

SUBSIDIARY STAFFING AND PERFORMANCE: THE CASE OF FOREIGN
MULTINATIONALS IN THE U.S.

by

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ABSTRACT OF THE THESIS

Subsidiary Staffing and Performance: The Case of Foreign Multinationals in the U.S.

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International staffing is an important mechanism for the control and coordination of culturally and geographically dispersed operations of a multinational corporation. However literature on subsidiary staffing patterns and the search for the antecedents of subsidiary staffing has led to mixed results in the past. Moreover, the relation between subsidiary staffing and subsidiary performance has received very limited attention from researchers. Thus, this thesis is aimed at improving our understanding of the antecedents and outcomes of subsidiary staffing by addressing two research questions.

My first research question relates to the antecedents of subsidiary staffing. I explore the influence of cultural distance between home and host countries, uncertainty avoidance dimension of the home country's national culture, and dependence of the subsidiary on the headquarters on subsidiary staffing patterns. My second research question relates to whether there is a relation between how a subsidiary is staffed and how it performs. Within this question, I explore whether multinational corporations face

a paradox when staffing culturally distant subsidiaries. Although the literature suggests that cultural distance leads to ethnocentric staffing patterns, I argue that this decision will lower subsidiary performance since cultural distance will also diminish the ability of parent country nationals to operate successfully in such an environment.

I test my model on a random sample of 52 foreign multinationals operating in the U.S. Although U.S. is the top recipient of foreign direct investment in the world, this population has not been studied in published international staffing studies, and thus is a valuable contribution to the emerging literature on this topic.

The results provide support for both of the research questions. All the three antecedents are significant predictors of the ratio of parent country nationals in the workforce. For the second research question, although there is no direct relation between subsidiary staffing and performance, this relation depends on the cultural distance between the U.S. and the home country. Ethnocentric staffing diminishes subsidiary performance significantly when cultural distance is high

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INTRODUCTION

The growth of global economy as a result of decrease in trade barriers, increased trade, highly mobile capital, and rapid transmission of technology across national borders has been accompanied by an increase in multinational corporations (MNC) that locate operations and employ workers almost anywhere in the world (Bartlett & Ghoshal, 1987, 1988; Freeman, 1995; Porter, 1986). The growth of world trade has been consistently surpassing world production since 1950's (UNCTAD, 2002), and total stock of world's foreign direct investment (FDI) has reached almost \$7 trillion as of 2002. More than 850,000 foreign subsidiaries of about 65,000 parent firms continue to contribute to the world economy everyday (WTO, 2002).

The MNCs playing in this global field continuously face the challenge of responding to opposing demands of being locally responsive to national conditions and integrating global operations for efficiency in order to survive and get ahead of the global competition (Bartlett & Ghoshal, 1987, 1988; Doz, Bartlett, & Prahalad, 1981). Performance of these MNCs depends on their ability to cope with heterogeneous cultural, institutional, and competitive environments, to coordinate their geographically and culturally dispersed human resources, and to leverage innovations across national borders (Carpenter, Sanders, & Gregersen, 2001). The most difficult management challenge facing a MNC is the structuring of the company's internal decision-making process to allow the organization to sense, interpret and respond to tensions and the resolution of the contradictory demands for global competitiveness and national responsiveness (Doz et al., 1981).

Human resource practices are among the organizational practices that can assist MNCs in facing this challenge. Dowling, Welch, and Schuler (1999) differentiate the area of international human resource management from domestic management of human resources by the complexity of issues arising from the need to employ different national categories of workers. Torbiorn (1997) identifies the issue of staffing the MNC with different national categories of workers as one of the strategic issues that needs to be dealt with, within the area of international human resources management. MNC staffing is an important vehicle in terms of establishing and maintaining organizational integration and control over international expansion activities (Balgia & Jaeger, 1984; Konopaske, Werner, & Neupert, 2002). This can be accomplished by configuring the staffing composition of subsidiaries such that parent country nationals (PCNs), host country nationals (HCNs) and third country nationals (TCNs) are appropriately utilized in subsidiaries so that the fit between the subsidiary staffing and its internal and external environment is achieved (Tarique, Schuler, & Gong, 2006). In this thesis, subsidiary staffing is defined as the extent to which PCNs are present in the workforce of the subsidiary.

One of the complexities of managing a MNC is the fact that as the number of subsidiaries of a MNC increases, it becomes increasingly hard for the managers in the headquarters to process information about them and control their worldwide operations (Balgia & Jaeger, 1984). Most of the time, they turn to expatriates who can directly or indirectly control the geographically and culturally dispersed subsidiaries (Harzing, 2001a). Although researchers agree on the set of antecedents that may influence how a subsidiary is staffed (Dowling, et al., 1999; Downes, 1996; Erdener & Torbiorn, 1999;

Rosenzweig & Nohria, 1994; Tarique et al., 2006; Welch, 1994) empirical support relating to different forms of subsidiary staffing and expatriate utilization did not reach consistent results in the past (Boyacigiller, 1990; Gong, 2003a; Harzing, 1996, 2001b; Kessapidou & Varsakelis, 2003; Konopaske, Werner, & Neupert, 2002; Kopp, 1994; Richards 2001; Thompson & Keating, 2004; Tung, 1982) and thus deserves further attention.

While antecedents of subsidiary staffing have been studied leading to mixed results, its organizational outcomes have received very limited attention. Most importantly, the impact of different configurations of subsidiary staffing on subsidiary performance has largely been ignored. Researchers have criticized that that bulk of the literature on international human resource management has focused around expatriate management issues such as selection and training (Gong, 2003a,b; Toh & DeNisi, 2003), and articulated a strong need to empirically link international HRM policies with behavioral and financial outcomes and organization's performance (Schuler, Budhwar, & Florkowski, 2002). One exception to this criticism has been Gong (2003 a,b) who argued that a heterogeneous staffing composition may enhance learning and innovation, and therefore increase subsidiary performance; but also can lead to nationality-based social categorization and identification that can work against subsidiary performance (Gong, 2003a; Toh & DeNisi, 2003). Therefore, the right mix of PCNs, HCNs, and TCNs present in a subsidiary can be sensitive to contextual factors (Jackson & Schuler, 1995; Schuler, et al., 2002; Tarique, et al., 2006).

The contribution of this thesis for the international staffing literature is twofold. First of all, it aims at improving our understanding of the antecedents of subsidiary

staffing which is a research area that has yielded mixed results in the past. This study differs from the previous ones in terms of testing the established frameworks of international staffing on a different population. Although U.S. is the top recipient of FDI in the world (UNCTAD, 2005), earlier studies of subsidiary staffing has either focused on the subsidiaries of Japanese MNCs (Gong, 2003b; Gaur, Delios, & Singh, 2005), explored countries that are not major attractions for FDI such as Ireland (Thompson & Keating, 2004) and Greece (Kessapidou & Varsakelis, 2003), or has specifically excluded subsidiaries that are operating in the U.S. (Harzing, 1996, 2001b) due to the difficulty of collecting data in this population. Therefore, studying subsidiary staffing in the context of U.S. is an important contribution to this field. My first set of arguments that deals with the antecedents of subsidiary staffing is based on transaction costs theory (Coase, 1937; Williamson, 1975, 1979).

The second contribution of this thesis is to examine the relation between subsidiary staffing and subsidiary performance which is an area that has been overlooked in previous research. Thus the second aim of this thesis is to understand whether there is a relation between who manages the subsidiary and how it performs in the U.S. This relation is studied in context by analyzing the extent to which the link between staffing and performance depends on the cultural distance between U.S. and parent country. The second part of my thesis is based on the knowledge transfer perspective of expatriation (Bonache & Brewster, 2001; Hocking, Brown, & Harzing, 2004; Lazarova & Tarique, 2005; Novecevic & Harvey, 2004; Riusala, & Suutari, 2004); and the resource-based view of the firm (Barney, 1991, 2001). The model that will be tested is presented in Figure-1.

SUBSIDIARY STAFFING APPROACHES

Perlmutter (1969) claimed that it was possible to categorize the attitudes of top managers of MNCs towards building their worldwide operations upon which key organizational decisions are made. His conceptualization provides a useful framework for categorizing subsidiary staffing approaches and has been extensively applied to previous international staffing research (Dowling et al., 1999; Harvey, Speier, & Novecevic, 2001; Mayrhofer & Brewster, 1996; Taylor, Beechler, & Napier, 1996; Thompson & Keating, 2004). The first approach Perlmutter (1969) suggests is the ethnocentric approach in which strategic decisions for the subsidiary are managed at headquarters, subsidiaries do not have much autonomy, and key positions at the host locations are filled by PCN expatriates. The second approach proposed by Perlmutter (1969) is the polycentric approach. MNCs that take a polycentric approach to managing and staffing their subsidiaries treat each subsidiary as a distinct national entity with considerable decision-making autonomy. In the polycentric approach, HCNs are in charge of the subsidiary operations. Finally, MNCs that adapt a geocentric approach take a worldwide view to their operations. In a geocentric MNC, PCNs, HCNs, or TCNs can be found in key positions anywhere in the company's operations. Later on, Heenan and Perlmutter (1979) have added another approach to this categorization which they called the regiocentric approach. This approach is an extension of the polycentric one, and MNCs that take a regiocentric approach to staffing their subsidiaries utilize employees mainly from the region in which the subsidiary is located. Among all these approaches, geocentric staffing is proposed to be the ideal one since it aims at leveraging innovation

across borders and achieving local responsiveness and global integration simultaneously (Caligiuri & Stroh, 1995).

In its extreme form, an ethnocentric staffing composition would indicate that a subsidiary is staffed solely with PCN expatriates, and a polycentric staffing composition would indicate that the subsidiary is staffed solely with HCNs. A geocentric staffing composition would indicate a diverse staffing composition in which employees from other subsidiaries of the MNC are represented in the subsidiary, and would range from less heterogeneous to more heterogeneous based on the number and ratio of other nationalities present in the staffing composition (Gong, 2003a). In this thesis, subsidiary staffing is based on Perlmutter's (1969) categorization and is defined as the extent to which PCNs are present in the subsidiary workforce and whether the subsidiary is managed by a PCN or a U.S. national.

