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**Top Management Characteristics of Foreign MNC
Affiliates and Affiliate Performance in Japan:
Knowledge-Based and Upper Echelon Perspectives**

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**Top Management Characteristics of Foreign MNC Affiliates and Affiliate Performance in
Japan: Knowledge-Based and Upper Echelon Perspectivesⁱ**

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ABSTRACT

Drawing from the knowledge-based view of MNCs and the upper echelon perspective, we examine the relationship between top management characteristics of MNC affiliates and affiliate performance. Using a sample of 643 foreign MNC affiliates operating in Japan, we found that when the length of an affiliate operation was shorter, the affiliate performed better under the expatriate managing director rather than the Japanese manager. We also found that when the size of an affiliate was larger and the length of operation was shorter, the affiliate performed better under the larger rather than smaller proportion of expatriates in top management teams. Implications for research and practice of top management staffing of MNC foreign affiliates are discussed.

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INTRODUCTION

For multinational corporations (MNCs) that operate in different countries, performance of their foreign affiliates is critical for the success of the entire MNCs. Among many factors that would affect performance of MNC foreign affiliates, top management characteristics of the MNC affiliates are the major focus of our study. Specifically, by focusing on the Japanese context, we investigate the impact of the nationality of individual managing directors and top management teams (TMT) of MNC affiliates on their performance in Japan, with the consideration of the length of affiliate operation and size of the affiliate that may moderate such an impact.

International business researchers, especially researchers in the field of international human resource management have investigated the determinants of whether MNCs send their expatriates or find local employees to fill top management positions of their affiliates operating in foreign countries (e.g., Bebenroth, Li & Sekiguchi, in press; Belderbos & Heijltjes, 2005; Gong, 2002, 2003; Harzing, 2001; Tan & Mahoney, 2006; Thompson & Keating, 2004). However, few researchers have examined the effects of such MNCs' staffing practices on affiliate performance, except for Gong (2003) who found that the positive effect of expatriate staffing on MNC affiliates increases when cultural distance is high, but that effect decreases over time. Thus, our study attempts to contribute to the literature on MNCs by conducting a theoretical and empirical investigation on staffing of MNC affiliates and their performance. In doing so, we theoretically draw from the knowledge-based view of the firm (e.g., Nickerson & Zenger, 2004) and the upper echelon perspective (Hambrick & Mason, 1984; Hambrick, 2005) in order to understand the mechanism through which top management characteristics of MNCs' foreign affiliates influence affiliate performance.

Our study focuses on a single country, Japan as a research context and examines the affiliates of MNCs from various countries operating within its borders. Japan is a good research site because MNCs from many countries have their affiliates operating there. Thus, contrary to multi-country studies that only use samples of MNCs from one or two home-countries (e.g., Japanese MNCs), we examine a sample of MNCs coming from many countries to Japan, which would

strengthen the generalizability of findings. Also, the single-country research design or "many-to-one" research design has some advantages over the multi-country research design (e.g., Harzing, 2001) such as the capability for controlling many variables (Bebenroth et al., in press).

THEORETICAL BACKGROUND

The knowledge-based view of MNCs emphasizes that knowledge flow within MNCs or knowledge transfer between the parent MNCs and their foreign affiliates is the key for the success of the affiliate operation. The knowledge-based view (Grant, 1996) stems from resource-based view of the firm (Barney, 1991) which proposes that firm performance is largely determined by the firm's resources that are valuable, rare, inimitable and nonsubstitutable. Thus, knowledge that is created within MNCs is considered to be a critical part of the firm's resources that are the source of sustainable competitive advantage, and it should flow or be transferred between parent MNCs and their affiliates. The knowledge flow and transfer may not only be unidirectional such as from parent MNCs to their affiliates but also more cyclical in nature such that MNC affiliates receive firm-specific knowledge from the parent MNCs and parent MNCs receive market or local specific knowledge from their affiliates. This kind of cyclical and reciprocal knowledge flow will enable MNCs to develop effective operational strategy of their foreign affiliate incorporating both MNC firm-specific knowledge and market-based or local-specific knowledge on where the affiliate is operating (Dowes & Thomas, 2000). Expatriate managers will play a critical role in this cyclical and reciprocal knowledge transfer process. For MNCs, expatriation remains a viable staffing strategy even though it is costly because the expatriation facilitates the communication process between the parent location and its affiliates, as well as across affiliates, aids in establishing country linkages, and increases the firm's understanding of international operations (Dowling, Schuler, & Welch, 1994). Generally, consistent with the knowledge-based view, the expatriation literature frequently cites the need to transfer resources abroad as a primary reason for expatriating parent-country nationals to foreign affiliates (Dowling et al., 1994).

