Hofstede, Schwartz, or managerial perceptions? The effects of different cultural distance measures on establishment mode choices by multinational enterprises

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Abstract

In recent years, scholars have become increasingly critical of Kogut and Singh’s [(1988). The effect of national culture on the choice of entry mode. Journal of International Business Studies, 19(3), 411–432] cultural distance index and of Hofstede’s [(1980). Culture’s consequences: International differences in work-related values. Beverly Hills: Sage Publications] underlying national culture framework. We therefore examine and compare the effects of five cultural distance measures on the choice by multinational enterprises (MNEs) between expanding abroad through greenfield or acquisition. Two of these measures are based on Hofstede (1980), another two on Schwartz [(1994). Beyond individualism/collectivism: New cultural dimensions of values. In U. Kim, H. C. Triandis, C. Kagitcibasi, S. C. Choi, & G. Yoon (Eds.), Individualism and collectivism: Theory, methods, and applications (pp. 85–119). Thousand Oaks: Sage Publications; (1999). A theory of cultural values and some implications for work. Applied Psychology: An International Review, 48(1), 12–47], and one on perceptual perceptions. Analyzing a sample of foreign expansions by Dutch MNEs and controlling for other factors, we find that high scores on all cultural distance measures significantly increase the likelihood that MNEs choose greenfields, and that the explanatory power of the Hofstede and Schwartz-based measures is comparable, while that of the perceptual one is somewhat lower. We

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conclude that it may thus be premature to dismiss Hofstede's work as outdated or as inaccurately reflecting national cultures, and to consider Schwartz's framework to be superior.

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**Keywords:** Cultural distance; Greenfield; Acquisition; Hofstede; Schwartz; Managerial perceptions; Establishment mode choice

### 1. Introduction

In the last few decades, international business (IB) research has made extensive use of the concept of national cultural distance to explain the expansion behavior and affiliate success of multinational enterprises (MNEs) (see Shenkar, 2001 for an overview). National cultural distance can be defined as the extent to which the shared norms and values in one country differ from those in another (Chen & Hu, 2002; Hofstede, 2001; Kogut & Singh, 1988). One stream of IB research that has often included cultural distance as an explanatory variable is that on foreign entry mode choices by MNEs (see Harzing, 2003 for an overview). Most studies in this stream have measured the cultural distance between an MNE's home country and the target country of the expansion through Kogut and Singh's (1988) index, which is based on Hofstede's (1980) dimensions of national culture. Although scholars have become increasingly critical of this index and of Hofstede's underlying work (e.g., Schwartz, 1994; Shenkar, 2001; Steenkamp, 2001), foreign entry mode studies have continued to rely on them, since little progress has been made in developing reliable alternatives. We aim to break this status quo by examining and comparing the effects of five measures of cultural distance on the choice by MNEs between expanding abroad through greenfield investment or acquisition, the so-called 'establishment mode choice' (Padmanabhan & Cho, 1995). Two of these measures are based on the work of Hofstede (1980), another two on that of Schwartz (1994, 1999), and one on managerial perceptions, and we test their effects in a sample of foreign expansions by Dutch MNEs. Controlling for the effects of other variables affecting MNEs’ establishment mode choices, we find that high scores on all measures significantly increase the likelihood that MNEs choose greenfields and that the explanatory power of the Hofstede and Schwartz-based measures is comparable, while that of the perceptual one is lower. This leads us to conclude that it may be premature to dismiss Hofstede's (1980) work as outdated or as inaccurately reflecting national cultures, and to consider Schwartz's (1994, 1999) more recent framework to be superior.

The next section reviews the frameworks that form the basis for our cultural distance measures. We then discuss the relationship between cultural distance and establishment mode choices by MNEs, our empirical application. In the methodological section that follows we describe our data sources, the operationalization of our variables, and the statistical method we used. We then present our empirical findings and discuss them in a subsequent section. The final section concludes and offers suggestions for future research.

### 2. Cultural frameworks

#### 2.1. Hofstede's dimensions of national culture

Hofstede (1980) analyzed survey data on work-related values obtained between 1967 and 1973 from more than 117,000 IBM employees working in 40 different countries, and found
that four statistically-independent dimensions explained the inter-country variation in employee responses to his survey questions. He labeled these four dimensions ‘power distance’, ‘uncertainty avoidance’, ‘individualism’, and ‘masculinity’, and assigned each country in his sample a score on them that varied between 0 and 100.2 Power distance refers to the extent to which people believe and accept that power and status are distributed unequally, while uncertainty avoidance refers to the extent to which people are threatened by uncertain, unknown, or unstructured situations. Individualism and its opposite collectivism refer to the degree to which a society emphasizes the role of the individual as opposed to that of the group. Finally, masculinity and its counterpart femininity refer to the extent to which a society emphasizes traditional masculine values such as competitiveness, assertiveness, achievement, ambition, and high earnings, as opposed to feminine ones such as nurturing, helping others, putting relationships with people before money, not showing off, and minding the quality of life (Hofstede, 1980). Over time, the validity of these dimensions has been confirmed by many studies (e.g., Van Oudenhoven, 2001; for an overview of earlier replications, see Søndergaard, 1994), suggesting that they can reliably be used to classify countries according to their national cultures and to determine the cultural distance between them.

Although Hofstede’s massive and pioneering work has significantly increased our understanding of national cultures and the differences between them, scholars have become increasingly critical of this work in recent years (e.g., Brett & Okumura, 1998; Schwartz, 1994; Steenkamp, 2001). Especially Schwartz (1994) has raised several serious concerns. First, he argues that Hofstede’s cultural dimensions are not necessarily exhaustive, because the survey Hofstede analyzed was not designed to identify dimensions of national culture, and hence may not have contained all relevant questions. Second, he argues that Hofstede’s sample of countries did not accurately reflect the full spectrum of national cultures and that adding additional countries could therefore have resulted in other or a different number of dimensions. Third, according to Schwartz, the IBM employees surveyed by Hofstede were not representative of the general population of their respective countries in terms of education, scientific and technological background, and ‘exposure to modernizing forces’ (1994, p. 91). Although Hofstede (1980) argues that this does not matter as long as the respondents were non-representative in the same way across countries, Schwartz contends that the extent of misrepresentation in Hofstede’s study is likely to have varied from one country to another, with this extent probably being larger in developing countries than in developed ones. This undesirable variation may have affected the order of the countries on Hofstede’s dimensions and may even have affected which dimensions emerged. Fourth, Hofstede derived his dimensions from data obtained between 1967 and 1973. Since then, major cultural changes have occurred worldwide (e.g., Ohmae, 1990), introducing the risk that his dimensions are outdated. Finally, according to Schwartz, it is unclear whether Hofstede’s value items are conceptually equivalent across cultures, i.e. whether people from different cultures understand them in the same way. This is a necessity for an inter-country comparison of scores on cultural dimensions to be meaningful (Schwartz, 1994).

