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Market entry decisions are some of a firm's most important strategic choices. Although some recent studies have begun to consider the impact of learning and experience on foreign market entry, no study has examined the impact of a firm's own operations in similar markets on subsequent entry decisions. In this study, the authors introduce the concept of near-market knowledge to reflect the knowledge firms generate by operating in markets that are culturally and economically similar. The authors compile extensive data on the complete foreign market entries of 19 multinational firms. They use a hazard model on 722 entry observations to evaluate the impact of the dynamic near-market knowledge measures and other economic and cultural variables on foreign market entry timing. In contrast with much previous research, the authors find that cultural distance from the domestic market is not a significant factor. However, the authors find significant effects for the new measures of near-market cultural and economic knowledge and for several other economic variables as well. The authors discuss the implications of these findings for further research and management practice.

Whose Culture Matters? Near-Market Knowledge and Its Impact on Foreign Market Entry Timing

Market entry decisions are some of a firm's most important strategic choices. Entering new markets requires a major commitment of financial and managerial resources. These commitments can be particularly high when firms enter foreign markets. Even though many companies established multinational operations long ago, many of today's leading companies are currently making these important foreign market entry decisions. For example, Wal-Mart and America Online are deciding which markets to enter in Europe, Asia, and Latin America (*New York Times* 1999; *The Wall Street Journal* 2000). More broadly, according to *BusinessWeek's* (2000) determination of the top 50 companies in the S&P 500, half of these 50 companies were established within the past 20 years and began to internationalize only within the past 10 years. These companies include Dell

Computer and Cisco Systems as well as retailers such as Home Depot and Best Buy. Yet companies have had mixed success expanding in foreign markets. For example, Wal-Mart did not initially adapt its retail format in Argentina to the local culture. However, the retailer learned valuable lessons there to help its subsequent operations in similar countries (*New York Times* 1999).

Current research provides limited guidance for firms on the internationalization process. Nearly all studies focus on either cultural distance or a country's economic attractiveness as the primary determinants of foreign market entry. The potentially important impact of knowledge generated from operating in similar countries has not been considered. Also, nearly all research examines the entry decision and neglects important information contained in the relative timing of these entries.

Recently, researchers have begun to examine the impact of knowledge and learning on a firm's internationalization efforts. Although these factors are expected to affect international entry, currently "there is little evidence that supports such learning effects," and empirical results "suggest that there are no general learning effects" (Barkema, Bell, and Pennings 1996, pp. 155, 161). In contrast, Shaver, Mitchell, and Yeung (1997) find support for the importance of foreign firms' experience in the United States on the sur-

vival of their subsequent ventures in the U.S. market. In related research, Gupta and Govindarajan (2000) use survey data to evaluate the transfer of knowledge within multinational corporations. However, their study is not about foreign market entry timing.

Although a few recent studies have begun to consider the impact of knowledge on internationalization, no current study has considered the role of knowledge developed by a firm's subsidiaries in similar markets on subsequent foreign market entries. In this study, we introduce the concept of *near-market knowledge* and evaluate its impact on foreign market entry timing. We pose several questions related to this general topic: First, after other factors are controlled for, does cultural distance affect when firms enter foreign markets? Existing research supporting the importance of cultural distance tends to consider small samples of firms and countries; such research does not control for economic factors, focuses on the initial foreign market entry only, or does not control for other sources of cultural influence (e.g., Bilkey and Tesar 1977; Hadjikhani 1997; Johanson and Vahlne 1977). Second, is there an impact of economic similarity on entry decisions? Although many studies have considered the impact of a country's economic characteristics, our study is the first to analyze the potential impact of economic similarity between the domestic market and potential new markets while controlling for each country's economic attractiveness. Third, what is the relative importance of economic factors and cultural factors? Previous research has focused on either economic factors or cultural distance but has not considered them simultaneously.

To address these questions, we conduct an extensive search for the complete entry data of many multinational firms. We also collect data on economic and cultural factors and apply a hazard model to analyze these determinants of foreign market entry timing. Our research has several objectives, each of which contributes to the literature in a unique way:

- •To evaluate the impact of knowledge generated in similar markets on subsequent foreign market entries. To capture the effect of this knowledge, we propose two new measures: near-market cultural knowledge and near-market economic knowledge. These measures reflect a firm's knowledge about potential markets that is derived from existing operations in similar markets.
- •To evaluate the impact of cultural similarity with the home market on foreign market entry timing, after controlling for other important variables.
- •To evaluate the impact of economic similarity with the home market on foreign market entry timing.
- •To assess the relative importance of economic factors and cultural factors on foreign market entry timing.

The remainder of the article is organized as follows: In the next section, we briefly review research on foreign market entry. Following that, we develop our hypotheses and describe our entry data and economic and cultural variables. Then, we discuss our model and estimation procedure. Afterward, we present our results and conclude with a discussion of key findings, implications, and directions for further research.

BACKGROUND ON FOREIGN MARKET ENTRY RESEARCH

Early marketing research proposes normative guidelines and methods for selecting foreign markets on the basis of macroeconomic variables and other indicators of market potential (Cavusgil 1985; Green and Allaway 1985; Sethi 1971; Sheth and Lutz 1973). However, the marketing literature does not contain any empirical study on foreign market entry, to the best of our knowledge.[1] The relatively small number of articles on any international topic in marketing journals has led to calls for more international research (Day and Montgomery 1999; Deshpandé 1999; Stewart 1999; Winer 1998).

Outside of marketing, there are many articles on foreign market entry (e.g., Aharoni 1966; Caves 1971; Hymer 1976; Kogut 1988; Melin 1992). In Figure 1, we present an organizing framework for this broad area of research, including this article. In Table 1, we list some of the important articles we reviewed to develop this framework.[2]

Current research on foreign market entry provides several insights. For example, many researchers find that cultural similarity with respect to the domestic market is an important determinant of entry (e.g., Bilkey and Tesar 1977; Hadjikhani 1997; Johanson and Vahlne 1977). Other research finds that market entry decisions are positively related to country size and the levels of development, trade, and infrastructure (e.g., Davidson 1980; Loree and Guisinger 1995; Terpstra and Yu 1988). In this study, we present a broader consideration of cultural and economic factors by considering the impact of knowledge developed by foreign subsidiaries on subsequent foreign market entries.

### THE IMPACT OF KNOWLEDGE ON FOREIGN MARKET ENTRY TIMING

Our basic thesis is that a firm's knowledge of the economic and cultural environment of a foreign market will affect its probability of entering that market. This knowledge comes from the home market on characteristics that are similar to those of potential new markets. Also, this knowledge can be generated in foreign markets in which the firm already operates that are similar to potential new markets (Golder 2000b). This latter source of knowledge has not been considered in previous research. Therefore, we define near-market knowledge as a firm's understanding of potential new markets based on knowledge generated from operating in similar markets. The term "near-market" does not refer to markets that are geographically close. Rather, it refers to markets that are economically and culturally similar. Foreign market entry decisions will also be influenced by the economic attractiveness of countries. In this study, we evaluate the impact of economic and cultural knowledge while controlling for the economic attractiveness of each country.