Literature Review: Antecedents of Subsidiary Staffing

Antecedents that are proposed to explain and predict the use of expatriates in international management literature can be summarized under home-country related factors, host-country related factors, subsidiary-specific factors, and parent company-specific factors (Dowling et al., 1999; Downes, 1996; Erdener & Torbiorn, 1999; Rosenzweig & Nohria, 1994; Welch, 1994; Tarique et al., 2006). Research that has tapped into the question of how subsidiaries are staffed has been increasing in the last two decades (Boyacigiller, 1990; Gong, 2003a; Gaur, et al., 2005; Harzing, 1996, 2001b; Kessapidou & Varsakelis, 2003; Konopaske, et al., 2002; Kopp, 1994; Richards 2001; Thompson & Keating, 2004; Tung, 1982) and is reviewed below.

The pioneering work of Tung (1982) who conducted her study among the largest MNCs in U.S.A., West Europe, and Japan documented that while MNCs headquartered in Europe and U.S. were likely to use HCNs at the senior, middle, and lower levels of management in developed countries, they were more likely to use PCNs at these levels in less developed countries. Her study revealed the ethnocentric orientation of Japanese MNCs by showing that PCN expatriates were utilized at all levels of the management hierarchy regardless of the region in which the subsidiaries were located. Her study shows the importance of both the subsidiary location and a country-of-origin effect in terms of choosing a subsidiary staffing approach.

Boyacigiller (1990), who has conducted one of the most influential studies in this topic found that complexity of the subsidiary operations, interdependence between headquarters and the subsidiary, cultural distance between home and host countries, political risk and level of competition in the host country were all related to higher utilization rates of expatriates within the subsidiaries of a large multinational U.S. bank. This study reveals that subsidiary specific factors, host country related factors and cultural factors play a significant role in terms of staffing subsidiaries.

Kopp (1994) has replicated the findings of Tung (1982) and reported country-of-origin differences among MNCs in the use of PCN, TCN, and HCNs in the managerial positions of foreign operations. Her study reaffirmed that MNCs that are headquartered in Japan are more likely than both European and U.S. MNCs to fill top management as well as managerial (e.g. supervisory, white collar) positions with PCNs confirming the importance of home country related factors for the choice of subsidiary staffing approach.

Harzing conducted two large-scale studies (1996, 2001b) and one smaller scale (2001b) study that attempted to disentangle the antecedents of using a PCN vs. a HCN managing director. In her 1996 study, she tested propositions put forth by Downes (1996) on a sample of 1480 subsidiaries, and replicated some of Boyacigiller's (1990) findings. Her study documented that political risk in the host country and cultural distance increased the probability of using PCN expatriates as managing directors of foreign subsidiaries. She also reported that HCN managing directors were preferred in host countries that are high on cultural dimensions of individualism and uncertainty avoidance. In 2001, she tested her propositions on 2689 subsidiaries and again found cultural distance, uncertainty avoidance of the home country, level of political stability in the host country, and majority ownership to be positively related to the use of PCN managing directors. A high level of education and high cost of living in the host country was negatively related to the use of PCN managing directors. However, neither of these studies included U.S. subsidiaries of foreign MNCs and U.S. MNCs due to the unconventional approach she collected her data. Because data was collected by inferring the nationality of the managing director from their names, such an approach was not feasible in case of U.S., which is a country of immigrants and thus makes the use of such a technique highly unreliable.

More recently, Richards (2001) has gathered information from the headquarters of 23 U.S. based MNCs and their respective subsidiaries in U.K. and Thailand. Her research has shown that subsidiaries were more likely to be managed by a PCN expatriate if the subsidiary is large, if it is based in Thailand, that is, if there is a greater cultural distance from the U.S., if the marketing theme implemented at the subsidiary location is

similar to U.S., if there is less reliance on contractors in the subsidiary operations, and if they are in the consumer goods industry. It is interesting to note that she also found PCN managers to be employed at subsidiaries that are not integrated with the rest of the MNC and also in subsidiaries with a local customer base.

Gong (2003b) has studied the subsidiaries of Japanese MNCs and found that cultural distance increased the tendency of Japanese MNCs to employ PCN expatriates at the CEO level in the subsidiary as well as increased the ratio of expatriates both at the top management team level and at the workforce level. Furthermore, he showed that this tendency to implement an ethnocentric staffing approach has weakened over time as the subsidiary gained experience in the host environment. Because, his work was only limited to Japanese MNCs who are known for their ethnocentric orientation (Kopp, 1994; Tung, 1982), its generalizability is also limited. Gaur et al. (2005) has also examined the same population, but this time they examined the influence of institutional distance on the choice of staffing strategy. Their study documented that institutional distance is another antecedent that relates to the use of ethnocentric staffing and that it predicts staffing approach more consistently than cultural distance.

Kessapidou and Varsakelis (2003) examined the choice of managing director in the Greek subsidiaries of foreign multinationals. Their results in part contradicted those that were found by Boyacigiller (1990), and Harzing (1997), since they reported that cultural distance from Greece increased the probability of MNCs employing a HCN managing director. They further showed that the larger the size of a subsidiary is, the higher the possibility of the subsidiary being managed by a PCN expatriate.

Most recently, Thompson, and Keating (2004) have investigated the staffing practices of 238 foreign multinationals in Ireland and showed that country-of-origin, industry, level of uncertainty avoidance and power distance of the parent country culture, intensity of R&D, subsidiary age, entry mode, size of the MNC, and degree of internationalization were significantly related to the use of PCN managing directors in these subsidiaries.

The review of this research stream shows that there still exists a research gap in understanding how MNCs choose to staff their worldwide operations, and what factors come into play in their choice. Although this thesis is a modest attempt to improve our understanding in the case of foreign MNCs in the U.S., as Harzing (1996) suggests, only very large scale international studies would be able to fully capture the intricate factors that come into play in the choice of subsidiary staffing.

Theory Development: Transaction Costs and Subsidiary Staffing

Based on the work of Coase (1937), Williamson (1975, 1979) suggested that minimizing the transaction costs related to an exchange between two parties is the basic determinant of organizational structure. In its simplest terms, transaction costs theory is based on the notion that those forms of organizations that are more efficient and have less transaction costs will replace less efficient ones (Robins, 1987). These costs include all kinds of search and information costs related to an exchange, uncertainty in determining appropriate prices for an exchange, as well as the costs of monitoring and enforcing contractual performance of the parties. The basic example of the transactions costs theory is the emergence of a bureaucratic type of organization rather than a market organization, since the former one will be more efficient and less costly in terms of

governing the transactions that are necessary to complete the process of producing goods and delivering services. Still where appropriate, some activities will be carried out by market exchange especially if the activities are not firm-specific, or do not need to be carried out repeatedly. Ouchi (1980) has further argued that clan-like form of organizational control in which the organization is governed by a set of shared values and assumptions among its members (i.e. culture) may even be more efficient than bureaucratic ones especially if the organization is involved in complex and knowledge-intensive work.

Transaction costs theory is among the theories that have been applied to examine managerial choices related to the operations of subsidiaries (Erdener & Torbiorn, 1999; Gong, Oded, Yadong, & Mee-Kau, 2001; Harzing, 2003). The role of transaction costs theory in subsidiary management is that, in the case of MNC-subsidiary relations, the MNC will strive to configure the structure of the subsidiaries such that the transactions costs related to internationalization and controlling the operations in the host environment will be minimized. Such costs relate to searching and finding out relevant information in that location, enforcing the performance of subsidiary employees, and controlling and monitoring subsidiary operations. Given that a MNC 'consists of a group of geographically dispersed and goal-disparate organizations that include its headquarters and the different national subsidiaries' (Ghoshal & Bartlett, 1990: 603), controlling subsidiary operations so that they act in line with overall MNC objectives is a central issue for optimizing transaction costs of internalization (Gatignon & Anderson, 1988).

According to Balgia and Jaeger (1984), MNCs use two types of control over their subsidiaries. The bureaucratic control on the one hand utilizes an extensive set of rules,

regulations, and procedures that clearly limit management's role and autonomy in the subsidiaries. Bureaucratic control is feasible from the transaction costs perspective when relatively accurate and complete information about work processes, behaviors, outcomes, and performance is available (Eisenhardt, 1989). As an alternative, MNCs rely on cultural control through a set of shared values and norms when information about work processes, behaviors, environmental contingencies, and their outcomes are rather uncertain (Balgia & Jaeger, 1984; Ouchi, 1980). Cultural control is achieved by placing a number of expatriates who may either directly control subsidiary operations by acting as mini headquarters or indirectly control the subsidiary based on socialization (Harzing, 2001a). Thus, the number of expatriates present in a subsidiary reflects the level of cultural control a MNC wants to exert on the subsidiary (Konopaske et al., 2002).

The question is what determines whether an ethnocentric staffing approach where PCN expatriates are heavily utilized or a polycentric approach where they are utilized to a lesser extent will be chosen as a more efficient form of subsidiary governance. The form of control that the MNC chooses will minimize the transaction costs of internationalization. In the next part of this thesis, I will develop my first set of hypothesis that is related to the prediction of subsidiary staffing composition based on transaction costs theory.