### 2.2. Schwartz’s dimensions of national culture

Schwartz’s value survey overcomes many of the apparent limitations of Hofstede’s work. Based on both theoretical and empirical research, Schwartz (1992) first identified an

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2Over the years, these scores have become available for an increasing number of countries.
exhaustive set of 56 individual values recognized across cultures, thus covering all value dimensions explaining inter-country cultural variation. He then examined which of these values had an equivalent meaning across countries, which reduced the number of useful values to 45. He subsequently surveyed school teachers and college students from 67 countries as of 1988, averaged the scores on each of the 45 value items for each country, and used smallest-space analysis to identify a number of meaningful and interpretable dimensions along which national cultures differ. This procedure resulted in seven dimensions, which he labeled ‘conservatism’, ‘intellectual autonomy’, ‘affective autonomy’, ‘hierarchy’, ‘egalitarian commitment’, ‘mastery’, and ‘harmony’ (Schwartz, 1994, 1999). Schwartz (1994, pp. 112–115) reports the mean importance scores on each of these dimensions for 38 countries and cultural groups.

Conservatism represents a culture’s emphasis on maintaining the status quo, propriety, and restraining actions or desires that may disrupt the solidarity of the group or the traditional order. Intellectual and affective autonomy refer to the extent to which people are free to independently pursue their own ideas and intellectual directions, and their affective desires, respectively. Hierarchy denotes the extent to which it is legitimate to distribute power, roles and resources unequally, while egalitarian commitment refers to the extent to which people are inclined to voluntarily put aside selfish interests to promote the welfare of others. Mastery expresses the importance of getting ahead by being self-assertive, while harmony denotes the importance of fitting harmoniously into the environment (Schwartz, 1999).

Brett and Okumura conclude that Schwartz’s framework is superior to Hofstede’s because “[i]t is based on a conceptualization of values; it was developed with systematic sampling, measurement and analysis techniques; and (...) its normative data are recent, collected in the late 1980s and early 1990s” (1998, pp. 500–501). Steenkamp (2001) also emphasizes the strong theoretical foundations of Schwartz’s dimensions, but notes that the validity of Schwartz’s framework has not yet been tested through empirical applications. This paper makes a first step in this direction by empirically examining the explanatory power of two cultural distance measures based on Schwartz’s (1994, 1999) dimensions of national culture.

2.3. Managerial perceptions of cultural distance

So far, we have discussed aggregated data from secondary sources that can be used to classify countries according to their national cultures and to determine the cultural distance between them. However, several authors suggest the use of individual-level perceptual measures to assess cultures and cultural differences, because managers’ perceptions drive their strategic decisions and behavior (Boyd, Dess, & Rasheed, 1993; Johanson & Vahline, 1977; O’Grady & Lane, 1996; Shenkar, 2001; Sullivan & Bauerschmidt, 1990; Zhao, Luo, & Suh, 2004). Nevertheless, only few empirical studies have examined the impact of perceptual cultural distance measures on foreign entry mode choices by MNEs and on the success of their foreign subsidiaries (Bell, 1996; Evans & Mavondo, 2002; Kim & Hwang, 1992; Meschi & Roger, 1994; Mjoen & Tallman, 1997; Taylor, Zou, & Osland, 1998). Evans and Mavondo (2002), for example, asked respondents to indicate on a 7-point Likert scale the extent to which the country entered by their firm differed from their firm’s home country on each of Hofstede’s dimensions of national culture. Bell (1996), on the other hand, combined the Kogut
and Singh (1988) index and a single-item perceptual measure of cultural distance into a composite measure, and examined the effect of this variable on an MNE’s choice between partially owned and wholly owned greenfields. Unfortunately, Bell (1996) did not examine the effects of Kogut and Singh’s (1988) index and his perceptual measure separately, making it impossible to compare their explanatory power. Below, we will advance our understanding of this issue by examining and comparing the effects of the Kogut and Singh (1988) index and a perceptual measure of cultural distance.

3. Application: greenfield vs. acquisition

One phenomenon that national cultural distance has been argued to affect is the choice by MNEs between expanding abroad through greenfield investment or acquisition (e.g., Brouthers & Brouthers, 2000; Kogut & Singh, 1988; Larimo, 2003), the so-called ‘establishment mode choice’ (Cho & Padmanabhan, 1995). In general, the larger the cultural differences between countries, the larger the differences in their firms’ organizational and managerial practices (Kogut & Singh, 1988; Larimo, 2003). It is thus difficult for MNEs to integrate into their corporate network acquisitions made in culturally distant countries, as the practices of MNEs and acquired firms are likely to be incompatible and difficult to transfer in such cases (Brock, 2005; Gómez-Mejia & Palich, 1997). Moreover, post-acquisition integration requires interactions between workforces from different cultures. Given that inter-firm communication is culture-specific (Adler, 1986; Bandyopadhay & Robicheaux, 1993), these interactions are likely to be problematic and to cause negative feelings and attitudes among employees, resulting in poor acquisition performance (Buono & Bowditch, 1989; Elsass & Veiga, 1994; Very, Lubatkin, & Calori, 1996).

On the other hand, it is much easier for MNEs to integrate greenfield investments made in culturally distant countries, as greenfields enable MNEs to introduce their organizational and managerial practices from the outset, without being faced with existing ones, and to carefully select and hire employees who fit their national culture (Hennart & Park, 1993; Hofstede, 2001; Kogut & Singh, 1988). In line with previous research, we therefore hypothesize:

**Hypothesis.** The larger the cultural distance between an MNE’s home country and the target country of the expansion, the more likely that this expansion will be a greenfield investment rather than an acquisition.

In the remainder of this paper, we examine the extent to which five measures of cultural distance based on the frameworks described in Section 2 confirm this relationship, and compare their explanatory power. Since our study is exploratory, we do not make ex ante predictions on the explanatory power of each measure, nor on their comparative effects.

