

Hiding behind the language: Language fluency of subsidiary staff and headquarter control in multinational corporations

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Abstract

This paper examines control and coordination mechanisms in multinational corporations. It argues that control and coordination mechanisms are likely to vary across foreign subsidiaries that have different degrees of fluency in the shared language of communication. We investigated 164 Finnish and Chinese foreign subsidiaries of Western multinational corporations. The findings show that the higher the fluency of subsidiary staff in speaking the shared language with headquarters, the less the headquarters will use mechanisms to enhance formalization.

Key words: control, coordination, multinational corporations, foreign subsidiary management, language, internal communication

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1. Introduction

Many multinational corporations (MNC) today operate through a network of foreign subsidiaries located in various countries. Subsidiaries develop into highly specialized units and continuously exchange staff, components, products and information with sister units and the headquarters. This connectedness between units emphasizes the need for staff to communicate with the help of a shared language. Simultaneously, the task of top management at headquarters to control and coordinate subsidiary activities becomes increasingly complex.

An additional challenge is the multilingual environment of the corporation in which headquarter staff exercise control. Within the MNC, there is a constant interplay between a number of idioms: the parent country language spoken in the home base of the corporation and by parent country nationals; the official corporate language used in formal reporting, building of a common corporate culture and facilitating of internal communication flows within the corporation; and a wide range of subsidiary languages used in foreign units for various work-related and social purposes (Marschan-Piekkari et al., 1999b). Consider for example the Finnish Kone Elevators, the fourth largest elevator and escalator company in the world. More than 90% of the sales are generated outside Finland and more than 93% of the personnel are located in foreign subsidiaries, indicating the significance of foreign subsidiaries' contribution to the overall performance of the corporation (Kone Annual Report, 2001). Out of the total international workforce, 35% speak English as the native tongue and English is

used as the common corporate language within Kone. The parent country language is Finnish (7%) and the major subsidiary languages are French (12%), German (11%), and Italian (10%), showing the Eurocentric character of the corporation (Europe accounts for 53% of the sales, while North America and Asia-Pacific for 32% and 12% respectively; Kone company material). A large proportion of internal information exchanges take place between non-native speakers of English (Charles and Marschan-Piekkari, 2002), which typifies the control and coordination challenges faced by Kone top management.

The literature on control and coordination in MNCs is rich and abundant. However, in this paper, we argue that a neglected factor in prior research on control of foreign subsidiaries in MNCs is language (Marschan-Piekkari, Welch and Welch, 1999a). Needless to say, controlling a multilingual workforce in foreign subsidiaries is most likely to occur in instances where top managers who exercise the parenting function over staff at foreign subsidiaries share a common language - whether it is the corporate language, parent country language or another idiom at subsidiary level. When no shared language is available or language skills at subsidiary level are very poor, these units may consciously try to avoid or resist the headquarters' efforts to control by 'hiding behind the language' or passively adopt patterns of non-conforming behavior.

The purpose of this paper is then to explore how language fluency of subsidiary staff affects control mechanisms used by headquarters. We argue that the effectiveness of various control mechanisms may be influenced by language abilities of subsidiary staff. Consequently, we expect language fluency of subsidiary staff to influence the

combination of control mechanisms used by headquarters. From the subsidiary perspective, we regard language skills to function as part of the unit's competence base. The level of our analysis is the dyad, a specific headquarter-foreign subsidiary relationship. Given the rise of informal and subtle control mechanisms such as socialization, informal communication networks and teams in MNCs (Ghoshal, Korine and Szulanski, 1994; Martinez and Jarillo, 1989), which are highly dependent on a shared language, our research question seems particularly pertinent. Moreover, the findings of the present study have implications for knowledge management and the accumulation of social capital in MNCs (Barner-Rasmussen, 2002; Nahapiet and Ghoshal, 1998; Tsai and Ghoshal, 1998).

The remainder of this paper is organized into three sections. First, relevant literature on control and language is reviewed. Thereafter, we report on the research methodology and detail our findings. The final section is a discussion and summary of key issues emerging from the study.