The upper echelon perspective emphasizes the role of top management teams (TMT) that influence the firm's strategy, operation and subsequent performance (Hambrick & Mason, 1984; Hambrick, 2005). Evolved from the notion of dominant coalition in behavioral theory of the firm

(Cyert & March, 1963), the upper echelon perspective suggests that the corporate CEO alone may not have strong effects on corporate performance. Rather, this perspective suggests that the group of top managers, or top management teams (TMT) will have larger effects on corporate strategy, operation and performance. A group of top managers such as TMT members will act based on their personalized cognitive frames, which are a function of their experience, values, and personalities. Thus, their demographic background is one of the important factors that predict TMT member behaviors that would greatly influence the performance of the entire organization.

Based on the upper echelon perspective, our focus is the characteristics of top management positions of MNC affiliates rather than their entire workforce level as key determinants of affiliate performance. Our study not only examines the characteristics of single managing directors or CEOs but also the characteristics of top management teams (TMT) of MNC foreign affiliates. In terms of the characteristics of top management of MNC affiliates, we focus on the nationality of the managing director (i.e., whether the position is held by an expatriate or a host country national) and the proportion of expatriate managers in TMT of the affiliate.

HYPOTHESES

As discussed previously, one of the determinants of MNC foreign affiliates' performance, especially in their early stages of operation is the transfer of knowledge, or more broadly, transfer of critical resources that have been developed within the MNCs for a sustainable competitive advantage (Barney, 1991). Knowledge-based view of the MNCs suggests that because such knowledge and other resources are often firm specific, expatriate employees from MNCs' home countries play a critical role as "transmitters" of such knowledge and other resources. In addition, expatriate managers who fill the top management positions such as a managing director and other top-level managers will not only transfer and exchange critical knowledge and resources between affiliates and rest of the MNCs, but also closely correspond with their headquarters in order to monitor and control the foreign affiliates for desirable operations. Because the upper echelon perspective (Hambrick & Mason, 1994) suggests that TMT often have a strong effect on the firm's strategy, operation, and eventually performance, we argue that in the early stage of MNC affiliate operation, namely, when the MNC affiliates need exchange and transfer of knowledge with parent MNCs to be successful, expatriate

managers who fill top management positions of the affiliates (managing director and other top manager positions in TMT) will contribute to the performance of the affiliate more than local employees who fill the equivalent positions.

On the other hand, as the length of affiliate operation increases and business structure and operational processes become established and routinized, knowledge transfer and exchange between affiliates and the rest of MNCs may become relatively less important. It might be due to the organizational leaning effect of the MNC affiliates that they internalize the critical knowledge of the MNCs and establish the context-specific capabilities to transform such knowledge into the operational routines that will result in high performance. This means that when the age of the affiliate becomes older, contributions of expatriate top managers to the operation and performance of MNC affiliates will become less salient compared with the early stages of operation, and host country nationals who fill the top management positions of the affiliates and who also have obtained firm specific knowledge of the MNCs, may become able to manage the entire affiliate operation effectively. In addition, heavy reliance of expatriate top managers may cause many problems for affiliate performance in the later stage of affiliate operation such as the motivation problem due to the lack of advanced opportunities for local employees and the damage of local legitimacy (Gong, 2003). Host country nationals who may have more skills to manage local employees and more likely to receive local legitimacy may contribute to better affiliate performance. Therefore, we argue that as the age of MNC affiliates becomes older, the impact of expatriate managers who fill top management positions on affiliate performance will become weaker.

In summary, we predict that the age of foreign MNC affiliates, or the length of affiliate operation, will moderate the relationship between the characteristics of top management of MNC affiliates and affiliate performance. That is, expatriate top managers will have a stronger effect on affiliate performance when the affiliate is younger and such effect will become weaker as the affiliate gets older. Gong (2003) empirically tested and obtained supporting results for the similar hypothesis using the sample of Japanese MNCs that operate in different foreign countries. However, Japanese MNCs, are considered to rely heavily on sending expatriates to foreign operations and the generalizability of his findings may be questionable. We do not limit the sample of MNCs to Japanese

companies and attempt to constructively replicate and extend his findings to the MNCs from many different home countries including North American, European and other Asian countries.

Hypothesis 1a. Affiliate age will moderate the relationship between the nationality of affiliate managing director and affiliate performance in such a way that the younger the affiliate, the stronger the positive impact of the expatriate managing director on affiliate performance is.

