

Multi-dimensionality of Environment and Subsidiary Staffing in Multinational Enterprises:
The Moderating Effect of Region-specific Diversification

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Abstract

The person–environment (P–E) fit theory posits that the term “environment” can be defined at different levels. This study delineates two environmental dimensions (strategic and organizational) and empirically examines the potential moderating effects of the strategic environment (intra- and inter-regional diversification) on the relationship between the organizational environment (subsidiary ownership and host-country experience) and the MNE subsidiary staffing composition. Results indicate that both strategic and organizational dimensions have impacts on subsidiary staffing composition. However, the interaction effect of each is significant only when there is fit between demands from different environmental dimensions.

Keywords: MNEs, subsidiary staffing, person–environment fit, multi-dimensionality of environment

1. INTRODUCTION

Subsidiary staffing is one of salient strategies for effective management of overseas subsidiaries; it helps not only increase in firm performance (Belderbos and Heijltjes, 2005; Boyacigiller, 1990; Delios and Bjorkman, 2000) but also balance between dual pressures for global integration and local responsiveness (Ghoshal and Bartlett, 1988). As different competitive strategies require different employee role behaviors (Schuler and Jackson, 1987), MNEs pursuing global integration are likely to send out more expatriates to better manage foreign subsidiaries across borders (Black and Mendenhall, 1990; Boyacigiller, 1990; Schuler et al., 1993), whereas firms emphasizing local responsiveness may employ a larger proportion of local staff to readily adapt to local circumstances (Harzing, 2001; Gong, 2003). In other words, firms expect different advantages by assigning parent country nationals (PCNs) or employing host country nationals (HCNs) (Black et al., 1999; Schneider and Barsoux, 2002;

Tarique et al., 2006).

A key advantage of PCNs may be the fundamental competencies in monitoring subsidiary operations to ensure that the subsidiary behaves in accordance with MNEs' overall business strategy (Edström and Galbraith, 1977; Tung, 1993), facilitating effective control and coordination of overseas subsidiaries (Dowling et al. 1999; Harzing, 2001; Richards, 2001). In addition, PCNs may better understand each subsidiary's role within the MNE network (Kuemmerle, 1997) and have extensive knowledge about the MNE's corporate culture with regard to its goals, objectives, and policies (Laing, 1994; Naumann, 1992). Their familiarity with the corporate culture makes the PCNs more capable to execute the orders that come from the headquarters (Edström and Galbraith, 1977). On the other hand, by hiring more HCNs, MNEs can easily gain external legitimacy (Brouthers, 2002; Forstenlechner and Mellahi, 2011) — acceptance and approval of the MNE by the primary stakeholders in the host country (Suchman, 1995). Since HCNs are familiar with local market conditions and local business practices (Banai, 1992; Kobrin, 1988), a staffing composition weighted toward HCNs might help with adapting to new circumstances easily through reducing liability of foreignness (Zaheer, 1995) and overcoming legitimacy challenges (Harzing, 2001).

However, each employee type has its own disadvantages as well. PCNs may lack sufficient knowledge about host country culture and practices (Thompson and Tambyah, 1999) and are questioned about their loyalty toward their multinational employers (Banai and Reisel, 1993; Black and Gregersen, 1992). In addition, assigning PCNs to the foreign subsidiaries incurs more costs than maintaining HCNs (Schuler et al., 1991; Shaffer et al., 1999). In case of HCNs, they typically have limited working and socializing experiences within the multinational headquarters, and their understanding of the strategic role of each subsidiary in the network is likely to be incomplete (Tan and Mahoney, 2006).

Due to the different advantages and disadvantages of employment choice between

PCNs and HCNs, MNEs make decisions on subsidiary staffing in accordance with their specific situations (Boyacigiller, 1990; Harzing, 2001; Tan and Mahoney, 2006). The extant studies have investigated various situation factors including firm- and country-level characteristics to illustrate different situations where MNEs make decisions on subsidiary staffing, (e.g., Tan and Mahoney, 2006; Gong, 2003; Delios and Bjorkman, 2000; Harzing, 2001). However, only a few studies (e.g., Tarique et al., 2006; Taylor et al., 1996) have paid attention to MNEs' competitive strategy across global integration and local responsiveness and, in particular, the influence of a middle-ranged competitive posture (region-specific diversification strategy) on subsidiary localization has not been examined.

