

# Do Multinationals Really Prefer to Enter Culturally-Distant Countries Through Greenfields Rather than Through Acquisitions? The Role of Parent Experience and Subsidiary Autonomy

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ABSTRACT AND KEYWORDS	
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ROLE OF PARENT EXPERIENCE AND SUBSIDIARY AUTONOMY**

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**Abstract**

Prior research has argued that multinational enterprises (MNEs) prefer to enter culturally-distant countries through greenfields rather than through acquisitions, since acquisitions in such countries are costlier to manage. This argument contains two hidden assumptions: (1) the additional costs of acquisitions in culturally-distant countries are the same for all MNEs, and (2) such acquisitions have no benefits over their greenfield counterparts. In this paper we relax these two assumptions by arguing that an MNE's preference for greenfields in culturally-distant countries depends on its international and host-country experience, and on the level of autonomy it plans to grant the focal subsidiary. Analyzing 171 wholly-owned greenfield investments and full acquisitions made by Dutch MNEs in 35 countries, we find that these MNEs prefer to enter culturally-distant countries through greenfields, but that this preference is lower when they have little international experience, or plan to grant the focal subsidiary considerable autonomy in marketing.

**Keywords:** greenfield; acquisition; cultural distance; international experience; host-country experience; subsidiary autonomy

## **Introduction**

The sharp rise in foreign investment during the last decades of the 20<sup>th</sup> century has increasingly exposed firms to other cultures (UNCTAD, 2000; Hofstede, 2001). This has led scholars (Kogut and Singh, 1988; Cho and Padmanabhan, 1995; Larimo, 2003) to examine how the cultural distance to the target country of an investment affects the choice by multinational enterprises (MNEs) between entering that country through a greenfield investment (i.e., a new subsidiary established from scratch) or an acquisition, the so-called establishment mode choice (Cho and Padmanabhan, 1995). These scholars have argued that the costs of managing acquisitions increase faster with cultural distance than those of managing greenfields, leading them to hypothesize that MNEs will prefer to enter culturally-distant countries through greenfields rather than through acquisitions. Several studies have found empirical support for this hypothesis (Barkema and Vermeulen, 1998; Harzing, 2002; Larimo, 2003).

Yet, MNEs do not always enter culturally-distant countries through greenfields. In fact, they frequently enter them through acquisitions. For example, in Barkema and Vermeulen's (1998) sample, 42% of the investments by Dutch MNEs in the culturally-distant continents of Central and South America, Asia, and Africa were acquisitions. This indicates that under particular conditions MNEs prefer to enter culturally-distant countries through acquisitions rather than through greenfields. In this paper we aim to identify these conditions by relaxing two implicit assumptions made in prior studies on the impact of cultural distance on establishment mode choice. The first implicit assumption made in these studies is that the additional costs of managing acquisitions in culturally-distant countries over the costs of managing greenfields are the same for all MNEs. We contend that these additional costs are likely to be lower for MNEs with extensive international or host-country experience because such MNEs have better cross-cultural management skills (Barkema *et al.*, 1996). We therefore hypothesize that these experienced MNEs are more likely to make acquisitions in culturally-distant countries than their inexperienced counterparts. The additional management costs of acquisitions in culturally-distant countries are also likely to be lower for MNEs that grant their subsidiaries considerable autonomy, since such MNEs interact less intensely with their subsidiaries and should hence experience fewer culture-related conflicts

with them (Shenkar, 2001). We therefore hypothesize that MNEs planning to grant the focal subsidiary much autonomy also have a higher propensity to enter culturally-distant countries through acquisitions.

The second assumption made in prior establishment mode studies is that acquisitions in culturally-distant countries only have disadvantages over their greenfield counterparts in the form of higher management costs. We contend, however, that such acquisitions also have important advantages because they bring novel practices and knowledge of a culturally-distant market, while wholly-owned greenfields do not (Wilson, 1980; Vermeulen and Barkema, 2001). Since MNEs with little international or host-country experience typically lack these assets, this pleads for the contrary hypothesis that these inexperienced MNEs, rather than their experienced counterparts, have a higher propensity to enter culturally-distant countries through acquisitions. In addition, we argue that the novel practices and local market knowledge that come with acquisitions in culturally-distant countries are also more valuable to MNEs that grant their subsidiaries more autonomy. This argument reinforces our earlier hypothesis that MNEs planning to grant the focal subsidiary considerable autonomy have a higher propensity to enter culturally-distant countries through acquisitions. Analyzing a sample of 171 wholly-owned greenfield investments and full acquisitions made by Dutch MNEs in 35 countries, we find that these MNEs prefer to enter culturally-distant countries through greenfields, but that their preference for acquisitions in such countries is significantly higher when they have little international experience, or plan to grant the focal subsidiary considerable autonomy in marketing.

Our paper contributes to previous research by identifying several important factors that weaken the positive relationship between cultural distance and the likelihood that MNEs choose greenfield entry, thereby improving our understanding of how national cultural differences influence MNEs' establishment mode choices. Specifically, whereas prior establishment mode studies have implicitly assumed that the additional management costs of acquisitions in culturally-distant countries are the same for all MNEs, we contend that these additional costs are firm-specific. Moreover, whereas prior studies have focused on the additional costs of acquisitions in culturally-distant countries, we also take into account the benefits of such acquisitions over wholly-owned greenfields, and show that these benefits are firm-specific as well.

An empirical contribution of our study is that we use a mix of survey and archival data, whereas prior establishment mode studies have typically relied exclusively on archival data. This mix allows us to employ variables closely reflecting our theoretical constructs, and to carefully control for other factors affecting MNEs' establishment mode choices.

### **Literature review**

There is considerable research on the determinants of the choice by MNEs between expanding abroad through greenfields or acquisitions (for reviews, see Datta *et al.*, 2002 and Shimizu *et al.*, 2004). One important determinant is the cultural distance between the home country of an MNE and the country entered by that MNE, since this distance differentially affects the management costs of greenfield and acquired subsidiaries. Acquired subsidiaries, on one hand, come with firmly-established local organizational and managerial practices, and with a predominantly local workforce. The larger the cultural distance to the target country, the more incompatible the practices and values of employees of acquired subsidiaries will be with those of their MNE acquirers (Cho and Padmanabhan, 1995), causing the management costs of acquired subsidiaries to increase substantially with cultural distance. Greenfield subsidiaries, on the other hand, are established from scratch and hence do not come with established workers and practices (Hennart and Park, 1993; Harzing, 2002). Instead, MNEs can staff their greenfield subsidiaries with personnel that fits their culture reasonably well, and can introduce their practices in such subsidiaries without having to abolish divergent established practices first (Kogut and Singh, 1988; Hennart and Park, 1993). Consequently, the costs of managing greenfields will increase only marginally with cultural distance (Hofstede, 2001; Vermeulen and Barkema, 2001). Because the costs of managing greenfields increase less rapidly with cultural distance than those of managing acquisitions, prior establishment mode research has hypothesized that an MNE's preference for greenfields over acquisitions increases with the cultural distance to the target country (Kogut and Singh, 1988; Cho and Padmanabhan, 1995; Larimo, 2003). Several studies have found empirical support for this claim (Barkema and Vermeulen, 1998; Harzing, 2002; Larimo, 2003).

However, while MNEs may prefer in some cases to enter culturally-distant countries through greenfields, they do not always do so. As stated earlier, in Barkema and Vermeulen's (1998) sample, 42% of the investments by Dutch MNEs in the culturally-distant continents of Central and South America, Asia, and Africa were acquisitions (vs. 79% of the investments in the culturally-closer continents of Europe, North America, and Australia).<sup>1</sup> In fact, the number of acquisitions in culturally-dissimilar countries is growing (Morosini *et al.*, 1998), partly because many countries relaxed their foreign acquisition restrictions in the 1990s (UNCTAD, 2000). These observations suggest that under certain conditions MNEs find it more attractive to enter culturally-distant countries through acquisitions rather than through greenfields. Below we identify these conditions by relaxing two hidden assumptions made by previous studies.

**Relaxing assumption 1: The additional costs of managing acquisitions are the same for all MNEs**

Prior studies of the relationship between cultural distance and establishment mode choice have argued that MNEs prefer to enter culturally-distant countries through greenfields rather than through acquisitions, since acquisitions in such countries are costlier to manage (Kogut and Singh, 1988; Cho and Padmanabhan, 1995; Larimo, 2003). Hence, these studies have implicitly assumed that the additional costs of managing acquisitions in culturally-distant countries over the costs of managing greenfields are the same for all MNEs. However, these additional costs are likely to vary with an MNE's international and host-country experience. An MNE's international experience refers to its experience with managing operations outside its home country, without reference to specific host countries, while its host-country experience refers to its experience with the target country of the focal investment. Both these experiences may reduce the additional management costs of acquisitions in culturally-distant countries, because they act as mechanisms that lower cultural challenges (Shenkar, 2001). According to organizational learning scholars (Barkema *et al.*, 1996; Barkema and Vermeulen, 1998), MNEs with extensive international experience have been exposed to a large variety of foreign cultures, and will hence experience fewer cultural difficulties in a given host country than MNEs with little international experience.



