control fall short of the costs of attaining it.

Consistent with the prediction of TCE, Erramilli and Rao (1993: 30–33) found that service firms with low asset specificity prefer shared control modes over full ownership modes, particularly in cases where the firm was relatively small and the country risk was high. Anderson and Coughlan (1987: 78) found the presence of specific assets to be associated with a higher likelihood of preference for establishing internal distribution agents. Additionally, Davidson and McFetridge (1985: 15–19) found that high control modes are preferred when the technology involved is central to the firm's core business, is research and development intensive, and has not been transferred previously—all indicators of high asset specificity. Kim and Hwang (1992: 41) also found a positive relationship between asset specificity and reference for high control modes among US firms, as did Kogut and Zander (1993: 635).

Based on TCE and prior research findings, the following hypothesis is posed:

H4. There is a positive relationship between asset specificity and a firm's choice of a high control entry mode.

**Inability to Receive a Fair Price.** In some cases, a firm may find itself in a situation where it believes that it cannot obtain a fair price for its technology or products if it enters into a low control mode. According to TCE, market imperfections can occur when there is an imperfect flow of information among companies (Williamson, 1981). As a result, potential licensees or joint venture partners may disagree with the firm as to the value of its offering. Such disagreement will significantly increase the costs (time and effort) associated with negotiating and monitoring of the transaction contract. In these instances, it is likely that the firm will opt for a high control entry mode in order to minimize total transaction costs. Therefore, the following prediction is made:

H5. There is a positive relationship between the firm's inability to obtain a fair price for its technology or products and the firm's choice of a high control entry mode.

**Frequency of Transactions.** If the frequency of transactions between the subsidiary in a foreign nation and the firm's other subsidiaries is relatively low, the firm is likely to prefer a market exchange because it does not need to negotiate the contract frequently (Klein, Frazier, and Roth, 1990: 197). However, when the volumes are large and the frequency of transactions is high, the transaction costs associated with frequent negotiation and contracting with local partners will be high (Williamson, 1985). In these cases, the firm is better off using a high control mode in order to minimize the costs of frequent negotiations that are associated with a low control mode. In addition, the firm can ensure that frequent transactions between its subsidiaries can be conducted in an orderly fashion when it retains control over such transactions. Therefore:

H6. There is a positive relationship between the required frequency of transactions needed for a successful venture and the firm's choice of a high control entry mode.

**Size of the Firm.** Prior empirical studies on entry modes show a consistent pattern of larger firms being more prone to prefer high control options (e.g., Gomes-Casseres, 1990: 14–15; Agarwal and Ramaswami, 1992: 20; Erramilli and Rao, 1993: 30–31; Kwon and Konopa, 1993: 70–74). The TCE argument that would explain these findings is that high control ventures into new markets involve high

levels of resource commitment and risk. Large firms, being more able to absorb such risks, will be more likely to opt for high control modes. Furthermore, large firms are often motivated by the greater potential for economic rent associated with a high control mode. Thus:

- H7. There is a positive relationship between the size of a firm and its choice of a high control entry mode.

## **METHODOLOGY**

To empirically test the hypotheses, a cross-industry mail survey of US and Japanese executives was conducted. The executives were asked to respond to a series of questions pertaining to a recent foreign market entry decision. This approach allows for direct investigation of the relationship between entry mode choice and the internal and external factors tested (Erramilli and Rao, 1993: 26).

### **Sampling Frame**

Manufacturing industries were targeted for this study for two reasons. First, no prior study has collected primary data on the entry mode choices of both US and Japanese manufacturing firms. Second, prior literature suggests that there are fundamental differences in considerations involved in entry mode choice between service industries and manufacturing industries (Erramilli and Rao, 1993). The study was further limited to continuous process manufacturing firms in order to enhance the homogeneity of the sampling frame.

The sampling frame of 1189 Japanese and 1024 US firms was identified using Dun and Bradstreet's American Corporate Families and Dun's Asia/Pacific Key Business Enterprises. These sources listed the firm's annual sales, number of employees, and key contact persons. Only firms with at least 100 employees and \$20 million in annual sales were included. These criteria were considered necessary to enhance the relative homogeneity of the sample, and were consistent with the focus of the research, namely firms which are of sufficient size to have a range of possibilities in terms of entry mode arrangements.