To fill the gap in the existing literature, this study adopts a theoretical framework using person–environment (P–E) fit theory. P–E fit theory suggests that organizations select individuals with similar characteristics to those of individuals in the target environment and qualities that meet the demands of that environment (Edwards, 1991; Muchinsky and Monahan, 1987). In essence, it rejects the “one best way for all” approach and views that a firm's decisions should be contingent on the situational variables it faces (Burnes, 1996; Miles and Snow, 1994; Venkatraman and Camillus, 1984). For success, MNEs need to align their structures with the environmental contingencies, and the same is true of staffing composition in subsidiaries (Adler and Ghadar, 1990; Schuler et al., 1993). Moreover, P–E theory posits that the term “environment” can be used at different levels such as vocation, organization, job, strategy, and country (see Tarique et al., 2006). Taking “multi-dimensionality of strategic fit” (Zajac et al., 2000: 430) into consideration, this study subdivides the environment that MNE subsidiaries face into two groups: strategic and organizational environments.

We herein propose and test four hypotheses that focus on the key research question of how the varying patterns of interaction between environmental factors at different levels (MNEs' region-specific strategy and subsidiary characteristics) affect the subsidiary staffing

composition. We perform ordinary least squares (OLS) regression analysis on a sample of 1,165 foreign subsidiaries of Korean firms operating in 55 countries in 2016.

2. THEORY AND HYPOTHESES

2.1. Person–environment fit theory

The fit can be conceptualized in various ways: it occurs 1) when a person supplements, embellishes, or possesses characteristics that are similar to other individuals' in an environment (Muchinsky and Monahan, 1987: 269), 2) when a person's characteristics make whole the environment or add to it what is missing (Muchinsky and Monahan, 1987, p.271), 3) when an environment satisfies individuals' needs, desires, or preferences (Kristof, 1996), or 4) when an individual has the ability required to meet environmental demands (Edwards, 1991; Kristof, 1996). In this study, we particularly adopt the perspective of demands–abilities fit (Edwards, 1991), suggesting that organizations employ individuals with resources and competencies necessary to meet demands arising from the environment (Chatman, 1989; Kristof, 1996; Schneider et al., 2000). Moreover, an environment can be viewed at multiple levels, such as vocation, job, organization, strategy, and country (Olian and Rynes, 1984).

In case of MNE subsidiaries, multiple dimensions of the environment can be presented as strategic, national, and organizational. First, a strategic dimension represents headquarters' competitive strategy or strategic posture, which is closely related to either global integration or local responsiveness (Porter, 1985; Taylor et al., 1996; Schuler et al., 1993). An organizational dimension includes specific characteristics of subsidiaries, such as MNEs' ownership, host-country experience, and number of employees. Finally, a national dimension concerns national-level factors such as socioeconomic difference.

Grounded in the P–E fit theory, we delineate two environment dimensions (strategic and organizational) for testing hypotheses. In detail, we introduce two types of competitive

strategies (inter- and intra- regional diversification) and two organizational characteristics (subsidiary ownership structure and host-country experience) into our research model. For the national dimension, economic distance is introduced to control for national differences between home and host countries.

2.2. Inter- and Intra- regional diversification strategies: Strategic environmental dimension

Among generic MNE strategies (e.g., Porter, 1986; Prahalad and Doz, 1987), multi-domestic and global strategies display quite contrasting qualities that can affect subsidiary staffing practices (Harzing, 2000). MNEs pursuing a global strategy are concerned about benefits from economies of scale by developing standardized products and services to be produced and sold in the same way throughout the world (Levitt, 1983). For enhancing efficiency, they are likely to manage overseas subsidiaries in a standardized and efficient manner (Ghoshal, 1987). On the contrary, firms following a decentralized multi-domestic strategy may respond to specific needs within various host countries by providing localized products and services. In this case, foreign subsidiaries should be differentiated to successfully confront cultures, markets, and business practices that contrast markedly with those of the home country (Luo, 2001), and headquarters may delegate more responsibilities and decision-making authority to local subsidiaries (Hamel and Prahalad, 1983).

Recently, many scholars have indicated that most MNEs are regional rather than global (e.g., Hejazi, 2007; Rugman, 2005; Rugman and Verbeke, 2007; Qian et al., 2010). The phenomenon of regionalization emphasizes the role of region-specific diversification strategy, which lies somewhere in between the two extreme approaches of global and multi-domestic strategies. Regional diversification provides a mechanism for firms to gain access to different resources within regions while responding to regional demands more actively (Qian et al., 2008). Depending on the degree of diversification, it can be subdivided into intra- and inter-

regional diversification.

MNEs in a specific geographic region can acquire, integrate, and reassign resources within a region (Nachum et al., 2008) and accumulate knowledge on culture, practices, norms, and values at the regional level. These region-bound firm-specific advantages (RFSAs) (Rugman and Verbeke, 2005) can be exploited successfully throughout a region rather than being restricted to one country (Arregle et al., 2009; Peng et al., 2010).