We base our thesis about the importance of near-market knowledge on organizational learning research (Fiol and Lyles 1985; Huber 1991; Kohli and Jaworski 1990; Levitt and March 1988; Prahalad and Hamel 1994; Schendel 1996; Slater and Narver 1995). Theories of organizational learning

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[1]We reviewed the articles on international topics published in *Journal of Marketing*, *Journal of Marketing Research*, *Journal of Consumer Research*, and *Marketing Science* since 1980. A table classifying this research and a reference list of these 43 articles are available from the authors.

[2]Overall, we reviewed more than 125 articles. An expanded Table 1 with all references is available from the authors.

Figure 1
ORGANIZING FRAMEWORK FOR RESEARCH ON INTERNATIONALIZATION
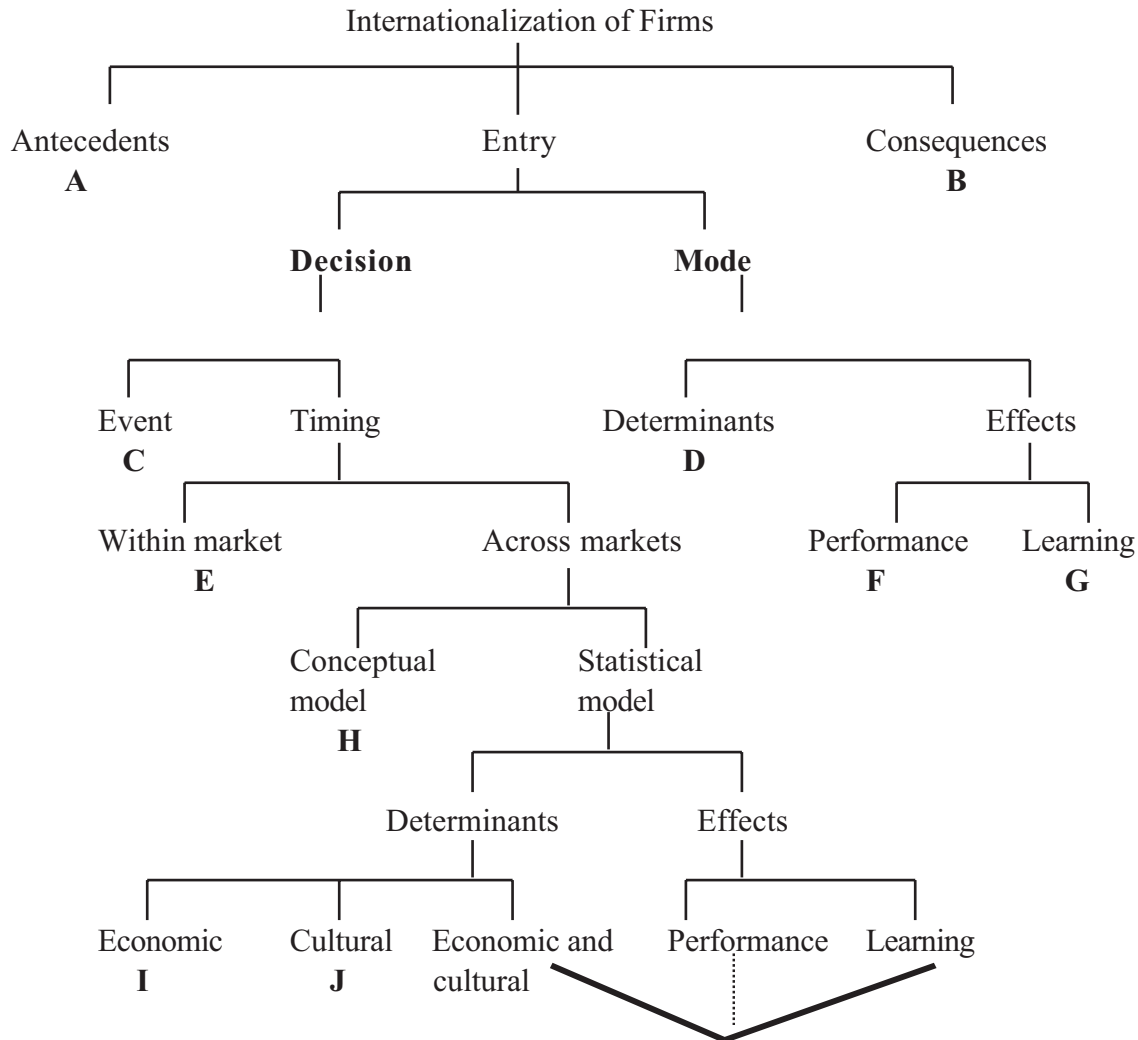
Mitra and Golder (2002)

argue that firms develop knowledge based on their experiences. This store of knowledge constitutes an important resource of the firm and is a source of competitive advantage (Dierickx, Cool, and Barney 1989; Lippman and Rumelt 1982). When multinational corporations internationalize, they can use the knowledge generated in foreign markets to select other foreign markets in which the firm is more likely to succeed (Barkema, Bell, and Pennings 1996; Barkema and Vermeulen 1998; Zaheer 1995). Therefore, this near-market knowledge can be an important determinant of foreign market entry. In spite of the importance of this topic, there has been no empirical investigation of the role of intra-corporation knowledge transfer on foreign market entry timing (Gupta and Govindarajan 2000). We attempt to address this gap in the literature by considering the impact of two sources of knowledge: the home market and similar markets in which the firm already operates. In addition, we consider

the economic attractiveness of each country as a determinant of foreign market entry timing.

Knowledge from the Home Market

We propose two hypotheses regarding home-market knowledge. The first is related to culture, and the second is related to economic factors.

Nearly all research on the impact of culture on foreign market entry has considered the distance between a firm's domestic culture and the culture of each potential market. The difference between the cultures of two countries is termed "cultural distance." Theories on cultural distance argue that internationalization is incremental and that firms enter countries with the most similar cultures. Several empirical studies support this process (e.g., Bilkey and Tessar 1977; Hadjikhani 1997; Johanson and Vahlne 1977; Johanson and Wiedersheim-Paul 1975). However, a few

Table 1

KEY RESEARCH ON INTERNATIONALIZATION

Antecedents of Internationalization (A)

Cavusgil and Nevin 1981; Sambharya 1996; Shaver, Mitchell, and Yeung 1997.

Consequences of Internationalization (B)

Geringer, Beamish, and daCosta 1989; Gupta and Govindarajan 2000; Kogut and Kulatilaka 1994; Mitchell, Shaver, and Yeung 1994.