Internationally-experienced MNEs will therefore incur fewer additional costs in managing acquired subsidiaries located in culturally-distant countries. Similarly, MNEs with extensive host-country experience generally know better how local firms are organized and how they operate, and know more about the culture and communication style of local workers than MNEs without such experience. MNEs with prior experience with a host country will therefore incur fewer additional costs in managing acquired subsidiaries in that country than MNEs without host-country experience. Consequently, MNEs with extensive international or host-country experience should be less hesitant to make acquisitions in culturally-distant countries than their inexperienced counterparts. Hence:

**Hypothesis 1a:** The higher an MNE's international experience, the higher the likelihood that it will enter a culturally-distant country through an acquisition rather than through a greenfield investment.

**Hypothesis 2a:** The higher an MNE's host-country experience, the higher the likelihood that it will enter a culturally-distant country through an acquisition rather than through a greenfield investment.

Besides varying with an MNE's experience, the additional costs of managing acquisitions in culturally-distant countries may also vary with the level of autonomy an MNE grants the focal subsidiary. This level of autonomy primarily depends on whether the MNE parent finds it more important to realize economies of scale or to be locally responsive. MNE parents attempting to realize subsidiary or corporate-level economies of scale based on R&D or reputation will grant the focal subsidiary little autonomy, because the realization of such economies requires that the subsidiary performs specific activities as desired by the parent. MNE parents aiming to be locally responsive, on the other hand, will grant the subsidiary considerable autonomy, because local responsiveness requires adaptation of a subsidiary's products or business activities to local conditions (Prahalad and Doz, 1987; Anand and Delios, 1996).

When MNE parents grant specific subsidiaries little autonomy, they will interact intensely with these subsidiaries. In such cases the management costs of acquisitions in culturally-distant countries are likely to be much higher than those of their greenfield counterparts, since acquisitions in culturally-distant countries come with divergent practices and a culturally-different workforce, whereas wholly-owned

greenfields do not. Consequently, the amount of cultural friction between MNE parents and their non-autonomous subsidiaries located in culturally-distant countries will be much higher when these subsidiaries are acquired ones than when they are greenfield ones. On the other hand, when MNE parents grant specific subsidiaries considerable autonomy, they will interact less intensely with these subsidiaries. In such cases the management costs of acquisitions in culturally-distant countries need not exceed those of their greenfield counterparts, as the culturally-different workforce and practices that come with acquisitions will not cause cultural friction when there is little parent-subsidiary interaction (Shenkar, 2001). Consequently, the likelihood that MNEs will enter culturally-distant countries through acquisitions should increase with the level of autonomy they plan to grant the focal subsidiary. Hence:

**Hypothesis 3:** The higher the level of autonomy that an MNE plans to grant the focal subsidiary, the higher the likelihood that it will enter a culturally-distant country through an acquisition rather than through a greenfield investment.

### **Relaxing assumption 2: Acquisitions have no culture-related benefits over greenfields**

As stated earlier, prior establishment mode studies have argued that acquisitions come with established local practices while greenfields do not, causing the costs of managing acquisitions to increase faster with cultural distance than those of managing greenfields. Hence, these studies have implicitly assumed that acquisitions have no culture-related benefits over greenfields. However, the fact that acquired firms bring their own practices may actually be an advantage rather than a disadvantage (Vermeulen and Barkema, 2001; Anand and Delios, 2002; Shimizu *et al.*, 2004). The reason is that some of these practices are non-location bound and can hence be exploited by their MNE acquirers in other countries (Rugman and Verbeke, 1992). Because their nature depends on the acquired firm's history and environment (Amit and Schoemaker, 1993; Kostova, 1999), they are likely to be especially novel when the acquired firm is located in a culturally-distant country (Kogut and Singh, 1988; Morosini *et al.*, 1998). Hence, the larger the cultural distance to a country, the more MNEs will benefit from the practices that come with an acquisition in that country. Because an MNE's existing practices are typically inert and hence difficult to

change (Nelson and Winter, 1982), acquisitions in culturally-distant countries are an excellent vehicle for MNEs to efficiently obtain radically-new practices (Vermeulen and Barkema, 2001). Thus, while prior establishment mode research has considered culturally-determined differences in practices between MNEs and local firms to be a barrier to cross-border acquisitions, such differences may in fact encourage MNEs to make these acquisitions (Very *et al.*, 1997; Child *et al.*, 2001).

A second advantage of acquisitions over wholly-owned greenfields is that they bring local market knowledge (Wilson, 1980) and hence enable MNEs to be locally responsive (Harzing, 2002). Such knowledge is typically location-bound, i.e. only applicable in a particular country or a small set of culturally-similar countries (Rugman and Verbeke, 1992). Since market knowledge is to a large extent tacit and experiential, it is difficult to purchase in disembodied form (Hennart, 1982) and time consuming to develop through greenfield investments (Johanson and Vahlne, 1977). It is therefore more efficiently obtained through acquisitions (Harzing, 2002). Local market knowledge is particularly important to MNEs expanding into culturally-distant countries (Tan and Mahoney, 2003), because such countries have radically-different values, customs, business practices, and customer preferences with which MNEs are likely to be unfamiliar or uncomfortable (Kogut and Singh, 1988; Caves, 1996; Hofstede, 2001). Hence, the larger the cultural distance to a country, the more MNEs will benefit from the market knowledge that comes with an acquisition in that country.

Thus, acquisitions in culturally-distant countries have the advantage over wholly-owned greenfields of bringing radically-different new practices and knowledge of a culturally-dissimilar market. Such practices and knowledge are especially valuable to MNEs without host-country experience, since such MNEs are likely to lack these assets and may hence improve their global or local competitive position by obtaining them through acquisitions. MNEs with extensive host-country experience, on the other hand, are more likely to be familiar with local practices and the local market, and may hence find the benefits of making an acquisition in that market to be limited. A similar line of reasoning applies to an MNE's international experience. MNEs with little such experience are likely to have a small pool of practices and market knowledge, and may hence benefit considerably from enlarging this pool with radically-different

practices and market knowledge by entering culturally-distant countries through acquisitions.

Internationally-experienced MNEs, on the other hand, already have a large pool of diverse practices and knowledge of many different markets (Barkema and Vermeulen, 1998), and will thus value less the practices and market knowledge that come with acquisitions in culturally-distant countries. Hence, while hypotheses 1a and 2a proposed that experienced MNEs are more likely to enter culturally-distant countries through acquisitions, the above suggests the reverse view that *inexperienced* MNEs are more likely to do so. That is:

**Hypothesis 1b:** The *lower* an MNE's international experience, the higher the likelihood that it will enter a culturally-distant country through an acquisition rather than through a greenfield investment.

**Hypothesis 2b:** The *lower* an MNE's host-country experience, the higher the likelihood that it will enter a culturally-distant country through an acquisition rather than through a greenfield investment.

In sum, international and host-country experience do not only reduce the additional management costs of acquisitions in culturally-distant countries (as reflected in hypotheses 1a and 2a), but also the benefits of such acquisitions over greenfields (as reflected in hypotheses 1b and 2b). As a result, it is *a priori* unclear how these two experience types will moderate the relationship between cultural distance and establishment mode choice.

The moderating effect of the level of subsidiary autonomy, on the other hand, is theoretically less ambiguous. We have argued earlier that MNEs granting their subsidiaries more autonomy will find the additional costs of managing acquisitions in culturally-distant countries to be lower. We contend that these MNEs will at the same consider the benefits of such acquisitions over greenfields to be larger for two reasons. First, parent-firm managers who grant subsidiaries considerable autonomy tend to have a polycentric mindset (Harzing, 2000), meaning that they value local practices (Perlmutter, 1969). Since the novelty of such practices increases with cultural distance (Morosini *et al.*, 1998), these managers will find acquisitions in culturally-distant countries to be particularly valuable. Parent-firm managers who grant subsidiaries little autonomy, on the other hand, are more likely to have an ethnocentric mindset, and will

hence be less receptive to foreign practices (Perlmutter, 1969; Harzing, 2000). These managers will consider the home-grown practices of their parent firm to be superior and will be skeptic of local practices. The larger the cultural distance to a country, the more skeptical they will be about the practices of local firms, and the less merit they will see in acquiring these firms.

Second, MNEs granting their subsidiaries considerable autonomy, such as those following a multidomestic strategy (Bartlett and Ghoshal, 1989; Anand and Delios, 1996), typically aim to be locally responsive rather than globally integrated, and hence need to have intimate knowledge of the local market, especially in culturally-distant countries with radically-different values, customs, business practices, and customer preferences (Kogut and Singh, 1988; Hofstede, 2001). Because acquisitions in culturally-distant countries bring this knowledge whereas their wholly-owned greenfield counterparts do not, MNEs granting their subsidiaries considerable autonomy should find such acquisitions very valuable. On the other hand, MNEs granting their subsidiaries little autonomy, such as those following a global strategy, do not aim to be locally responsive and will hence value acquisitions in culturally-distant countries and their market knowledge less. Instead, they will find it more attractive to enter such countries through greenfields, so as to reap the benefits of their global strategy (Harzing, 2002).