### **Questionnaire and Measures**

A structured survey questionnaire was developed using a multistage process. First, prior entry modes literature was reviewed to identify measures relevant to the study. Second, a bank of items which were

potentially useful to measure these constructs was developed by examining the conceptual and empirical literature. These items were then expanded into Likert-type statements answered on a five-point scale ranging from "strongly agree" to "strongly disagree."

The third stage was to pretest the questionnaire, via personal interviews with four US and four Japanese executives responsible for international market ventures as well as with several academicians familiar with research on entry modes. Based on feedback from these interviews, some items were dropped and others were modified. It should be noted that the items pretested among Japanese managers had been translated into Japanese after being put through a translation/backtranslation process in order to ensure that equivalent items were being measured. Prior to finalizing the questionnaire, the survey was administered to several US and Japanese business executives in order to evaluate the validity of the revised items and the amount of time it took to complete the survey. After incorporating feedback from these additional pretests, the English version of the questionnaire was finalized.

Once the English version of the questionnaire was finalized, it was translated into Japanese and backtranslated into English following Douglas and Craig's (1983: 186–190) framework. The translation work was performed by a team of academics teaching in a Japanese department, including one individual with considerable business experience in Japan. The initial and backtranslated English versions of the questionnaire were compared in order to ensure that equivalent constructs were being measured in the two languages. Discrepancies were reconciled by modifying the wording of some items.

The dependent variable in this study was type of entry mode chosen. Respondents could choose from the following options: licensing/franchising, joint venture, or full ownership. With the exception of size of the firm, which was divided into five categories based on the company's sales level, the independent variables were measured using five-point Likert scales.

## **Data Collection**

Data collection involved multiple mailings. Materials were mailed from the United States. In the initial mailing, a personalized cover letter, a questionnaire, and a postage-paid business reply envelope were sent to the CEO/President for each of the 1024 US and 1189 Japanese firms in the sampling frame. The cover letter explained the importance of participation in the study, and promised a summary report of the study's finding upon request. Five weeks after the initial mailing, an additional mailing, which included a replacement

copy of the questionnaire, was sent out to those firms that had not responded in the first mailing. In the United States, a third mailing was also sent out as a follow-up to the second mailing. Due to the budgetary constraints, there was no third mailing to Japanese firms.

For the US sample, 55 questionnaires were returned undelivered, and 51 were not usable, usually due to the firm indicating that it no longer engaged in international business operations. Of the remaining 918 questionnaires, 165 usable responses were obtained, resulting in an effective response rate of 18.0 percent. For the Japanese sample, 107 questionnaires were returned undelivered, and 64 more were not usable, again usually due to the firm indicating that it no longer was engaged in international business decisions. Of the remaining 1018 questionnaires, 178 responses were obtained, for an effective response rate of 17.4 percent.

### Assessment of Nonresponse Bias

Potential nonresponse bias was assessed by comparing the responding firms with nonresponding firms in terms of annual sales and number of full-time employees, the only comparative data available for the responding and nonresponding groups.

The results of the t-test comparisons are reported in Table 1. For the US sample, responding firms and the nonresponding ones are not statistically different based on average annual sales and average number of employees. Similarly, for the Japanese sample, the responding firms are not different from the nonresponding ones based

**Table 1. Assessment of Nonresponse Bias**

Characteristics	Category	Mean	t-Value	Significance Level
<b>United States</b>				
Sales	Responding firms	15501.3	-1.60	.111
	Nonresponding firms	7838.5		
Number of employees	Responding firms	687	-1.06	.287
	Nonresponding firms	549		
<b>Japan</b>				
Sales	Responding firms	9568.1	-.94	.346
	Nonresponding firms	6509.7		
Number of employees	Responding firms	520	-1.93	.054
	Nonresponding firms	373		

**Table 2. Key Characteristics of the Sample**

Characteristics	Distribution	Percent of Cases	
		United States	Japan
Years of international business operations	less than one year	3.6	4.6
	1 to 5 years	13.9	15.6
	6 to 10 years	18.2	24.3
	11 to 20 years	26.7	23.1
	over 20 years	37.6	32.4
Number of countries in which the firm has operations	one	5.5	14.6
	2 to 5	27.4	37.6
	6 to 10	12.8	17.0
	11 to 20	23.8	16.4
	21 to 50	19.5	8.2
	more than 50	11.0	6.4
Type of primary product	consumer product	23.0	21.3
	Industrial product	57.0	63.2
	other	20.0	15.5
Previous presence in the market	yes	42.1	49.1
	no	57.9	50.9

on average annual sales and average number of employees. Thus, it can be concluded that there is no evidence of nonresponse bias, and the sample is fairly representative of the firms in the sampling frame. The major characteristics of the two samples are summarized in Table 2.