International Entry (C, D, E, F, G, H, I, J)

Entry Decisions (C, E, H, I, J)		*Literature on Entry Mode (D, F, G)*	
Decisions as Events (C)	*Decision Timing (E, H, I, J)*	*Determinants (D)*	*Effects (F, G)*
Grosse and Trevino 1996; Loree and Guisinger 1995; Scaperlanda and Mauer 1969; Schneider and Frey 1985; Terpstra and Yu 1988; Veugelers 1991.	Timing within markets (E): Chang 1995; Li 1995; Pan, Li, and Tse 1999; Tan and Vertinsky 1996.	Agarwal and Ramaswami 1992; Anderson and Gatignon 1986; Beamish and Banks 1987; Brouthers and Brouthers 2000; Erramilli and Rao 1993; Hennart 1988; Kogut 1988; Kogut and Singh 1988; Pan, Li, and Tse 1999.	Performance effects (F): Barkema et al. 1997; Delios and Beamish 1999; Li 1995; Merchant and Schendel 2000; Pan and Chi 1999.
	Timing across markets, conceptual models (H): Aharoni 1966; Hadjikhani 1997; Johanson and Vahlne 1977; Johanson and Weidersheim-Paul 1975; O'Grady and Lane 1996.		Learning effects (G): Barkema, Bell, and Pennings 1996; Barkema and Vermeulen 1998; Chang 1995; Hamel 1991; Makino and Delios 1996.
	Timing across markets, economic factors (I): Davidson 1980, 1983.		
	Timing across markets, cultural factors (J): Benito and Gripsrud 1992.		

studies do not find a significant effect for cultural similarity on market entry and suggest that other factors may explain internationalization (Benito and Gripsrud 1992; Oviatt and McDougal 1997; Sullivan and Bauerschmidt 1990; Turnbull 1987).

Differences in culture have been found to affect brand image strategies (Roth 1995), consumer innovativeness (Steenkamp, ter Hofstede, and Wedel 1999), negotiations (Campbell et al. 1988; Graham 1985), and marketing decision making (Tse et al. 1988). When companies operate in countries with different cultures, they need to modify their operations in these areas as well as other elements of the marketing mix (Davidson 1983). These modifications increase costs and risks as the difference between cultures increases. Therefore, companies are likely to enter countries with cultures that are similar to the domestic market before entering countries with less similar cultures.

H_1: Cultural distance is negatively related to foreign market entry timing.

Although cultural distance has been widely examined in market entry studies, economic distance has received only minimal consideration (Davidson 1983; Evans, Lane, and O'Grady 1992; Nordstrom and Vahlne 1992; O'Grady and Lane 1996). However, firms seem more likely to be successful operating in countries with economic characteristics that are similar to those in the firm's home market. Similar economic characteristics reflect potentially important similarities between countries where knowledge transfer is valuable. For example, similar economic conditions might be associated with similarities in consumer demand and business institutions (e.g., distribution channels, media, adver-

tising agencies). Knowledge of these factors can help firms succeed in foreign markets. Therefore, companies are likely to enter countries with economies similar to the domestic market before entering countries with less similar economies.

H_2: Economic distance is negatively related to foreign market entry timing.

Knowledge from Similar Markets

We now consider the impact of near-market knowledge, that is, knowledge generated in similar markets in which the firm already operates. Again, we propose one hypothesis related to culture and another related to economic factors. The rationale for these hypotheses is similar to H_1 and H_2 except that knowledge comes from similar markets rather than the domestic market.

The literature on organizational learning suggests that firms have the opportunity to acquire and share knowledge throughout their organizations (Huber 1991; Sinkula 1994; Slater and Narver 1995). A market-oriented firm will be particularly active in collecting and disseminating knowledge about each market in which the firm operates (Day 1994; Golder 2000b; Kohli and Jaworski 1990; Narver and Slater 1990). Thus, firms are likely to make some effort to transfer knowledge generated from operating in foreign markets to other similar markets. The knowledge generated in successful markets should increase the probability that the firm will enter similar markets.

To evaluate the impact of knowledge about similar cultures on foreign market entry, we propose the term *near-market cultural knowledge*, which we define as a firm's

understanding of the culture of potential new markets based on knowledge generated from operating in similar markets. This construct is dynamic because it changes over time as firms enter additional similar markets and gain experience in those markets. When companies have positive experiences in foreign markets, the cultural knowledge generated in those markets will lead to earlier entry in similar markets.[3]

H_3: Near-market cultural knowledge generated from successful foreign entries will lead to earlier entry in similar markets.

To evaluate the impact of knowledge about similar economies on foreign market entry, we propose the term *near-market economic knowledge*. Our logic for including this measure is similar to that for including near-market cultural knowledge. Namely, firms have the greatest ability to leverage their existing knowledge in similar new markets. We define near-market economic knowledge as a firm's understanding of the economy of potential new markets based on knowledge generated from operating in similar markets. Again, this construct is dynamic because it changes over time as firms enter additional similar markets and gain experience in those markets. When companies have positive experiences in foreign markets, the economic knowledge generated in those markets will lead to earlier entry in similar markets.

H_4: Near-market economic knowledge generated from successful foreign entries will lead to earlier entry in similar markets.

Economic Attractiveness of Countries

Perhaps the most important factor in foreign market entry decisions is the economic attractiveness of a country. Firms are likely to choose more prosperous and accessible economies, ceteris paribus. The extensive literature on foreign direct investment supports this view (e.g., Buckley and Casson 1976; Dunning 1981; Teece 1986). Foreign direct investment theory argues that firms face various disadvantages in foreign markets and invest only when expected benefits exceed those costs (Hymer 1976; Vernon 1966). These benefits depend on the economic characteristics of each country (Davidson 1980; Dunning 1998; Scaperlanda and Mauer 1969). Therefore, economic characteristics of a country are likely to be associated with foreign market entry.

H_5: The economic attractiveness of a country is positively related to foreign market entry timing.

Relative Importance of Economic and Cultural Factors

Many studies find support for certain economic factors, and other studies find support for cultural distance (see Table 1). However, these factors tend to be studied in separate streams of research rather than examined simultaneously. Therefore, an interesting issue is the relative importance of each factor. We expect that economic factors will play a larger role in companies' foreign market entry timing decisions. Companies can mitigate the negative impact of cultural distance by gaining experience in similar foreign

markets and by hiring managers with knowledge of the local culture. In contrast, although companies can learn about consumer demand and economic institutions, these companies have practically no influence on the economic prosperity, size, and infrastructure of a country. Therefore,

H_6: Economic factors are more important than cultural factors in foreign market entry timing.

DATA

To address our research objectives, we compiled a comprehensive multicountry, multifirm data set. We consider all countries firms have entered as well as those they have not entered yet. We begin by describing our sample of firms and our data on foreign market entries. Then, we describe our data for the cultural and economic variables.

Sample

At the outset, we established four criteria for selecting our sample of firms: First, we restrict our efforts to consumer products companies. Because we rely on published reports for much of our data, these companies are more likely to have independent reports of their activities (Golder 2000a). Second, we consider companies that operate in many countries so that each company provides many entry observations. Third, we consider firms based in a variety of domestic markets. This criterion enables us to analyze entry factors that may generalize across firms from different countries. Fourth, we focus on successful companies so that our findings and implications are based on firms that have succeeded in their international efforts. Although the fourth criterion is difficult to quantify, the companies in our final sample generate more than half their revenue outside their domestic markets. All these firms have survived for at least several decades, hold leading market share positions in many markets, and have not withdrawn from any foreign market entered. Thus, consistent with previous research, we use survival as our measure of success in these foreign markets (Lieberman and Montgomery 1988, 1998).

Initially, we identified 35 firms that satisfy these criteria (see Table 2). After more than 1000 hours of work, we were able to collect all the foreign market entries for 19 of these firms. Despite great effort, we were unable to collect complete data for the remaining firms.