2. Previous research

Control is defined here as the 'regulation of activities within an organization so that they are in accord with the expectations established in policies and targets (Child, 1973, p. 117). The literature on control is abundant and there is a multitude of studies discussing the scope and degree of control as well as control mechanisms (Baliga & Jaeger, 1984; Cray, 1984; Egelhoff, 1984; Geringer & Hebert, 1989; Ghoshal & Nohria, 1989). Following Martinez and Jarillo's (1989, p. 491) classification, we

divide control mechanisms into two broad groups: formal and informal. Much of the previous work in the area has separately examined either formal or informal aspects of control. As Sullivan (1992) argues, a better understanding of control issues requires their joint consideration and our aim is to redress this imbalance. Formal, structural mechanisms encompass such control devices as centralization or decentralization of decision making, shaping the organizational structure, standardization and formalization of various systems and written procedures, and development of planning, budgeting and reporting systems. Informal, more subtle mechanisms, on the other hand, can be the creation of a shared corporate culture through socialization, building informal communication networks and supporting personal relationships through various corporate meetings, teams, staff transfers, and creative use of venues (Harzing, 1999; Martinez and Jarillo, 1989). Out of these, we focus on centralization of decision making, output control, formalization of procedures and policies, and social control, which will be defined in Section 3. The formal and informal aspects of control are complementary and competing approaches to control. In other words, any given headquarter-subsidary relationship is likely to exhibit elements of formal and informal elements at the same time (Nobel and Birkinshaw, 1998).

At a first glance, it may seem that language fluency of subsidiary staff does not affect more formal, structured control mechanisms such as written, standardized systems and procedures, and planning, budgeting and reporting systems. These should be applied in the same way regardless of subsidiary language. Some of the formal control mechanisms such as output control (setting goals in terms of relatively objective criteria for subsidiaries to achieve) may indeed be exercised in the same way across the subsidiary network. Others, however, may be implemented slightly differently in

order to ensure their effectiveness even in units with poor skills in the shared language. For example, one would expect centralization of decision making to increase in headquarter-subsidary relationships where foreign subsidiary staff has insufficient language skills. Similarly, headquarters is likely to increase formalization (standardized rules and procedures) when controlling subsidiaries that face challenges to communicate in the shared language. However, in their in-depth case study of Kone Elevators, Marschan-Piekkari et al. (1999a) found that particularly the Spanish speaking units could fully ignore formal company communication sent from the headquarters in Finland and not attempt to have it translated into the local subsidiary language since it arrived in the ‘wrong’ idiom. Monks (1996) found similar results in her study of nine MNCs operating subsidiaries in Ireland. As all documents and policies received in the HR department of the Irish subsidiary were written in French and not translated into English, the local staff rarely paid them any attention. One may speculate that some of the headquarters’ attempts to ensure a uniform company policy in foreign subsidiaries may be undermined because these units try to ‘hide behind the language.’ This would suggest reconsidering the balance of formal and informal control mechanisms and the shift in emphasis between them.

The contribution of expatriates to social control within the MNC has long been recognized in the international management and IHRM literature (Edström and Galbraith, 1977; Harzing, 2001). In the early stages of internationalization European MNCs tended to rely on informal control mechanisms in steering foreign units (Franko, 1976; Hedlund, 1984). Subsidiary management positions were frequently filled with loyal parent country nationals, who had been indoctrinated with the

corporate culture. This type of control was implicit by nature²; a culture of trust supported the rather autonomous positions of foreign subsidiaries (Edström and Galbraith, 1977; Hedlund, 1984). These findings suggest that the role of the MNC home-base can explain the nature of headquarter control. At the same time, there is contradictory evidence showing that American and Japanese MNCs also rely to an increasing degree on social control and coordination mechanisms in managing their European units, allowing them to maintain a high level of flexibility in their operations (Lehrer and Asakawa, 1999). Hence, the literature seems to be divided as to whether the home-base of the MNC or the location of the subsidiary (combined with psychic distance) influence more significantly the type of control mechanisms used in steering foreign units.

However, the place of language in this process has received little attention (Lahtinen, 2000; Marschan-Piekkari et al., 1999b; Nurmi, 1995). The staffing policy of the MNC – ethnocentric, polycentric, geocentric (Perlmutter, 1969) – used in the recruitment of key persons to top subsidiary positions indicates whether certain nationalities are favoured over others and thus, a hierarchy of preferences in terms of language skills. It is often taken for granted that expatriates are able to communicate in the parent country language (at least parent country nationals) and the common corporate language. Their ability to speak the language of the receiving subsidiary is sometimes used as a selection criteria (Dowling et al., 1998). In her study of the Finnish company Wärtsilä NSD and its Italian subsidiary, Lahtinen (2000) found that expatriates may impede the flow of information between headquarters and the subsidiary. They may

² Harzing's (2001) recent findings, however, suggest that expatriate control may be more direct by nature rather than implicit and informal. In this context, she refers to German research in the area that has found expatriates to ensure a uniform company policy in the subsidiary and keep a close eye on the subsidiary's operations locally.

lack sufficient fluency in the local language, which excludes them from vital subsidiary information and inhibits their ability to monitor local subsidiary operations and transfer this information back to headquarters. As the barriers to staff mobility become increasingly important in globally operating companies, which try to implement a geocentric staffing policy (Perlmutter, 1969), the spread of nationalities represented by expatriates will probably to increase. Hence, language skills of expatriates are likely to vary affecting their ability to operate as control instruments.