## ANALYSES AND RESULTS

### The Constructs and Their Reliability

To assess the reliability of the factors, a coefficient alpha was computed for each factor. Table 3 contains the specific factors, the number of items that measure them, and their coefficient alpha. As can be seen, for the three items on which reliability can be assessed, the coefficient alphas are .771, .816, and .635. Because they were measured by single items due to their observable nature, the reliability of the uncertainty of demand, ability to receive a fair price, firm size, and frequency of transaction variables could not be assessed. It should be noted that due to the dearth of primary data based studies in this area, measurement scales for several factors had to be newly developed for this study. Given the exploratory nature of such

**Table 3. Measurement and Reliability Estimates of the Factors**

Factor	Items	Coeff. Alpha
Uncertainty of demand	The demand in this foreign market for our products is very uncertain.	n.a.
Attractiveness of market	The rate of growth in this foreign market is very strong. The potential size of this foreign market is tremendous.	.771
Cultural similarity	People in this foreign country have values systems that are similar to those of our home country. People in this foreign country have norms that are similar to those of our home country. Many of the customs practiced by people in this foreign country are very different from those from those practiced in our home country. This foreign country we entered is culturally similar to our home country.	.816
Asset specificity	The technology we contribute to this venture can easily codified. The technology we contribute to this venture is very hard to teach. The technology we contribute to this venture is very complex.	.635
Inability to get fair price	It would be hard for us to get a fair price for our technology if we licensed it out to local firms.	n.a.
Frequency of transactions	We need to maintain frequent transfer of good between this venture and our operations in other countries.	n.a.
Size of firm	(Measured by a rating scale.)	n.a.

measurement schemes, the reliability of factors used in this study is considered to be adequate.

### **Test of Hypotheses**

Consistent with previous studies and the nature of the dependent variable, hypotheses were tested by multiple discriminant analysis. Since the key research questions of the current study are whether TCE can explain companies' entry mode choice for both US and Japanese firms, discriminant analysis was conducted separately on the US and Japanese samples. Specifically, the dependent variable is the entry mode, which has three major categories: licensing/franchising (1), joint venture (2), and wholly owned subsidiary (3). The

literature has established that licensing/franchising mode offers least control to the firms, whereas the wholly owned subsidiary mode affords greatest control and the joint venture mode the middle degree of control (see Root, 1994). Thus, increased value of the dependent variable represents an increase in the level of control associated with the mode.

For the US and Japanese samples, respectively, a discriminant model was fitted onto both the external market factors and the internal factors. The underlying assumptions of discriminant analysis were checked by examining univariate skewness and kurtosis, and by the Box's *M* test. For both the US and Japanese samples, the skewness and kurtosis are relatively small, offering no evidence of a non-normal distribution. Similarly, the Box's *M* test statistics are not significant, suggesting that variance-covariance matrices across the groups are not statistically different. Hence, there exists no evidence that the assumptions of the discriminant analysis are violated in this study.

The results of the discriminant analysis for both the US sample and the Japanese sample are presented in Table 4 and the classification results are shown in Table 5. For the US sample, two discriminant functions are computed. In the United States one function is statistically significant, and it explains 71.75 percent of the variance. Based on the discriminant loadings of individual predicting factors on the significant discriminant function, it can be seen that US firms tend to adopt a high-control mode to enter foreign markets

**Table 4. Results of Discriminant Analysis**

Discriminating Factor	Discriminant Loading	
	United States	Japan <sup>a</sup>
Uncertainty of demand	0.050	-0.185
Attractiveness of market	0.329 <sup>b</sup>	0.114
Cultural similarity	-0.226 <sup>b</sup>	-0.471
Specificity of the assets	-0.083	0.019
Inability to get fair price	0.577 <sup>b</sup>	0.662
Frequency of transactions	0.507 <sup>b</sup>	0.392
Size of the firm	0.481 <sup>b</sup>	-0.164
	Fit Statistics	
Percent of variance explained	71.75%	74.34%
Wilks' lambda	0.601	0.858
Chi-square	43.732	13.309
Degree of freedom	16	16
Significance level	0.001	0.502

<sup>a</sup>The results for the Japanese sample are presented only for comparison since neither discriminant function is significant.