Cultural distance. Culture is defined as “the shared motives, values, beliefs, identities, and interpretations or meanings of significant events that result from common experiences of members of collectives and are transmitted across age generations” (House, Hanges, Javidan, Dorfman, & Gupta, 2004). Hofstede (1980) has originally identified four dimensions of culture that differentiated national entities. Accordingly,

national cultures differ on the extent to which less powerful members of the organizations expect and accept that power is distributed unequally (power distance), the members of a society are intolerant for uncertainty and ambiguity (uncertainty avoidance), the individuals are integrated into groups (individualism vs. collectivism), and the extent to which they value assertiveness and competitiveness over modesty and caring (masculinity vs. femininity). Hofstede (2001) has later on added a fifth dimension based on Confucian dynamism, which is the long-term orientation and refers to the degree to which a society embraces, or does not embrace long-term devotion to traditional, forward thinking values. Based on his work, the project GLOBE (House et al., 2004) has developed nine dimensions for comparing different cultures of the world. For example, they differentiated between in-group collectivism vs. institutional collectivism and also identified dimensions that were not present in Hofstede's original work such as gender egalitarianism, and performance orientation.

The extent to which these dimensions of culture are different among home and host countries influences the perception of managers in the parent company regarding the transaction costs of using alternative forms of control (Balgia & Jaeger, 1984; Boyacigiller, 1990; Kogut & Singh, 1988). According to Gong (2003: 729):

‘As cultural distance increases, information asymmetry between the headquarters and the subsidiary becomes more serious in that the subsidiary has greater knowledge of its environment, actions, and performance than the headquarters has. As cultural distance increases, complete and accurate information about subsidiary actions and performance becomes more difficult and expensive to obtain, and subsidiary activities thus become harder to interpret, making behavioral and outcome controls by the headquarters difficult.’

Such a context puts extra demands on the information processing requirements of the managers in the headquarters, making it increasingly difficult to take into account all

the contingencies related to that environment and set an extensive list of rules and regulations governing the behavior and output of the subsidiary.

The use of expatriates will minimize costs related to finding out information, and deciding on the solutions, and expected behavior or output for each contingency. Moreover, although the cost of expatriates are significantly higher than employing local nationals, these costs will still be lower than that of searching for information and setting rules and regulations for each type of contingency. Therefore, the headquarters will choose cultural control through a higher utilization of PCN expatriates over bureaucratic control whenever the environment in which the subsidiary operates is uncertain. Moreover, the more uncertain the environment is, the more is the perceived need to control the subsidiary, and as a result, the more ethnocentric the staffing of that subsidiary will be.

Hypothesis 1a: *The greater the cultural distance between the parent country and the U.S., the higher the ratio of parent country nationals in the subsidiary workforce.*

Uncertainty avoidance. Uncertainty avoidance refers to the extent to which the members of a collective seek orderliness, consistency and structure to cover situations in their daily lives. It reflects society's reliance on social norms and procedures to alleviate the unpredictability of future events (House et al., 2004). Hofstede (2001) argued that the cultural dimension of uncertainty avoidance is particularly relevant for the functioning of organizations. Similarly, Harzing (2003) suggested that focusing on individual cultural

dimensions as predictors of organizational modes in foreign markets would be a further development in international studies.

When the managers in the parent company are from a society that is high on uncertainty avoidance, they will have a higher tendency to control the subsidiary operations since they will perceive higher transaction costs if they let the locals run the subsidiary operations. In these cultures, there is likely to be suspicion towards foreigners as managers and a view that employees need to be kept under control. For that purpose, their tendency to have expatriates who act as mini headquarters in the subsidiary location (Harzing, 2001a) will also increase. Therefore I predict that the MNCs which are from high uncertainty avoidance countries will be more ethnocentric in their subsidiary staffing compositions.

***Hypothesis 1b:** The higher the parent country culture is in uncertainty avoidance dimension, the higher the ratio of parent country nationals in the subsidiary workforce.*

Dependence on headquarters. The role of the subsidiary within the MNC can be defined by the amount and direction of the resource flows between the subsidiary and the rest of the organization (Gupta & Govindarajan, 1991). Subsidiaries also vary on the extent to which they are dependent on the headquarters for different types of know-how such as product, process, managerial know-how and inputs such as raw materials or intermediate parts (Rosenzweig & Nohria, 1994). Birkinshaw and Morrison (1995) developed a useful typology that differentiates between three types of roles that is imposed on the subsidiaries which also highlights the extent to which the subsidiary is

dependent on the headquarters. A subsidiary that is a ‘local implementer’ has limited geographic scope, as well as limited product or value-added scope within the MNC and thus is highly dependent on the headquarters and the rest of the MNC for know-how and inputs. A ‘specialized contributor’ has considerable expertise in certain specific functions or activities, but its activities are tightly coordinated with the activities of other subsidiaries. Thus, it is characterized by a narrow set of value activities and high levels of interdependence. ‘The world mandate’ works with the headquarters to develop and implement strategy. Such a subsidiary has worldwide or regional responsibility for a product line or entire business, and is typically not dependent on the headquarters or any other subsidiaries.

When the subsidiary is highly dependent on the headquarters for know-how and inputs, having PCN expatriates who have the MNC-specific knowledge readily present in the subsidiary will help alleviate the transactions costs of operations. Expatriates will be a less costly conduit for transferring the know-how from the headquarters to the subsidiary. Thus, I expect that a more ethnocentric staffing approach will be present in subsidiaries that are dependent on the headquarters.

***Hypothesis 1c:** The more dependent the subsidiary is on the parent company, the higher the ratio of parent country nationals in the subsidiary workforce.*

SUBSIDIARY STAFFING AND PERFORMANCE

Expatriate Roles

International staffing literature offers several categorizations for the nature of expatriate assignments and the reason why MNCs utilize expatriates (Caligiuri, 2004; Edstrom & Galbraith, 1977; Novecevic & Harvey, 2004). The original classification made by Edstrom and Galbraith (1977) suggested that there are basically three motives for international assignments. The first motive is to fill positions, which mainly is about the transfer of technical knowledge to developing countries, where qualified local nationals are not available. Although some argue that host countries are now more advanced economically and socially, and their workforce is becoming more qualified to hold such type of positions that would have required the expertise of the PCNs in the past (Hailey, 1996; Toh & DeNisi, 2003), transfer of firm-specific technical knowledge is still essential for many of the subsidiary operations. Transfers of this type might be of a short-term assignment nature rather than a long-term international assignment to fill in specific technical gaps and this type of assignment's successful completion may require minimal intercultural competence and interaction with local nationals (Caligiuri, 2004).

The second motive for international assignments is management development, which is concerned with exposing a high-potential manager to international experience, and preparing the person for future executive positions. Assignments aimed at management development, are increasingly becoming a part of career development programs specifically for companies who pursue a global management strategy (Caligiuri & Colakoglu, 2005) and are logical in the pursuit of building international management competence (Torbiorn, 1994). These types of assignments require a high degree of intercultural competence (Caligiuri, 2004) since they typically involve responsibilities aimed at controlling the subsidiary operations and/or transfer of tacit knowledge.

The third category is called organizational development (Edstrom & Galbraith, 1977), and this category infers that expatriates are used as part of a coordination and control strategy, and involve more strategic responsibilities than the previous two. Strategic expatriates hold very senior international positions and are sent abroad to fill critical postings (Caligiuri, 2004). Expatriates of this type are required to transfer both tacit and explicit knowledge from the headquarters regarding processes, ways of doing business, corporate culture and values, and control the behavior and the output of the subsidiary against the headquarter expectations.

As a summary, we may conclude that although international assignments occur for a number of reasons, it seems that controlling the subsidiaries either directly or indirectly, and transfer of tacit and explicit knowledge from the headquarters are the main outcomes of these assignments (Bonache & Brewster, 2001; Hocking et al., 2004; Riusala & Suutari, 2004) that can influence subsidiary level outcomes such as performance.

Literature Review: Subsidiary Staffing and Performance

The employment of PCN expatriates to manage overseas subsidiaries may have an influence on both subsidiary performance and the overall MNC performance. Its influence on the MNC performance results from knowledge mobilization across national borders, management development, creation of a common organizational culture, and the emergence of an effective informal information network. Developing an international cadre of managers who have a global mindset and who understand the dynamics of local responsiveness and global integration may be one source of sustained competitive advantage for the MNC (Bonache & Brewster, 2001; Caligiuri & DiSanto, 2001; Kobrin,

1988) that is valuable, scarce, inimitable and non substitutable (Barney, 1991). For example, Carpenter et al. (2001) had found that the CEO's international assignment experience improved MNC performance. Caligiuri and Stroh (1995), in their examination of the relation between Perlmutter's (1979) four management approaches and MNC performance, found ethnocentric companies to be less successful than companies operating under geocentric, polycentric, or regiocentric strategies. These results are also justified by Hocking et al.'s (2004) finding that expatriate learning is a significant emergent outcome of international transfers which might be transferred into improved MNC performance in the long run.

However, the use of expatriates has more immediate and readily observable effects on the subsidiary performance. According to Gong (2003a), heterogeneity of staffing has affective, behavioral, cognitive, and strategic outcomes, which in turn affects subsidiary financial performance either positively and negatively. The employment of PCN expatriates can indeed have both performance enhancing and performance inhibiting effects depending on contextual factors and the fit between the staffing approach and the contextual variables. Therefore, I do not posit a direct relation between subsidiary staffing and performance and argue that this relationship depends on contextual factors.

Although, there are only a few empirical studies that examine the relation between subsidiary staffing and performance, the mixed evidence that has accumulated supports the notion that contextual factors need to be considered in this relationship. For example, Konopaske et al. (2002) found support for the interactive effect of the mode of entry and staffing approach on subsidiary performance of Japanese MNCs. Specifically,

they found that ethnocentric staffing in joint ventures relates negatively to subsidiary performance and ethnocentric staffing in wholly owned subsidiaries relates positively to subsidiary performance. Richards (2001), in her comparison of the subsidiaries of U.S. MNCs in U.K. and Thailand found that locally managed subsidiaries in Thailand were more successful than expatriate-run ones because of the higher cultural distance between U.S. and Thailand, compared to U.K. and U.S. Gong (2003b) reported that ethnocentric staffing has a positive effect on subsidiary performance as cultural distance increases and that this effect diminishes over time as the host country learns from the parent country. Most recently, Gaur et al. (2005) documented that a higher proportion of PCN expatriates in the workforce in institutionally distant environments hindered the performance of subsidiaries, while the employment of PCN managing directors aided performance in the same type of environments. Interestingly, Harzing (2001b) hypothesized that the lower performance of the subsidiary with respect to other subsidiaries in the MNC would be positively related to the use of PCN managing directors and documented significant results in this respect. Still in her footnotes, she questioned the causality of her argument by asking whether it could be the case that PCN managing directors were leading to lower performance. Collectively this evidence suggests that we need a better understanding of the relation between subsidiary staffing and performance and the contextual factors that are important in moderating this relationship.