In sum, acquisitions in culturally-distant countries are not only less costly but also more beneficial to MNEs granting their subsidiaries much autonomy than to MNEs granting them little autonomy. MNEs planning to grant the focal subsidiary much autonomy should therefore have a higher propensity to enter culturally-distant countries through acquisitions, as already expressed earlier in hypothesis 3.

## **Methodology**

### ***Data collection***

We collected our data in mid-2003 from several secondary sources (to be specified below) and through a mail survey of top managers of Dutch MNEs with more than 100 employees. We had identified the names of these managers and their firms through the REview and Analysis of Companies in Holland (REACH)

database, which contains Chamber of Commerce data on all firms registered in the Netherlands.<sup>2</sup> Dutch subsidiaries of foreign MNE parents were excluded from the survey.

The carefully-designed questionnaire was first evaluated by several international management scholars, and subsequently pre-tested on five senior managers whose firms had recently established or acquired foreign subsidiaries. These pre-tests resulted in several changes in the wording of questions. In the questionnaire we asked managers to provide data on one of their firm's foreign greenfield investments or acquisitions, or on one of each. To ensure the reliability of this data, we structured the questionnaire in such a way that respondents would only provide investment data if (1) their firm was responsible for foreign establishment mode decisions, (2) the investments had been completed in 1995 or a later year, and (3) the respondents had been personally involved in them.

We sent the questionnaire to 1,782 managers of 821 Dutch firms.<sup>3</sup> Eighty-nine managers turned out to be no longer employed at the firms contacted, while another 19 worked for firms without foreign subsidiaries. Three hundred and twenty-two questionnaires were filled out and returned – a response rate of 19.2%, comparable to that of other foreign entry mode studies using survey data (e.g., Kim and Hwang, 1992: 22%; Harzing, 2002: 20%). Respondents were mostly CEOs and CFOs, although in some cases they had other titles, such as Member of the Management Team and Director of Corporate Development. Two hundred of the 322 respondents indicated that their firm was responsible for foreign establishment mode decisions in which they had been personally involved in recent years, and thus provided data on one of their firm's foreign greenfields or acquisitions, or on one of each.<sup>4</sup> In total we received data on 248 foreign investments made by 159 MNEs. We excluded 77 investments from our analyses; nine because of incomplete data, and 68 for reasons to be specified below. The final sample consists of 171 investments – 92 wholly-owned greenfields and 79 full acquisitions – completed by 120 MNEs in 35 countries between 1995 and 2003. Table 1 shows the geographic distribution of the investments, while Table 2 shows the industry distribution of the MNEs that made them.

< Insert Table 1 and 2 about here >

### ***Non-response bias***

To assess whether the 120 MNEs whose investments comprise the final sample are representative of the full population of Dutch MNEs, we examined whether they differed from the 701 MNEs whose managers either did not respond to our questionnaire or did respond but provided no or unusable investment data. *T*-tests that corrected for unequal variances across groups indicated that the 120 MNEs included in the final sample are significantly larger than these 701 MNEs, both in annual worldwide sales and in number of employees ( $P < 0.05$  for both variables, two-tailed), with the former having on average sales of 3.38 billion euros and approximately 12,200 employees, and the latter sales of 1.30 billion and approximately 3500 employees.<sup>5</sup> Hence, our findings may not be generalizable to relatively small MNEs.<sup>6</sup>

### ***Dependent and key independent variables***

*Establishment mode.* The dependent variable is the establishment mode chosen by an MNE for a specific foreign investment, i.e. whether the investment was a greenfield or an acquisition. We obtained this information from the questionnaire and created a dummy variable coded 1 for greenfields and 0 for acquisitions. Since local partners in greenfield joint ventures (JVs) bring in new practices and local market knowledge (Hennart, 1988), such ventures provide benefits which resemble those of acquisitions. Hence, our claim that acquisitions have benefits over greenfields only applies to wholly-owned greenfields. To perform a cleaner test of our hypotheses, we therefore excluded from our sample all 68 investments involving a local co-owner. Following Brouthers and Brouthers (2000), we thus focus on the choice between wholly-owned greenfields and full acquisitions.

*Cultural distance.* To maximize comparability with prior establishment mode studies, we measure the cultural distance between the Netherlands and our 35 host countries through the Kogut and Singh (1988) index (e.g., Kogut and Singh, 1988; Padmanabhan and Cho, 1999; Larimo, 2003). This index is based on the differences in scores on each of Hofstede's (1980) four dimensions of national culture, viz. power distance, uncertainty avoidance, individualism, and masculinity. The validity of these dimensions has been empirically confirmed in many studies (e.g., Van Oudenhoven, 2001; for a review of earlier

replications, see Spondergaard, 1994), indicating that they can reliably be used to classify countries according to their national cultures and to determine the cultural distance between them.

*MNE's international experience.* Following Caves and Mehra (1986), Kogut and Singh (1988), and Barkema and Vermeulen (1998), we measure an MNE's international experience through the log of the number of foreign countries in which the MNE has subsidiaries. We obtained this number from the responding MNEs' annual reports and corporate websites. Following Vermeulen and Barkema (2001), we also distinguish between an MNE's international experience with greenfields and its international experience with acquisitions, so as to examine whether these two types of international experience moderate the relationship between cultural distance and establishment mode choice in the same way. Since respondents are unlikely to know how many of their firms' foreign subsidiaries all over the world are greenfield ones and how many acquired ones, we asked respondents to indicate on two 7-point Likert-type scales how much experience their firm had with foreign greenfields and with foreign acquisitions (see Appendix A for the exact wording of the items).

*MNE's host-country experience.* As shown in Appendix A, we obtained data on an MNE's host-country experience by asking survey respondents to indicate whether their firm had previously been active in the country entered through (1) licensing agreements, (2) sales agents, (3) sales subsidiaries, (4) manufacturing or service subsidiaries, or (5) other means. As these experiences increase an MNE's knowledge of the host country to a different extent (Johanson and Vahlne, 1977), we assigned different values to them. Specifically, the first four experience types were given the values of 1 through 4, respectively. Almost all experiences in the fifth category involved direct exports to the host country and were assigned a value of 2. Our measure of an MNE's host-country experience is the sum of the values assigned to the different experience types.<sup>7</sup>

*Subsidiary autonomy.* Since the level of autonomy granted to a specific subsidiary is hard to measure from secondary sources, we followed Datta (1991) and Weber *et al.* (1996), among others, and assessed this level of autonomy through the questionnaire. We asked respondents to indicate how much autonomy their management team planned to give the subsidiary at the time it was established or



acquired. As shown in Appendix A, we asked them to do so for 12 different business activities on 5-point Likert-type scales. We deliberately asked for the *planned* rather than for the realized level of autonomy for each activity because the planned level better reflects parents' strategic intentions. The reason is that high realized levels of autonomy may reflect either deliberate choices by parents to grant much autonomy or unsuccessful attempts by parents to obtain tight control over subsidiary activities.

We created a summated autonomy scale by combining the individual autonomy items into a single composite measure. Such a scale is reliable if the inter-item correlations exceed 0.30 and the item-to-scale correlations 0.50 (Hair *et al.*, 1998). We therefore excluded the item 'raising capital', as it had a low correlation with most of the other items and an item-to-scale correlation of only 0.31.<sup>8</sup> The 11 remaining items generally satisfied Hair *et al.*'s (1998) correlation criteria and formed a highly reliable scale with a Cronbach's alpha of 0.88. We therefore averaged their scores into a composite measure of the planned level of subsidiary autonomy.<sup>9</sup>

### ***Control variables***

We control for the most important other factors that have been found to affect establishment mode choices by MNEs, viz.:

*MNE's level of diversification.* Widely-diversified MNEs may prefer acquisitions over greenfields because their main advantage consists in advanced management control systems that reduce the incremental costs of making and managing acquisitions (Hennart and Park, 1993). Following prior studies (Harzing, 2002; Larimo, 2003), we measured an MNE's level of diversification through the log of the number of 4-digit BIK codes in which it operated according to the REACH database.<sup>10</sup>

*MNE type.* Like those of Kogut and Singh (1988), Barkema and Vermeulen (1998), and Vermeulen and Barkema (2001), our sample consists of investments by both manufacturing and service MNEs. We therefore controlled for potential differences in the establishment mode choices of these two types of MNEs through a dummy variable coded 1 for non-manufacturing MNEs – i.e., service and wholesale

trade firms – and 0 for manufacturing ones. We based our classification on REACH's description of the MNE parent's main activities.

*Amount of technological knowledge to be transferred.* MNEs that plan to transfer large amounts of firm-specific technological knowledge to their foreign subsidiaries often have a clear preference for greenfields, as such knowledge is easier to transfer to greenfield than to acquired subsidiaries (Hennart and Park, 1993). We therefore asked respondents to indicate on a 7-point Likert-type scale how much proprietary technological knowledge their firm intended to transfer to the subsidiary at the time it was established or acquired (see Appendix A).