<sup>b</sup>Statistically significant at  $p < .05$ .

**Table 5. Classification Results**

Actual Group <sup>a</sup>	No. of Cases	Predicted Group Membership		
		Lic./Franc.	Joint Venture	Wholly Owned Sub.
<b>US Sample</b>				
Licensing/franchising	10	8 80.0%	1 10.0%	1 10.0%
Joint venture	38	2 5.3%	27 71.1%	9 23.7%
Wholly owned subsidiary	44	7 15.9%	15 34.1%	22 50.0%
<b>Japanese Sample<sup>b</sup></b>				
Licensing/franchising	16	9 56.3%	3 18.8%	4 25.0%
Joint venture	43	12 27.9%	20 46.5%	11 25.6%
Wholly owned subsidiary	34	6 17.6%	14 41.2%	18 38.3%

<sup>a</sup>For US and Japanese samples, respectively: Percent of classes correctly classified, 61.96 and 42.24 percent; Proportional chance rate 41.12 and 37.70 percent.

<sup>b</sup>The results for the Japanese sample are presented only for comparison since neither discriminant function is significant.

when the foreign market is attractive (supporting H2), when it is hard to receive a fair price for their technology and know-how (supporting H5), when the frequency of transactions is high (supporting H6), and when the size of the firm is large (supporting H7). In contrast, companies tend to adopt a low-control mode when the foreign market is culturally similar to the home market (supporting H3). The effects of asset specificity and uncertainty of demand are not significant (no support for H1 and H4). When the discriminant function is used for classifying the cases, it can be seen from Table 5 that 61.96 percent of the cases are correctly classified, well surpassing the proportional chance rate of 41.12 percent.

The results for the Japanese sample are also shown in Table 4 and Table 5. Of the two discriminant functions that are fitted onto the Japanese sample, neither is statistically significant. This suggests that the TCE based discriminant model is not supported by the data. In Table 4, the fit statistics and the discriminant loadings of factors on the first discriminant function are presented for the Japanese sample only for the purpose of comparison with the US results. These results for the Japanese sample are not interpretable due to the fact that the underlying discriminant function is not significant. Similarly in Table 5, Japanese cases are also classified for compari-

son purpose only. Nevertheless, it is clear that the classification of Japanese firms leads to a hit rate of 46.24 percent, which is only slightly over the proportional chance rate of 37.70 percent. This suggests that TCE theory did not successfully predict the entry mode choices of the Japanese firms sampled in this study.

In summary, it can be concluded that the TCE-based discriminant model provides adequate explanation for the US firms' entry mode choice. Five of the seven TCE-based hypotheses are supported by the US data. However, the TCE model does not appear to explain the Japanese firms' entry mode choice.

## **DISCUSSION AND IMPLICATIONS**

### **Managerial Implications**

The findings offer insight on the factors that are important to US firms when they make a choice among alternative entry modes. Such insight can be important to local firms seeking to enter into joint ventures or licensing agreements with US partners. By understanding what factors help to motivate a US firm to opt for a specific arrangement, potential local partners or licensees are better equipped to successfully communicate the advantages they offer to a US firm.

The findings of this study suggest that five of the factors studied are significant predictors of the US firms' entry mode choice. First, US firms tend to opt for wholly owned subsidiaries (as opposed to joint ventures or licensing arrangements) in attractive foreign markets (H2). This finding may be linked to the higher risk of shirking by the local firms as perceived by the US firms when the foreign market is attractive. In addition, US firms may also regard an attractive foreign market as opportunity to realize economies of scale by entering it with a high control mode. Regardless, this finding suggests that managers of local firms in attractive foreign markets may increase their chances of entering into licensing agreements or joint ventures with US firms if they can convince the US firm that they will not engage in shirking behavior and that they will be cooperative in aligning their operations with those of US firms. Thus, it is important for local firms to understand what signals or assurances the American firms look for as a sign of trustworthiness during negotiations. To the extent that the foreign firm can convince the US firm that it can be trusted to execute its marketing plan, it may be able to increase its probability of entering in to a desired partnership.