Firms with an intra-regional diversification strategy prefer providing products and services that are regionally localized. In this process, knowledge acquired in each country may contribute to understanding the needs and preferences in the relevant regional market, since regional-level knowledge can be achieved through accumulation of country-specific knowledge (Li, 1994; Yu 1990). In addition, a successful experience from a country within a given region might help MNEs to gain legitimacy in that region. For example, firms having an experience of successful entry to Malaysia or Indonesia might be more likely to survive in the Southeast Asian market than those without any experience or knowledge in a member country. Therefore, intra-regionally diversified MNEs put high values on gaining country-specific knowledge and legitimacy as well as at the regional-level. To meet such strategic environmental needs, MNEs will delegate authority to subsidiaries and place more importance on HCNs in staffing composition, whose core competences include familiarity with the cultural, economic, political, and legal environment of the host country, and ability to respond effectively to the host country's requirements for localization (Tarique et al., 2006).

On the other hand, MNEs often decide to enter multiple regions in order to access various resources that are unavailable within a single region (Lu and Beamish, 2004; Wan and Hoskisson, 2003). Similar to firms with a global strategy, inter-regionally diversified MNEs might emphasize standardization and global integration of business activities. Accordingly, these firms will increase the proportion of PCNs who are able to effectively communicate with

headquarters and to maintain control over subsidiary's operation (Tarique et al., 2006). In other words, a staffing composition that is weighted toward PCN is a more appropriate choice for inter-regionally diversified firms to meet demands arising from strategic environment. Hence, Hypotheses 1a and 1b are given. Neither is new, but both are necessary for model completeness (see Baik and Park, 2015).

Hypothesis 1a: Greater intra-regional diversification is related to higher local staffing level in foreign subsidiaries (i.e., staffing composition weighted toward HCNs).

Hypothesis 1b: Greater inter-regional diversification is related to lower local staffing level in foreign subsidiaries (i.e., staffing composition weighted toward PCNs).

2.3. MNEs' subsidiary ownership and host-country experience: Organizational environmental dimension

Previous studies (e.g., Ando and Rhee, 2006; Gaur et al., 2007; Harzing, 2001; Kühlmann and Hutchings, 2010) demonstrated that MNEs' subsidiary ownership and host-country experience are main factors influencing staffing policies and localization of human resource, as they are associated with the issues of exercise of control and knowledge acquisition.

The headquarters tend to have stronger incentives to exercise control over a subsidiary with a higher ownership level (Youssef, 1975), in which case the subsidiary staffing composition will be weighted to PCNs. On the other hand, with accumulated local experience, the staffing composition will be weighted to PCNs for different reasons; the more host-country experience the subsidiary has, the more local knowledge (Johanson and Vahlne, 1977) and legitimacy (Delios and Bjorkman, 2000; Zaheer and Mosakowski, 1997) will be secured,

decreasing reliance on HNCs.

In this study, we expect that the influences of MNEs' ownership and host-country experience on local staffing level of foreign subsidiaries will be moderated by MNEs' competitive strategies (intra- or inter-regional diversification). When MNEs pursue intra-regional diversification, the relationship between subsidiary ownership and HCN-weighted staffing will be weakened. In general, it is expected that a high degree of ownership leads to more incentives for control and PCN-weighted subsidiary staffing. However, in case of a high level of intra-regional diversification, subsidiaries are required to achieve local knowledge and legitimacy in both national and regional markets by employing more HCNs. To put it differently, if there is inconsistency between requirements of strategic environment (more reliance on HCNs) and organizational environment (more reliance on PCNs), the negative effect of MNEs' ownership on HCN-weighted staffing of foreign subsidiaries will be mitigated.

In case of a high degree of inter-regional diversification, the relationship between MNEs' ownership and HCN-oriented staffing will be strengthened. While firms pursuing inter-regional diversification strategy give priority to effective control and coordination, for subsidiaries with a high level of MNEs' ownership, incentives for control will increase additionally. As the requirements of the strategic environment (more reliance on PCNs) and of the organizational environment (more reliance on PCNs) are consistent, firms may have much stronger incentives for PCN assignment. In line with these arguments, the following hypotheses are advanced:

Hypothesis 2a: MNEs' intra-regional diversification moderates the relationship between subsidiary ownership and HCN-weighted staffing such that the negative influence of subsidiary ownership on HCN-weighted staffing is weakened.

Hypothesis 2b: MNEs' inter-regional diversification moderates the relationship between subsidiary ownership and HCN-weighted staffing such that the negative influence of subsidiary ownership on HCN-weighted staffing is strengthened.