Foreign Market Entry Data

Data availability is a major limitation in studying foreign market entry. Previous research tends to be based on companies from a specific country (e.g., Davidson 1980; Hadjikhani 1997; Johanson and Wiedersheim-Paul 1975) or to consider only the initial foreign markets entered (e.g., Benito and Gripsrud 1992; Johanson and Vahlne 1977). Our objective is to analyze a more complete data set by including all foreign market entries of multiple firms. After many months of data collection, we believe that our data are sufficient for evaluating our hypotheses.

Our data on market entries come from university and stock exchange libraries (Golder 2000a). For 2 firms, entry data come solely from annual reports. For the other 17 firms, we use multiple sources for our data. Approximately half the market entry data are from more than 700 annual reports. About one-fifth of the data are from more than 50 books that chronicle the histories of some of these companies. The

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[3]When companies have negative experiences in foreign markets, near-market knowledge is valuable to firms, but it may have a negative effect on foreign market entry timing.

Table 2
SAMPLE OF COMPANIES

Company	Age of Company (Years)	Number of Countries Entered	End of Observation Period
Burger King	45	44	1999
Cadbury	100	28	1995
Campbell's	98	20	1997
Danone	33	40	1998
General Foods	70	28	1984
General Mills	71	28	1995
Gillette	98	38	1998
Johnson & Johnson	112	48	1990
Kellogg	93	24	1981
Kimberly Clark	127	29	1995
Matsushita	81	46	1990
McDonald's	44	41	1990
Nabisco	123	37	1994
Nestlé	132	60	1990
Philips	108	59	1995
Pillsbury	130	25	1997
Procter & Gamble	109	26	1981
Sony	53	36	1997
Unilever	109	45	1974

Notes: Complete entry data are not available for Bausch & Lomb, Coca-Cola, Colgate–Palmolive, Heinz, Henkel, Hormel Foods, Kodak, Kraft Foods, L'Oreal, Pepsico, Quaker Oats, RCA, Revlon, Rowntree, Sara Lee, and Seagram.

remaining data come from company Web pages and business periodicals such as *BusinessWeek* and *Barron's*. For all firms, we have data beginning with the firms' initial foreign entry up to their most recent publicly documented entry. For 2 companies, we have data on a few of their latest entries but were not able to collect the immediately preceding entries. In these cases, we consider only the period for which we have complete entry data. The average year of the most recent entry across the 19 firms is 1992.

To validate our data, we contacted all 19 companies. Of the 15 firms that responded to our inquiry, 8 claimed that the data are secret. These claims confirm the difficulty previous researchers have had in compiling similar data. Four firms sent us a total of 19 market entry dates for some of their most important foreign markets. In all 19 cases, the companies' records confirmed our data. The remaining 3 firms agreed to review our entire record of their entry dates. On the basis of these reviews, only four of our entry dates were different from the firms' records. They were off by two years in three cases and one year in the other case. For these four observations, we modified our data to reflect the companies' records. The few differences between our data and company records provide strong corroboration of our data. Overall, we corroborated 292 of our entry events and found only small differences for less than 1.5% of these observations. On the basis of these results, we have a high degree of confidence in our data. The final data set includes 12 firms from the United States, 2 from the United Kingdom, 2 from Japan, and 1 each from the Netherlands, France, and Switzerland.

Cultural Data

Our two cultural variables are cultural distance and near-market cultural knowledge. Similar to nearly all research on cultural distance, we use data from Hofstede (1980), whose data include four dimensions of culture: individualism, uncertainty avoidance, power distance, and masculinity. Our specific measure of cultural distance is the composite index proposed by Kogut and Singh (1988), which "is used quite

often in studies of foreign entry" (Barkema, Bell, and Pennings 1996, p. 157). This index combines Hofstede's four measures by taking the square root of the sum of the squared difference on each dimension for all pairs of countries. Before differences are taken, each measure is normalized on the basis of the variance of each measure across countries.

Our measure of near-market cultural knowledge is designed to capture the cultural knowledge firms generate by operating in similar markets. We base our measure on two key criteria: First, every market in which a firm operates that is more similar to a potential market than the domestic market is will increase the cultural knowledge of the potential market. Second, the duration of experience in each of these markets will increase cultural knowledge, though there should be diminishing returns to this duration. On the basis of these criteria, we propose the following measure of near-market cultural knowledge:

(1)   Near-Market Cultural Knowledge$_t$ =

$$\sum_{i=1}^{n_t} \frac{\log(1 + \text{years}_{it})}{(\text{similar}_i - \text{potential})},$$

where

n_t = the number of markets in which a firm operates that are more similar to the potential market than the home market is at time t,

years_{it} = the number of years in market i at time t, and

$(\text{similar}_i - \text{potential})$ = Kogut and Singh's (1988) measure of cultural distance between the potential market and similar market i.

Each potential market will have its own measure of near-market cultural knowledge. These measures change over time as firms enter additional similar markets and operate

for more years in those markets. We add one to the number of years so that knowledge is positive in the first year of operations in a new market. We use the reciprocal of cultural distance so that higher knowledge is associated with shorter distance. Thus, near-market cultural knowledge is measured as the cumulative experience in all foreign markets that are more similar to each potential market than the domestic market is. In a subsequent section on model robustness, we discuss the results using alternative measures of near-market cultural knowledge.

Economic Data

We require three sets of economic variables: measures of economic attractiveness, economic distance between the home market and potential markets, and near-market economic knowledge.

Economic attractiveness. We believe that four factors affect the economic attractiveness of countries: First, countries with prosperous consumers are more attractive because these consumers are likely to purchase more goods and be able to pay higher prices for those goods. These conditions have positive effects on a company's profitability. Second, larger economies are more attractive because companies will be able to sell more units. Higher sales combined with experience effects and economies of scale generate positive effects on profits. Third, countries with more developed infrastructure are more attractive because distribution channels will reach more consumers throughout the country and the costs of distribution are likely to be lower. Fourth, countries with high population density are likely to have consumers who are more accessible to the immediate marketing efforts of a firm. This accessibility may simply be due to geographic concentration, but it may also be due to a higher number of media outlets in these population centers. Concentrated populations also promote word-of-mouth effects that may benefit new entrants.

The extensive empirical literature on foreign direct investment confirms the importance of these factors as well as directs us to associated variables that have been shown to have a significant effect on market entry. On the basis of this research, we measure economic prosperity with gross national product (GNP) per capita (e.g., Davidson 1980; Loree and Guisinger 1995; Reuber 1973; Root and Ahmed 1979), economic size with GNP (e.g., Davidson 1980; Dunning 1973; Scaperlanda and Mauer 1969; Terpstra and Yu 1988), economic accessibility with population density (e.g., Adelman and Morris 1966; Root and Ahmed 1979), and economic infrastructure with kilometers of railroad per square kilometer (e.g., Loree and Guisinger 1995; Root and Ahmed 1979). We selected this final measure because it is relevant for the entire period of our data.

The major challenge in using these variables is that they vary over time. Therefore, we collected data on all four variables for every country in every year beginning with the year of incorporation of the oldest firm in our sample (1867). These data come from multiple sources, including the *United Nations Yearbooks*, *The World Development Reports*, the *Yearbooks of International Trade Statistics*, *World Development Indicators*, and Mitchell (1998). Before 1940, data are not available in every year for some countries. In these cases, we averaged the two observations outside each

missing observation. Data for GNP are adjusted for inflation within each country and converted to 1995 U.S. dollars.