A second predictor of US firms' choice of entry mode is the level of cultural similarity between the home and host countries. Our find-

ings indicate that US firms tend to adopt a low control arrangement when entering a foreign country where the values and norms are similar to those in the United States (H3). TCE theory suggests that this is because it is easier for a firm to negotiate and monitor contracts with local firms, reducing the costs of transaction associated with low control modes. Practically, this suggests that, other things being equal, US firms will be more likely to opt for licensing arrangements or joint ventures in countries with cultures similar to the United States, suggesting an opportunity for firms in countries such as the UK or Canada to enter into partnerships with US firms. Foreign firms from countries with dissimilar cultures to the United States (e.g., China and India) are more likely to have to offer other substantial advantages (e.g., local market knowledge) in order to partner with US firms. Thus, managers of foreign firms from countries that are not culturally similar to the United States would be well advised to stress the importance of other key advantages they can offer to US firms that they hope to partner with.

A third significant factor in US firms' entry decision is the ability to get a fair price for their assets and technology. When they perceive that they will be unable to obtain a fair price for their technology and know-how in the foreign market, US firms tend to choose high control mode to enter a foreign market (H5). Thus, in general, foreign firms hoping to partner with US firms will be more able to negotiate such an arrangement if they are prepared to offer the US firm what it perceives to be adequate compensation for their technology and know-how. To do so, they will have to follow the new technology and market in order to accurately assess the potential value of the technology or know-how in order to negotiate an agreement that is acceptable to both parties. Additionally, the foreign firm is likely to increase its chances of entering in to a desired partnership if it can convince the US firm that it understands the firm's need to receive a fair price and is prepared to do what it can to ensure that this goal is reached.

Fourth, US firms also tend to opt for full ownership when the frequency of transactions between the planned ventures and their other subsidiaries (H6) is high. This suggests that foreign firms hoping to enter in to partnerships with US firms will be more able to do so in circumstances where the arrangement requires fewer transactions. To the extent that managers of a foreign firm can propose a governance structure that reduces or minimizes the number of transactions, it may have more success in negotiating such an arrangement.

A final finding is that larger US firms (H7) are more likely to choose full ownership than are smaller firms. This finding makes intuitive sense, since smaller firms will typically be less able to afford the high capital investment and increased risk associated with whol-

ly owned subsidiaries. An implication of this finding is that foreign firms seeking partnerships with US firms in order to serve their local market may find it easier to convince a smaller US firm to enter into a partnership agreement. If the foreign firm prefers a larger US firm as a partner, it may be well advised to consider offering an agreement that will satisfy other concerns of the potential partner (e.g., assurance that a fair price will be received for technology; a governance arrangement designed to reduce the frequency of transactions). If these other concerns of large US firms cannot be met, the foreign firm may need to consider partnering with a smaller US firm.

Our findings show no significant link between uncertainty of demand (H1) and asset specificity (H4) to US firms' choice of foreign market entry mode. While these findings suggest that these factors are less important than those listed previously in the modal choice decisions of US managers, additional research is needed to identify the exact conditions under which these factors may become significant predictors of US firms' modal choice for foreign market entry.

The lack of support for the TCE model for the Japanese firms studied raises some intriguing questions. It is possible that Japanese firms may not act to minimize transaction costs. It is also possible that Japanese firms have a different notion of transaction costs when it comes to competing in the global market. Regardless, our findings suggest that Japanese and US managers perceive different factors as key considerations in choosing an entry mode.

If Japanese firms do not act to minimize transaction costs, it becomes interesting to consider what factors would they consider in making entry mode choice. Previous studies have proposed that Japanese firms may be more prone to base these decisions on strategic factors than their American counterparts (Thurrow, 1992). Thus, Japanese firms may base their entry mode decision on strategic factors such as potential for cross-subsidization and learning, as opposed to the costs of contracting and transaction. For firms competing with Japanese firms, it is important to understand Japanese firms' motives in entry decisions in order to respond effectively.

If Japanese firms perceive transaction costs differently, it is important to understand their notion of transaction costs and its cultural basis. Once an understanding is gained, better measures can be developed for factors that affect Japanese firms' conception of transaction costs. In any case, cultural knowledge needs to be developed by firms competing with Japanese firms.