Host-country experience, which is another factor composing the organizational environment, can lead to different staffing compositions in combination with the effect of the strategic environment. In a situation where MNEs conduct the intra-regional diversification strategy, the effect of host-country experience on HCN-oriented staffing of foreign subsidiaries will be mitigated; while there is a negative relationship between host-country experience and HCN-oriented staffing in general, intra-regionally diversified firms may prefer HCN-weighted staffing composition since HCNs' competencies for gaining local knowledge and legitimacy are valuable in this strategic situation. To sum up, if there are inconsistent requirements from the strategic environment (more reliance on HCNs) and organizational environment (less reliance on HCNs), the negative impact of host-country experience on HCN-oriented staffing will be mitigated.

In case of a high level of inter-regional diversification, however, the relationship between host-country experience and HCN-weighted staffing will be strengthened. While sufficient host-country experience enables subsidiaries to be less dependent on HCNs, firms operating in multiple regions may consider that the advantages of PCNs outweigh those of HCNs. In this manner, as the requirements of the strategic environment (more reliance on PCNs) and of the organizational environment (less reliance on HCNs) are consistent, firms may have much stronger incentives for PCN assignment in their subsidiary staffing composition. Hence, we formulate the following hypotheses:

Hypothesis 3a: MNEs' intra-regional diversification moderates the relationship between

host-country experience and HCN-weighted staffing such that the negative influence of host-country experience on HCN-weighted staffing will be weakened.

Hypothesis 3b: MNEs' inter-regional diversification moderates the relationship between host-country experience and HCN-weighted staffing such that the negative influence of host-country experience on HCN-weighted staffing will be strengthened.

The hypothetical research model of our study is graphically displayed in Figure 1, wherein the numbers refer to the hypotheses.

Figure 1 goes about here

3. METHODOLOGY

3.1. Data

We used subsidiary-level data of Korean MNEs drawn from the Overseas Korean Business Directory (2016). It is provided by the Korea Trade Investment Promotion Agency (KOTRA), a governmental organization supporting overseas expansion of Korean companies and promoting foreign direct investment in Korea. The dataset includes each subsidiary's year of entry, entry mode, number of HCNs and PCNs, the address of company headquarters, and so on. Finally, the TS2000 database of the Korea Listed Companies Association and the KIS-LINE database provided by the Korea Information Service were used for collecting financial data of each subsidiary.

Table 1 gives the country–subsidiary breakdown for the sample in this study. It indicates that the 1152 subsidiaries included in the sample were operating in 55 countries

during the study period.

Table 1 goes about here

3.2. Measures

3.2.1. Dependent variable

We calculated the degree of HCN-oriented staffing (LOCAL) by dividing the number of HCNs by the number of subsidiary employees based on previous studies (e.g., Boyacigiller, 1990; Colakoglu and Caligiuri, 2008; Konopaske et al., 2002).

3.2.2. Independent variables and control variables

Independent variables

Four interaction variables between strategic environment (intra- and inter-regional diversification) and organizational environment (subsidiary ownership and host-country experience) are introduced. In this way, we examined possible effects of fit (or misfit) between demands from multiple environmental dimensions on HCN-oriented staffing in foreign subsidiaries. The intra-regional diversification/subsidiary ownership interaction variable (INTRA/OWN) measures the constraining effect of misfit between demands from strategic and organizational dimensions of an environment, whereas the inter-regional diversification/subsidiary ownership interaction variable (INTER/OWN) measures the compensating effect of fit between demands arising from the multiple environmental dimensions. On the other hand, the intra-regional diversification/host-country experience interaction variable (INTRA/EXP) measures the constraining effect of misfit, while the inter-regional diversification/host-country experience interaction variable (INTER/EXP) measures the compensating effect of fit between

demands from the multiple environmental dimensions.

Following previous studies (e.g., Qian et al., 2013; Baik and Park, 2015), we adopt two commonly accepted entropy measures of diversification: the intra- (INTRA) and inter-regional diversification (INTER) indexes developed by Qian et al. (2010). These measures are calculated based on subsidiary presence in five regions: (1) Africa, (2) Asia Pacific, (3) Eastern Europe, (4) Latin America and the Caribbean, and (5) Western Europe and others, in accordance with OECD regional classification. INTRA captures geographic diversification across countries within a given region, whereas INTER captures diversification across different regions (Qian et al., 2010).

The entropy measure of INTRA is defined as:

$$\text{INTRA} = \sum_{a=1}^j p_{aj}^j \times \text{INTRA}_{aj}.$$

Here, INTRA_{aj} equals the subsidiaries within the a^{th} global market region ($a \in j$) and P_{aj}^j is the proportion of the number of subsidiaries in the j^{th} country to the total subsidiaries of the a^{th} global market region. If there are j regions in total, INTRA will be the weighted average of INTRA_{aj} , while the weight is the previously defined P_{aj}^j .