Economic distance. Our four economic distance variables are based on the four time-varying measures of economic attractiveness. We call these four variables "economic prosperity distance," "economic size distance," "economic infrastructure distance," and "economic accessibility distance." Each measure of economic distance is the absolute value of the difference between each economic attractiveness variable for the domestic country and the economic attractiveness variable for each foreign country.

Near-market economic knowledge. Our measures of near-market economic knowledge capture the economic similarity between each foreign market and the similar foreign markets in which the firm already operates. They are based on the four time-varying economic attractiveness measures for each country. We call these four measures "near-market prosperity knowledge," "near-market size knowledge," "near-market infrastructure knowledge," and "near-market accessibility knowledge." These measures are similar to the one proposed for near-market cultural knowledge. The general form of the equation for all four measures of near-market economic knowledge is as follows:

$$(2) \qquad \text{Near-Market Economic Knowledge}_t =$$

$$\sum_{i=1}^{n_t} \frac{\log(1 + \text{years}_{it})}{\left| \text{similar}_i - \text{potential} \right|_t},$$

where

$$n_t = \text{the number of markets in which a firm operates that are more similar to the potential market than the home market is at time t,}$$

$$\text{years}_{it} = \text{the number of years in market i at time t, and}$$

$$\left| \text{similar}_i - \text{potential} \right|_t = \text{the absolute value of the difference on any of the four economic attractiveness variables between the potential market and similar market i at time t.}$$

Each potential market will have its own measures of near-market economic knowledge. These measures change over time as firms enter additional similar markets and operate for more years in those markets and as the basic economic attractiveness variables change over time.

MODELING FOREIGN MARKET ENTRY TIMING

Each foreign market entry is a time-based binary event. The probability of entry changes over time as a function of time-varying independent variables. The model parameters associated with the economic and cultural variables provide the tests of our hypotheses. Time-based phenomena are modeled best by the hazard function (Allison 1984; Cox 1972). The hazard model has several advantages for analyzing duration time events (Golder and Tellis 1997; Helsen and Schmittlein 1993). It can identify cross-sectional and longitudinal effects. Also, it can handle sample selection biases such as censoring, so that information about countries that have not been entered yet is included.

Hazard Model

We model the rate at which market entry occurs as a function of a baseline hazard function and independent variables. The baseline hazard function specifies the probability of entry given that no entry has occurred up to time t. Independent variables modify the probability of the baseline hazard function. If T is a random variable representing the time from a firm's incorporation to market entry, the distribution function of T for no entry (commonly referred to as the survivor function) is written as

$$(3) \qquad S(t) = Pr(T \geq t),$$

where S(t) is the survivor (or no entry) function of T, and Pr is the probability of no entry up to time t.

A mathematically equivalent way of specifying the distribution of T is through its hazard function. The hazard function h(t) specifies the instantaneous entry probability at t. If T is a continuous random variable, h(t) is expressed as

$$(4) \qquad h(t) = \lim_{\Delta t \to 0} \frac{Pr(t \leq T < t + \Delta t | T \geq t)}{\Delta t} = \frac{f(t)}{S(t)},$$

where f(t) is the probability density function of T.

To operationalize Equation 4, we apply Cox's (1972) proportional hazard model for two main reasons: First, it is not constrained by a particular distribution for the baseline hazard function; therefore, it is more robust than other hazard models (Allison 1995). Second, it enables us to use time-varying independent variables. Therefore, the time to entry for each firm and country in our sample follows its own hazard function, $h_{ij}(t)$, expressed as

$$(5) \qquad h_{ij}(t) = h(t; z_{ijt}) = h_0(t) \exp(z_{ijt}\beta),$$

where $h_0(t)$ is an unspecified baseline hazard function, z_{ijt} is the vector of independent variables for the ith firm and jth country at time t, and β is the vector of parameters. Because β is the same for all firms, the baseline hazard function is adjusted by the independent variables at each time period.

We estimate the hazard model with the semiparametric partial likelihood method proposed by Cox (1972). The partial likelihood considers the probability that of all countries that have not been entered, one country experiences entry. We use SAS program PHREG for estimating the model parameters and the STRATA subroutine to control for the effect of individual firms entering multiple countries. For more details about the advantages of using hazard models for analyzing duration time phenomena, see Allison (1995) and Helsen and Schmittlein (1993).

Variables

Our dependent variable is the time, in years, between the year of incorporation and the year each country is entered. As in previous research, we define a firm's foreign market entry as the initial establishment of a sales or manufacturing subsidiary in that country (Mascarenhas 1992; Tan and Vertinsky 1996). Modeling the time to entry has an advantage over previous studies that use ranked entry data (e.g., Benito and Gripsrud 1992; Davidson 1980). Time to entry captures information reflected in the varying periods of time between entries. Furthermore, the hazard model enables us to include information on countries that firms have chosen not to enter yet (i.e., the censored observations). Our independent variables are the measures we discussed in the "Data" section: cultural distance, near-market cultural knowledge, economic attractiveness, economic distance, and near-market economic knowledge.

RESULTS

We begin by presenting descriptive results of our data. Afterward, we discuss the model results and our findings on each hypothesis.

Descriptive Results

In Table 3, we present results on the average time to enter the first foreign market. On average, it took 24 years. However, this time has decreased significantly to 9 years for newer companies. This finding suggests that firms have sought international opportunities more quickly over time. In contrast, there is no significant difference in time to first entry among firms based in different countries.

Also in Table 3, we present data on the number of foreign countries firms have entered. On average, firms have entered 37 countries. Therefore, many countries remain to be entered for the typical firm in our sample. We find a significant difference between the newest firms and the middle-aged firms in our sample. However, there is no significant

Table 3

CHARACTERISTICS OF FOREIGN MARKET ENTRY

Criteria	Sample	Number of Firms	Average Years to First Foreign Market Entry (Standard Deviation)	Average Number of Foreign Countries Entered (Standard Deviation)
	All Firms	19	*24 (15)*	*37 (12)*
Age of firms	<50 years	3	9.0 (4.4)[1,2]	42 (2.8)[1]
	51 to 100 years	8	22 (13)[1]	32 (9.0)[1]
	>100 years	8	32 (16)[2]	37 (15)
Home country	United States	12	27 (16)	33 (9.0)
	Europe	5	18 (12)	47 (14)
	Japan	2	25 (23)	44 (4.9)

[1]Two-sample t-test significantly different at $p < .05$.
[2]Two-sample t-test significantly different at $p < .01$.

difference between the newest and the oldest firms. Because we have no reason to expect a U-shaped relationship, we do not propose an explanation for this difference. Overall, we believe that Table 3 shows a common number of countries entered over time and across firms from different countries. These findings suggest that newer firms move through the internationalization process more quickly. It also suggests that there is a central tendency for the number of countries in which firms choose to operate.

Model Results

We use two criteria to evaluate model results. First, we use the Bayesian information criterion (BIC) and the consistent Akaike information criterion (CAIC) to evaluate improvement in model fit for each construct. Second, we consider the statistical significance of individual parameters. Our results are based on the 39 countries measured by Hofstede (1980). Because these countries include most of the countries firms have entered, we are able to model the majority of entry events in our data. We lose a higher percentage of censored observations for the minor countries that firms have not entered yet. Overall, we estimate our model on 496 of 683 entry events and 226 of 1046 censored-entry observations.