Hypothesis 1b. Affiliate age will moderate the relationship between the proportion of expatriate board members and affiliate performance in such a way that the younger the affiliate, the stronger the positive impact of the larger proportion of expatriate board members on affiliate performance is.

We argue that affiliate size is also an important factor that will interact with the characteristics of MNC affiliate top management and the length of affiliate operation. To our knowledge, past research in this field has not fully incorporated affiliate size into the theoretical framework to understand the mechanism in which MNC affiliate top management influences affiliate performance. The theory of executive job demands (Hambrick, Finkelstein, & Mooney, 2005), a part of the upper echelon perspective, suggests that three factors, (1) task challenges (e.g., difficult strategic conditions), (2) performance challenges (e.g., demanding owners and board), and (3) executive aspirations (strong personal desire to deliver maximum performance) will cause heavier executive job demands, and the strategic choice and behaviors of top managers under such heavy executive job demands will reflect their background and dispositions. In case of MNC foreign affiliates, we argue that as affiliate size becomes greater, the executive job demands of the affiliate top management will also increase. This is because increasing MNC affiliate size will cause the increase of coordination complexity, greater need for managerial experience and expertise, and growing interdependence between the affiliate and the rest of MNCs (Johnston & Menguc, 2007), which increase task challenges. Also, performance of larger sized foreign affiliates of MNCs may be critical for MNCs as a whole, and demands for higher performance from their headquarters may also be high. Furthermore, top management members of bigger affiliates may have stronger sense of mission and stronger aspiration for maximum performance because of the criticality of larger MNC affiliates for the overall performance of the MNCs. Therefore, in such a high executive job demands situation, the relationship between top management characteristics of MNC affiliates and their operation and performance will become

greater.

In Hypothesis 1, we argued that the impact of expatriate top managers on affiliate performance is greater when the affiliate is younger. Here, we further argue that this interactive effect of affiliate age and expatriate top managers will be stronger when affiliate size is bigger because executive job demands are heavier when affiliate size is large, which strengthens the relationship between top management characteristics and affiliate performance. In other words, affiliate size will moderate the interaction effect of affiliate age and expatriate top managers on MNC affiliate performance, indicating the existence of a more complex three-way interaction between affiliate size, affiliate age, and affiliate top management characteristics in determining affiliate performance.

Hypothesis 2a. Affiliate size will moderate the interaction between affiliate age and the nationality of affiliate managing director on affiliate performance in such a way that the interaction is stronger for a larger affiliate.

Hypothesis 2b. Affiliate size will moderate the interaction between affiliate age and the proportion of expatriate board members on affiliate performance in such a way that the interaction is stronger for a larger affiliate.

METHODS

Sample

The Gaishikei-kigyo soran (Toyo Keizai Shimposha, 2003) was used to obtain data to test our hypotheses. From this database, we identified 643 Japan-based foreign MNC affiliates that have the necessary information for our study such as top management characteristics and affiliate performance. Industries in which the affiliates operate included finance and insurance (16.8%), medical and chemistry (14.5%), machine (12.9%), wholesale, (8.9%), service (6.5%), automobile (6.4%) and others. Nationalities (home countries) of MNCs included USA (49.5%), Germany (12.0%), UK (8.4%), France (5.8%), Switzerland (5.0%), South Korea (3.0%), Netherlands (2.2%), Sweden (1.7%), Taiwan (1.6%), Denmark (1.4%), China (1.2%), Italy (1.1%), and others. The average number of top management teams was 6.56, and the average ownership ratio was 75%. The average length of affiliate operation in Japan was 27 years.

Measurements

Managing directors and board members nationalities were judged by examining their names.

Past research that used this method for Japanese sample yielded a high level of reliability (e.g., 97% to 100% interrater agreement) because of the relative ease with which Japanese names can be differentiated from Western and other Asian names (Gong, 2003; Harzing, 2001). Based on the judgment, the nationalities of managing directors were dummy coded with 1 for expatriates (non-Japanese) and 0 for host country nationals (Japanese). The proportion of expatriate top managers in TMT was calculated by dividing the number of expatriate top managers by the number of all top managers in TMT.

Affiliate age was measured as the number of years of operation since the affiliate was established in Japan. Affiliate size was measured in terms of the number of employees working for the affiliate. With regard to affiliate performance, labor productivity was used as sales over the number of affiliate employees. Following the past literature, the logarithm of labor productivity was used in the analyses (e.g., Gong, 2003).

Control Variables

Control variables that might influence the affiliate performance were included in the analyses. These control variables included industry, nationality (home country) of MNC, amount of capital invested in the affiliate, ownership ratio, and number of employees working for the MNC in total. To control for the effect of industries, 10 dummy variables were created representing industries. To control for the effect of MNC nationality, 17 dummy variables were created representing MNCs' home countries.