*Relatedness of the investment.* 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 (Hennart and Park, 1993; Caves, 1996). 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. In line with Barkema and Vermeulen (1998), we measured the relatedness of an investment by a categorical variable equal to 0 if the subsidiary's main products/services were the same as the parent's main products/services, 1 if the subsidiary's main products/services were the same as the parent's secondary products/services, and 2 if the subsidiary's main products/services were different from both the parent's main and secondary products/services.

*Investment size.* Large investments are more likely to be acquisitions rather than greenfields (Caves and Mehra, 1986; Hennart and Park, 1993). The likely reason is that acquired subsidiaries come with their own cadre of managers, which is beneficial if the minimum efficient scale of the investment is large, as a greenfield investment of that scale would require many managerial resources from the MNE (Caves and Mehra, 1986). We obtained data on the size of the investment from the questionnaire by asking respondents to indicate on a 7-point Likert-type scale the planned size of the subsidiary compared to that of its parent (in terms of the number of employees) (see Appendix A).

*Demand growth.* In contrast to acquisitions, greenfields increase local supply and may hence provoke a competitive response from incumbents (Hennart and Park, 1993). Such a response is more

likely if an industry is growing slowly, as greenfield entry into such an industry will reduce the market share and profits of incumbents. MNEs entering slow-growth industries may therefore prefer acquisition entry. If an industry is growing more rapidly, on the other hand, greenfield entry becomes more tolerable for incumbents and hence more likely (Zejan, 1990). However, greenfields take time to become operational, which may result in high foregone profits if an industry is growing very rapidly (Caves and Mehra, 1986). Hence, MNEs are likely to prefer acquisitions to greenfields if an industry is either growing very slowly or very rapidly (Caves and Mehra, 1986; Hennart and Park, 1993). To control for this curvilinear effect, we asked respondents to rate on a 7-point Likert-type scale how large they thought the growth rate of demand for the subsidiary's products/services would be (see Appendix A). Following Caves and Mehra (1986) and Hennart and Park (1993), we included in our models the absolute value of the deviation of this growth rate from its sample mean, expressed in standard deviation units.

*Acquisition restrictions.* While many countries relaxed their foreign acquisition restrictions in the 1990s (UNCTAD, 2000), these restrictions have not been completely abolished and may hence still affect an MNE's establishment mode choice (Padmanabhan and Cho, 1995; Barkema and Vermeulen, 1998). Following Henisz (2000) and Delios and Henisz (2000), among others, we therefore control for their existence through the average response of thousands of senior executives surveyed for IMD's *World Competitiveness Yearbook* to the statement "Foreign investors are free to acquire control in domestic companies". We obtained these average responses for each of our host countries from *IMD World Competitiveness Online*, where they are reported on a yearly basis on a 0 to 10 scale. We subtracted the reported scores from 10, so that higher values indicate higher acquisition restrictions. By including this variable, we rule out the possibility that the effect of cultural distance on establishment mode choice is driven by formal and informal acquisition restrictions correlated with cultural distance rather than by firms' strategic considerations (Henisz, 2000).

*Lack of acquisition targets.* The availability of suitable acquisition targets also affects an MNE's establishment mode choice (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-type 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 A).

*Year fixed-effects.* Finally, since the investments in our sample were completed between 1995 and 2003, we included year dummies in our models, using 1995 as the baseline year, so as to control for annual variations in the propensity to acquire (Barkema and Vermeulen, 1998).

### ***Common-method bias***

Because we obtained a substantial part of our data through a survey, our results are potentially affected by common-method bias. However, there are several reasons why such bias is unlikely to be present in this study. First, the data for several independent variables (i.e., cultural distance, an MNE's international experience, its level of diversification, its type, and acquisition restrictions) come from secondary sources. Second, although an MNE's host-country experience, its international experience with greenfields, and its international experience with acquisitions were obtained from the questionnaire, these experiences are interacted with cultural distance. Interaction effects are unlikely to be subject to common-method bias, as respondents are unlikely to consciously theorize moderated relationships when they fill out a survey (Kotabe *et al.*, 2003). Third, we did not reveal to respondents the exact goal of the survey, thereby reducing the likelihood that respondents link specific variables to establishment mode choice. Finally, a principal-components factor analysis of all survey-based variables included in our regression models resulted in four factors, with the largest factor accounting for only 19% of the total explained variance of 59.9%, suggesting the absence of common method bias (Harman, 1967).

### ***Statistical Method***

Because the dependent variable is dichotomous, we used logistic regression to test our hypotheses. Logistic regression models are formally 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). Since the dependent variable

has a value of 1 if an investment was a greenfield, a positive regression coefficient indicates that a particular independent variable increases the probability of greenfield entry. We estimated our models with STATA 9.1, using the “cluster” sub-command to obtain robust (i.e., Huber-White) standard errors that are adjusted for the fact that several MNEs had multiple investments in our sample (see Xu *et al.*, 2004, for further details of this procedure).

## Results

Table 3 gives the descriptive statistics of all variables and their correlations. All correlations between pairs of independent variables included in the same model are lower than 0.3, except for that between cultural distance and acquisition restrictions ( $r=0.48$ ). This illustrates the importance of controlling for these restrictions in order to isolate the impact of cultural distance. In those regression models where the majority of the variance of both cultural distance and acquisition restrictions was associated with the same condition index, the value of that index did not exceed 10, indicating that multicollinearity between cultural distance and acquisition restrictions is not a concern (Belsley *et al.*, 1980: 105). The values of the variance inflation factors of cultural distance and acquisition restrictions confirmed this, as these values were only about 1.5, much lower than the multicollinearity threshold of 10 (Hair *et al.*, 1998).

< Insert Table 3 and 4 about here >

Table 4 displays the results of the regression analyses we performed. Since all interaction terms contain cultural distance and are hence highly correlated, we enter each interaction term in a separate model. The explanatory power of all models is good, as their Chi-squared values are all significant ( $P=0.000$ ) and their percentages of correctly-classified observations all exceed the chance rate of 50.3% by more than 25% points.<sup>11</sup> Model 1 shows that cultural distance has a positive impact on the likelihood of greenfield entry ( $P<0.01$ ), a finding in line with that of Barkema and Vermeulen (1998), Harzing (2002), and Larimo (2003). Hypothesis 1a predicted that this positive impact of cultural distance would be weaker for MNEs with extensive international experience, while hypothesis 1b claimed that it would be weaker for MNEs with little such experience. Model 2b in Table 4 tests these conflicting predictions.

The regression coefficient of the interaction effect of cultural distance and international experience is significantly positive ( $P < 0.001$ ), indicating that internationally-experienced MNEs have a stronger preference for greenfields in culturally-distant countries. In other words, MNEs with little international experience are more likely to make acquisitions in culturally-distant countries than their experienced counterparts. We thus find support for hypothesis 1b. Model 2a shows that international experience also has a direct effect on establishment mode choice. Keeping cultural distance and all other factors constant, MNEs are more likely to choose acquisitions when they have more international experience ( $P < 0.05$ ). In sum, the lower an MNE's international experience, the lower the likelihood that it will choose acquisitions (keeping cultural distance constant), but the higher the likelihood that it will choose acquisitions in culturally-distant countries.

Models 3b and 4b test whether an MNE's international experience with greenfields and its international experience with acquisitions have similar moderating effects. This is indeed the case, as the interaction effects of cultural distance and the two international experience types are both significantly positive ( $P < 0.01$  and  $P < 0.05$ , respectively). Hence, both MNEs with little international greenfield experience and MNEs with little international acquisition experience are more likely to make acquisitions in culturally-distant countries than their experienced counterparts. Models 3a and 4a show that both experience types also have a direct effect on establishment mode choice, with MNE's being more likely to choose greenfields when they have extensive greenfield experience ( $P < 0.05$ ) and acquisitions when they have extensive acquisition experience ( $P < 0.001$ ). Thus, the lower an MNE's acquisition experience, the lower the likelihood that it will choose acquisitions (keeping cultural distance constant), but the higher the likelihood that it will choose acquisitions in culturally-distant countries.

Model 5b tests hypotheses 2a and 2b. Hypothesis 2a proposed that MNEs with extensive host-country experience would have a stronger preference for acquisitions in culturally-distant countries, while hypothesis 2b proposed the reverse view that MNEs with little host-country experience would have this stronger preference. The results of Model 5b support neither hypothesis, as the interaction effect of cultural distance and host-country experience is non-significant. That is, MNEs with extensive host-

country experience are as likely to enter culturally-distant countries through acquisitions as MNEs with little host-country experience. Model 5a shows that host-country experience does have a direct effect on establishment mode choice; keeping cultural distance constant, MNEs with extensive host-country experience are more likely to choose acquisitions rather than greenfields ( $P < 0.01$ ).

Hypothesis 3, finally, claimed that MNEs planning to grant the focal subsidiary considerable autonomy would have a stronger preference for acquisitions in culturally-distant countries. We find no support for this hypothesis, as the interaction effect of cultural distance and subsidiary autonomy is non-significant in Model 6b. Model 6a shows that subsidiary autonomy does have a direct effect on establishment mode choice; keeping cultural distance constant, MNEs are more inclined to choose acquisitions when they plan to grant the focal subsidiary much autonomy ( $P < 0.05$ ).