One reason for why the evidence is mixed other than the fact that this stream of literature has recently started to emerge is the lack of adequate theory which sheds light on this relationship and the appropriate moderators that need to be taken into account. These studies either lacked theory development (Richards, 2001) or used theories such as

agency theory and institutional theory (Gaur et al., 2005; Gong, 2003b). In developing my own hypothesis and choosing the moderator, I rely on the knowledge transfer perspective of expatriation (Bonache & Brewster, 2001; Hocking et al., 2004; Novecevic & Harvey, 2004; Lazarova & Tarique, 2005; Riusala & Suutari, 2004) as well as the resource based view of the firm (Barney, 1991) since these perspectives are well-suited for understanding this relationship.

Theory Development: Subsidiary Staffing, Knowledge Transfer, and Performance

Expatriates transfer firm-specific tacit and explicit knowledge to the subsidiaries regarding corporate culture, values, management style, ways of conducting business, and core competencies of the headquarters that make it successful. Hocking et al. (2004) identified the types of knowledge being transferred by expatriates as managerial and professional know-how application, technology innovation transfer, culture transfer, policy transfer, and best practice systems transfer. However, in order to create a competitive advantage in the subsidiary location, expatriates not only need the firm-specific knowledge that they already possess, but also depend on host country specific knowledge about the local market, customer preferences, and culturally acceptable management techniques (Gong, 2003a). If integration of the knowledge base of expatriates with the local tacit knowledge residing in HCNs is achieved, this resource can be valuable, inimitable, scarce, and non-substitutable (Harvey & Novecevic, 2004) resulting in a source of sustained competitive advantage in the local market and increased performance (Barney, 2001). Some studies that empirically support this argument show that performance of subsidiaries are superior to that of domestic firms because of possessing firm-specific advantages of the MNC (Globerman & Meredith, 1984).

Interestingly, this relationship does not specifically hold when foreign MNCs operating in the U.S. are compared to their local counterparts. Empirical evidence suggests that financial performance of foreign MNCs in U.S. are consistently lower than U.S. owned firms (Kim & Lyn, 1990); an indication that the U.S. market poses specific challenges even for MNCs that are successful elsewhere. U.S. market is thought to be one of the toughest markets in the world, both because of its vast size and because of the highly aggressive behavior of competitors. In their book about the performance problems experienced by foreign multinationals in the U.S., Jones and Galvez-Munos (2001) reveal that falling market shares, declining profits, and sudden removal of foreign-owned companies from the S&P 500 are not unique to a few MNCs, but that many of the world's leading MNCs experience acute control, managerial, and performance problems in U.S. Furthermore, they argue that one of the major challenges that contribute to the performance problems of these foreign MNCs is that they find it particularly hard to transfer knowledge from the outside world to the U.S.

Based on the knowledge-transfer perspective and the resource-based view, it is the ability to integrate local and global knowledge bases that can boost performance and create the competitive advantage for the subsidiary. Although, it is relatively easier to transfer explicit knowledge, tacit knowledge is difficult to convey, and its transfer requires greater effort and strong ties between the units in which knowledge transfer and integration takes place (Reagans & McEvily, 2003). At the subsidiary level, most of the knowledge that needs to be integrated is not explicit, but relates to values, culture, and management style that are tacit in nature. For the case of MNCs in U.S., preliminary evidence suggests that it is especially difficult to transfer knowledge to U.S. subsidiaries

and that there are control and management problems both due to the unique market conditions as well as due to the American managers who are highly-achievement oriented and find it hard to see their future in a foreign-owned firm (Jones & Galvez-Munos, 2001). These problems in integrating knowledge could be even more prevalent when there is a high cultural distance between U.S. and the host country. Therefore, the target contextual variable that I will explore in this thesis is cultural distance since I argue that MNCs are faced with an interesting dilemma when it comes to staffing culturally distant locations. Although they tend to deploy more expatriates to culturally distant locations, this tendency may also diminish the subsidiary performance due to the reasons I provide in the next section.

Moderator: cultural distance. The problems arising from the use of expatriates and the emotional conflict that arises in multicultural teams due to cultural and language differences are widely recognized in the literature (Dowling et al., 1999; Kopp, 1994; Von Glinow, Shapiro, & Brett 2004). Friction among PCNs and HCNs can be amplified when there is also a lack of understanding due to cultural differences (Joshi, Labianca, & Caligiuri, 2002). According to Armstrong and Cole (1996), cultural distance does not always create conflict but simply increase its likelihood. Even in cases where the friction is minimal, it will be difficult to transfer tacit knowledge due to cultural and language barriers between these two groups and integrate their knowledge effectively. As the cultural distance between the home and host country increases, problems associated with the use of expatriates can be amplified and work against knowledge integration and subsidiary performance.

Other than the cultural barriers that can impede knowledge integration between the two groups, another problem associated with the use of expatriates is the visible differences in the compensation packages between PCNs and HCNs that can lead to unintended consequences (Toh & DeNisi, 2003). On average, expatriates cost employers two to five times as much as home-country counterparts and frequently ten or more times as much as local nationals in the country to which they are assigned (Reynolds, 1997). Especially in cases where cooperative behavior is vital for team output, pay compression is essential (Lazear, 1991; Levine & Tyson, 1990). Compensation packages that are closer across the organizational hierarchy create an egalitarian climate and increase the likelihood of cooperation. Similarly, expatriates need full cooperation from HCNs in order to integrate the local and the global knowledge bases. However, these pay differences are likely to lead to reduced cooperation on the part of the HCNs, because of the perceived inequality in terms of compensation packages. HCNs may question whether the expatriates are actually producing as much as their paychecks and tend to withdraw or reduce effort if. As the cultural distance increases, the expatriates will be a more salient referent group for the comparison of compensation packages (Toh & DeNisi, 2003). This perceived inequality may further lead to withdrawal of any cooperative effort on the side of the HCNs and impede knowledge integration.

A third problem associated with the use of expatriates which is another barrier for knowledge integration is the duration of assignments that typically last for two to three years (Dowling et al., 1999). However, learning the country-specific ways of conducting business takes time. Although expatriates can adjust to a life in a new country in a shorter period of time, it requires more time to understand the dynamics of conducting

business in the local market and developing relations with clients, colleagues, and suppliers (Hailey, 1996). More than the adjustment, which is typically the focus of cross-cultural training programs, the ability to conduct business is the key to success for any international assignment. According to Kobrin (1988), the reduction of U.S. expatriates in the worldwide operations of MNCs is not a sign that these MNCs are at a more advanced stage of internationalization, but is due to the fact that U.S. expatriates were unsuccessful in adapting to these culturally distant locations, and MNCs had to get out of the 'expatriate business'. Although there is a debate surrounding the claim of high failure rates of U.S. expatriates (Harzing, 1995), Dowling, et al. (1999) suggests that the length of assignment can be a factor that contributes to or provokes failure. They argue that the average assignment for Japanese firms is four to five years, compared to two to three years for American firms, and the longer assignment allows the Japanese expatriates more time to adjust to the foreign situation. Even though the expatriates may have the right personality to adapt to a new country and have the right competencies to do the job, as the cultural distance increases, it gets more difficult and they need more time to understand the local dynamics of the business environment as well as the locals do.

In this sense, MNCs face a paradox when they staff culturally distant countries. The cultural distance paradox arises from the tendency that even though MNCs may have an urge to increase the level of control they have on culturally distant subsidiaries, cultural distance will also magnify these performance inhibiting effects of expatriates that were discussed in this section.

Hypothesis 2: *Cultural distance interacts with subsidiary staffing in affecting subsidiary performance: The greater the cultural distance, the lower the*

performance of subsidiaries that have a higher ratio of parent company nationals in their workforces.

METHODS

Target Sample

Directory of Foreign Firms Operating in the U.S. was used as the main source for selecting companies to be included in this thesis. The directory lists about 7,200 subsidiaries located in the U.S. that are owned wholly, or in part, by 2,800 foreign firms from 79 countries. The number of companies that were randomly selected for inclusion in this study was 300. The directory has limited information about each subsidiary including industry, name of the managing director, name and country-of-origin of the parent company, and contact information. Each of the selected companies was contacted by phone to identify the name of its HR Manager in order to personalize the invitation letters; since personalization of a letter is suggested to increase response rate (Harvey, 1987; LaGrace & Kuhn, 1995). HR Managers were selected as respondents because they typically have the kind of factual information required in this study (e.g. number of expatriates) and knowledgeable about relations with parent company and how the subsidiary is performing. Out of the 300 companies contacted, contact name for 237 companies were identified. The letters were sent to the ‘Director of Human Resources’ when a name was not identified and to the ‘Managing Director’ if I was informed that the subsidiary did not have a ‘Director of Human Resources’ position.

Survey Procedure

In the first round of the data collection process, an invitation letter and a research proposal were sent to 27 companies indicating the purpose of the study and declaring that

they would be contacted to set up a phone interview. The invitation letter and the research proposal is attached in Appendix-1 and 2. Out of the first 27 companies, data was collected from six. However, respondents preferred to fill out a soft copy of the survey over an interview and data was collected by sending the surveys to the respondents by e-mail. Therefore, I decided to use an online version of the survey in the second round of data collection.