INTER is calculated using the following equation:

$$\text{INTER} = \sum_{i=1}^m P^i \ln \left(\frac{1}{P^i} \right),$$

where m is the number of regions in which a firm has subsidiaries, and P^i is the proportion of the number of subsidiaries in the i^{th} global market region to a firm's total number of subsidiaries in all regions.

Subsidiary ownership (OWN) is assigned a value of 1 for full ownership cases (more than 95 percent owned) and 0 for shared ownership cases (Cho and Padmanabhan, 2005). Host-country experience (EXP) is expressed as the difference between a subsidiary's year of

establishment and the year of observation.

Control variables

We measure the relative size of subsidiaries as the number of employees in the subsidiary divided by the total number of employees in the MNE (Minbaeva et al., 2003). Following Taggart and Hood (1999), it is expected that the larger the relative size of subsidiary compared to the rest of the corporation, the more incentives for subsidiary control the MNE will have. We control for industry effects by coding the industry dummy variable as 1 for global industries and 0 for non-global ones (GLOBAL). In accordance with Brügger et al. (2009), the Global Industry Classification Standard (GICS) is used as a guideline to classify the sample subsidiaries into the global industries.

As P–E fit theory posits, three environmental contingencies (strategic, organizational, and national) can influence MNE subsidiary staffing practices. In this study, we control for national effects by including the cultural distance (Cho and Padmanabhan, 2005) and the economic distance variables (Ghemawat, 2001; Harvey et al., 2001). Cultural distance (CD) is measured by composite index showing the overall cultural distance of each host country from Korea using Hofstede’s four indices (Hofstede, 1980) and the methodology developed by Kogut and Singh (1988). To measure economic distance, we calculate the differences in the real per-capita gross domestic product (GDP) between Korea and a given host country (Tsang and Yip, 2007). The equation is as follows:

$$\begin{aligned} & \text{Economic distance between parent country (p: Korea) and host country (h)} \\ & = \ln(y_p) - \ln(y_h) \text{ (where Korea is the more developed host country)} \\ & = \ln(y_h) - \ln(y_p) \text{ (where the host country is more developed than Korea).} \end{aligned}$$

4. RESULTS

Table 2 lists the means, standard deviations, and correlations of the variables in this study. As the analysis includes testing for moderating effects, there is a significant threat of multicollinearity. To eliminate this problem, we center the variables included in the multiplication terms (Aiken and West, 1991). In this way, the covariance between a product term and its centered components can be reduced, while there is no effect on the regression coefficient for the interaction term (Aiken and West, 1991). Finally, analysis on variance inflation factors (VIF) showed that multicollinearity was not a concern, since all VIF values (max: 2.02; means: 1.33) were substantially lower than the cut-off point of 10 recommended by Cooper and Schindler (2006) and Neter et al (1996).

Table 2 goes about here

We next generate a series of models to test our hypotheses. Table 3 reports multiple regression results with the control variables and each of the predictor variables (Models 1–4) and with all control and predictor variables (Model 5). Models are designed to investigate the relative importance 1) between the intra-regional diversification variable (INTRA) and the predictors (intra-regional diversification/subsidiary ownership (INTRA/OWN) and intra-regional diversification/host-country experience (INTRA/EXP)) and 2) between the inter-regional diversification variable (INTER) and the predictors (inter-regional diversification/subsidiary ownership (INTER/OWN) and inter-regional diversification/host-country experience (INTER/EXP)). The results indicate that, overall, all models are significant.

In Model 1, global industry, relative size of a subsidiary, economic distance, subsidiary ownership and host-country experience have significant effects on HCN-weighted staffing in the subsidiary. Especially, subsidiary ownership and host-country experience have negative

relationships with HCN-oriented staffing ($\beta = -0.0800$, $p < 0.01$; $\beta = -0.0022$, $p < 0.01$). These results are consistent with the arguments of previous studies (e.g., Gaur et al., 2007; Harzing, 2001) that the two predictors have influences on MNEs' staffing practices.

Table 3 goes about here

Hypotheses 1a and 1b predict that the subsidiary staffing composition is affected by region-specific diversification strategies: intra- and inter-regional diversification. Results of Model 2 indicated the opposite effects of intra- and inter-regional diversification on staffing practices in foreign subsidiaries ($\beta = 0.0302$, $p < 0.05$; $\beta = -0.0446$, $p < 0.01$). These results lend support to Hypotheses 1a and 1b and to the basic assumption of the P-E fit theory that a subsidiary's staffing composition can be determined in accordance with its parent's strategic intent (Egelhoff, 1988; Kobrin, 1988; Tarique et al., 2006).