The effects of the control variables are generally as expected and similar across all models. Product-diversified MNEs are more likely to acquire, while those intending to transfer large amounts of technological knowledge are more likely to choose greenfields. Large subsidiaries are more likely to have been acquisitions, and both low and high-growth industries are more likely to be entered through acquisition. Acquisition restrictions and a lack of suitable local acquisition targets lead MNEs to choose greenfields.

Because the Kogut and Singh (1988) index has limitations (Shenkar, 2001), we replicated the above tests using two alternative cultural distance measures, viz. (1) a Euclidean distance version of the Kogut and Singh (1988) index, as used in Chang and Rosenzweig (2001) and Vermeulen and Barkema (2001), and (2) Dow and Karunaratna's (2006) measure of religious distance. When we used these alternative measures, we obtained results highly similar to the ones reported in Table 4.<sup>12</sup>

### **Additional analyses**

Contrary to our expectations, we found that an MNE's preference for acquisitions in culturally-distant countries does not increase with the level of autonomy it plans to grant the focal subsidiary. One possible explanation is that higher levels of subsidiary autonomy make it more difficult for MNEs to capture the

novel practices that come with acquisitions. Since some of these practices are non-location bound, their MNE acquirer needs to transfer them from the acquired subsidiary to other parts of its corporate network in order to fully exploit their potential. Such intra-firm transfers of practices become more difficult when the acquired subsidiary has more autonomy, as they require close ties between source and recipient units (Szulanski, 1996; Kostova, 1999). Hence, although MNEs planning to grant the focal subsidiary higher levels of autonomy may value the practices that come with acquisitions more, they may at the same time realize that it will be more difficult for them to benefit from these practices, causing the likelihood of an acquisition in a culturally-distant country not to increase with the planned level of subsidiary autonomy.

However, higher levels of subsidiary autonomy should not make it more difficult for MNEs to benefit from the local market knowledge that comes with acquisitions in culturally-distant countries. The reason is that this knowledge is typically location-bound and hence does not need to be transferred to other parts of an MNE's corporate network. Consequently, an MNE does not need to have close ties with an acquired subsidiary in order to benefit from the local market knowledge of that subsidiary. In fact, to take maximum advantage of this knowledge, the MNE should allow the subsidiary to continue to determine its own policies by granting it considerable autonomy (Harzing, 2002).

Since not all business activities depend to the same extent on local market knowledge, the benefits of granting autonomy to an acquired subsidiary are likely to differ across business activities (cf. Prahalad and Doz, 1987). Hence, it could be that MNEs planning to grant their subsidiaries autonomy in areas that rely heavily on market knowledge are more likely to make acquisitions in culturally-distant countries, while those planning to grant their subsidiaries autonomy in areas that rely less on such knowledge are not. This may also explain why we found that the average level of subsidiary autonomy across *all* business activities did not increase the probability that MNEs enter culturally-distant countries through acquisitions. To examine whether the moderating effect of the level of subsidiary autonomy indeed differs across business activities, we performed a principal-components factor analysis on the 11 items comprising our composite subsidiary autonomy measure. This analysis yielded three factors with eigenvalues larger than 1 that together explained 67.6% of the total variance. Since the item 'packaging'



loaded almost equally on all three factors, we removed it and performed another factor analysis on the 10 remaining items. This produced three clearly interpretable factors together explaining 68.8% of the total variance. The first factor consists of the human resource management (HRM) activities 'design of reward systems, 'job design', and 'selection and training of employees' (Cronbach's alpha = 0.82), while the second consists of 'procurement', 'product/service design', 'R&D', and 'production/service process', and is hence production related (Cronbach's alpha = 0.82). The third factor consists of the items 'use of brand names', 'pricing', and 'advertising and sales promotion', and is clearly marketing related (Cronbach's alpha = 0.74). We averaged the scores on the items comprising each factor and examined whether the resulting three dimensions of subsidiary autonomy had different moderating effects on the relationship between cultural distance and establishment mode choice. Table 5 shows that this was indeed the case. MNEs planning to grant the focal subsidiary much autonomy in marketing are more likely to make acquisitions in culturally-distant countries (Model 9b), whereas MNEs planning to grant it much autonomy in HRM or production are not (Models 7b and 8b). These findings suggest that local market knowledge plays a more important role in marketing than in HRM and production activities. We obtained the same results when we used our two alternative cultural distance measures.

< Insert Table 5 about here >

## **Discussion and conclusion**

Prior research has argued that the costs of managing acquisitions increase faster with cultural distance than those of managing greenfields, leading MNEs to enter culturally-distant countries through greenfields rather than through acquisitions (Kogut and Singh, 1988; Cho and Padmanabhan, 1995; Larimo). However, several empirical studies have not found support for this claim (Cho and Padmanabhan, 1995; Padmanabhan and Cho, 1999; Brouthers and Brouthers 2000), and we observe quite frequently MNEs making acquisitions in culturally-distant countries. In this paper we sought to close this gap between theory and empirical reality by identifying the conditions under which MNEs find it more attractive to enter culturally-distant countries through acquisitions. We argued that the attractiveness of

making acquisitions rather than greenfield investments in culturally-distant countries depends on an MNE's international and host-country experience, and on the level of autonomy it grants the focal subsidiary. Analyzing 171 wholly-owned greenfield investments and full acquisitions made by Dutch MNEs, we found that these MNEs have a higher preference for acquisitions in culturally-distant countries when they have little international experience or plan to grant the focal subsidiary considerable autonomy in marketing.

While we found MNEs with little international experience to have a higher propensity to enter culturally-distant countries through acquisitions, this was not the case for MNEs with little host-country experience. One possible explanation is that an MNE's host-country experience is a less accurate proxy for its need to obtain new practices and market knowledge through acquisitions in culturally-distant countries than its international experience. Even when MNEs lack experience with a particular culturally-distant host country, they may find the benefits of making an acquisition in that country to be low, as they may have obtained many diverse practices and knowledge of culturally-similar markets through prior foreign ventures.

However, international and host-country experience did both have a direct effect on establishment mode choice. In line with prior studies (Caves and Mehra, 1986; Andersson and Svensson, 1994; Barkema and Vermeulen, 1998; Harzing, 2002), we found that, keeping cultural distance constant, MNEs with little host-country experience as well as those with little international experience are more likely to choose greenfields. When simultaneously considering the direct and indirect effects of international experience, we can conclude that MNEs with little international experience generally prefer greenfield entry, but that this preference is weaker in culturally-distant countries, presumably because acquisitions in such countries enable inexperienced MNEs to extend their relatively small pool of assets with radically-new practices and knowledge of culturally-distant markets.

When we broke down an MNE's international experience into its international experience with greenfields and its international experience with acquisitions, we continued to find both direct and indirect effects. In line with Padmanabhan and Cho (1999), we found that MNEs with extensive foreign

greenfield experience are more likely to choose greenfields, while those with extensive cross-border acquisition experience are more likely to make acquisitions. As expected, we also found that both of these experience types moderate the relationship between cultural distance and establishment mode choice. We found them to moderate this relationship in the same way, with MNEs with extensive greenfield experience and those with extensive acquisition experience both being more likely to enter culturally-distant countries through greenfields. The likely reason is that both of these types of MNEs have little need to obtain novel practices and local market knowledge through acquisitions in culturally-distant countries, as they have already built up a large and diverse pool of practices and market knowledge through their many previous international ventures. Hence, our findings suggest that both previous acquisitions and previous greenfields contribute to an MNE's pool of assets. This conclusion runs counter to Vermeulen and Barkema (2001)'s claim that MNEs only learn from their previous acquisitions. According to them, greenfields do not contribute to an MNE's knowledge base but are merely used for the exploitation of existing knowledge. Our findings suggest a more nuanced view. Wholly-owned greenfields indeed do not bring novel practices and local market knowledge, and hence do not immediately contribute to an MNE's knowledge base, leading inexperienced MNEs to make acquisitions in culturally-distant countries. However, wholly-owned greenfields do gradually develop valuable practices and/or market knowledge over time, thereby eventually enlarging an MNE's knowledge base. Consequently, the larger an MNE's experience with prior greenfields, the lower its need to make acquisitions in culturally-distant countries.

As with different types of foreign experiences, we also expected the planned level of subsidiary autonomy to moderate the relationship between cultural distance and establishment mode choice. We found partial support for this expectation, as the intended level of subsidiary autonomy in marketing significantly increased the probability that MNEs enter culturally-distant countries through acquisitions, but the intended overall level of autonomy did not. As stated earlier, these findings suggest that the benefits of granting autonomy to acquisitions in culturally-distant countries are larger for marketing than for other business activities. The intended overall level of subsidiary autonomy did have a direct effect on

establishment mode choice, however. Keeping cultural distance constant, we found that MNEs planning to grant higher overall levels of autonomy to a subsidiary prefer acquisition over greenfield entry. This finding is in line with Harzing's (2002) finding that MNEs with a multidomestic strategy are more likely to expand abroad through acquisitions and those with a global strategy through greenfields.