In the second round of the process, an online version of the survey was created and the initial mailings included the link to the online survey. The second version of the letter sent to the companies is attached in Appendix-2. One week after the first letters were sent, reminders were mailed including similar information contained in the first letter. One week after the second letters, another set of reminders was sent to those companies that a contact name was not available and follow-up phone calls were made to the rest of the companies. A voice mail was left to those individuals that could not be reached after calling two times and those that could be reached were reminded personally.

Respondents

There were 19 undeliverable surveys and the total number of usable surveys was 52 yielding to a response rate of 18.5 %. It is interesting to note that the response rate generated from personalized letters were 20 %, while the response rate generated from letters that were sent to companies without identifying a contact name was only 4%, confirming the importance of personalization in mass mailings (Harvey, 1987; LaGrace & Kuhn, 1995). For example, although the final follow-up phone calls generated an

increase in the response rate, no responses were received from the companies that a third letter was sent.

The final response rate of 18.5 % compares favorably to the 10-12 % response rates typical for mailed surveys to top executives of American firms (Hambrick, Geletkanycz, & Fredrickson, 1993). However, there is some evidence that online surveys generate lower response rates than traditional mail surveys because of lower trust in the data collection process (Birnbaum, 2004; Cerdin & Peretti, 2004).

The mean size of the workforce of the sample is 278 (s.d. 633.21) and the mean age of the subsidiaries is 24.19 years (s.d. 22.19). Table-1 shows the distribution of respondents in terms of their country-of-origin and Table-2 exhibits the industries that were represented in the sample. Overall, the subsidiaries were from 18 different countries, and the random sampling allowed for a representative distribution among countries in terms of their investment in the U.S. The subsidiaries that were involved in manufacturing made up 48 % of the population and the service sector made up 51 % of the sample. An analysis of the industries in terms of Kobrin (1991)'s measure of global vs. multidomestic showed that most of these industries can be classified as multidomestic since intrafirm transactions account for less than 25% of international sales in these industries. The only industries that can be classified as global within the sample are 'chemical manufacturing' and 'electronics and components manufacturing' industries which make up 5.7 % of the sample.

Measures

Subsidiary staffing. In the survey instrument, an expatriate was defined as “an employee of the subsidiary who has been transferred to the U.S. operations from the headquarters or from another subsidiary for an extended period of time.” Because MNCs are increasingly opting for localizing expatriates and thus lowering their high compensation costs (Dwyer, 2004), respondents were also instructed to include those employees that either stay in the U.S operations for a fixed period of time with a typical expatriate contract and those employees that are localized in the U.S. operations. Subsidiary staffing was measured at two different levels: At the managing director level, and at the workforce level.

Based on Gong (2003), Konopaske et al. (2002), and Boyacigiller (1990), subsidiary staffing at the workforce level was measured as the ratio of PCN expatriates in the workforce.

Subsidiary performance. Based on Taggart (1999), and Andersson, Forsgren, & Holm (2002), respondents were asked to report on the subsidiary’s performance against industry norms with respect to sales volume, profitability, and market share on a scale of five (1=well below industry norm; 5 = well above industry norm). Respondents were also given a ‘not applicable’ option in case a performance dimension is not relevant for that subsidiary’s goal. By asking the respondents to assess performance with respect to industry norms, the effect of industry on performance was also controlled for. Respondents were also asked to report on the subsidiary’s performance against parent company’s expectations on a scale of five (1 = well below expectations, 5 = well above expectations). The performance measure was an average of all the applicable dimensions. Cronbach’s alpha for this measure was .86 indicating high reliability.

Cultural distance. Cultural distance between U.S. and the country-of-origin of the parent company was measured using Kogut and Singh's (1988) established measure of cultural distance. In order to calculate the CD index, Hofstede's (2001) country scores on the dimensions of power distance, uncertainty avoidance, individualism, and masculinity were used.

Cultural distance index is formed based on the deviation along each of the four cultural dimensions of each country from the U.S. ratings. The deviations are corrected for differences in the variances of each dimension and then arithmetically averaged. Algebraically, the following index is formed:

$$CD_j: \sum_{i=1}^4 \{(I_{ij} - I_{iu})^2 / V_i\} / 4,$$

where CD_j is the cultural distance of the J th country from U.S.A., I_{ij} stands for the i th cultural dimension of the J th country, V_i is the variance of the index for the i th cultural dimension and u indicates the host country U.S.A.

Uncertainty avoidance. Hofstede (2001)'s scores on the uncertainty avoidance dimension of the national culture of the MNC's country-of-origin was used.

Dependence on headquarters. This construct was measured using Rosenzweig and Nohria's (1994) measure. The respondents were asked to report on the extent to which the subsidiary is dependent on the parent company for product know-how, process know-how, managerial know-how, and inputs such as raw materials and intermediate parts (1= highly independent, 5=highly dependent). Dependence was measured as the average of four items and Cronbach's alpha was .77 for this measure.

Power Analysis

Statistical power analysis exploits the relationships among the three variables involved in a statistical inference: sample size, significance criterion, and population effect sizes (Cohen, 1992; Seldmeier & Gigerenzer, 1989). A review of the reported effect sizes among the variables of interest in earlier studies (Boyacigiller, 1990; Gong 2003a; Konopaske et al., 2003) revealed a population effect size that is considered to be medium by Cohen (1992). The number of independent variables that will be entered in the regression equation for both of the hypothesis is three. In order to achieve a power of .80 with three variables at $\alpha = 0.05$, a sample size of 84 is required (Cohen, 1992). However, since this study is an exploratory one, I will use a less rigorous standard for the rejection of null hypothesis than the traditional significance levels of $\alpha = .01$, and $\alpha = .05$. For such exploratory studies, Cohen (1992) suggests using $\alpha = 0.10$ as appropriate.

At $\alpha = 0.10$, with three variables, and a medium population effect size which is estimated to be around .15, my sample size of 52 results in a power of .60 (Cohen, 1977). This indicates that I have a 60 % chance of detecting the medium effect size that I believe to exist in the population, and a 40 % chance of engaging in a Type II error by not finding evidence against the false null hypothesis. Although this power is lower than the accepted power level of .80, it still compares favorably to the median power of published studies in the behavioral sciences which is estimated to be around .37 (Seldmeier & Gigerenzer, 1989).

RESULTS

Preliminary Analysis

Prior to analysis, all variables included in the study were examined for accuracy of data entry, missing values, outliers and the fit between their distributions and the

assumptions of regression analysis. Using ratio of PCN expatriates as the dependent variable in an ordinary least squares regression may violate regression assumptions and may create spurious relationships (Cohen & Cohen, 1983). To avoid this problem and to stabilize the variance in this variable, an 'arcsin' transformation of the ratio of expatriates was performed and used in subsequent analysis (Kleinbaum, Kupper, Muller, & Nizam, 1998).

Table-3 presents the means, standard deviations, and the zero-order correlations of the variables included the analysis. A total of 44 % of the subsidiaries have managing directors who are PCNs. Subsidiaries in the sample have an average of 7.8 % PCN expatriates in their workforce.

In the first hypothesis, it was predicted that cultural distance, uncertainty avoidance dimension of the home country and dependence on headquarters would be related to subsidiary staffing. Observation of the zero-order correlations indicate that the correlations between the ratio of PCNs in the workforce and cultural distance, uncertainty avoidance, and dependence on headquarters are all significant ($r = .28, .54, .43$; $p < .05, .01, .01$ respectively); providing preliminary support for the first hypothesis at the workforce level. In the second hypothesis, it was predicted that the relation between subsidiary staffing and performance will depend on cultural distance. Although there seems to be an overall negative relationship between the ratio of PCNs in the workforce and performance ($r = -.15$) as well as cultural distance and performance ($r = -.01$), both of these correlations fell short of reaching significance.

Regression Analysis

Hierarchical regression analysis was used to test Hypothesis 1a, b, and c at the workforce level. Models 1 through 3 in Table 4 presents the results of this analysis. In hierarchical regression, order of entry should be determined by theoretical importance and the coefficients should be interpreted at the point of entry (Tabachnick & Fidell, 2001). Therefore, regression coefficient of each predictor will be interpreted as they enter the model. In hypothesis 1a, it was predicted that cultural distance would be positively related to the ratio of PCN expatriates in the workforce. The coefficient of cultural distance variable and the model was significant. Thus, this hypothesis was supported ($F = 4.55$, $p < .05$). In hypothesis 1b, it was predicted that uncertainty avoidance would be positively related to the ratio of PCN expatriates in the workforce. This variable was entered in the second step of the analysis. The coefficient of uncertainty avoidance, the overall model and the change in R^2 was significant supporting hypothesis 1b ($F = 10.05$, $p < .001$). In hypothesis 1c, it was predicted that dependence on headquarters would be positively related to the ratio of PCN expatriates in the workforce. The coefficient of dependence on headquarters, the overall model and the change in R^2 in the final step were all significant providing support for this hypothesis ($F = 11.41$, $p < .001$). The final model with the three predictors explains 42 % of the variance in the arcsin transformation of ratio of PCNs in the workforce ($p < .001$).

In hypothesis 2, it was predicted that cultural distance would moderate the relation between subsidiary staffing and performance such that a higher ratio of PCN expatriates in the workforce would lead to lower performance when cultural distance is high. In order to test this hypothesis, the variables cultural distance and the arcsin transformation of ratio of PCN expatriates were centered to decrease collinearity between

these variables and their product term (Aiken & West, 1991; Cohen & Cohen, 1983). The moderation effect is present when the addition of the interaction term to the model that contains the independent variables significantly increases R^2 ; and the coefficient of the interaction terms is significant. Table-5 presents the results of this analysis. In step one, the independent variables were entered, in step two, the interaction term was entered. After entering the interaction term, the change in R^2 , and the coefficient of the interaction term was significant ($p < .10$) lending support for hypothesis 2.