Improvement in model fit. The BIC and CAIC statistics measure improvement in fit after we correct for the number of parameters and sample size. In our analysis, we sequen-

tially added the variables associated with each construct that provided the largest improvement in these fit statistics. The results of this analysis are reported in Table 4. On the basis of fit statistics, Model C is the best model. Therefore, economic attractiveness, near-market cultural knowledge, and near-market economic knowledge are associated with entry timing decisions, whereas economic distance and cultural distance are not. These results highlight the importance of near-market knowledge on entry timing decisions.

In Table 5, we report correlations among the variables in Model C at the median time of entry across all observations. Multicollinearity does not appear to be a problem. Also, the stability of the parameters across Models A–E indicates that multicollinearity does not have a meaningful impact on the results. Next, we discuss results for each of our hypotheses.

Knowledge from the home market. We find no impact of cultural distance on foreign market entry timing after we control for other variables (Model E). Even when we estimate a model with only cultural distance and the economic attractiveness variables, cultural distance is not significant. This finding differs from those of much research on internationalization (Hadjikhani 1997; Johanson and Vahlne 1977; Wiedersheim-Paul, Olson, and Welch 1978). If we estimate our model with cultural distance only, the parameter is –.22 and is statistically significant at the $p < .01$ level. These results suggest that previous studies may have overstated the importance of cultural distance by not controlling for eco-

Table 4

PARAMETERS OF HAZARD MODEL OF FOREIGN MARKET ENTRY TIMING

Construct	Variable	Model A	Model B	Model C	Model D	Model E
Economic attractiveness	Prosperity	.000032*** (.000010)	.000033*** (.000011)	.000035*** (.000011)	.000037*** (.000012)	.000037*** (.000013)
	Size	.000023*** (.000011)	.000028*** (.000012)	.000032** (.000013)	.000038** (.000017)	.000038** (.000017)
	Infrastructure	.012*** (.0015)	.012*** (.0015)	.013*** (.0018)	.012*** (.0018)	.012*** (.0018)
	Accessibility	.0054* (.0017)	.0047* (.0015)	.0046*** (.0021)	.0042** (.0021)	.0040* (.0021)
Near-market cultural knowledge			13.33*** (4.42)	12.81*** (4.45)	13.28*** (4.46)	13.36*** (4.48)
Near-market economic knowledge	Prosperity			.058*** (.021)	.059** (.026)	.057** (.026)
	Size			N.S.	N.S.	N.S.
	Infrastructure			.10* (.060)	.10* (.059)	.09* (.059)
	Accessibility			N.S.	N.S.	N.S.
Economic distance	Prosperity				–.0029*** (.0011)	–.0029*** (.0011)
	Size				N.S.	N.S.
	Infrastructure				N.S.	N.S.
	Accessibility				N.S.	N.S.
Cultural distance						N.S.
Log-likelihood		–1540.49a	–1484.46	–1470.51	–1449.37	–1440.69	–1439.01
BIC		–1540.49a	–1497.63	–1486.96	–1478.99	–1483.47	–1485.08
CAIC		3080.98a	2999.25	2978.93	2966.98	2979.95	2984.17

aFit statistics from hazard function without covariates.
*$p < .10$.
**$p < .05$.
***$p < .01$.
Notes: Standard errors are in parentheses. N.S. = not significant.

Table 5

CORRELATION MATRIX FOR VARIABLES IN MODEL C[a]

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)
Economic attractiveness–prosperity (1)	1.00										
Economic attractiveness–size (2)	−.11	1.00									
Economic attractiveness–infrastructure (3)	.32	−.08	1.00								
Economic attractiveness–accessibility (4)	.26	.32	.13	1.00							
Near-market cultural knowledge (5)	−.06	.05	.01	−.07	1.00						
Near-market prosperity knowledge (6)	.21	−.07	.20	.32	−.04	1.00					
Near-market size knowledge (7)	.25	−.04	.19	.35	−.04	.38	1.00				
Near-market infrastructure knowledge (8)	.07	.30	.05	.30	.33	.39	.29	1.00			
Near-market accessibility knowledge (9)	.02	.27	.01	.17	.26	.27	.37	.23	1.00		
Economic prosperity distance (10)	.36	−.20	.25	−.08	−.05	−.05	−.03	−.12	−.15	1.00	
Cultural distance (11)	−.28	.09	−.14	.02	−.17	.09	.09	.11	.10	−.29	1.00

[a]Plus economic prosperity distance and cultural distance to support interpretation of the results in Table 4.

nomic attractiveness. Therefore, we do not find support for H_1.

The concept of economic distance suggests that companies will be more likely to enter countries with market conditions that are similar to those of their domestic market. As a construct, we do not find sufficient improvement in model fit to justify the inclusion of economic distance. However, we find support for one of the four variables, economic prosperity distance (based on statistical significance and improvement in BIC and CAIC). This variable may be more likely than the other economic distance variables to reflect knowledge that might be valuable in other markets. For example, consumers in foreign markets with GNP per capita similar to that of the domestic market are more likely to buy similar types of products and have access to similar types of media. Therefore, our results provide partial support for H_2, at least for economic prosperity distance.

Knowledge from similar markets. In contrast with our results on cultural distance, we find that higher near-market cultural knowledge is associated with higher probability of entry. This variable improves model fit, and the parameter is significant with several combinations of additional variables (Models B–E). Therefore, our results suggest that culture still has an important impact on entry decisions. However, cultural knowledge generated in similar markets seems to be more important than cultural knowledge from the home market. This result seems logical, because companies should be more successful when they transfer knowledge from countries that are more similar. Therefore, our results suggest that near-market cultural knowledge may be a better measure than cultural distance for the impact of culture on foreign market entry timing. These results support H_3.

Near-market economic knowledge suggests that companies' entry decisions will be partially determined by more similar countries in which the firm already operates. In Model C, we have an improvement in fit after including the near-market economic knowledge variables. Also, two of these four variables are significant. Therefore, companies seem to base their entry timing decisions on economic knowledge gained in similar markets. These results support H_4.

Economic attractiveness. All four economic attractiveness variables are positively associated with foreign market entry timing. Not surprisingly, firms tend to enter these high-potential markets earlier. These results support H_5.

Relative importance of cultural and economic factors. The largest improvement in model fit comes from the economic attractiveness variables, all four of which are statistically significant. In addition, near-market economic knowledge and economic prosperity distance affect entry timing. Even though near-market cultural knowledge is also significant, our results indicate that economic factors are more important determinants of foreign market entry timing. Thus, our results support H_6.

Robustness of Results

Because Model C is our best model, we use this specification to evaluate the robustness of our model results. Our first test of robustness considers the possibility that geographic and language similarities drive the internationalization process and that our near-market cultural knowledge variable simply reflects these factors. Therefore, we estimate Model C with four additional variables: (1) geographic distance between the home market and each foreign market, (2) geographic distance between each foreign market and the closest market in which the firm already operates, (3) a dummy variable for whether the language of each foreign market is the same as that of the home market, and (4) a dummy variable for whether the language of each foreign market is the same as that of another market in which the firm already operates. The second and fourth variables change over time. In this expanded model, near-market cultural knowledge, the four economic attractiveness variables, and near-market prosperity knowledge remain significant. The results for the geography and language variables suggest that firms tend to prefer entering markets that are geographically close to the home market or another market in which the firm already operates and markets that have the same language as the domestic market.