In order to accurately operationalize our theoretical constructs and to carefully control for other factors influencing establishment mode choices, we collected a part of our data through a survey. Except for the subsidiary's establishment mode and the parent's host-country experience, our survey-based variables are measured through perceptual Likert-type scales (see Appendix A). A limitation of such perceptual measures is that the items and response categories used may be interpreted differently by different managers, even when these managers have the same nationality. Some of our findings should therefore be interpreted with care. Another limitation of our study is that we only analyzed the foreign investments of Dutch MNEs. We therefore invite researchers to examine the generalizability of our findings by replicating our tests on samples of foreign investments made by non-Dutch MNEs. We also encourage future studies to explore the existence of other interaction effects besides those identified in this paper. Except for Barkema and Vermeulen (1998), establishment mode scholars have limited themselves to examining the main effects of specific factors and have overlooked that these factors may jointly affect MNEs' establishment mode choices. This study has been a first attempt to systematically identify some of these joint effects.

Since MNEs may not only obtain new practices through acquisitions but also through greenfield JVs, future studies could also examine whether it is more attractive for MNEs to learn these practices through full acquisitions of local firms or through greenfield JVs with such firms. Since JVs are often more temporary forms of cooperation, local firms joint venturing with MNEs run a higher risk of creating a new competitor by sharing their valuable practices with MNEs than those being acquired by MNEs. Consequently, local JV partners may be more reluctant to share their practices with MNEs than acquired local firms. Moreover, JVs may be costlier to manage than acquisitions because they involve a local partner with an equity stake and, hence, decision-making power. On the other hand, by fully acquiring

this equity stake, MNEs take away one of the incentives of the acquired firm's management to perform well, thereby increasing management costs (Hennart, 1988). Future research may shed more light on the comparative benefits and management costs of JVs and acquisitions.

## Notes

<sup>1</sup>In our sample 35.4% of all investments in culturally-distant countries (i.e., countries with a cultural distance score above the sample median) are acquisitions. These acquisitions in culturally-distant countries comprise 44.3% of all acquisitions in our sample.

<sup>2</sup>All firms registered in the Netherlands are legally required to file data with the Chamber of Commerce.

<sup>3</sup>Most of these firms were MNE parents. However, a few parents allowed their Dutch-based divisions to independently make foreign investments. We therefore also sent the questionnaire to the directors of these divisions.

<sup>4</sup>Although some respondents worked for the same firm, they usually provided data on different investments. In the very few cases where they did provide data on the same investment, we followed Very *et al.* (1997) and averaged their responses into a single observation.

<sup>5</sup>It should be noted that we were unable to obtain sales and employee data for some of the MNEs to which we sent the questionnaire.

<sup>6</sup>We think there are two reasons why the responding MNEs were on average larger than the non-responders. First, large MNEs are more likely to have established or acquired foreign subsidiaries in recent years, and are therefore more likely to qualify for participation in the study, as we explicitly asked for data on *recent* foreign investments. Second, because large MNEs, on average, invest abroad more often, their management is likely to be more interested in participating in our study, as we gave respondents the option to receive a free overview of its main findings.

<sup>7</sup>When we assigned equal weights to all experience types, we obtained results similar to those reported in Table 4, although the main effect of the unweighted host-country experience measure was somewhat weaker than that of the weighted one.

<sup>8</sup>These low correlations are caused by the fact that subsidiaries generally had very little autonomy with respect to raising capital. In 148 of the 171 cases respondents assigned a score of 1 to this item.

<sup>9</sup>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.

<sup>10</sup>The BIK-code is the Dutch equivalent of the American SIC-code. It has been developed by the Dutch Chamber of Commerce.

<sup>11</sup>The chance rate is calculated as  $a^2 + (1 - a)^2$ , where  $a$  is the proportion of greenfields in the sample.

<sup>12</sup>These results are available from the authors upon request.

## References

- Amemiya, T. (1981) 'Qualitative response models: A survey', *Journal of Economic Literature* **19**(4): 1483-1536.
- Amit, R. and Schoemaker, P.J. (1993) 'Strategic assets and organizational rent', *Strategic Management Journal* **14**(1): 33-46.
- Anand, J. and Delios, A. (1996) 'Competing globally: How Japanese MNCs have matched goals and strategies in India and China', *Columbia Journal of World Business* **31**(3): 50-62.
- Anand, J. and Delios, A. (2002) 'Absolute and relative resources as determinants of international acquisitions', *Strategic Management Journal* **23**(2): 119-134.
- Andersson, T. and Svensson, R. (1994) 'Entry modes for direct investment determined by the composition of firm-specific skills', *Scandinavian Journal of Economics* **96**(4): 551-560.
- Barkema, H.G., Bell, J.H.J. and Pennings, J.M. (1996) 'Foreign entry, cultural barriers, and learning', *Strategic Management Journal* **17**(2): 151-166.
- Barkema, H.G. and Vermeulen, F. (1998) 'International expansion through start-up or acquisition: A learning perspective', *Academy of Management Journal* **41**(1): 7-26.
- Bartlett, C.A. and Ghoshal, S. (1989) *Managing Across Borders: The Transnational Solution*. Harvard Business School Press: Boston.
- Belsley, D.A., Kuh, E. and Welsch, R.E. (1980) *Regression Diagnostics: Identifying Influential Data and Sources of Collinearity*, Wiley: New York.
- Brouthers, K.D. and Brouthers, L.E. (2000) 'Acquisition or greenfield start-up? Institutional, cultural and transaction cost influences', *Strategic Management Journal* **21**(1): 89-97.
- Caves, R.E. 1996. *Multinational Enterprise and Economic Analysis*, second edition, Cambridge University Press: Cambridge, NY.
- Caves, R.E. and Mehra, S.K. (1986) 'Entry of foreign multinationals into U.S. manufacturing industries', in M.E. Porter (ed.) *Competition in Global Industries*, Harvard Business School Press: Boston, MA, pp. 449-481.



- Chang, S.-J. and Rosenzweig, P.M. (2001) 'The choice of entry mode in sequential foreign direct investment', *Strategic Management Journal* **22**(8): 747-776.
- Child, J., Falkner, D. and Pitkethly, R. (2001) *The Management of International Acquisitions*, Oxford University Press: Oxford, UK.
- Cho, K.R. and Padmanabhan, P. (1995) 'Acquisition versus new venture: The choice of foreign establishment mode by Japanese firms', *Journal of International Management* **1**(3): 255-285.
- Datta, D.K. (1991) 'Organizational fit and acquisition performance: Effects of post-acquisition integration', *Strategic Management Journal* **12**(4): 281-297.
- Datta, D.K., Herrmann, P. and Rasheed, A.A. (2002) 'Choice of foreign market entry mode: Critical review and future directions', in M.A. Hitt and J.L.C. Cheng (Eds.) *Managing transnational firms: Resources, market entry and strategic alliances. Advances in International Management* **14**, JAI Press: Amsterdam, pp. 85-153.
- Delios, A. and Henisz, W.J. (2000) 'Japanese firms' investment strategies in emerging economies', *Academy of Management Journal* **43**(3): 305-323.
- Dow, D. and Karunaratna, A. (2006) 'Developing a multidimensional instrument to measure psychic distance stimuli', *Journal of International Business Studies* **37**(6): 578-602.
- Hair Jr., J.F., Anderson, R.E., Tatham, R.L. and Black, W.C. (1998) *Multivariate Data Analysis*, fifth edition, Prentice Hall: Upper Saddle River, NJ.
- Harman, H.H. (1967) *Modern Factor Analysis*, University of Chicago Press: Chicago.
- Harzing, A.-W. (2000) 'An empirical analysis and extension of the Bartlett and Ghoshal typology of multinational companies', *Journal of International Business Studies* **31**(1): 101-120.
- Harzing, A.-W. (2002) 'Acquisitions versus greenfield investments: International strategy and management of entry modes', *Strategic Management Journal* **23**(3): 211-227.
- Hennart, J.-F. (1982) *A Theory of Multinational Enterprise*, University of Michigan Press: Ann Arbor.
- Hennart, J.-F. (1988) 'A transaction costs theory of equity joint ventures', *Strategic Management Journal* **9**(4): 361-374.