Probing the interaction. In order to increase the interpretability of the interaction effect, the regression equation was solved for high and low levels of cultural distance and then plotted on a graph (Aiken & West, 1991). For two-way interactions, regions of significance are values of the moderator for which the simple slope of the dependent variable on the independent variable is statistically significant (Preacher, Curran, & Bauer, 2003). According to Curran, Bauer, and Willoughby (in press), computing regions of significance can be more powerful than picking arbitrary values of the moderator at which to examine the significance of simple slopes. Calculation of the significant region (Preacher et al., 2003) revealed that the slope of subsidiary performance on the ratio of expatriates were significant at $p < .05$ between cultural distance values of 1.17 and 2.48. Figure-2 shows that the slope of subsidiary performance on ratio of expatriates decreases at a much higher rate when cultural distance is low. Overall, as cultural distance increases by one unit, the slope of subsidiary performance on the arcsin transformation of ratio of PCNs decreases by .93 units.

POST HOC ANALYSIS

Antecedents of Subsidiary Staffing

Uncertainty avoidance. The analysis in the results section revealed a high correlation between the independent variables cultural distance and uncertainty avoidance ($r = .43, p < .01$). Such a high correlation may confound the findings and indicates that the information contained in these two independent variables overlap significantly (Tabachnick & Fidell, 2001). Due this overlap, the regression coefficient of cultural distance becomes insignificant when uncertainty avoidance is entered in the equation since none of the variables get credit for the overlapping variance at this stage. This may be in part due to the fact that the ‘uncertainty avoidance’ score is represented as a constant in the ‘cultural distance’ score for each country. Since ‘cultural distance’ is the main theoretical focus of investigation in this study, a decision was made to drop the ‘uncertainty avoidance’ variable.

Control variables. In order to strengthen the conclusion that cultural distance significantly impacts the ratio of expatriates in a subsidiary, two control variables were added: Age of the subsidiary and the complexity of subsidiary operations. Age of the subsidiary has been suggested to be related to the use of expatriates in earlier studies (Delios & Bjorkman, 2000; Gong, 2003b; Thompson & Keating, 2003). MNCs may rely on a greater number of expatriates to transfer knowledge at the earlier stages of an operation and thus deploy more expatriates to the host location at this stage. Their reliance on expatriates may diminish as the subsidiary learns from the parent company and as learning takes place in the host environment. Age of the subsidiary was measured as the number of years a subsidiary has been present in the U.S.

A second variable that may be related to the use of expatriates in a subsidiary is the complexity of subsidiary operations (Boyacigiller 1990; Thomposon & Keating, 2003). If the subsidiary is functionally complex such that it encompasses a number of different functions ranging from production to R&D, MNCs may govern this complexity by sending out a greater number of expatriates. Based on Thompson and Keating (2003), a simple summated rating was created (Bartholomew, 1996) by adding the number of functions a subsidiary has. The functions included in the list were: 1) Production/Manufacturing, 2) Sales, 3) R&D, 4) Regional Headquarters, 5) Call Center, 6) Shared Services. Even though some functions may be strategically more important or complex than others, there is no natural ordering of these functions and therefore have not been considered in the creation of the index. The possible values of this index ranged from 1 to 6. The average complexity score for the subsidiaries was 1.76 (s.d.= 1.40)

Regression analysis. Hierarchical regression analysis was performed to test the impact of cultural distance on the ratio of expatriates after removing uncertainty avoidance from the analysis and after controlling for the age and complexity of the subsidiary. Table-6 presents the results of the new analysis. Control variables of age and complexity were first entered into the equation. None of them were significantly related to the arcsin transformation of the ratio of expatriates. Cultural distance was significantly related to the dependent variable after controlling for age and complexity of the subsidiary ($F = 2.91, p < .05$). Dependence on HQ was again a significant predictor of the ratio of expatriates in the workforce ($F = 4.40, p < .01$). The final model explained 28 % of the variance in the arcsin transformation of ratio of PCNs in the subsidiary.

While this alternative model removed the possible confounding effect of uncertainty avoidance on cultural distance and strengthened the conclusion that cultural distance plays an important role in the use of expatriates, the removal of uncertainty avoidance led to a 14% decrease in the variance explained by the overall model. The results of the two models signify the importance of cultural forces when staffing subsidiaries.

DISCUSSION

Research Implications

This study found that cultural distance, uncertainty avoidance of the home country, and dependence on headquarters increase the propensity of staffing subsidiaries with more PCN expatriates. Moreover, these variables predict the use of expatriates even after controlling for the age of the subsidiary as well as the functions embedded in it. The most interesting of the findings is that the propensity to adopt an ethnocentric staffing approach in culturally distant locations hinders performance of the subsidiaries at the same time. Given that a majority of the earlier studies have also found cultural distance to be related to ethnocentric patterns, this thesis reveals that many multinationals may be at a performance disadvantage at culturally distant locations where a greater number of expatriates are deployed. This study shows that MNCs take into account transaction costs when staffing subsidiaries and adopt an approach that is thought to minimize the transaction costs of operating in a novel environment (Coase, 1937; Williamson, 1975, 1979). At the same time, it also shows that the calculation of transactions costs may not always be accurate since human beings have limited information processing capability and thus take cognitive shortcuts to solve complex problems (Fiske & Neuberg, 1990),

such as managing and coordinating the geographically and culturally dispersed operations.

While this study replicates some of the earlier findings of antecedents of subsidiary staffing in the case of foreign MNCs in the U.S. (Boyacigiller, 1990; Harzing 1996, 2001b, Gong 2003b); with respect to the relation between subsidiary staffing and performance, it contradicts earlier findings. When this relation was studied by Gong (2003b) and Gaur et al. (2005), it was reported that the interaction between the ratio of PCNs and cultural distance was positive and significant for the subsidiaries of Japanese MNCs. One reason for this contradiction may be the presence of superior Japanese product, process, and management know-how that is being effectively transferred along with a Japanese expatriate team (Adler, 1999; Jenkins & Florida, 1999; Johnson & Ouchi, 1974; Ouchi, 1981).

It is also worth noting that even though the relation between ratio of expatriates and subsidiary performance was not significant when cultural distance was not accounted for, the overall pattern is that a greater use of expatriates in the U.S. decreases performance. This finding may result from the difficulty foreign MNCs are experiencing in transferring knowledge to the U.S. subsidiaries (Jones & Galvez-Munos, 2001) which increases further as cultural distance increases. Even for the Japanese MNCs which seem to be effectively transferring knowledge through the use of expatriates in general, there is evidence that they encounter serious knowledge transfer problems in their U.S. operations (Fucini & Fucini, 1990; Milkman, 1991; Kenney & Florida, 1993). Therefore, it is imperative to conduct research that explicitly taps into the question of how knowledge is being transferred via the expatriates to the U.S. subsidiaries and the

problems that MNCs face in this regard. In addition, the impact of an ethnocentric subsidiary staffing on HCNs and its impact on knowledge integration can be further explored within this picture.

Another reason for this pattern may be that a greater use of expatriates is an indication of an overall ethnocentric attitude on the part of MNCs that does not reflect well on the performance of U.S. subsidiaries. After all, U.S. culture is geared toward individualism (Hofstede, 1990) and independence that may not respond well to 'headquarter imperialism' (Briscoe & Schuler, 2004). This tendency is also in line with Caligiuri and Stroh (1995) who reported ethnocentric companies to be less successful than geocentric or polycentric ones. However, as Mayrhofer and Brewster (1996) suggest many MNCs are having difficulty empowering their individual subsidiaries or making the transition to a geocentric mindset.

Earlier studies as well as this study suggest that the relation between subsidiary staffing and performance is not a direct one, but rather depends on contextual factors (Gong, 2003a; Gaur et al., 2005). In this study, I exclusively explored the role of cultural distance since I argued that it presents a dilemma for MNCs and is a theoretically important construct. Future studies can explore the fit between staffing strategy and other contextual variables. The fit between subsidiary staffing and subsidiary-specific factors such as mode of entry, the role of the subsidiary or MNC-specific factors such as industry, strategy, and state of internationalization can be topics for future research. Also it may be interesting to see the impact of the fit between subsidiary staffing and expatriate management practices on subsidiary performance. One can argue that the fit between subsidiary staffing and effective expatriate management practices could increase

performance. As a result, this modest attempt to disentangle antecedents of subsidiary staffing and its relation to subsidiary level outcomes opens up the door for more interesting and fruitful research avenues.

While this study is not an exception in terms of excluding TCNs from analysis, the negligible amount of TCNs that were present in subsidiaries makes the analysis of the antecedents and outcomes of using geocentric staffing patterns not meaningful. While lack of TCNs in subsidiaries may indicate that many of the foreign MNCs in the U.S. are not at an advanced stage of internalization, it is important for future studies to focus on their presence. Using a geocentric staffing pattern may have different antecedents (such as a global or a transnational strategy) than the extent of ethnocentricity of staffing. Moreover, a geocentric staffing pattern may have more positive performance outcomes than ethnocentric staffing patterns.

Practical Implications

Expatriates play a significant role in transferring firm-specific tacit knowledge to the subsidiaries, and are needed for better performance on both the subsidiary and the MNC level. However, cultural distance between different categories of employees (i.e. PCNs, HCNs) can inhibit the performance facilitating effects of expatriates as the results of this study suggests. Based on the findings of this study, there are three practical implications for MNCs.

First of all, MNCs need to find out ways to effectively transfer knowledge among different groups of employees especially in culturally distant subsidiaries and take measures to increase cooperation, coordination, and communication among them. For example cross-cultural training that is typically offered to expatriates can also be offered

to HCNs to increase their understanding of the MNCs home culture and increase their awareness of cross-cultural issues. Therefore, rather than focusing exclusively on expatriate assignment management, the focus of HR departments in MNCs need to shift to managing the relation between different national categories of employees as well as developing knowledge integration practices.