## **Implications for Future Theory Building**

Transaction cost economics has been the dominant theoretical framework in the entry mode literature. However, most previous

studies designed to test TCE-derived propositions have been based on secondary data sets, and the cross-cultural generalizability of the TCE framework has not been assessed. While clear progress has been made in testing the framework, we argue in this study that further progress can be made if cross-cultural primary data are used to test the TCE-based propositions. This is because some TCE constructs are latent in nature and their conceptual domains are usually broad and complex (e.g., uncertainty of demand (H1) and asset specificity (H4)). To capture the full domain of the TCE constructs, the use of proxy measures based on the secondary data is often inadequate, and direct measures based on primary data are necessary. Perceptual measures are not without pitfalls, though, since there is no guarantee that subjective managerial interpretations will always match objectively measured constructs and there is also the possibility that managers in different cultures may interpret a question differently. However, as noted by Narver and Slater (1990), there is support for using perceptual measures for research on business decision, and many studies have done so. While the use of managerial perceptions does introduce a subjective measure, prior studies have observed a strong correlation between managerial perceptions of performance and objective measures of performance (e.g., Dess and Robinson, 1984; Pearce, Robbins, and Robinson, 1987). Additionally, the use of a translation/back-translation technique, such as that employed in this study, substantially reduces the possibility of conceptual, functional, or linguistic equivalence issues leading managers from different cultures to interpret the same question differently (Miracle, 1988).

In this study, we set out to overcome the limitations in previous studies by reporting a test of TCE-derived propositions based on a multicountry primary data set. The results lend general support for the TCE-based predictions of US firms' modal choice for foreign market entry. But the results also cast doubts on TCE ability to predict Japanese firms' modal choice for foreign market entry, at least in its current form, as evidenced by the lack of support for our TCE-based hypotheses in Japan. This latter result further suggests that arguments made by Granovetter (1985), North (1981), and Hill (1995) be taken seriously in attempting to understand and explain the entry mode choices of Japanese firms. These authors' argument suggests culture has an impact on economic institutions in a country and that these institutions, in turn, influence the transaction costs associated with different entry modes (e.g., partnerships vs. full ownerships). Hill (1995: 122) specifically suggests that long-standing aspects of Japanese culture, including concepts of group identification, loyalty, collective responsibility, reciprocal obligations, and harmony have in-

fluenced Japanese institutions in such a way that the transaction costs associated with partnering tend to be lower than they are in the West. Our results make this type of thinking all the more intriguing, since they suggest that, if TCE is to be applied to Japanese entry mode choices, it needs to be modified to reflect the institutional structures that exist in Japan.

## **LIMITATIONS**

This study's assessment of the cross-cultural generalizability of TCE is limited by the fact that only two countries are included. However, the two countries studied do represent the world's two largest economies. A second limitation of the research is that the sampling frame consists of only those firms that have at least 100 employees and \$20 million dollars in annual sales. While this approach captures the firms most likely to be involved in large-scale international operations, it does not allow for an assessment of whether small businesses consider different factors in modal decisions. Future research should focus on other countries, particularly other industrialized countries (e.g., Germany, the United Kingdom, South Korea, Canada). A study of the modal choices of small firms might also be worthwhile.

Another limitation of the research involves the use of single item indicators to measure three of the key TCE constructs. Future research is needed to develop multiple item scales for uncertainty of demand, ability to receive a fair price, and frequency of transactions.

Finally, the fact that cases of exporting were dropped from the analysis represents a limitation. While the exclusion of exporting is consistent with the approach taken in virtually all previous studies of entry modes, future researchers should attempt to develop theoretical perspectives designed to help explain the choice between exporting and foreign direct investment.

## **CONCLUSION**

The results of this study suggest that several of the internal and external variables posited to be important by prior TCE studies were found to have predictive validity for US firms. However, the TCE propositions were not supported by the Japanese sample. Thus, the TCE model explained the US firms' entry decisions well, but its propositions were not supported by the Japanese firms' entry decisions. This finding suggests that the TCE may not be generalizable

across cultures. Japanese managers either do not act to minimize transaction costs, or, alternatively, make different assumptions about transaction costs due to the aspects of Japanese culture that are different from those that characterize Western society.

To enhance the cross-cultural generalizability of theories on entry mode choice, our findings suggest that additional factors be considered in building theory. Consistent with the observations of Hill, Kim, and Hwang (1990), Tallman and Shenkar (1994: 108), and Shane (1994: 640), it appears that additional cultural factors need to be considered. Additionally, we suggest that strategic factors need to be considered. In this way, it may be possible to build theory that is more broadly applicable to today's global marketplace.

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