- Hennart, J.-F. and Park, Y.-R. (1993) 'Greenfield vs. acquisition: The strategy of Japanese investors in the United States', *Management Science* **39**(9): 1054-1070.
- Henisz, W.J. (2000) 'The institutional environment for multinational investment', *Journal of Law, Economics, and Organization* **16**(2): 334-364.
- Hofstede, G. (1980) *Culture's Consequences: International Differences in Work-Related Values*, Sage Publications: Beverly Hills, CA.
- Hofstede, G. (2001) *Culture's Consequences: Comparing Values, Behaviors, Institutions, and Organizations across Nations*, second edition, Sage Publications: Thousand Oaks.
- Johanson, J. and Vahlne, J.-E. (1977) 'The internationalization process of the firm – A model of knowledge development and increasing foreign market commitments', *Journal of International Business Studies* **8**(1): 23-32.
- Kim, W.C. and Hwang, P. (1992) 'Global strategy and multinationals' entry mode choice', *Journal of International Business Studies* **23**(1): 29-53.
- Kogut, B. and Singh, H. (1988) 'The effect of national culture on the choice of entry mode', *Journal of International Business Studies* **19**(3): 411-432.
- Kostova, T. (1999) 'Transnational transfer of strategic organizational practices: A contextual perspective', *Academy of Management Review* **24**(2): 308-324.
- Kotabe, M., Martin, X. and Domoto, H. (2003) 'Gaining from vertical partnerships: Knowledge transfer, relationship duration, and supplier performance in the U.S. and Japanese automotive industries', *Strategic Management Journal* **24**(4): 293-316.
- Larimo, J. (2003) 'Form of investment by Nordic firms in world markets', *Journal of Business Research* **56**(10): 791-803.
- Morosini, P., Shane, S. and Singh, H. (1998) 'National cultural distance and cross-border acquisition performance', *Journal of International Business Studies* **29**(1): 137-158.
- Nelson, R.R. and Winter, S.G. (1982) *An Evolutionary Theory of Economic Change*. Bellknap/Harvard: Cambridge, MA.

- Padmanabhan, P. and Cho, K.R. (1999) 'Decision-specific experience in foreign ownership and establishment strategies: Evidence from Japanese firms', *Journal of International Business Studies* **30**(1): 25-44.
- Perlmutter, H. (1969) 'The tortuous evolution of the multinational corporation', *Columbia Journal of World Business* **4**(January-February): 9-18.
- Prahalad, C.K. and Doz, Y.L. (1987) *The Multinational Mission: Balancing Local Demands and Global Vision*, Free Press: New York.
- Rugman, A.M. and Verbeke, A. (1992) 'A note on the transnational solution and the transaction cost theory of multinational strategic management', *Journal of International Business Studies* **23**(4): 761-771.
- Shenkar, O. (2001) 'Cultural distance revisited: Towards a more rigorous conceptualization and measurement of cultural differences', *Journal of International Business Studies* **32**(3): 519-535.
- Shimizu, K., Hitt, M.A., Vaidyanath, D. and Pisano, V. (2004) 'Theoretical foundations of cross-border mergers and acquisitions: A review of current research and recommendations for the future', *Journal of International Management* **10**(3): 307-353.
- Søndergaard, M. (1994) 'Hofstede's consequences: A study of reviews, citations, and replications', *Organization Studies* **15**(3): 447-456.
- Szulanski, G. (1996) 'Exploring internal stickiness: Impediments to the transfer of best practice within the firm', *Strategic Management Journal* **17**(Winter special issue): 27-43.
- Tan, D. and Mahoney, J.T. (2003) 'Explaining the utilization of managerial expatriates from the perspectives of resource-based, agency, and transaction cost theories', in J.L.C. Cheng and M.A. Hitt (eds.) *Advances in international management* **15**, Elsevier JAI: Amsterdam, pp. 179-205.
- UNCTAD. (2000) *World Investment Report 2000: Cross-Border Mergers and Acquisitions and Development Overview*, New York: United Nations.
- Van Oudenhoven, J.P. (2001) 'Do organizations reflect national cultures? A 10-nation study', *Internal Journal of Intercultural Relations* **25**(1): 89-107.

Vermeulen, F., and Barkema, H.G. (2001) 'Learning through acquisitions', *Academy of Management Journal* **44**(3): 457-476.

Very, P., Lubatkin, M., Calori, R. and Veiga, J. (1997) 'Relative standing and the performance of recently acquired European firms', *Strategic Management Journal* **18**(8): 593-614.

Weber, Y., Shenkar, O. and Raveh, A. (1996) 'National and corporate cultural fit in mergers/acquisitions: An exploratory study', *Management Science* **42**(8): 1215-1227.

Wilson, B.D. (1980) 'The propensity of multinational companies to expand through acquisitions', *Journal of International Business Studies* **11**(Spring-Summer): 59-65.

Xu, D., Pan, Y. and P.W. Beamish (2004) 'The effect of regulative and normative distances on MNE ownership and expatriate strategies', *Management International Review* **44**(3): 285-307.

Zejan, M.C. (1990) 'New ventures or acquisitions: The choice of Swedish multinational enterprises', *Journal of Industrial Economics* **38**(3): 349-355.

## Appendix A

### *Selected questionnaire items*

*MNE's international greenfield experience:* How much experience with setting up new foreign subsidiaries (i.e., foreign greenfield investments) does your entity have?

(7-point Likert-type scale ranging from 'none' to 'very much')

*MNE's international acquisition experience:* How much experience with acquiring foreign firms does your entity have?

(7-point Likert-type scale ranging from 'none' to 'very much')

*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 or more sales agents

by means of one or more sales subsidiaries

by means of one or more manufacturing or service subsidiaries

otherwise, viz. \_\_\_\_\_

*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
- raising capital

(5-point Likert-type 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’.)

*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-type scale ranging from ‘none’ to ‘very much’)

*Investment 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-type scale ranging from ‘very small’ to ‘very large’)

*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-type scale ranging from 'strongly negative' to 'strongly positive')

*Lack of acquisition targets:*

For greenfields: To what extent was the decision to undertake a greenfield investment in country X influenced by a lack of suitable acquisition candidates in country X?

For acquisitions: To what extent was your entity confronted with a lack of suitable acquisition candidates in country X?

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

**Table 1** Geographic distribution of the foreign investments in the sample

<i>Region</i>	<i>Number of investments</i>	<i>Percentage</i>
Belgium and Luxembourg	21	12.3
Northern Europe	11	6.4
United Kingdom and Ireland	25	14.6
Southern Europe	20	11.7
Germanic countries	19	11.1
Eastern Europe	24	14.0
North America	23	13.5
Latin America	10	5.8
Asia	12	7.0
Australia	3	1.8
Africa	3	1.8

**Table 2** Industry distribution of the MNEs in the sample

<i>Main industry</i>	<i>Number of MNEs</i>	<i>Percentage</i>
Agriculture and horticulture	3	2.5
Food and beverages	10	8.3
Machinery and electronics	11	9.2
Wood and paper products	9	7.5
Chemicals and synthetics	14	11.7
Metal products	11	9.2
Construction	5	4.2
Other manufacturing	4	3.3
Retail and wholesale trade	13	10.8
Transportation, storage, and communication	8	6.7
Financial services	13	10.8
Professional services	17	14.2
Other services	2	1.7



**Table 3** Descriptive statistics and correlations ( $N=171$ )<sup>a</sup>

<i>Variable</i>	<i>Mean</i>	<i>s.d.</i>	<i>1</i>	<i>2</i>	<i>3</i>	<i>4</i>	<i>5</i>	<i>6</i>	<i>7</i>	<i>8</i>	<i>9</i>	<i>10</i>	<i>11</i>	<i>12</i>	<i>13</i>	<i>14</i>
1. Establishment mode	0.54	0.50														
2. Cultural distance	2.07	0.96	.33													
3. MNE's international experience <sup>b</sup>	2.66	1.26	-.20	.00												
4. MNE's international greenfield experience	5.01	1.66	.17	.09	.30											
5. MNE's international acquisition experience	4.96	1.85	-.30	-.07	.65	.22										
6. MNE's host-country experience	3.10	2.38	-.26	.05	.19	-.03	.18									
7. Subsidiary autonomy	3.10	0.87	-.22	-.21	.01	-.14	.07	.03								
8. MNE's level of diversification <sup>b</sup>	0.87	0.63	-.20	-.16	.28	-.10	.22	.16	.14							
9. MNE type <sup>c</sup>	0.50	0.50	.04	-.06	.07	-.03	.08	-.04	.04	-.00						
10. Amount of technology to be transferred	4.06	2.06	.20	.04	-.12	.00	-.06	-.05	.03	-.10	-.07					
11. Unrelated investment	0.19	0.45	-.12	-.14	.15	-.00	.16	.09	.25	.20	.17	-.04				
12. Investment size	2.51	1.59	-.25	-.10	-.13	-.10	-.06	.04	.14	-.11	-.15	.21	.03			
13. Deviation from average demand growth	0.82	0.53	-.10	.11	.06	.13	.07	-.03	-.06	-.16	.04	-.01	-.10	-.08		
14. Acquisition restrictions	1.83	1.09	.26	.48	.08	.14	-.04	.07	-.11	-.12	-.15	.02	.00	-.08	.10	
15. Lack of acquisition targets	2.78	1.99	.25	.05	-.04	.03	.13	-.13	.01	-.17	.02	.03	-.05	-.02	-.02	.09

<sup>a</sup> Correlations greater than or equal to |0.15| are significant at  $P<0.05$ , while those greater than or equal to |0.20| are significant at  $P<0.01$  (two-tailed).

<sup>b</sup> Logged to eliminate skewness and/or outliers.

<sup>c</sup> Non-manufacturing = 1.