Next, intra- and inter-regional diversification strategies were proposed as moderators of 1) the relationship between subsidiary ownership and a staffing composition and of 2) the relationship between host-country experience and staffing composition. The results of these analyses are presented in Models 3 to 5 of Table 3.

Hypotheses 2a and 2b propose that the effect of subsidiary ownership on HCN-oriented staffing is dependent on MNE's regional diversification strategy. More specifically, an intra-regional diversification strategy is hypothesized to reduce the negative effect of subsidiary ownership and to increase the positive effect (Hypothesis 2a). The opposite is proposed for an inter-regional diversification strategy; the negative influence of subsidiary ownership on HCN-weighted staffing will be strengthened (Hypothesis 2b). As shown in Models 3 and 5 of Table 3, inter-regional diversification strategy interacted with subsidiary

ownership ($\beta = -0.0774$; $p < 0.1$) to predict HCN-oriented staffing. Thus, Hypothesis 2b is supported. However, intra-regional diversification strategy is not a moderator of the relationship between subsidiary ownership and HCN-weighted staffing; the interaction term has the expected sign but is not significant at the conventional statistical level.

Hypotheses 3a and 3b predict that the influence of host-country experience on HCN-oriented staffing is dependent on region-specific strategy. In other words, the negative influence of host-country experience will be weakened in case of a higher degree of intra-regional diversification (Hypothesis 3a), whereas an inter-regional diversification strategy is hypothesized to increase the negative effect of host-country experience (Hypothesis 3b). According to Models 4 and 5 of Table 3, the predictor variable intra-regional diversification/host-country experience (INTRA/EXP) is not significant at the conventional statistical level, although the term has the expected sign. Conversely, inter-regional diversification strategy interacted with host-country experience ($\beta = -0.0038$; $p < 0.1$) to predict HCN-weighted staffing, supporting Hypothesis 3b. The results of Model 5 reinforce the conclusion that Hypotheses 2b and 3b are supported.

5. DISCUSSION

Consistent with P–E fit theory, this study attempts to show that multiple aspects of an environment (strategic and organizational dimensions) simultaneously affect subsidiary staffing in MNEs. For this purpose, we model the effects on HCN-weighted staffing composition of (1) strategic environment (intra- and inter-regional diversification), (2) organizational environment (subsidiary ownership and host-country experience), and (3) their interaction. The results indicate that both strategic and organizational dimensions have influence on a subsidiary staffing composition, while the interaction effects are determined by the presence of compatibility between demands from the two environmental dimensions.

This study makes a number of contributions. First, the empirical findings show that different competitive strategies representing strategic environment have the opposite effects on subsidiary staffing composition: intra-regional diversification is related to HCN-oriented staffing, whereas inter-regional diversification is associated with PCN-weighted staffing. This is because the primary concern of MNEs varies in accordance with a particular demand arising from different types of strategic environment such as intra- and inter-regional diversification.

In addition, subsidiary ownership and host-country experience typifying organizational environment exert influence on staffing composition. MNEs are likely to exercise control over a subsidiary with a higher degree of ownership; thus, the subsidiary staffing composition will be weighted to PCNs. Likewise, sufficient host-country experience leads to PCN-weighted staffing. The more host-country experience a subsidiary gains, the more local knowledge and legitimacy will be secured, thereby decreasing reliance on HCNs will decrease. These findings are consistent with the view that PCNs and HCNs have different degrees of demand–ability fit (Edwards, 1991) and that one employee group may have competencies that are more suitable to address a particular strategic or organizational concern than the other (Schuler and Jackson, 1987).

Finally, this study is the first to empirically test the interaction between strategic and organizational environments in determining MNE subsidiary staffing composition. The results present that the inter-regional diversification/subsidiary ownership (INTER/OWN) and the inter-regional diversification/host-country experience (INTER/EXP) variables have significant effects on HCN-oriented staffing (see Figures 2 and 3). However, the other two interaction terms (intra-regional diversification/subsidiary ownership (INTRA/OWN) and the inter-regional diversification/host-country experience (INTRA/EXP)) do not have significant effects. Our findings suggest that MNEs' competitive strategy moderates the relationship between organizational environment and subsidiary staffing composition only if there is compatibility

between demands from the strategic and organizational environments.

Figures 2 and 3 go about here

Based on the results of this study, managers might find value if they consider the multi-dimensionality of environment and the interaction between different dimensions when making decisions on subsidiary staffing composition. Our findings provide insights that MNE subsidiaries can maintain a single goal (global integration or local responsiveness) by giving weight to either PCNs or HCNs if there are compatible demands from strategic and organizational environments. However, when they confront the conflicting demands (i.e., lack of compatibility), it is perhaps difficult for managers to use particular human resource practices in a consistent and coherent way.