RESULTS

Table 1 presents the descriptive statistics and correlations of key variables used in this study. A total of 215 out of 643 Japan-based foreign MNC affiliates had non-Japanese expatriate managing directors. Top management teams of the affiliates had an average of 40.4% expatriate top managers. The correlation matrix indicates that in general, foreign MNC affiliates with expatriate managing directors and/or larger investment capital were associated with better performance.

 Insert Table 1 and Table 2 about here

Hypotheses 1a and 1b predicted that affiliate age would moderate the relationship between the characteristics of affiliate top management and affiliate performance. To test these hypotheses, multiple hierarchical regression analyses were conducted. Model 1 and Model 2 as well as Model 0 (without interaction terms) in Table 2 present the regression results. In step 1 of the hierarchical regression, control variables were entered; in step 2, affiliate age, affiliate size, nationality of managing director and proportion of expatriate top managers in TMT were entered (Model 0); in step 3, the two-way interaction between affiliate age and nationality of managing director was entered in Model 1 and the two-way interaction between affiliate age and proportion of expatriate top managers in TMT was entered in Model 2. A significant interaction indicates a moderating effect (Baron & Kenny, 1986). To reduce multicollinearity when examining interactions, we centered the key independent variables in the regression (Aiken & West, 1991; Cohen, 1978).

In Model 1, the addition of the two-way interaction term explained an additional 0.6 percent of the variance in affiliate performance, which was statistically significant ($F = 4.14, p < .05$). In Model 2, the addition of the two-way interaction did not significantly explain additional variance in affiliate performance ($F = 0.22, n.s.$). To examine the nature of the significant two-way interaction, we plotted the interaction using a medium split approach in Figure 1. As Figure 1 suggests, MNC affiliates with expatriate managing directors performed better than those with Japanese managing directors when affiliates were younger. This tendency was weaker or nonexistent however when affiliates were older. This is consistent with the prediction of Hypothesis 1a. Thus, Hypotheses 1a was supported and Hypothesis 1b was not supported.

 Insert Figure 1 and Table 3 about here

Hypotheses 2a and 2b predicted the three-way interaction between affiliate size, affiliate age, and top management characteristics of MNC affiliates. To test these hypotheses, multiple hierarchical regression analyses were conducted. Model 3 and Model 4 as well as Model 0 in Table 3 present the regression results. In step 1, control variables were entered; in step 2, affiliate age, affiliate size, nationality of managing director, and proportion of expatriate top managers in TMT were entered, in step 3, the two-way interaction terms were entered; in step 4, the three-way interaction term including

nationality of managing director (Model 3) and that including proportion of expatriate top managers in TMT (Model 4) was entered. We found a significant three-way interactive effect (Change in $R^2 = .008$, $F = 5.62$, $p < .05$) in Model 4, but not in Model 3 (Change in $R^2 = .003$, $F = 2.40$, n.s.). A graphical illustration of the significant three-way interaction is depicted in Figure 2. As Figure 2 suggests, the interaction between affiliate age and proportion of expatriate top managers in TMT was stronger when affiliate size was larger. Specifically, affiliates with a larger proportion of expatriate top managers in TMT performed better than those with a smaller proportion when the affiliate was younger and the affiliate size was larger. When the affiliate size was smaller, such a relationship was weak or nonexistent. This is consistent with the prediction of Hypothesis 2b. Thus, Hypothesis 2a was not supported and Hypothesis 2b was supported.

 Insert Figure 2 about here

DISCUSSION

In our study, we theorized and empirically tested the proposition that the relationship between top management characteristics of MNC foreign affiliates and their performance was moderated by the length of affiliate operation and affiliate size. Our analyses using a sample of 643 foreign MNC affiliates operating in Japan generally support our major proposition. Specifically, we found that when the length of an affiliate operation was shorter, the affiliate performed better under the expatriate managing director, and when the size of an affiliate was larger and the length of operation was shorter, the affiliate performed better under the larger rather than smaller proportion of expatriate top managers in top management teams (TMT). We did not detect the two-way interaction effect between affiliate age and the proportion of expatriate top managers in TMT, but we did find the three-way interaction predicted in the second hypothesis, meaning that the two-way interaction would exist only when the affiliate size is larger.

Implications for MNC Literature

Our results provide evidence and support for the knowledge-based view of MNCs and the upper echelon perspective. That is, our findings indicate that knowledge transfer from the main MNCs and their foreign affiliates would be especially important when the affiliate age is younger, and thus,

expatriate top managers who have MNCs' firm specific knowledge play a significant role for affiliate performance. Our findings also indicate the characteristics of top management of MNC foreign affiliate matter in influencing affiliate performance.