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3The correlation between the Kogut and Singh (1988) index and Bell’s perceptual measure was 0.35.
4. Methodology

4.1. Data sources

Data for our study were collected from secondary sources and through a mail survey of senior managers of 821 Dutch MNE parents. The survey resulted in a 19.2% response rate, which is comparable to that of other foreign entry mode studies using survey data (e.g., Brouthers, Brouthers, & Werner, 1996: 20%; Harzing, 2002: 20%), and in complete data on 246 foreign expansions—127 greenfields and 119 acquisitions—undertaken by 157 MNEs between 1995 and 2003. We structured the carefully designed and pre-tested questionnaire in such a way that managers could only provide data on expansions in which they had been involved personally. Respondents were mostly CEOs and CFOs, although in some cases they had other positions, such as Director of Corporate Development. Given their personal involvement and senior positions, we believe that our respondents are knowledgeable and competent informants whose responses to our survey should be reasonably accurate.

4.2. Variables

4.2.1. Establishment mode

The dependent variable of our study is the establishment mode chosen by an MNE for a given foreign expansion, i.e. whether it was a greenfield investment or an acquisition. We obtained this information from the questionnaire and created a dummy variable that we coded 1 for greenfields, and 0 for acquisitions. In line with most previous entry mode research (e.g., Barkema & Vermeulen, 1998; Caves & Mehra, 1986; Cho & Padmanabhan, 1995, 2005; Hennart & Park, 1993; Larimo, 2003; Padmanabhan & Cho, 1995, 1999; Vermeulen & Barkema, 2001), greenfields include partially owned greenfields, while acquisitions include partial acquisitions.

4.2.2. Cultural distance

We examined the effects of five measures of cultural distance on an MNE’s establishment mode choice. The first is the traditional Kogut and Singh (1988) index, which uses the differences in the scores on Hofstede’s (1980) dimensions of national culture between the foreign country entered and the MNE’s home country, in this case the Netherlands. These differences are corrected for differences in the variance of each dimension and then arithmetically averaged. Algebraically:

\[ CD_j = \sum_{i=1}^{4} \left( \frac{(I_{ij} - I_{IN})^2}{V_i} \right) / 4, \]

where \( CD_j \) is the cultural distance between country \( j \) and the Netherlands, \( I_{ij} \) is country \( j \)'s score on the \( i \)th cultural dimension, \( I_{IN} \) is the score of the Netherlands on this dimension, and \( V_i \) is the variance of the score of the dimension. As Table 1 shows, virtually all previous studies testing for the effect of cultural distance on an MNE’s establishment mode choice have used this measure.

The second measure of cultural distance whose effect we tested is a Euclidean distance index based on Hofstede (1980) (see e.g., Barkema & Vermeulen, 1997; Brouthers &
Unlike the Kogut and Singh (1988) index, this measure does not assume that the differences in the scores on each of Hofstede’s dimensions are equally important in determining the cultural distance between countries. Instead, in line with the concept of Euclidean distance, it computes their distance in a four-dimensional space as the square root of the sum of the squared differences in the scores on each cultural dimension. Formally,

\[ CD_j = \sqrt{\sum_{i=1}^{4} (I_{ij} - I_{iN})^2 / V_i}. \]

Because Hofstede’s (1980, 2001) country scores were available for all 52 countries entered by the MNEs from which we received expansion data, we were able to test the effects of the above two variables on our full sample of 246 expansions.

The next two measures of cultural distance are similar to those described above, but instead rely on the scores on Schwartz’s (1994) seven dimensions of national culture. Our aim was to examine whether these Schwartz-based measures, which use more recent data obtained through a purposefully chosen research design, are better able to explain establishment mode choices by MNEs than the measures based on Hofstede (1980). Since the scores on Schwartz’s (1994) dimensions were available for only 26 of the 52 countries entered by the MNEs from which we received expansion data, we were able to test the effects of the above two variables on our full sample of 246 expansions.
entered by the MNEs from which we received expansion data, we tested the effects of the Schwartz-based measures on a sub-sample of 142 expansions, 73 greenfields and 69 acquisitions.

Finally, we examined the effect of a survey-based perceptual measure of national cultural distance. Following Bell (1996), we asked managers to rate on a 7-point Likert scale how large their management team perceived the cultural differences between the Netherlands and the country entered to be at the time the focal subsidiary was established or acquired (see the Appendix for the exact formulation). This measure was available for all 246 foreign expansions on which we received data. As stated earlier, even though strategic decisions such as foreign entry mode choices ultimately reflect managerial perceptions (Boyd et al., 1993), previous foreign entry mode studies have hardly ever tested the effects of perceptual measures of cultural distance.

4.3. Control variables

In order to bring out more clearly the true effects of the five cultural distance measures on an MNE’s establishment mode choice, we controlled for a variety of parent, subsidiary, industry, and other country-level variables potentially affecting this choice.

4.3.1. MNE size

Compared to greenfield investments, acquisitions generally require more financial resources, which large MNEs are more likely to possess (Kogut & Singh, 1988). This could make them more active acquirers than small MNEs. We controlled for this potential effect by including an MNE’s worldwide annual sales (in billions of euros). Data for this variable were obtained from the REACH database.4

4.3.2. MNE’s level of diversification

Widely diversified MNEs may prefer acquisitions over greenfields because their main advantage consists of management control skills embedded in senior management, an advantage that can be exploited relatively easily through acquisitions (Hennart & Park, 1993). We measured an MNE’s level of diversification by the number of 4-digit BIK codes in which it operated according to the REACH database.5

4.3.3. MNE’s host-country experience

Previous experience with the host country entered may also influence an MNE’s establishment mode choice. On one hand, MNEs with considerable experience of a country may already possess all the knowledge required to successfully operate in that country and, hence, may not need to make acquisitions to obtain this tacit knowledge. On the other hand, MNEs with much host-country experience may be better at managing local acquisitions, and may therefore be more likely to make them (Hennart & Park, 1993).

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4This database contains Chamber of Commerce data on all firms registered in the Netherlands. All these firms are legally required to file data with the Chamber of Commerce.

5The BIK-code is the Dutch equivalent of the American SIC-code. It has been developed by the Dutch Chamber of Commerce.
shown in the Appendix, we assessed an MNE’s level of host-country experience through the questionnaire by asking respondents to indicate whether their firm had previously been active in the country entered through (1) licensing agreements, (2) exports (direct or through sales agents), (3) sales subsidiaries, (4) manufacturing or service subsidiaries, or (5) other means. As the amount of interaction with locals and the degree of integration in the local economy, and thus the contribution to the MNE’s local knowledge base, varies across these experiences (Johanson & Vahlne, 1977), we assigned different values to them. Specifically, the first four experience types were given the values of 1–4, respectively. In 10 cases, firms had other experiences with the country entered. The value we assigned to these experiences depended on the description provided by the respondents. The resulting measure of an MNE’s host-country experience is the sum of the values assigned to the five experience types.