This study is not without limitations, some of which can provide opportunities for future research. First, the generalizability of this study's findings may be limited. The sample only includes foreign subsidiaries of Korean parent firms. Future studies should investigate subsidiary staffing composition across several nationalities of parent firms. Second, this study focuses on region-specific diversification composed of intra- and inter-regional diversification to delineate strategic environment. For testing the comprehensive effects of the strategic environment on international HR practices, it will be important to pay more attention to a diverse set of competitive strategies including global and multi-domestic ones. Future research should also consider various factors from organizational and national dimensions to explain the complex circumstances that MNEs are confronting. Lastly, an additional limitation of this study concerns the cross-sectional nature of the data. Since multiple dimensions of an environment and implications for subsidiary staffing may evolve over time and the cross-

sectional data precludes the opportunity for examining the causal relationships, future research should use longitudinal data.

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[Appendix]

Figure 1. Research model

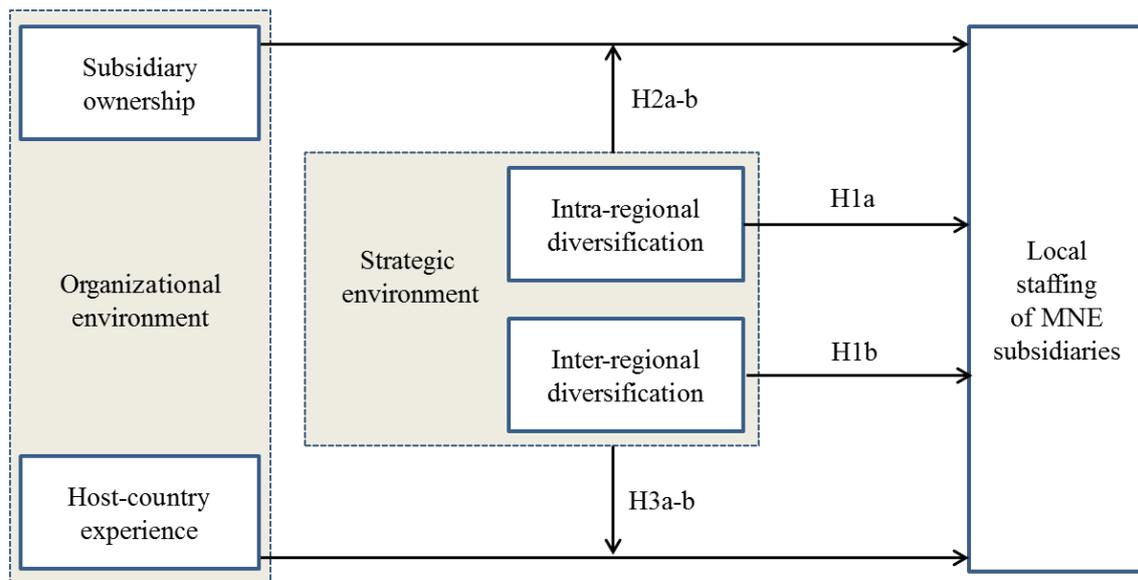


Table 1. Subsidiary Sample Breakdown by Country

Host country	Observations	Percent (%)
China	449	38.98
USA	99	8.59
Vietnam	90	7.81
Japan	56	4.86
India	42	3.65
Thailand	34	2.95
Russia	33	2.86
Brazil	27	2.34
Indonesia	26	2.26
Others	296	25.69
55	1152	100.00

Table 2. Descriptive Statistics and Correlations

Variable	Mean	SD	1	2	3	4	5	6	7	8
LOCAL	0.845	0.226								
GLOBAL	0.219	0.414	-0.037							
SIZE	1.109	6.300	0.102***	-0.037						
CD	2.110	1.065	-0.099***	-0.006	-0.011					
ED	1.403	0.716	0.285***	0.069*	0.079**	-0.180***				
OWN	0.866	0.341	-0.142***	-0.091**	0.028	0.107***	-0.125***			
EXP	12.277	7.880	-0.112***	0.011	0.005	0.137***	-0.139***	0.012		
INTRA	0.647	0.620	-0.014	-0.075*	-0.108***	-0.142***	-0.068*	-0.084**	0.219***	
INTER	0.597	0.532	-0.115***	-0.173***	-0.110***	-0.085**	-0.251***	-0.037	0.182***	0.676***

* p < .05; ** p < .01; *** p < .001

Table 3. Results of OLS Regression with Local Staffing of MNE Subsidiaries as the Dependent Variable