Gong (2003) empirically supported the interaction between the effect of expatriates and affiliate age using the sample of Japanese MNCs. This research somewhat replicated his findings using the sample of MNCs from various countries operating in Japan. Therefore, the theory would apply not only to Japanese MNCs that heavily rely on sending their expatriates for foreign operation (i.e., ethnocentric staffing policy) but also to MNCs in general, from various regions including North America, Europe, and Asia.

In addition, our result on the three-way interaction between affiliate age, affiliate size and top management characteristics of MNC affiliate on affiliate performance is a new finding which deepens the understanding of the effect of executive staffing of MNC foreign affiliates. This finding is consistent with the theory of executive job demands (Hambrick et al, 2005) such that larger affiliate sizes are associated with larger executive job demands, and thus, top managers background (e.g., nationality) will influence their decisions, behaviors and subsequent affiliate performance. Consistent with our finding for Hypothesis 1, however, the effect will become weaker as affiliate age becomes older.

Implications for Practice

For MNCs, the decision of whether they should send expatriates or find host country nationals to fill the top management positions of their foreign affiliates is critical, and such a decision should be made based on the impact of the nationality of top management on affiliate performance. In this view, our findings suggest that MNCs should consider sending their expatriate to fill top management positions especially in the early stage of affiliate operation. This would enable the MNCs to transfer their internal knowledge to their foreign affiliates as well as to control and coordinate the affiliate operation more efficiently and effectively. As affiliate age increases, our findings suggest that MNCs should consider gradually replacing their expatriate top managers with host country nationals who may be able to manage their local employee better and would be more likely to gain local legitimacy. Next, our findings suggest that affiliate size may also matter. That is, sending expatriate

top managers to fill TMT membership of an MNC foreign affiliate will be the better approach when affiliate size is large as well as when affiliates are young.

Limitations and Future Research

Results of our study should be viewed in light of their limitations. First, our findings are based on the cross-sectional archival data. Therefore, our results provide only limited support for causal inferences. Also, because we relied on the archival data, the actual process in which top management characteristics lead to the financial performance within the MNC affiliate is still unclear. Therefore, future research could further investigate the causal mechanism and the process in which top management characteristics lead to affiliate performance, mediated or moderated by other factors. To do so, future research should combine the archival data for multiple period to infer the causality, and also add other methods of data collection such as mail survey in order to obtain data or information about the detailed process or mediator variables.

The single country research design using Japanese data also has a potential limitation. Although there are some advantages of using this design, such as controlling many variables that otherwise influence the results in multi-country design as well as collecting MNCs from various countries operating in Japan, the generalizability of findings may be somewhat limited to the Japanese context. Our study using the single country research design would work with other studies with multi-country research design in a complementary way by making up for the limitations of each method. Future research could be conducted either by a single country research design in different countries or by a multi-country research design to further investigate the topic of our study.

In conclusion, the topic of top management characteristics of MNC affiliates or staffing practices of MNC affiliates and performance of the affiliates is a promising field to be investigated further. Future research should continue to pursue this topic by conducting studies in various countries around the world.

REFERENCES

- Aiken, L.S., & West, S.G. 1991. *Multiple regression: Testing and interpreting interactions*. Newbury Park, CA: Sage Publications.
- Barney, J. B. 1991. Firm resources and sustained competitive advantage. *Journal of Management*, 17: 99-120.
- Baron, R.M., & Kenny, D.A. 1986. The moderator-mediator variable distinction in social psychological research: Conceptual, strategic, and statistical considerations. *Journal of Personality and Social Psychology*, 51: 1173-1182.
- Bebenroth, R, Li, D. H.,& Sekiguchi, T. in press. Executive Staffing Practice Patterns in Foreign MNC Affiliates Based in Japan. *Asian Business & Management*.
- Belderbos, R.A., & Heijltjes, M.G. 2005. The determinants of expatriate staffing by Japanese multinationals in Asia: control, learning and vertical business groups. *Journal of International Business Studies*, 36: 341-354.
- Cyert, R. M., & March, J. G. 1963. *A behavioral theory of the firm*. Englewood Cliffs, NJ: Prentice-Hall.
- Cohen, J. 1978. Partialled products are interactions; partialled vectors are curve components. *Psychological Bulletin*, 85: 858-866.
- Dowling, P. J., Schuler, R. S., & Welch, D. E. 1994. *International dimensions of human resource management (2nd ed.)*. Belmont, Ca.: Wadsworth Publishing.
- Downes, M., & Thomas, A.S. 2000. Knowledge transfer through expatriation: The U-curve approach to overseas staffing. *Journal of Managerial Issues*, 12: 131-149.
- Gong, Y. 2002. *Staffing subsidiaries of multinational firms: Environmental antecedents and subsidiary level outcomes*. Unpublished dissertation, The Ohio State University.
- Gong, Y. 2003. Subsidiary Staffing in Multinational Enterprises: Agency, Resources, and Performance. *Academy of Management Journal*, 46: 728-739.
- Grant, R. M. 1996. Toward a knowledge-based view of the firm. *Strategic Management Journal*, 17: 109–122.