4.3.4. MNE’s mode experience

MNEs with much experience with a particular establishment mode (greenfield or acquisition) are likely to use this establishment mode for future expansions as well. This is either because they have gradually developed the skills and routines to effectively manage the establishment mode, thus reducing its implementation costs, or because they have become isomorphic, copying their past behavior (Cho & Padmanabhan, 2005; Padmanabhan & Cho, 1999). We obtained an MNE’s greenfield and acquisition experience from the questionnaire by asking respondents to rate on two 7-point Likert scales how much experience with foreign greenfields and foreign acquisitions their firm had (see Appendix).

4.3.5. MNE type

As our sample consists of expansions by both manufacturing and service MNEs, we controlled for potential differences in their establishment mode choices through a dummy variable coded 1 for non-manufacturing MNEs—i.e., service and wholesale trade firms—and 0 for manufacturing ones.

4.3.6. Amount of technological knowledge to be transferred

MNEs that plan to transfer large amounts of firm-specific technological knowledge to their foreign subsidiaries are likely to prefer greenfields, since such knowledge is easier to transfer to carefully selected employees than to those inherited from an acquisition (Hennart & Park, 1993). We therefore asked respondents to indicate on a 7-point Likert scale how much proprietary technological knowledge their firm intended to transfer to the subsidiary at the time it was established or acquired (see Appendix).

4.3.7. Unrelated expansion

MNEs expanding into new industries may prefer to make acquisitions, as this allows them to obtain the tacit product-specific knowledge they need to successfully operate in the new industry (Caves, 1996; Hennart & Park, 1993). We asked respondents for a description of the subsidiary’s main products/services and compared it to REACH’s description of the parent’s main and secondary activities. The resulting variable was assigned a value of 0 if

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6These experiences include temporary projects, procurement from local firms, and attending trade shows, among others.
the subsidiary’s main products/services were the same as the parent’s main products/services, a value of 1 if the subsidiary’s main products/services were the same as the parent’s secondary products/services, and a value of 2 if the subsidiary’s main products/services were different from both the parent’s main and secondary products/services.

4.3.8. Subsidiary size

MNEs tend to prefer acquisitions when the planned size of the subsidiary is relatively large. The likely reason is that acquired subsidiaries come with their own cadre of managers, which is beneficial if the minimum efficient size of the planned subsidiary is large, as a greenfield investment of that size would require many managerial resources from the MNE (Caves & Mehra, 1986). We obtained data on a subsidiary’s size from the questionnaire by asking respondents to indicate on a 7-point Likert scale the planned size of the subsidiary compared to that of its parent (see Appendix).

4.3.9. Planned level of subsidiary autonomy

Whereas MNEs with a global strategy usually intend to tightly integrate their subsidiaries, those with a multi-domestic strategy generally plan to grant their subsidiaries much autonomy because such MNEs want these subsidiaries to be locally responsive. While tight integration is easier to achieve through greenfields, local responsiveness is easier to realize through acquisitions (Harzing, 2002). MNEs planning to grant their subsidiaries little autonomy are therefore likely to prefer greenfields, and those planning to grant them much autonomy acquisitions. We therefore asked managers to indicate on 5-point Likert scales how much autonomy their management team intended to give the subsidiary in 11 areas at the time it was established or acquired (see Appendix). Since the 11 items formed a reliable scale (a = 0.89), we averaged their scores into a composite measure of the planned level of subsidiary autonomy.7

4.3.10. Shared subsidiary ownership

Although the choice between greenfield and acquisition is generally considered to be conceptually independent of the choice between partial and full subsidiary ownership (e.g., Cho & Padmanabhan, 1995; Harzing, 2002; Hennart & Park, 1993; Padmanabhan & Cho, 1999), Caves and Mehra (1986) and Larimo (2003) nevertheless found that greenfield entries were more likely to be partially rather than wholly owned. We therefore asked respondents to indicate whether the focal subsidiary had any local co-owners (see Appendix) and created a dummy variable which we assigned a value of 1 if this was the case.

4.3.11. Expected demand growth

A major difference between greenfield and acquisition entry is that the former increases local supply, which may reduce prices and profits and may therefore provoke a competitive response from incumbents (Hennart & Park, 1993). Such a response is more likely if an industry is growing slowly, as greenfield entry will go at the expense of the market shares of incumbents in this case. If an industry is growing rapidly on the other hand, the

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7It should be noted that we did not always have autonomy scores on all items, either because the desired level of autonomy for particular activities had not been decided ex ante, or because subsidiaries did not perform certain activities. We therefore averaged the scores of those items for which scores were available.
supply-increasing features of greenfields are less of a problem, as each incumbent’s market share and profits will be hardly affected (Zejan, 1990). This makes greenfields more tolerable for incumbents and hence more likely. We therefore asked respondents to rate on a 7-point Likert scale how large their management team thought the growth rate of demand for the subsidiary’s products/services would be (see Appendix).

4.3.12. Acquisition restrictions and incentives

Host-country policies in the form of both legal restrictions and governmental incentives may also affect an MNE’s establishment mode choice (e.g., Padmanabhan & Cho, 1995). We therefore asked respondents to indicate on two 7-point Likert scales the extent to which their firm was confronted with legal restrictions on acquiring local firms, and with governmental incentives to enter through greenfield rather than acquisition (see Appendix). As the items formed a reliable scale ($\alpha = 0.71$), we averaged them into a composite measure of governmental restrictions and incentives.

4.3.13. Lack of acquisition targets

A final factor affecting an MNE’s establishment mode choice is the availability of suitable acquisition targets (e.g., Zejan, 1990). If such targets are lacking, MNEs have to resort to greenfield investments. We therefore asked respondents to rate on a 7-point Likert scale the extent to which their firm was confronted with a lack of suitable local acquisition candidates at the time the subsidiary was established or acquired (see Appendix).

4.4. Method

Since the dependent variable in our study is dichotomous, we used logistic regression to test the effects of the five cultural distance measures, entering each measure in a separate model. The regression coefficients estimate the impact of the independent variables on the probability that an expansion will be a greenfield investment, with a positive coefficient indicating that an independent variable increases the probability of a greenfield. In general terms the model can be expressed as $P(y_i = 1) = 1/(1 + \exp(-a - X_i \beta))$, where $y_i$ is the dependent variable, $X_i$ is the vector of independent variables for the $i$th observation, $a$ is the intercept parameter and $\beta$ is the vector of regression coefficients (Amemiya, 1981). We estimated our models with Intercooled STATA 7, using the maximum likelihood method.