Our second test of robustness evaluates the possibility that firms make entry-timing decisions on the basis of their expectations about the future economic attractiveness of foreign markets. We are unable to determine the specific expectations of the firms in our data set for so many countries over so many years. Therefore, we assume perfect foresight and reestimate Model C with the economic attractiveness variables five years into the future. All the same parameters remain significant. These results confirm the importance of near-market knowledge even when we assume perfect foresight on the economic attractiveness variables.

Our third test considers the possibility that entries into a particular country may be consolidated into a short period on the basis of either a political decision to open up to foreign investment or another factor we do not consider. We evaluated our entry data and found that the years of entry into each country tended to have a range of approximately 50–80 years. Only three countries had a range for year of entry less than 40 years or a standard deviation for year of entry less than 15. We reestimated the model without these three countries (Iran, Israel, and Thailand), and all the same parameters remain significant. Although the potential problem of not controlling for political decisions does not affect our results, it could be a problem in other data sets.

Robustness with different measures of near-market knowledge. We evaluate two changes to our measures of near-market knowledge. The first change evaluates the possibility that there are not diminishing returns to knowledge generation in each foreign market. Therefore, we estimate Model C using near-market knowledge measures calculated with years in the numerator of Equations 1 and 2, rather than the log transformation. In this analysis, all the same parameters remain significant.

Our final test of robustness evaluates our results using an alternative conceptualization of near-market knowledge. We consider the possibility that firms increase their near-market knowledge only by entering markets that are more similar, not by spending more time in similar markets. Our operational measure is the negative value of the distance between

each potential market and the most similar market in which the firm already operates on each dimension of near-market knowledge.[4] These measures change over time as firms enter increasingly similar markets. The difference between these measures and our primary measures of near-market knowledge is that we consider only the most similar market rather than cumulative experience based on time spent in all similar markets. In Table 6, we report complete model results based on this alternative conceptualization. These results are similar to the primary model results in Table 4. In particular, economic attractiveness and near-market cultural knowledge appear to be the most important factors in entry timing. Also, cultural distance is not significant in this analysis. The only difference in these results is that near-market economic knowledge improves model fit based on BIC but not CAIC. However, near-market prosperity knowledge, by itself, improves model fit based on both statistics.

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[4]A potential downside of this operationalization is that our distance measures and our near-market knowledge measures will be the same until a firm enters a foreign market that is more similar to a potential market than the domestic market is. To evaluate the potential impact on parameter estimates, we calculate correlations between each distance measure and the associated near-market knowledge measure at the median time of entry. The correlation between the two culture measures is −.29. For the most important economic variable, prosperity, the correlation between economic distance and near-market economic knowledge is −.15. These correlations do not seem likely to affect our results on near-market knowledge and cultural distance, especially when our primary measures of near-market knowledge provide essentially the same results.

Table 6

PARAMETERS OF HAZARD MODEL OF FOREIGN MARKET ENTRY TIMING USING ALTERNATIVE CONCEPTUALIZATION OF NEAR-MARKET KNOWLEDGE

Construct	Variable	Model A	Model B	Model C	Model D	Model E
Economic attractiveness	Prosperity	.000032*** (.000010)	.000047*** (.000010)	.000068*** (.000011)	.000074*** (.000013)	.000077*** (.000014)
	Size	.000023*** (.000012)	.000044*** (.000011)	.000066*** (.000011)	.000071*** (.000014)	.000079*** (.000016)
	Infrastructure	.012*** (.0015)	.012*** (.0015)	.012*** (.0018)	.012*** (.0027)	.013*** (.0039)
	Accessibility	.0054** (.0027)	N.S.	N.S.	N.S.	N.S.
Near-market cultural knowledge			.23*** (.041)	.20*** (.043)	.18*** (.045)	.19*** (.061)
Near-market economic knowledge	Prosperity			.00011*** (.000035)	.00010*** (.000035)	.00010*** (.000036)
	Size			N.S.	N.S.	N.S.
	Infrastructure			N.S.	N.S.	N.S.
	Accessibility			N.S.	N.S.	N.S.
Economic distance	Prosperity				−.0054*** (.0014)	−.0054*** (.0014)
	Size				N.S.	N.S.
	Infrastructure				N.S.	N.S.
	Accessibility				N.S.	N.S.
Cultural distance						N.S.
Log-likelihood		−1540.49[a]	−1484.46	−1469.06	−1455.44	−1451.83	−1451.83
BIC		−1540.49[a]	−1497.63	−1485.52	−1485.06	−1494.61	−1497.90
CAIC		3080.98[a]	2999.25	2976.03	2979.12	3002.23	3009.80

[a]Fit statistics from hazard function without covariates.
*p < .10.
**p < .05.
***p < .01.
Notes: Standard errors are in parentheses. N.S. = not significant.

Table 7

SURVEY OF SENIOR EXECUTIVES ON FOREIGN MARKET ENTRY

Questions	Mean Response[a]
1. I prefer to enter a country that is similar to the home market of my company in terms of *economic* factors like market size, income, infrastructure, etc.	2.6
2. I prefer to enter a country that is similar to the home market of my company in terms of *cultural* factors like attitudes, beliefs, customs, etc.	2.2
3. In selecting foreign markets, I place more importance on *economic* factors than *cultural* factors.	5.1
4. In selecting foreign markets, I value experience gained in other foreign markets that are *economically* similar.	5.4
5. In selecting foreign markets, I value experience gained in other foreign markets that are *culturally* similar.	4.9
6. When entering a new country, I transfer knowledge developed in the most similar countries.	5.0
7. When entering a new country, I prefer to use managers with experience in other foreign countries that are most similar.	4.7

[a]Responses were given on a seven-point scale, where 1 = "strongly disagree" and 7 = "strongly agree."

Overall, our robustness checks confirm the importance of economic attractiveness, near-market cultural knowledge, and near-market economic knowledge, at least for the prosperity variable.

Validation of Model Results

To validate our model results, we sought input from executives at successful multinational firms. Because top executives are responsible for international entry decisions, we contacted only the chief executive officer and the other top executive most directly responsible for international operations at each firm. Nine of these executives agreed to answer questions about how economic and cultural factors influence their foreign market entry decisions.

In Table 7, we present the survey questions along with the mean response for each question. These responses support our model results. In particular, knowledge generated in similar markets is important to these executives. When selecting foreign markets, they highly value experience gained in markets that are economically and culturally similar. Moreover, when countries have been entered, the executives transfer knowledge and managers from similar countries.

Another confirmatory finding from these responses is that executives place more importance on economic than cultural factors. This belief is evident in the mean response to Question 3 in Table 7. In addition, the matched questions about economic and cultural factors (Questions 1 and 2 and Questions 4 and 5) indicate that these executives place more importance on economic factors.

Finally, these responses support our finding that cultural distance from the home market is not an important determinant of foreign market entry. However, an alternative explanation for this result may be that most of the executives who participated work at companies that have already entered many countries similar to their home market.