VARIABLES	Model 1	Model 2	Model 3	Model 4	Model 5
Global industry (GLOBAL)	-0.0315** (0.0152)	-0.0371** (0.0154)	-0.0339** (0.0155)	-0.0355** (0.0154)	-0.0339** (0.0155)
Relative size (SIZE)	0.0030*** (0.0010)	0.0029*** (0.0010)	0.0028*** (0.0010)	0.0028*** (0.0010)	0.0028*** (0.0010)
Cultural distance (CD)	-0.0060 (0.0060)	-0.0061 (0.0061)	-0.0058 (0.0061)	-0.0052 (0.0061)	-0.0058 (0.0061)
Economic distance (ED)	0.0817*** (0.0092)	0.0752*** (0.0095)	0.0749*** (0.0096)	0.0760*** (0.0095)	0.0749*** (0.0096)
Subsidiary ownership (OWN)	-0.0800*** (0.0186)	-0.0806*** (0.0187)	-0.0779*** (0.0190)	-0.0790*** (0.0187)	-0.0779*** (0.0190)
Host-country experience (EXP)	-0.0022*** (0.0008)	-0.0023*** (0.0008)	-0.0018** (0.0009)	-0.0019** (0.0009)	-0.0018** (0.0009)
Intra-regional diversification (INTRA)		0.0302** (0.0141)	0.0075 (0.0358)	0.0286** (0.0142)	0.0075 (0.0358)
Inter-regional diversification (INTER)		-0.0446*** (0.0168)	0.0220 (0.0418)	-0.0437*** (0.0169)	0.0220 (0.0418)
OWN × INTRA			0.0255 (0.0385)		0.0255 (0.0385)
OWN × INTER			-0.0774* (0.0450)		-0.0774* (0.0450)
EXP × INTRA				0.0025 (0.0017)	0.0024 (0.0017)
EXP × INTER				-0.0038* (0.0021)	-0.0038* (0.0021)
Constant	0.846*** (0.0282)	0.865*** (0.0309)	0.831*** (0.0379)	0.856*** (0.0313)	0.831*** (0.0379)

Observations	1,152	1,152	1,152	1,152	1,152
Adjusted R-squared	0.111	0.115	0.117	0.116	0.117
F	24.90***	19.67***	13.72***	16.12***	13.72***

n = 1152; * p < .10 ** p < .05 *** p < .01

Figure 2. Effects of Subsidiary ownership by Inter-regional diversification on HCN-weighted staffing

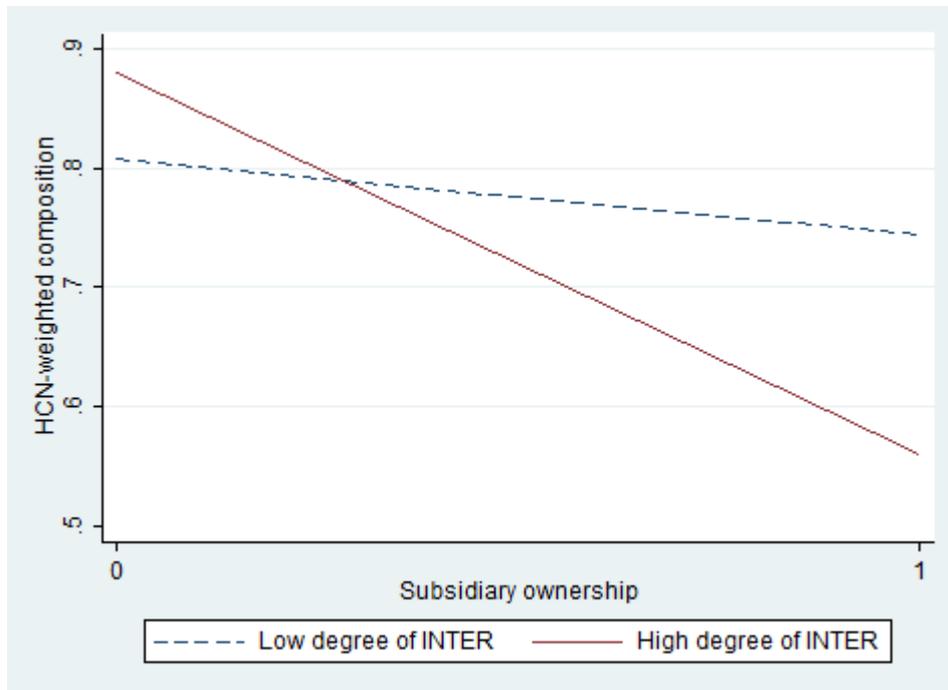


Figure 3. Effects of host-country experience by inter-regional diversification on HCN-weighted staffing