5. Results

Table 2 reports the pairwise correlations between all variables. It shows that all five cultural distance measures are significantly correlated at $p<0.01$, with the two Hofstede-based measures both correlating 0.48 with their Schwartz-based equivalents and the four aggregated measures correlating between 0.36 and 0.41 with the perceptual measure. This indicates that (1) Hofstede’s (1980) and Schwartz’s (1994) cultural dimensions overlap only partly and thus reflect both similar and different aspects of national cultures, and (2) aggregated measures and managerial perceptions of cultural distance, although being significantly correlated, differ from one another to a considerable extent (cf. Bell, 1996; Lenartowicz & Roth, 1999, 2001; Stöttinger & Schlegelmilch, 1998; Zhao et al., 2004). The table also indicates that the regression models reported below do not suffer from
Table 2
Pairwise correlations between all variables

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<td>2. Kogut and Singh index based on Hofstede</td>
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<td>3. Euclidean distance based on Hofstede</td>
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<tr>
<td>6. Perceived cultural distance</td>
<td>0.18</td>
<td>0.38</td>
<td>0.36</td>
<td>0.37</td>
<td>0.41</td>
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<tr>
<td>7. MNE size</td>
<td>−0.06</td>
<td>0.04</td>
<td>0.04</td>
<td>−0.00</td>
<td>−0.03</td>
<td>−0.10</td>
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<tr>
<td>8. MNE’s level of diversification</td>
<td>−0.08</td>
<td>−0.11</td>
<td>−0.07</td>
<td>−0.11</td>
<td>−0.13</td>
<td>−0.06</td>
<td>0.29</td>
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<tr>
<td>9. MNE’s host-country experience</td>
<td>−0.21</td>
<td>−0.03</td>
<td>−0.00</td>
<td>0.14</td>
<td>0.11</td>
<td>−0.04</td>
<td>0.15</td>
<td>0.11</td>
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<tr>
<td>10. MNE’s greenfield experience</td>
<td>0.18</td>
<td>0.14</td>
<td>0.12</td>
<td>0.08</td>
<td>0.07</td>
<td>0.08</td>
<td>0.13</td>
<td>−0.04</td>
<td>−0.01</td>
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<tr>
<td>11. MNE’s acquisition experience</td>
<td>−0.22</td>
<td>−0.05</td>
<td>−0.08</td>
<td>0.05</td>
<td>0.00</td>
<td>−0.03</td>
<td>0.33</td>
<td>0.18</td>
<td>0.19</td>
<td>0.22</td>
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<tr>
<td>12. MNE type (non-manufacturing = 1)</td>
<td>0.02</td>
<td>−0.11</td>
<td>−0.08</td>
<td>−0.09</td>
<td>−0.09</td>
<td>0.10</td>
<td>−0.06</td>
<td>0.02</td>
<td>−0.04</td>
<td>0.07</td>
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<td></td>
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<tr>
<td>13. Amount of technology to be transferred</td>
<td>0.17</td>
<td>0.11</td>
<td>0.11</td>
<td>0.00</td>
<td>−0.01</td>
<td>0.10</td>
<td>−0.02</td>
<td>−0.09</td>
<td>−0.05</td>
<td>0.07</td>
<td>−0.03</td>
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<tr>
<td>14. Unrelated expansion</td>
<td>−0.12</td>
<td>−0.11</td>
<td>−0.08</td>
<td>−0.11</td>
<td>−0.10</td>
<td>−0.05</td>
<td>0.21</td>
<td>0.12</td>
<td>0.05</td>
<td>−0.06</td>
<td>−0.01</td>
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<tr>
<td>15. Subsidiary size</td>
<td>−0.17</td>
<td>−0.10</td>
<td>−0.10</td>
<td>−0.07</td>
<td>−0.07</td>
<td>0.04</td>
<td>0.00</td>
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<td>−0.11</td>
<td>0.24</td>
<td>−0.04</td>
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<tr>
<td>16. Planned level of subsidiary autonomy</td>
<td>−0.23</td>
<td>−0.12</td>
<td>−0.12</td>
<td>−0.05</td>
<td>−0.06</td>
<td>−0.07</td>
<td>0.10</td>
<td>0.08</td>
<td>0.04</td>
<td>−0.11</td>
<td>0.09</td>
<td>0.09</td>
<td>0.04</td>
<td>0.16</td>
<td>0.11</td>
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<tr>
<td>17. Shared subsidiary ownership</td>
<td>−0.13</td>
<td>0.11</td>
<td>0.09</td>
<td>0.12</td>
<td>0.12</td>
<td>0.04</td>
<td>−0.03</td>
<td>−0.05</td>
<td>−0.07</td>
<td>0.04</td>
<td>−0.11</td>
<td>0.03</td>
<td>0.10</td>
<td>0.06</td>
<td>0.14</td>
<td></td>
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<tr>
<td>18. Expected demand growth</td>
<td>0.25</td>
<td>0.16</td>
<td>0.16</td>
<td>0.26</td>
<td>0.25</td>
<td>0.20</td>
<td>0.09</td>
<td>−0.01</td>
<td>0.05</td>
<td>0.07</td>
<td>0.01</td>
<td>−0.07</td>
<td>0.12</td>
<td>−0.04</td>
<td>−0.01</td>
<td>−0.06</td>
<td>0.02</td>
<td></td>
<td></td>
</tr>
<tr>
<td>19. Acquisition restrictions and incentives</td>
<td>−0.04</td>
<td>0.23</td>
<td>0.23</td>
<td>0.27</td>
<td>0.28</td>
<td>0.23</td>
<td>0.01</td>
<td>−0.02</td>
<td>0.03</td>
<td>0.04</td>
<td>0.07</td>
<td>−0.04</td>
<td>0.08</td>
<td>−0.01</td>
<td>0.13</td>
<td>0.09</td>
<td>0.17</td>
<td>0.04</td>
<td></td>
</tr>
<tr>
<td>20. Lack of acquisition targets</td>
<td>0.20</td>
<td>0.03</td>
<td>0.04</td>
<td>0.05</td>
<td>0.06</td>
<td>0.08</td>
<td>0.03</td>
<td>−0.10</td>
<td>−0.08</td>
<td>−0.01</td>
<td>0.11</td>
<td>0.02</td>
<td>0.03</td>
<td>−0.04</td>
<td>−0.09</td>
<td>−0.02</td>
<td>−0.12</td>
<td>0.16</td>
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</tr>
</tbody>
</table>

Correlations greater than or equal to |0.13| are significant at $p<0.05$, while those greater than or equal to |0.17| are significant at $p<0.01$ (two-tailed).
multicollinearity, as the highest correlation between pairs of independent variables included in the same model is only 0.33, being that between an MNE’s size and its acquisition experience.