Another practical implication that may alleviate this performance problem can be to focus on effectively localizing subsidiaries in culturally distant locations. One goal for such subsidiaries can be to speed up the process of transferring MNC specific knowledge to the HCNs such that the subsidiary is no longer dependent on PCNs. Effective localization means that local talent who has an understanding of the MNC ways of doing business is being developed. Such an objective of mentoring and developing local successors can be incorporated in the performance management process of PCN expatriates.

Third of all, even if compressing the pay levels between HCNs and PCNs is not a feasible objective, the perceived opportunities to advance in the MNC can decrease the level of frustration of the HCNs, and facilitate increased communication among these groups. Therefore, geocentric, and regiocentric approaches to staffing can be better in terms of utilizing different knowledge bases.

Limitations

Although, this study has important contributions to the international staffing literature, it is not without its limitations. First of all, even though the sample is representative of the foreign MNCs in the U.S., the modest sample size poses some problems in terms of the power of the statistical analysis and engaging in Type II error.

Future studies can replicate the findings of this study on a larger sample of the same population. Second, only foreign MNCs operating in the U.S. were included in the study. Therefore, its generalizability to other MNCs operating in other countries is also limited.

The cross-sectional design of the study also may pose some limitations. The positive or negative impact of subsidiary staffing on performance may not always be immediate, but may take time to materialize. Therefore, the results should be interpreted with this alternative possibility in mind and future attempts may use a longitudinal design to capture the effect of time.

One other limitation can be the use of a subjective performance measure. However, it is notoriously difficult to get objective subsidiary performance data (Andersson, Forsgren, & Pedersen, 2001) and subjective measures of performance are shown to be positively associated with objective measures (Wall et al., 2004) and are frequently used in HR research (e.g. Delaney & Huselid, 1996). Indeed, the use of a subjective measure can capture the multidimensional nature of this construct better than objective financial measures (Gilley & Rasheed, 2000; Rogers & Wright, 1998). With the use of a subjective performance measure, it was possible to assess organizational performance from a financial/accounting point of view (profitability and sales), product/market point of view (market share), and from the headquarters' point of view (headquarter expectations). (Andersson et al., 2001; 2002; Harvey et al., 2001; Taggart, 1999). Future studies can use objective and subjective measures of subsidiary performance jointly.

Harzing (2003) criticizes the myopic use of the cultural distance concept especially in entry mode studies and argues that alternative distance concepts such as

psychic distance, institutional, geographical, or language distance need to be taken into account in such studies. However, studies that cluster countries based on cultural dimensions reveal that all these concepts are intricately related and culture could be capturing or overarching these alternative distance concepts. For example the GLOBE project has grouped countries in ten cultural clusters. Similarly, Ronen and Shenkar (1985) has also grouped countries into eight clusters based on former studies that compared and examined work values among a number of countries. An examination of both of the cluster studies show that countries that end up being in the same cultural cluster are also similar in terms of institutional, environmental, geographic distance, as well as religion, and language. Therefore, cultural distance concept can still be capturing a great extent of most of the alternative distance concepts.

The final point that researchers can try to improve in future studies is to use alternative measure that captures cultural distance. The use of cultural distance index as developed by Kogut and Singh (1989) has been under criticism for several reasons (Harzing, 2003; Kirkman, Lowe, & Gibson, in press; Shenkar, 2001). According to Shenkar (2001), the main assumptions tied to the methodological properties of this index are corporate homogeneity and spatial homogeneity. Corporate homogeneity refers to the lack of corporate culture variance and spatial homogeneity refers to uniformity within one national unit. While the use of cultural distance measure as is improves the comparability of findings with previous international staffing research that has relied primarily on this measure, future studies can try to incorporate suggestions to improve the measurement of cultural distance concept. Such suggestions include supplementing the

index by cognitive cultural distance measures (e.g. Boyacigiller, 1990) or using conjunction measures that do not assume linearity (e.g. Ronen and Shenkar, 1985).

CONCLUSION

In this thesis, I have attempted to contribute to the international staffing literature by studying the PCN expatriate usage patterns of foreign multinationals operating in the U.S. I have shown that established frameworks of subsidiary staffing also applies to the U.S. context and that MNCs take into account transaction costs of operating in the U.S when staffing their subsidiaries. Another contribution of this thesis has been to respond to the calls that urge international HR researchers to examine links between international HR practices and organizational performance (Schuler et al., 2002). This thesis showed the importance of cultural distance as it moderates the relation between the use of expatriates and subsidiary performance. My results indicated that overall there is a negative relation between the ratio of expatriates in a subsidiary and the subsidiary's performance. Although the results are preliminary based on the small sample, it opens up an area that is worth examining and understanding further.

Appendix-1: First Version of the Invitation Letter

January 25, 2004

Dear Mr. Dave Rich,

I am writing this letter to invite you in a research project that is being conducted through Rutgers University, School of Management. As a PhD candidate, I am examining the staffing practices of foreign multinationals operating in the U.S, and attaching a research proposal for your review. As a subsidiary HR Manager, you are in a unique position to contribute to this project. For your participation, I will be providing you with a full technical report of my findings with your subsidiary benchmarked.

Participation will only involve a 15 minute interview with you on the phone. Your participation in the study is voluntary, and there are no costs or risks associated with participation. Also, you will be free to withdraw from the study at any time. I will keep the information collected in this study anonymous and strictly confidential.

In the next couple of weeks, I will follow-up with a phone call, and if you agree to participate in this research opportunity, I would like to schedule a phone interview. In the meantime, please do not hesitate to contact me if you have any questions or suggestions regarding my research proposal.

Thank you very much in advance for your attention and support to this material.

Best Professional Regards,

Saba Colakoglu, MBA, PHR

Appendix-2: Research Proposal for Invitees

What are the study objectives?

There are over 3200 multinational companies operating in the U.S., with more than 8000 subsidiaries across the country. One of the strategic challenges faced by these multinationals is to have the right staffing composition within the subsidiaries to run their U.S. operations successfully. Multinationals rely on expatriates from the parent country and other countries, as well as local talent to achieve their performance goals.

This study is designed to examine how foreign multinationals staff their U.S. subsidiaries, what factors are influential in terms of utilizing expatriates vs. local talent, and how the subsidiary staffing composition relates to subsidiary performance.

Who are the participants?

Browning North America was selected by a random process from the Directory of Foreign Firms Operating in the United States. A representative sample of 200 subsidiaries is being contacted for data collection. Because participation rate is of utmost importance in terms of getting meaningful results from this study, your participation and opinions will be highly appreciated.

How will data be collected?

Phone interviews will be conducted with the Human Resources Manager of the participating organizations. The interviews will last no more than 15 minutes.

What information is needed?

The interview will consist of five main parts:

1. General information about the subsidiary (e.g. size, years in operation, function)
2. Information about staffing composition (e.g. the number and nationalities of expatriates)
3. Relations with the parent company (e.g. dependence on the parent for know-how)
4. Performance (e.g. how the subsidiary is performing with respect to industry norms vs. parent company expectations)
5. Additional comments and insights you can provide

What are the benefits of participation?

You will be provided with a full technical report in which you can benchmark your subsidiary's staffing practices against the practices of other subsidiaries.



Saba Colakoglu is a 1st year doctoral student and a research assistant at Rutgers University School of Management and Labor Relations in New Jersey. Her research and teaching interests are in the area of International Human Resources Management. Saba has worked as an HR Consultant for the Turkish subsidiary of the Finnish telecommunications company Nokia Networks, has a B.S. in Psychology and holds an M.B.A.

Appendix-3: Second Version of the Invitation Letter

July 12, 2005

Dear Julie Johnson,

I am a PhD student who is examining the staffing practices of foreign multinationals operating in the U.S.A., and I am writing this letter to invite you to participate in my thesis project. As the HR Manager of a U.S. subsidiary, you are in a unique position to contribute to my project. At the completion of this study, I will be providing you with an executive summary of my findings.

Your involvement in this study is voluntary, and there are no costs or risks associated with participation, which will require no more than 5-7 minutes of your time to complete an on-line questionnaire. All respondents will remain anonymous, and the information collected will be kept strictly confidential. The questions relate to general information about the subsidiary, its staffing composition (e.g. number of expatriates, if any), and relations with the parent company. To access this questionnaire, please log on to:

www.surveyz.com/TakeSurvey?id=25702

The response rate is of utmost importance for the successful completion of my study and I am very grateful for your willingness to be a participant. If you feel you are not the right person to respond to this questionnaire, please forward this letter to the appropriate person in your organization.

I thank you in advance for your attention and for your support for my thesis. If you have any questions about your rights as a research subject, you may contact the Sponsored Programs Administrator at Rutgers University at 732-445-2799 or contact me at 856-366-34-04 or sabacol@eden.rutgers.edu.