Overall, we are most encouraged by the responses that validate the importance of similar markets on entry timing decisions. These responses support our thesis about near-market knowledge and the importance of including our new measures of near-market cultural and economic knowledge.

DISCUSSION

We conclude by summarizing our primary findings, discussing their implications, and suggesting directions for further research. After an extensive data collection effort, we have the complete foreign market entries of 19 successful multinational firms. We model 496 actual entry events and 226 censored observations of foreign market entry. These data provide the basis for our results. Our findings provide support for all but one of our hypotheses. The one unconfirmed hypothesis provides evidence against a well-accepted finding on foreign market entry. In particular, we find that

- Near-market knowledge has an important impact on foreign market entry timing. We introduce and evaluate two new measures of near-market knowledge: near-market cultural knowledge and near-market economic knowledge. These measures capture a firm's understanding of potential new markets based on knowledge generated from operating in similar markets. We find that both constructs are positively associated with foreign market entry timing. This finding suggests that firms are more likely to enter countries in which they have greater cultural and economic knowledge based on operating in similar countries.
- Cultural similarity with the domestic market is not associated with foreign market entry timing. Two explanations may explain the difference in our findings from those of previous research. First, we control for economic factors. Second, we model the complete entry process rather than just the initial entry. Although cultural similarity with the domestic market may be important for the initial entry, it does not have a significant effect when all entries are considered. Culture still matters, but it is the cultural knowledge of similar markets that matters, not the culture of the domestic market.
- Several economic attractiveness variables play an important role in foreign market entry timing. Specifically, countries with more prosperous consumers, larger economies, more developed infrastructure, and more easily accessible consumers are more likely to be entered.
- Economic factors are stronger determinants of foreign market entry timing than are cultural factors.

Implications

Our findings provide several implications for researchers and managers. First, they demonstrate that previous research focusing exclusively on cultural similarity with the domestic market may not have captured the important role of culture. Our new measure of near-market cultural knowledge is one step toward a broader consideration of the role of culture on foreign market entry. We find that this new measure captures a more significant impact of culture than does the traditional measure of cultural distance. This finding provides support for the importance of firms being market-oriented by collecting and disseminating relevant knowledge throughout the organization. The firms in our sample

seem to have based their entry decisions on knowledge generated in similar foreign markets.

Second, companies making foreign market entry decisions today can learn from the successful multinational firms in our data. Today's internationalizing firms may be wise to place less emphasis on cultural differences and more on economic factors. However, the successful multinational firms in our data may have been able to overcome some of the negative effects of cultural distance by hiring local managers and transferring knowledge from similar markets.

Third, our results confirm the importance of considering both economic and cultural factors in modeling foreign market entry timing. Because both sets of factors play some role, it is not surprising that small cultural distances do not always lead to strong performance (Mitchell, Shaver, and Yeung 1994; O'Grady and Lane 1996).

Finally, the primary implication of our findings for today's expanding companies is that they should consider developing experience in foreign markets that will provide the best basis for entering other similar markets. By investing in a small country first and learning about the cultural and economic characteristics of its consumers and business institutions, a firm may be more successful when entering a larger country with similar characteristics.

Directions for Further Research

Our study's findings as well as its limitations provide several opportunities for further research. First, our model of market entry focuses on the entry event rather than the relative success of each entry. Longitudinal, archival-based studies of the relative success of companies in multiple markets may provide important insights into the relative impact of cultural and economic factors. In addition, further research could examine associations between foreign market entry and stock price returns. Even though our annual-level data are limited for this type of analysis, we found two results from an event study of our market entry data (Agrawal and Kamakura 1995; Chaney, DeVinney, and Winer 1991; Lane and Jacobson 1995). We evaluate excess stock returns as a function of the variables in Model C in an ordinary least squares regression.[5] We use the average excess daily returns from the Center for Research in Security Prices. These data begin in 1962 and include 13 of our firms and 196 entry events. On the basis of these data, we find that excess returns in the year of entry are associated with higher near-market cultural knowledge ($p = .101$) and higher near-market prosperity knowledge ($p = .109$). Although some readers may not consider these findings statistically significant, no other variables were even close to being significant. We believe that these results provide some additional confirmation for the importance of near-market knowledge on foreign market entry timing.

A second limitation is that our data do not contain failed entries or continuous measures of success for each surviving entry. To partially address this limitation, we divided the 12 U.S. firms in our sample on the basis of the percentage of revenue derived from foreign markets. Thus, we classify companies as relatively more successful and relatively less successful on the basis of this measure. Although we would have preferred to use continuous measures of success for each individual country, these data are not publicly available. However, we believe that our aggregate measures reflect each firm's average success across countries.

We estimate Model C separately for firms that have been relatively more successful and less successful in international markets (Table 8). The parameter for near-market cultural knowledge is 96% higher for the more successful firms than the less successful firms, and there is no overlap in the range of parameter estimates using plus or minus one standard error. Also, the parameter for near-market prosperity knowledge is significant for the more successful firms but is insignificant for the less successful firms. These results suggest that near-market knowledge has a larger effect on promoting entry when it is generated from more successful

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[5]Excess stock return is computed as the difference between the actual stock price return and the expected stock return, which is a function of the general market return. Our dependent measure is the cumulative daily excess return divided by the number of trading days during the year of interest.

Table 8

PARAMETERS OF HAZARD MODEL OF FOREIGN MARKET ENTRY TIMING FOR MORE SUCCESSFUL AND LESS SUCCESSFUL U.S. FIRMS

Construct	Variable	More Successful	Less Successful
Economic attractiveness	Prosperity	.000043* (.000022)	.000052** (.000024)
	Size	.000033* (.000019)	.000029* (.000015)
	Infrastructure	.020*** (.0045)	.019*** (.0032)
	Accessibility	N.S.	N.S.
Near-market cultural knowledge		14.20*** (2.90)	7.25** (2.81)
Near-market economic knowledge	Prosperity	.040** (.019)	N.S. N.S.
	Size	N.S.	N.S.
	Infrastructure	N.S.	N.S.
	Accessibility	N.S.	N.S.

*$p < .10$.
**$p < .05$.
***$p < .01$.
Notes: Standard errors are in parentheses. N.S. = not significant.

experiences in foreign markets. Future researchers should try to collect data on failed entries and consider modeling a new variable to examine whether knowledge generated from failed entries delays entry into similar markets.

A third limitation of our data is that they do not include competitive effects, firm-level capabilities, interorganizational relationships, political stability, legal systems, regulations, and the potential impact of colonialism. Although these data would be challenging to collect, they would likely provide additional insights on foreign market entry. Fourth, our data overrepresent the experiences of firms based in the United States and other developed economies. Although our study improves on previous research by considering firms from multiple countries, data on firms from more countries are required for a full understanding of differences in entry patterns across countries. A fifth limitation is that our results are restricted to the countries included in Hofstede's (1980) data. Cultural measures on a broader set of countries would be useful. Sixth, although our data include 237 actual entry events from the 1980s and 1990s, it would be interesting to compare our results with data on firms that began the foreign market entry process more recently. Finally, future researchers should try to measure differences in firms' abilities to transfer knowledge across countries as they proceed through the internationalization process. Studies addressing any of these limitations will require major data collection efforts, but the results are likely to be worthwhile. At a minimum, they could confirm the important role of near-market knowledge we find in this study.

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