Table 3 presents the results of the logistic regressions we ran to examine the effects of the cultural distance measures and the control variables on an MNE’s establishment mode choice. The table shows that the explanatory power of all models is high ($p = 0.000$) and that all five cultural distance measures are significant predictors of an MNE’s establishment mode choice ($p < 0.05$), with—as hypothesized—a large cultural distance consistently leading MNEs to prefer greenfields over acquisitions. The table also shows that adding each cultural distance measure to the control variables results in a significant reduction in the log likelihood and in an increase in the pseudo $R^2$ of each model, implying that adding cultural distance significantly increases the explanatory power of the models. However, the reduction in the log likelihood and the increase in the pseudo $R^2$ are lower for model 6 than for models 2–5, indicating that the explanatory power of the perceived cultural distance measure is lower than that of the four aggregated measures. The evaluation statistics for the Hofstede-based models (2 and 3) are highly similar on the other hand, as are those for the Schwartz-based ones (4 and 5), which should not be surprising given the high correlations between the two Kogut and Singh (1988) indices and their Euclidean counterparts.

The reduction in log likelihood is larger for the Hofstede-based models than for the Schwartz-based ones, but the former have a lower percentage of correctly classified observations (76.83% vs. 80.99%). In addition, although the increases in the pseudo $R^2$ are comparable across the Hofstede and Schwartz-based models (i.e., approximately 0.04), they are comparatively better for the latter ones, given that explaining an additional 4% points of variance is more difficult at higher pseudo $R^2$ values. Overall, the Hofstede and Schwartz-based measures thus explain establishment mode choices by MNEs equally well.

The effects of the control variables are generally as expected and similar across all models, although their significance levels sometimes differ slightly. However, in contrast to the results of the other models, the effect of an MNE’s experience with foreign greenfields is insignificant in models 4 and 5, while that of expansions by MNEs into unrelated industries is significantly negative in these models.

We also examined the effects of the differences in the scores between the Netherlands and the countries entered for each of Hofstede’s and Schwartz’s dimensions separately. The results indicated that the significant effects of the two Hofstede-based cultural distance measures are caused by differences in power distance and individualism, while those of the two Schwartz-based measures are caused by differences in conservatism, hierarchy, and egalitarian commitment. It should not be surprising that large differences on these dimensions cause MNEs to opt for greenfields, as they “directly bear on issues of internal integration and influence relationships with personnel, such as the organization’s choice of control forms, reward systems and so on” (Barkema & Vermeulen, 1997, p. 848), i.e. issues that are likely to complicate the integration of acquired subsidiaries (cf. Brock, 2005).

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8These results are available from the authors upon request.
Table 3
Logistic regression estimates of establishment mode choice (greenfield = 1)