- Johnston, S., & Menguc, B. 2007. Subsidiary size and the level of subsidiary autonomy in multinational corporations: a quadratic model investigation of Australian subsidiaries. *Journal of International Business Studies*, 38: 787-801.
- Hambrick, D.C., Finkelstein, S., & Mooney, A.C. 2005. Executive Job Demands: New Insights for Explaining Strategic Decisions and Leader Behaviors. *Academy of Management Review*, 30: 472-91.
- Harzing, A.W. 2001. Who's in Charge? An Empirical Study of Executive Staffing Practices in Foreign Subsidiaries. *Human Resource Management*, 40(2): 139-158.
- Nickerson, J. A., & Zenger, T. R. 2004. A knowledge-based theory of the firm - The problem-solving perspective. *Organization Science*, 15: 617-622
- Thompson, K., & Keating, M. 2004. An Empirical Study of Executive Nationality Staffing Practices in Foreign-Owned MNC Subsidiaries in Ireland. *Thunderbird International Business Review*, 46(6): 771-797.
- Tan, D., & Mahoney, J. T. 2006. Why a Multinational Firm Chooses Expatriates: Integrating Resource-Based, Agency and Transaction Cost Perspectives. *Journal of Management Studies*, 43: 457-484.
- Toyo Keizai Shimposha 2003. *Gaishikei kigyō soran (Foreign affiliated companies in Japan, a comprehensive directory)*, Tokyo: Toyo Keizai Shumposha.

Table 1: Descriptive Statistics and Correlations

Variable	Mean	S. D.	1	2	3	4	5	6
1. Affiliate performance	4.37	1.31						
2. Affiliate age	26.92	17.39	-.04					
3. Affiliate size	649.41	2184.60	.02	.28**				
4. Managing director nationality	0.33	0.47	.13**	-.03	.00			
5. Proportion of expatriate top managers in TMT	0.40	0.33	.09*	-.13**	-.14**	.64**		
6. Invested capital	7588.14	33578.35	.19**	.20**	.77**	.08	-.07	
7. Ownership ratio	75.09	27.30	.05	-.15**	-.15**	.34**	.46**	-.10**

N=643

* $p < .05$; ** $p < .01$

Table 2: Multiple Hierarchical Regression Analyses to Test Hypothesis 1

Variables	Model 0	Model 1	Model 2
1. Control variables			
Industry	-	-	-
MNC nationality	-	-	-
Invested capital	.37**	.38**	.37**
Ownership ratio	.05	.06	.06
2. Independent variables			
Affiliate age	-.02	-.02	-.03
Affiliate size	-.27**	-.27**	-.27**
Managing director nationality	.05	.06	.05
Proportion of expatriate top managers in TMT	-.06	-.07	-.07
3. Two-way interaction terms			
Affiliate age x Managing director nationality		-.08*	
Affiliate age x Proportion of expatriate board managers			-.02
R ²	.235	.245	.236
Change of R ²		.006*	.000

Note. Standardized regression coefficients are reported. Due to space considerations, coefficients for industry and MNC nationality (dummy variables) were not reported but are available from the authors.

* $p < .05$; ** $p < .01$

Table 3: Multiple Hierarchical Regression Analyses to Test Hypothesis 2

Variables	Model 0	Model 3	Model 4
1. Control variables			
Industry	-	-	-
MNC nationality	-	-	-
Invested capital	.37**	.50**	.49**
Ownership ratio	.05	.05	.04
2. Independent variables			
Affiliate age	-.02	-.03	-.04
Affiliate size	-.27**	-.15**	-.23*
Managing director nationality	.05	.04	.06
Proportion of expatriate top managers in TMT	-.06	-.07	-.05
3. Two-way interaction terms			
Affiliate age x Managing director nationality		-.05	
Affiliate size x Managing director nationality		-.24*	
Affiliate age x Proportion of expatriate top managers in TMT			-.03
Affiliate size x Proportion of expatriate top managers in TMT			.05
Affiliate age x Affiliate size		-.21*	-.39**
4. Three-way interaction terms			
Affiliate age x Affiliate size x Managing director nationality		.12	
Affiliate age x Affiliate size x Proportion of expatriate top managers			-.24*
R ²	.235	.267	.259
Change of R ² (when three-way interaction was entered)		.003	.008*

Note. Standardized regression coefficients are reported. Due to space considerations, coefficients for industry and MNC nationality (dummy variables) were not reported but are available from the authors.