Best Professional Regards,

Saba Colakoglu, MBA, PHR

FIGURE 1
Proposed Model

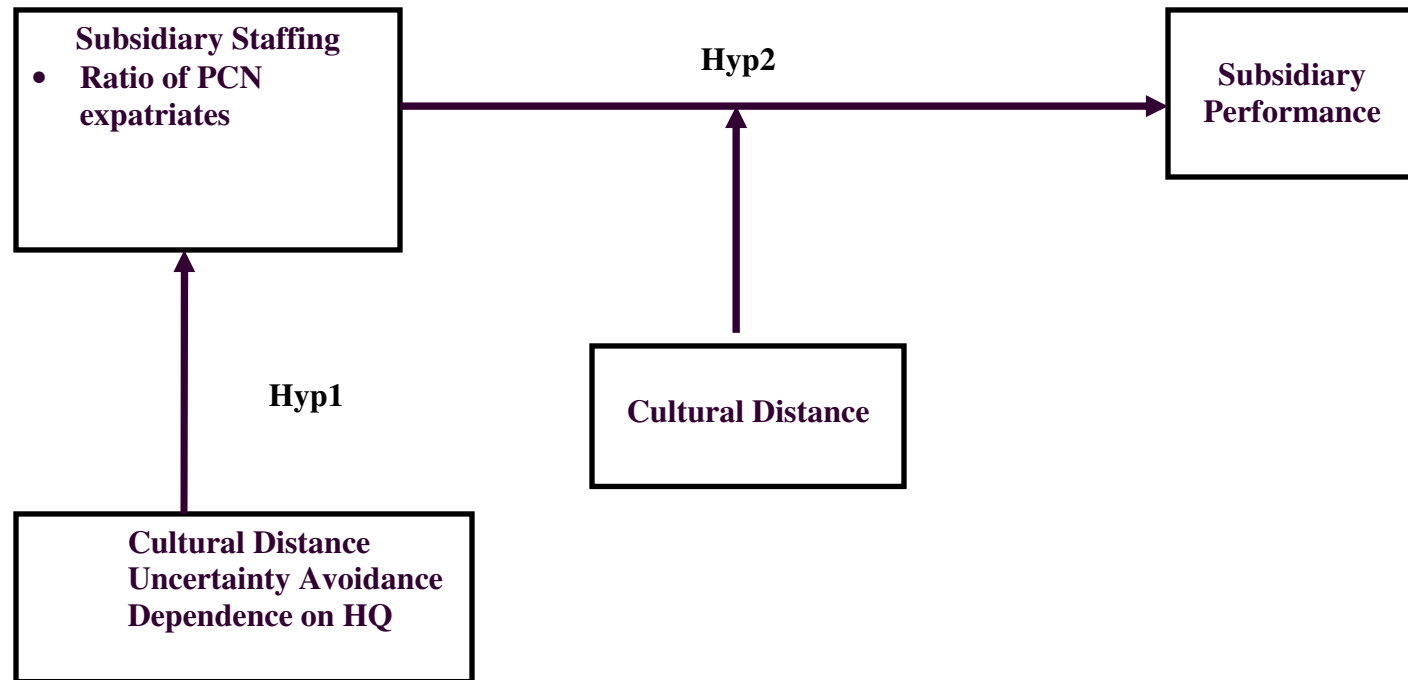
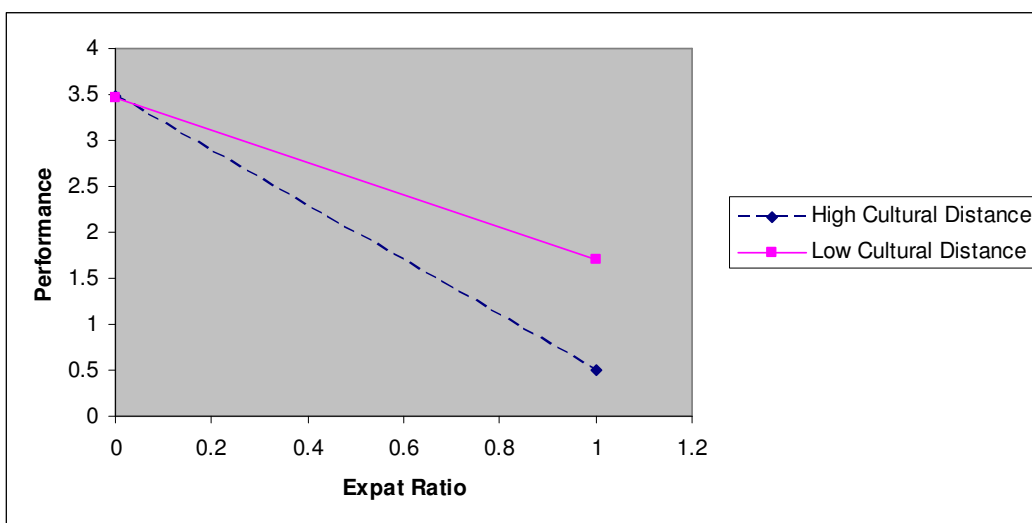


FIGURE 2
Moderating Effect of Cultural Distance



Regions of Significance ($p < .05$):

Lower Bound CD: 1.17

Upper Bound CD: 2.48

Performance = 3.45 - .68 (Ratio of PCNs) + .011 (Cultural Distance) - .93 (Ratio of PCNs*Cultural Distance)

TABLE 1**Countries Represented in the Sample and Scores on Cultural Dimensions and Cultural Distance**

Country	Frequency	Percent	PD	UA	MAS	IND	CD
1. Austria	2	3.8%	11	70	79	55	1.44
2. Australia	1	1.9%	36	51	61	90	0.02
3. Canada	7	13%	39	48	52	80	0.12
4. China	1	1.9%	80	40	66	20	2.91
5. Denmark	1	1.9%	18	23	16	74	2.17
6. Finland	1	1.9%	33	59	26	63	1.37
7. France	4	7.6%	68	86	43	71	1.54
8. Germany	5	9.6%	35	65	66	67	0.41
9. Israel	2	3.8%	13	81	47	54	1.64
10. Italy	1	1.9%	50	75	70	76	0.55
11. Japan	9	17%	54	92	95	46	2.63
12. Norway	2	3.8%	31	50	8	69	2.40
13. S. Arabia	1	1.9%	80	68	52	38	2.28
14. S. Korea	2	3.8%	60	85	39	18	3.39
15. Spain	1	1.9%	57	86	42	51	1.78
16. Sweden	4	7.6%	31	29	5	71	2.73
17. Switzerland	1	1.9%	34	58	70	68	0.34
18. UK	7	13%	35	35	66	89	0.08
Total	52	100					

PD: Power Distance**UA:** Uncertainty Avoidance**MAS:** Masculinity**IND:** Individuality**CD:** Cultural Distance from U.S.

$$\mathbf{CD_j:} \sum_{i=1}^4 \{(I_{ij} - I_{iu})^2 / V_i\} / 4$$

TABLE 2
Industries Represented in the Sample

Industry	Frequency	Percent
Manufacturing	<i>Based on 3 digit NAICS Codes</i>	
Beverage & Tobacco	2	3.8%
Primary Metal	2	3.8%
Machinery	5	9.6%
Computer & Electronics	4	7.6%
Wood	1	1.9%
Petroleum & Coal	1	1.9%
Chemicals	5	9.6%
Nonmetallic Mineral	1	1.9%
Electrical Equipment, Appliance, & Component	2	3.8%
Transportation Equipment	1	1.9%
Apparel	1	1.9%
Total Manufacturing	25	48%
Service	<i>Based on 2 digit NAICS Codes</i>	
Financial Services	2	3.8%
Agriculture, Forestry	2	3.8%
Mining	4	7.6%
Construction	1	1.9%
Wholesale Trade	2	3.8%
Retail Trade	3	5.7%
Transportation	2	3.8%
Information	2	3.8%
Professional, Technical, & Scientific Services	7	13%
Management of Companies	1	1.9%
Administrative Support	1	1.9%
Total Service	27	51%
TOTAL	52	

TABLE 3
Descriptive Statistics and Zero-Order Correlations

Variable	Mean	s.d.	1	2	3	4	5	6
1. Cultural distance	1.41	1.15						
2. Uncertainty avoidance	62.04	22.75	.43**					
3. Managing director	.44	.50	.20	.26 ⁺				
4. Dependence on HQ	2.61	1.09	.18	.14	.15			
5. Ratio of PCN expatriates ^a	.078	.11	.28*	.54**	.36**	.43**		
6. Performance	3.39	.83	-.01	-.33*	.03	-.21	-.15	

n=52

^a The correlation coefficients are based on the arcsin transformation of the variable.

⁺ p < .10

* p < .05

**p < .01

Two-tailed significance tests.

TABLE 4
Hierarchical Regression Results for Hypothesis 1a,b,c ^a

Variables	Model 1	Model 2	Model 3
Intercept	.15** (.04)	-.09 (.07)	-.24** (.08)
Cultural distance	.052* (.02)	.013 (.02)	.004 (.02)
Uncertainty avoidance		.005*** (.001)	.004*** (.001)
Dependence on HQ			.069** (.02)
Model F	4.55*	10.05***	11.41***
R ²	.08	.29	.42
Change in R ²	.08*	.21***	.12***

n = 52

^a Dependent variable: Arcsin transformation of PCN ratio

* p < .05

** p < .01

***p < .001

Two-tailed significance tests.

TABLE 5
Moderated Regression Analysis Results for Hypothesis 2 ^a

Variables	Model 1	Model 2
Intercept	3.39 (.12)	3.45 (.12)
Ratio of PCNs ^{b, c}	-.63 (.54)	-.68 (.58)
Cultural distance ^c	.03 (.11)	.01 (.11)
Ratio of PCNs ^{b, c} X Cultural distance ^c		-.93 ⁺ (.54)
F	.571	.26
R ²	.023	.08
Change in R ²		.06 ⁺

n = 52

^a Dependent variable: Subsidiary performance

^b The coefficients are based on the arcsin transformation of the variable.

^c The coefficients are based on centered variables.

⁺ p < .10

Two-tailed tests

TABLE 6
Post Hoc Analysis for Antecedents of Subsidiary Staffing^a

Variables	Model 1	Model 2	Model 3
Intercept	.30 (.05)	.21 (.06)	.04 (.09)
Subsidiary age	-.001 (.001)	-.002 (.001)	-.001 (.001)
Subsidiary complexity	-.03 (.02)	-.02 (.02)	-.02 (.02)
Cultural distance		.06 (.02)*	.04 (.02)
Dependence on HQ			.07 (.02)**
Model F	1.78	2.91*	4.40**
R ²	.07	.16	.28
Change in R ²	.07	.09 *	.12**

n = 52

^a Dependent variable: Arcsin transformation of PCN ratio

* p < .05

** p < .01

***p < .001

Two-tailed significance tests.

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