<table>
<thead>
<tr>
<th>Variable</th>
<th>Model 1: Control variables</th>
<th>Model 2: Kogut and Singh index based on Hofstede</th>
<th>Model 3: Euclidean distance based on Hofstede</th>
<th>Model 4: Kogut and Singh index based on Schwartz</th>
<th>Model 5: Euclidean distance based on Schwartz</th>
<th>Model 6: Perceived cultural distance</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cultural distance</td>
<td>0.58 (0.18)**</td>
<td>0.91 (0.27)**</td>
<td>1.08 (0.44)**</td>
<td>0.96 (0.38)**</td>
<td>0.23 (0.13)*</td>
<td></td>
</tr>
<tr>
<td>MNE size</td>
<td>−2.34E−03 (0.02)</td>
<td>−0.01 (0.02)</td>
<td>−0.01 (0.02)</td>
<td>−0.04 (0.06)</td>
<td>−0.03 (0.06)</td>
<td>−3.99E−04 (0.02)</td>
</tr>
<tr>
<td>MNE’s level of diversification</td>
<td>0.07 (0.10)</td>
<td>0.12 (0.10)</td>
<td>0.11 (0.10)</td>
<td>0.01 (0.17)</td>
<td>0.01 (0.17)</td>
<td>0.08 (0.10)</td>
</tr>
<tr>
<td>MNE’s host-country experience</td>
<td>−0.16 (0.07)**</td>
<td>−0.17 (0.07)**</td>
<td>−0.18 (0.07)**</td>
<td>−0.34 (0.11)**</td>
<td>−0.33 (0.11)**</td>
<td>−0.16 (0.07)**</td>
</tr>
<tr>
<td>MNE’s greenfield experience</td>
<td>0.39 (0.11)**</td>
<td>0.37 (0.11)**</td>
<td>0.37 (0.12)**</td>
<td>0.18 (0.17)</td>
<td>0.18 (0.17)</td>
<td>0.37 (0.11)**</td>
</tr>
<tr>
<td>MNE’s acquisition experience</td>
<td>−0.40 (0.10)**</td>
<td>−0.40 (0.11)**</td>
<td>−0.39 (0.11)**</td>
<td>−0.61 (0.18)**</td>
<td>−0.60 (0.18)**</td>
<td>−0.40 (0.10)**</td>
</tr>
<tr>
<td>MNE type (non-manufacturing = 1)</td>
<td>0.35 (0.32)</td>
<td>0.47 (0.33)</td>
<td>0.43 (0.33)</td>
<td>0.53 (0.54)</td>
<td>0.52 (0.54)</td>
<td>0.37 (0.32)</td>
</tr>
<tr>
<td>Amount of technology to be transferred</td>
<td>0.26 (0.09)**</td>
<td>0.22 (0.09)**</td>
<td>0.25 (0.13)**</td>
<td>0.25 (0.13)**</td>
<td>0.25 (0.09)**</td>
<td></td>
</tr>
<tr>
<td>Unrelated expansion</td>
<td>−0.41 (0.35)</td>
<td>−0.32 (0.36)</td>
<td>−0.34 (0.36)</td>
<td>−1.26 (0.61)*</td>
<td>−1.27 (0.61)*</td>
<td>−0.43 (0.35)</td>
</tr>
<tr>
<td>Subsidiary size</td>
<td>−0.24 (0.10)*</td>
<td>−0.20 (0.11)*</td>
<td>−0.20 (0.11)*</td>
<td>−0.26 (0.18)*</td>
<td>−0.26 (0.18)*</td>
<td>−0.24 (0.10)**</td>
</tr>
<tr>
<td>Planned level of subsidiary autonomy</td>
<td>−0.41 (0.18)*</td>
<td>−0.38 (0.19)*</td>
<td>−0.37 (0.19)*</td>
<td>−0.50 (0.31)*</td>
<td>−0.49 (0.31)*</td>
<td>−0.40 (0.19)*</td>
</tr>
<tr>
<td>Shared subsidiary ownership</td>
<td>−0.94 (0.37)**</td>
<td>−1.07 (0.39)**</td>
<td>−1.07 (0.39)**</td>
<td>−1.50 (0.62)**</td>
<td>−1.51 (0.62)**</td>
<td>−0.95 (0.38)*</td>
</tr>
<tr>
<td>Expected demand growth</td>
<td>0.58 (0.18)**</td>
<td>0.54 (0.19)**</td>
<td>0.54 (0.19)**</td>
<td>0.72 (0.31)**</td>
<td>0.74 (0.32)**</td>
<td>0.53 (0.18)**</td>
</tr>
<tr>
<td>Acquisition restrictions and incentives</td>
<td>−0.11 (0.14)</td>
<td>−0.22 (0.15)†</td>
<td>−0.23 (0.15)†</td>
<td>−0.04 (0.25)</td>
<td>−0.07 (0.25)</td>
<td>−0.17 (0.15)</td>
</tr>
<tr>
<td>Lack of acquisition targets</td>
<td>0.26 (0.10)**</td>
<td>0.29 (0.10)†</td>
<td>0.29 (0.10)†</td>
<td>0.39 (0.15)**</td>
<td>0.39 (0.15)**</td>
<td>0.27 (0.10)**</td>
</tr>
<tr>
<td>Intercept</td>
<td>−2.27 (1.33)*</td>
<td>−3.31 (1.42)**</td>
<td>−4.63 (1.56)**</td>
<td>−1.28 (2.25)</td>
<td>−2.84 (2.36)</td>
<td>−2.96 (1.40)*</td>
</tr>
<tr>
<td>N (greenfields)</td>
<td>246 (127)</td>
<td>246 (127)</td>
<td>246 (127)</td>
<td>142 (73)</td>
<td>142 (73)</td>
<td>246 (127)</td>
</tr>
<tr>
<td>Model $\chi^2$</td>
<td>90.52***</td>
<td>102.27***</td>
<td>103.43***</td>
<td>87.78***</td>
<td>87.45***</td>
<td>93.89***</td>
</tr>
<tr>
<td>Log likelihood</td>
<td>−125.12</td>
<td>−119.25</td>
<td>−118.67</td>
<td>−54.48</td>
<td>−54.65</td>
<td>−123.44</td>
</tr>
<tr>
<td>$-2\Delta\log\text{likelihood}^a$</td>
<td>11.75**</td>
<td>12.90**</td>
<td>7.82**</td>
<td>7.49**</td>
<td>3.36†</td>
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</tr>
<tr>
<td>Pseudo $R^2$</td>
<td>0.266</td>
<td>0.300</td>
<td>0.304</td>
<td>0.446</td>
<td>0.445</td>
<td>0.276</td>
</tr>
<tr>
<td>ΔPseudo $R^2$</td>
<td>0.035</td>
<td>0.038</td>
<td>0.040</td>
<td>0.038</td>
<td>0.010</td>
<td></td>
</tr>
<tr>
<td>Correctly classified (chance rate)</td>
<td>75.20% (50.05%)</td>
<td>76.83% (50.05%)</td>
<td>76.83% (50.05%)</td>
<td>80.99% (50.04%)</td>
<td>80.99% (50.04%)</td>
<td>75.20% (50.05%)</td>
</tr>
</tbody>
</table>

Standard errors in parentheses; †p < 0.1, *p < 0.05, **p < 0.01, ***p < 0.001 (one-tailed).

*aLikelihood-ratio test of full model vs. model without cultural distance.

bIncrease in pseudo $R^2$ when cultural distance is added to the model.
6. Discussion

Our findings indicate that the Hofstede and Schwartz-based measures of national cultural distance explain establishment mode choices by MNEs equally well, and that the explanatory power of the perceptual measure, in spite of its statistical significance, is somewhat lower. The latter finding is noteworthy, since—as stated earlier—managers’ perceptions should drive their strategic decisions (e.g., Boyd et al., 1993). One possible explanation for the lower explanatory power of the perceptual measure is that it contains biases.9 However, this is unlikely to be the case in this study for three reasons. First, following Weber, Shenkar, and Raveh (1996), we asked respondents to indicate how large their management team (rather than the respondents themselves) perceived the cultural differences between the Netherlands and the country entered to be, thus reducing the risk of single-respondent bias.10 Second, Table 2 shows that the highest correlation between our perceived cultural distance measure and the MNE characteristics included in our regression models such as the MNE’s size and its host-country experience is only $\rho = 0.10$, indicating that the cultural distance as perceived by management teams does not systematically vary across the MNEs from which we received expansion data. That is, management teams of large firms or of firms with much experience with a particular country do not perceive the cultural distance to that country to be significantly smaller (or larger) than management teams of smaller or less experienced firms. Third, in our questionnaire we also asked respondents to indicate on a 7-point Likert scale how much experience with foreign operations their management team had. The correlation between this measure and our perceived cultural distance measure was negligible (i.e., $\rho = 0.003$), indicating that experienced management teams’ perceptions of cultural distance do not differ from those of inexperienced ones. It is thus unlikely that the explanatory power of our perceived cultural distance measure is lower than that of the aggregated ones because the perceptual measure contains biases.

The perceptual measure, though unlikely to be biased, may suffer from another limitation however, in that it may be too crude because it consists of a single item. As a result, the measure may be incomplete (Sullivan, 1994) and may not take into consideration all differences in national culture that affect establishment mode choices by MNEs, which may explain its lower explanatory power. The four aggregated measures apparently reflect more of these differences, as their explanatory power is higher. However, as stated earlier, the two Hofstede-based measures and their Schwartz-based counterparts are only moderately correlated, indicating that they do not reflect the exact same cultural differences. Our finding that both types of measures, as well as the perceptual one, are nevertheless significant predictors of an MNE’s establishment mode choice indicates that they all reflect cultural differences that matter, i.e. cultural differences that MNE managers take into account in their establishment mode decisions, either explicitly or implicitly.