**Table 4** Logistic regression estimates of the probability of greenfield entry ( $N=171$ )<sup>a</sup>

<i>Variable</i>	<i>Model 1</i>	<i>Model 2a</i>	<i>Model 2b</i>	<i>Model 3a</i>	<i>Model 3b</i>	<i>Model 4a</i>	<i>Model 4b</i>
Cultural distance	0.76** (0.32)	0.69* (0.33)	-1.98** (0.84)	.78** (0.32)	-3.61** (1.43)	0.75* (0.40)	-0.80† (0.62)
MNE's international experience		-0.39* (0.20)	-2.68*** (0.78)				
Cultural distance x MNE's international experience			1.15*** (0.36)				
MNE's greenfield experience				0.21* (0.12)	-1.48** (0.56)		
Cultural distance x MNE's greenfield experience					0.92** (0.30)		
MNE's acquisition experience						-0.61*** (0.14)	-1.24*** (0.30)
Cultural distance x MNE's acquisition experience							0.32* (0.13)
MNE's level of diversification	-0.71* (0.33)	-0.73* (0.33)	-0.70* (0.35)	-0.63* (0.37)	-0.59† (0.38)	-0.62* (0.35)	-0.63* (0.36)
MNE type <sup>b</sup>	0.35 (0.43)	0.41 (0.42)	0.53 (0.47)	0.37 (0.45)	0.69† (0.52)	0.54 (0.43)	0.55 (0.44)
Amount of technology to be transferred	0.31** (0.11)	0.30** (0.10)	0.32** (0.12)	0.33** (0.11)	0.31** (0.11)	0.33*** (0.10)	0.34*** (0.11)
Unrelated investment	-0.29 (0.41)	-0.22 (0.45)	-0.39 (0.51)	-0.38 (0.43)	-0.51 (0.46)	-0.01 (0.48)	-0.07 (0.52)
Investment size	-0.64*** (0.17)	-0.66*** (0.17)	-0.70*** (0.19)	-0.63*** (0.18)	-0.61*** (0.20)	-0.81*** (0.20)	-0.81*** (0.20)
Deviation from average demand growth	-1.00* (0.46)	-0.96* (0.46)	-1.16** (0.47)	-1.05* (0.46)	-1.03* (0.47)	-1.03* (0.45)	-1.16** (0.47)
Acquisition restrictions	0.45* (0.25)	0.57* (0.30)	0.81** (0.30)	0.42† (0.26)	0.43† (0.33)	0.50* (0.27)	0.53* (0.32)
Lack of acquisition targets	0.26* (0.12)	0.27* (0.12)	0.28* (0.12)	0.25* (0.12)	0.22* (0.13)	0.37** (0.13)	0.35** (0.14)
$\chi^2$	56.08***	48.73***	39.88**	71.12***	63.23***	45.79***	50.01***
Log likelihood	-77.97	-76.30	-70.62	-76.59	-71.94	-68.54	-66.59
Likelihood ratio test of:							
- focal model vs. <i>Model 1</i>		3.33†		2.76†		18.86***	
- interaction term			11.37***		9.31**		3.89*
Pseudo $R^2$	0.339	0.354	0.402	0.351	0.391	0.419	0.436

<sup>a</sup> Greenfield = 1. Robust standard errors in parentheses. Year dummies and intercept are suppressed.

<sup>b</sup> Non-manufacturing = 1.

†  $P < 0.1$ , \*  $P < 0.05$ , \*\*  $P < 0.01$ , \*\*\*  $P < 0.001$  (two-tailed tests for competing hypotheses, one-tailed tests otherwise).

**Table 4 (continued)** Logistic regression estimates of the probability of greenfield entry ( $N=171$ )<sup>a</sup>

<i>Variable</i>	<i>Model 5a</i>	<i>Model 5b</i>	<i>Model 6a</i>	<i>Model 6b</i>
Cultural distance	0.87* (0.39)	1.25* (0.67)	0.72* (0.34)	0.54 (1.03)
MNE's host-country experience	-0.27** (0.10)	-0.06 (0.23)		
Cultural distance x MNE's host-country experience		-0.11 (0.12)		
Subsidiary autonomy			-0.40* (0.22)	-0.52 (0.82)
Cultural distance x Subsidiary autonomy				0.06 (0.40)
MNE's level of diversification	-0.60* (0.34)	-0.61* (0.34)	-0.67* (0.34)	-0.67* (0.34)
MNE type <sup>b</sup>	0.37 (0.45)	0.37 (0.45)	0.36 (0.42)	0.37 (0.42)
Amount of technology to be transferred	0.33** (0.12)	0.33** (0.12)	0.30** (0.11)	0.30** (0.11)
Unrelated investment	-0.31 (0.39)	-0.37 (0.40)	-0.07 (0.41)	-0.06 (0.41)
Investment size	-0.65*** (0.18)	-0.67*** (0.18)	-0.59*** (0.18)	-0.60*** (0.18)
Deviation from average demand growth	-1.10* (0.49)	-1.17** (0.50)	-0.96* (0.46)	-0.95* (0.46)
Acquisition restrictions	0.56** (0.24)	0.62** (0.24)	0.43* (0.25)	0.43† (0.27)
Lack of acquisition targets	0.27* (0.12)	0.27* (0.12)	0.27* (0.12)	0.27* (0.12)
$\chi^2$	70.22***	64.31***	58.49***	63.94***
Log likelihood	-74.07	-73.73	-76.60	-76.59
Likelihood ratio test of focal model vs. <i>Model 1</i>	7.79**		2.73†	
Likelihood ratio test of interaction term		0.69		0.03
Pseudo $R^2$	0.372	0.375	0.351	0.351

<sup>a</sup> Greenfield = 1. Robust standard errors in parentheses. Year dummies and intercept are suppressed.

<sup>b</sup> Non-manufacturing = 1.

†  $P < 0.1$ , \*  $P < 0.05$ , \*\*  $P < 0.01$ , \*\*\*  $P < 0.001$  (two-tailed tests for competing hypotheses, one-tailed tests otherwise).

**Table 5** Additional logistic regression estimates of the probability of greenfield entry<sup>a</sup>

<i>Variable</i>	<i>Model 7a</i>	<i>Model 7b</i>	<i>Model 8a</i>	<i>Model 8b</i>	<i>Model 9a</i>	<i>Model 9b</i>
Cultural distance	0.76** (0.31)	0.80** (0.33)	1.26** (0.46)	1.54** (0.60)	0.69* (0.35)	0.75* (0.33)
Subsidiary autonomy in HRM	0.08 (0.16)	0.10 (0.16)				
Cultural distance x Subsidiary autonomy in HRM		0.13 (0.27)				
Subsidiary autonomy in production			-0.95** (0.32)	-0.85** (0.31)		
Cultural distance x Subsidiary autonomy in production				0.49 (0.46)		
Subsidiary autonomy in marketing					-0.36† (0.25)	-0.60** (0.24)
Cultural distance x Subsidiary autonomy in marketing						-0.67* (0.37)
MNE's level of diversification	-0.70* (0.35)	-0.72* (0.35)	-0.67* (0.41)	-0.78* (0.44)	-0.97** (0.41)	-1.01* (0.44)
MNE type <sup>b</sup>	0.34 (0.43)	0.35 (0.43)	2.10** (0.79)	2.04** (0.76)	0.38 (0.44)	0.36 (0.46)
Amount of technology to be transferred	0.31** (0.11)	0.31** (0.11)	0.55*** (0.13)	0.56*** (0.14)	0.27** (0.11)	0.30** (0.12)
Unrelated investment	-0.40 (0.44)	-0.39 (0.45)	0.64 (0.67)	0.70 (0.71)	-0.22 (0.42)	-0.24 (0.43)
Investment size	-0.63*** (0.17)	-0.65*** (0.17)	-0.41* (0.18)	-0.44** (0.18)	-0.92*** (0.25)	-0.96*** (0.25)
Deviation from average demand growth	-1.04* (0.48)	-1.05* (0.48)	-0.82† (0.52)	-0.80† (0.51)	-1.74*** (0.53)	-1.96*** (0.58)
Acquisition restrictions	0.47* (0.25)	0.48* (0.26)	0.44† (0.33)	0.38 (0.31)	0.60* (0.28)	0.54* (0.30)
Lack of acquisition targets	0.25* (0.12)	0.25* (0.12)	0.30* (0.18)	0.28† (0.18)	0.33* (0.15)	0.38** (0.16)
<i>N</i>	169	169	133	133	149	149
$\chi^2$	54.42***	54.40***	52.54***	51.77***	48.69***	58.06***
Log likelihood	-77.36	-74.48	-45.72	-45.29	-58.39	-57.13
Pseudo $R^2$	0.338	0.338	0.504	0.508	0.433	0.445

<sup>a</sup> Greenfield = 1. Robust standard errors in parentheses. Year dummies and intercept are suppressed.

<sup>b</sup> Non-manufacturing = 1.

†  $P < 0.1$ , \*  $P < 0.05$ , \*\*  $P < 0.01$ , \*\*\*  $P < 0.001$  (one-tailed tests).

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