* $p < .05$; ** $p < .01$

Figure 1: The Interaction of Affiliate Age and Nationality of the Managing Director for Affiliate Performance

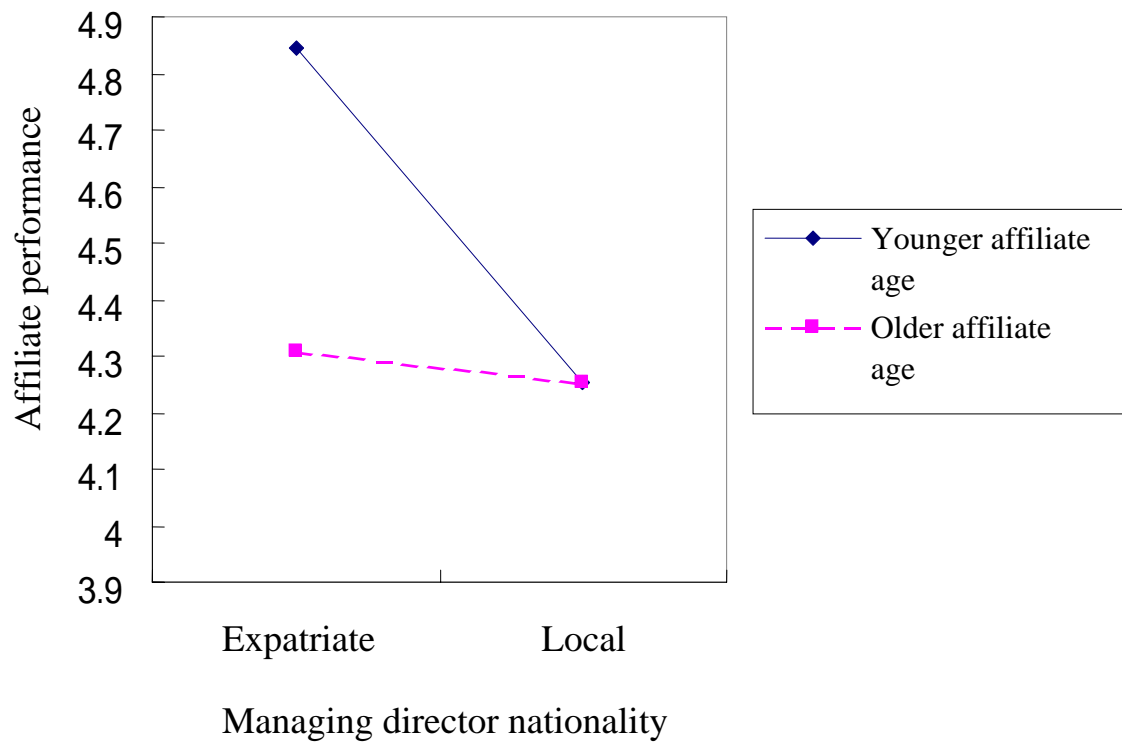
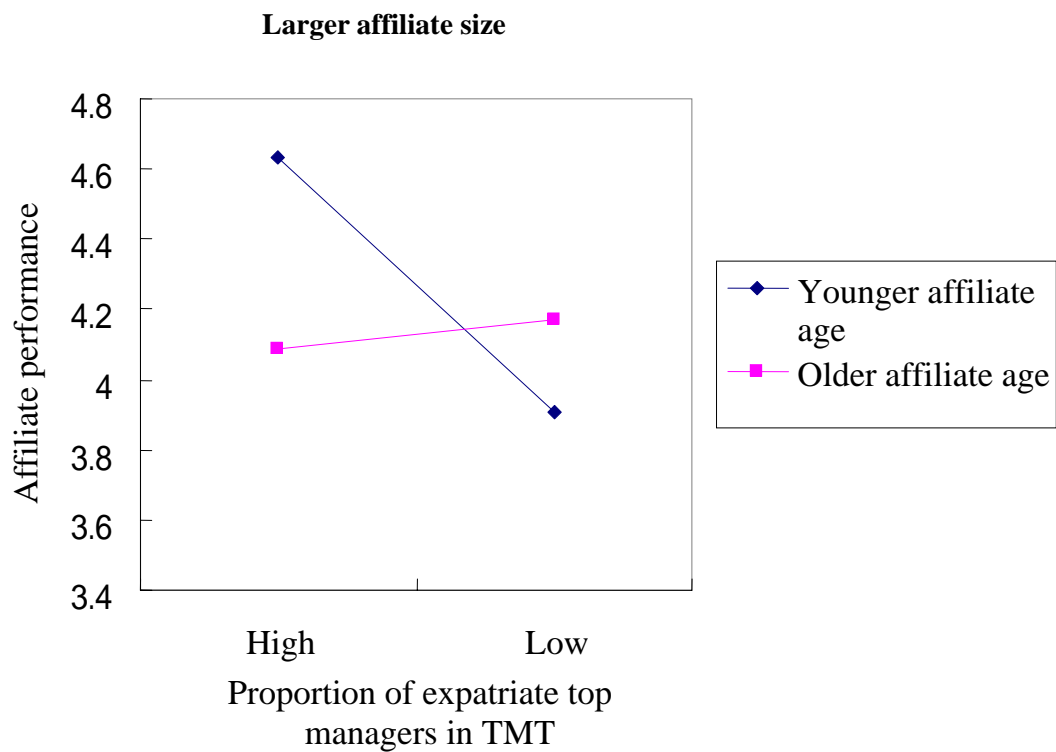
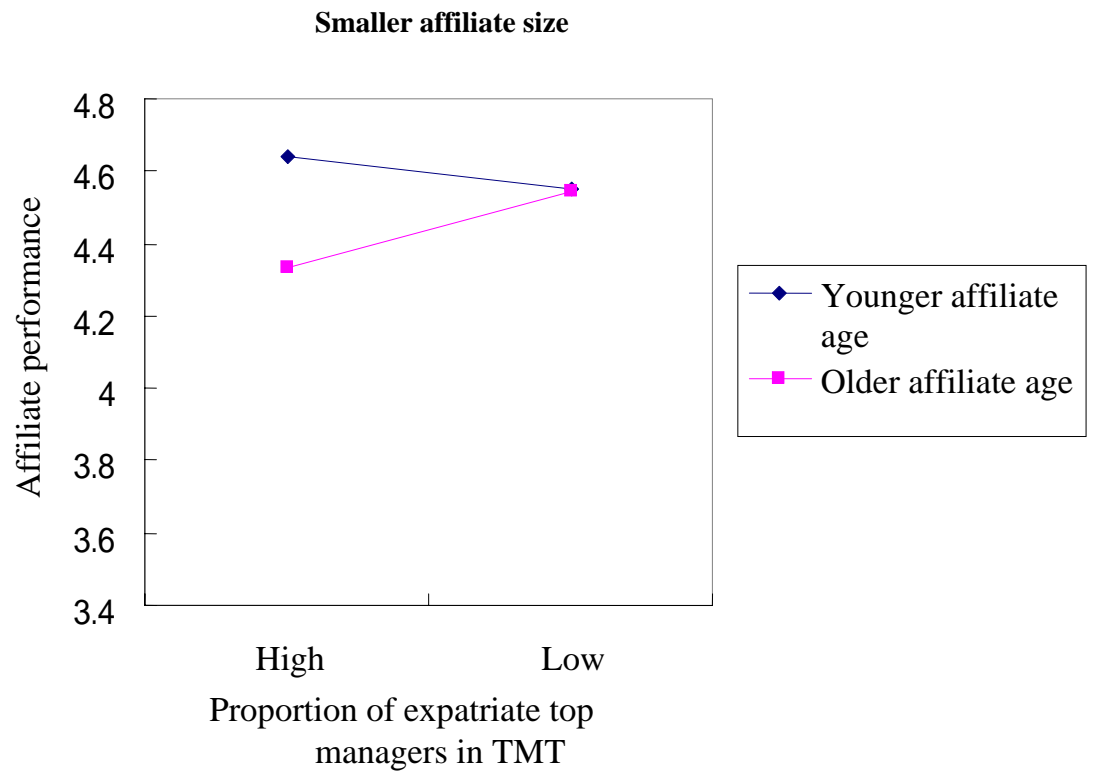


Figure 2: The Three-Way Interaction between Affiliate Size, Affiliate Age and Proportion of Expatriate Board Members for Affiliate Performance



ⁱ This paper was presented by the first and second author at Academy of International Business (AIB) Asian Chapter in Hangzhou, China on Dec. 7th 2008. Valuable comments and suggestions by participants of AIB are appreciated by the authors.