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9We thank an anonymous reviewer for bringing this point to our attention.
10This approach does not fully eliminate the risk of single-respondent bias, since individual management team members may have different views on their management team’s perception of the magnitude of cultural differences, depending on the length of time they have been a member of the team, among others.
7. Conclusions and suggestions

This study explores the comparative effects of various measures of national cultural distance on the choice by MNEs between expanding abroad through greenfield or acquisition. Previous empirical studies examining the effect of cultural distance on this choice have typically used the well-known Kogut and Singh (1988) index based on Hofstede (1980), but the latter’s work has become subject to increasing criticism in recent years (e.g., Schwartz, 1994; Steenkamp, 2001). We therefore sought to examine whether alternative measures of cultural distance, in particular those based on Schwartz’s (1994) dimensions of national culture and on managerial perceptions, are better able to explain establishment mode choices by MNEs.

The theoretical reason why the cultural distance to the target country should affect an MNE’s choice between greenfield and acquisition is that firms located in culturally distant countries have radically different organizational and managerial practices as well as communication styles, and are hence difficult to integrate into an MNE’s corporate network after they have been acquired. MNEs are therefore more likely to enter culturally distant countries through greenfield investments, as such investments allow MNEs to introduce their practices from the outset to a carefully selected workforce that fits their culture (Hennart & Park, 1993; Hofstede, 2001; Kogut & Singh, 1988).

Examining the effects of five measures of cultural distance in a sample of 246 foreign expansions by Dutch MNEs, we found that high scores on all these measures significantly increase the likelihood that these MNEs choose greenfields, and that the explanatory power of the Hofstede and Schwartz-based measures is comparable, while that of the perceptual one is somewhat lower. These findings suggest that IB scholars can reliably use both Hofstede and Schwartz-based measures of cultural distance, in the form of either the Kogut and Singh (1988) index or a Euclidean distance index. It may thus be premature to dismiss Hofstede’s work as outdated or as misrepresenting national cultures and to consider Schwartz’s framework to be superior, even though the latter’s research design was purposefully chosen for the goal of the research.

Our finding that the explanatory power of the perceptual cultural distance measure is lower than that of the Hofstede and Schwartz-based ones may be caused by the fact that the perceptual measure consists of a single item. We therefore recommend future studies to develop multiple-item measures of perceived cultural distance and to examine whether these more fine-grained measures are better able to explain establishment mode choices by MNEs.

The psychic distance literature (e.g., Johanson & Vahlne, 1977; O’Grady & Lane, 1996; Sullivan & Bauerschmidt, 1990) may offer valuable suggestions and templates for such measures. As our sample solely consists of foreign expansions by Dutch MNEs, we also urge scholars to examine the generalizability of our findings by replicating our tests in other settings, analyzing expansions by MNEs from other countries. Finally, we recommend future studies to examine the comparative effects of multiple measures of cultural distance on other strategic choices made by MNEs, such as that between shared and full subsidiary ownership, as well as on foreign subsidiary success. This will further increase our understanding of the validity of such measures and their underlying cultural frameworks in IB research.

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Appendix: Selected questionnaire items

Perceived cultural distance:
How large did your management team perceive the cultural differences (e.g., differences in norms and values, habits and customs, behaviors, business practices, organizational practices, language, ways of communicating, relationships with people) between the Netherlands and country X to be at the time of the decision to establish greenfield A [acquire venture B]?
(7-point Likert scale ranging from ‘very small’ to ‘very large’)

MNE’s host-country experience:
In which way(s) has your entity been active in country X before greenfield A [venture B] was established [acquired]? Please tick all forms of involvement that apply.
___ by means of licensing agreements
___ by means of one ore more sales agents
___ by means of one or more sales subsidiaries
___ by means of one or more manufacturing or service subsidiaries
___ otherwise, viz. ______________________

MNE’s greenfield experience:
How much experience with setting up new foreign subsidiaries (i.e., foreign greenfield investments) does your entity have?
(7-point Likert scale ranging from ‘none’ to ‘very much’)

MNE’s acquisition experience:
How much experience with acquiring foreign firms does your entity have?
(7-point Likert scale ranging from ‘none’ to ‘very much’)

Amount of technological knowledge transferred:
How much proprietary technological knowledge did your entity intend to transfer to greenfield A [venture B] at the time of the decision to establish [acquire] the venture?
(7-point Likert scale ranging from ‘none’ to ‘very much’)

Subsidiary size:
What was the [planned] relative size (in terms of the number of employees) of venture B [greenfield A] compared to the size of your entity at the time of the acquisition [at the time greenfield A was established]?
(7-point Likert scale ranging from ‘very small’ to ‘very large’)

Planned level of subsidiary autonomy:
The degree of subsidiary autonomy is the extent to which a subsidiary’s management team is free to run the venture at its own discretion. How much autonomy did your management team intend to give greenfield A [venture B] at the time it was established [acquired]? Please answer this question for each of the following functions that apply:

• procurement
• product/service design
• R & D
• production/service process
- the use of brand names
- packaging
- pricing
- advertising and sales promotion
- the design of reward systems
- job design
- selection and training of employees

(5-point Likert scales ranging from ‘very little autonomy intended’ to ‘very much autonomy intended’. For each item we also provided a separate category ‘no intentions in advance’.)

Shared subsidiary ownership:
For greenfields: Did greenfield A have one or more local co-owners (either firms, individuals, families, or the government of country X) during the first two years after it became operational?
For acquisitions: Did part of the shares of venture B remain in the hands of one or more local parties (either firms, individuals, families, or the government of country X) after the acquisition?

☐ yes
☐ no

Expected demand growth:
At the time of the decision to establish greenfield A [acquire venture B], how large did your management team expect the growth rate of the demand for greenfield A’s [venture B’s] products/services would be?
(7-point Likert scale ranging from ‘strongly negative’ to ‘strongly positive’)

Governmental acquisition restrictions and incentives, and lack of acquisition targets:
For greenfields: To what extent was the decision to undertake a greenfield investment in country X influenced by each of the following factors?
For acquisitions: To what extent was your entity confronted with each of the following factors during the acquisition of venture B?

- legal restrictions in country X with respect to acquiring local firms
- governmental incentives (such as tax advantages, subsidies, and low-interest loans) to abstain from the takeover of a local firm
- a lack of suitable acquisition candidates in country X

(7-point Likert scales ranging from ‘not at all’ to ‘to a very large extent’)

References