Social control can also be implemented through brief management trips. In her study of the Spanish operations of 19 Finnish companies, Lindholm (1997) found that Finnish top managers visited the Spanish units less frequently due to limited skills in Spanish. This finding implies that subsidiary staff in Spain had fewer opportunities to interact with headquarter staff and hence, social control was weakened (Marschan-Piekkari et al., 1999a). Similarly, socialization can be achieved through training, but since many management development programs and training courses are offered in English, subsidiary managers who do not regard themselves as competent in English may effectively be excluded from these venues. Therefore, one may speculate whether the use of some the control and coordination mechanisms may be confined to a limited, English speaking elite group within the MNC.

Recent research in the area suggests that MNCs adopt a differentiated approach to the use of various control and coordination mechanisms. It is argued that headquarters can best manage the specialized subsidiaries by tailoring control and coordination mechanisms to the specific situation of each subsidiary (Gupta and Govindarajan, 1991; Nobel and Birkinshaw, 1998). This situation is an outcome of the subsidiary's

role and contribution to the rest of the organization's operations, its age, size, performance, establishment mode (acquisition and greenfield), and cultural differences between the country the subsidiary is located in and the home base of headquarters (see for a review Harzing, 1999). In this context, we consider language fluency of subsidiary staff to be an important variable to consider when examining the use of control and coordination mechanisms in MNCs.

Much of the previous research on language in multinational management has been qualitative in its methodological approach and drawn from Finland-based multinational corporations that have expanded through foreign acquisitions (Barner-Rasmussen, 2002; Lahtinen, 2000; Marschan-Piekkari et al., 1999a; 1999b; Nurmi, 1995). In order to complement previous findings by exploring possible tendencies and trends in a larger sample of foreign subsidiaries belonging to Western MNCs, we designed a quantitative study.

3. Methods

The purpose of the study was to explore how language fluency of subsidiary staff affects control and coordination mechanisms used by headquarters.

3.1 Sample

The data for this study were collected through structured face-to-face interviews with general managers of foreign subsidiaries in Finland and China. The study is part of a larger research project on foreign subsidiaries of Western multinational companies and the role these subsidiaries play within their parent corporations. This paper concentrates on the dyad, the specific relationship between a subsidiary and its headquarters.

The interviews lasted from thirty minutes to two hours and entailed over 200 questions; however, only a part of those questions are included in this study. All interviews were carried out in English. In Finland, 91% of the managers were Finnish by nationality. In China, the corresponding figure was 20%. In the Finnish interview setting, difficulties or misunderstandings associated with the language of the questionnaire could be cleared by using Finnish or Swedish. In China, one fifth of the respondents were Chinese and the majority of them was interviewed by a Chinese member of the research team, who could overcome the language barrier. The rest of the respondents in China were expatriates of various nationalities, who had a good command of English. Therefore, any language related difficulty could be solved by rephrasing the questions.

A total of 554 subsidiaries were contacted and 164 subsidiaries agreed to participate in the study, yielding a response rate of almost 30%. The sample includes 89 subsidiaries in Finland (a response rate of 59%) and 75 in China (a response rate of

19%). The companies in Finland were all contacted by phone, but due to distance and cost considerations the companies in China were contacted by e-mail.³

The sample subsidiaries belonged to numerous industries. Their headquarters were located in Scandinavia (Denmark, Finland, Norway, Sweden), in other European countries (UK, Germany, the Netherlands, Belgium, France, Italy, Austria, Liechtenstein, Switzerland and Russia) as well as in the United States. The subsidiaries varied in terms of size (sales and employees) and functional type: some were strictly sales or service units while others were manufacturing units. (See Table 1)

 Insert Table 1 here

3.2 Variables

Dependent variables

The dependent variable in this study consists of four control and coordination mechanisms derived from previous studies on control and coordination. These are centralization of decision-making, output control, formalization and social control.

Centralization of decision-making

The general manager was asked to rate, on a scale from 1 (headquarters) to 5 (subsidiary), where the locus of decision-making of the following issues lies: strategic subsidiary goals, the strategy of the subsidiary, the budget for the next year, product-

³ The reason for the considerable disparity between the response rates in Finland and in China can be explained by the fact that relationships between the business world and the academic world in the Nordic countries have been very close resulting in corporations being willing to cooperate with researchers (Björkman & Forsgren, 2000). Another reason for the lower response rate in China might

related issues (range, pricing, design, and R&D), production and purchasing issues, as market area as well as advertising and promotion. The variable centralization of decision-making was produced by taking the mean of these issues. The Cronbach alpha of the construct was 0.8283.

Output control

The variable output control is based on the perceptions of the general manager of how important certain output measures are for the headquarters when evaluating the subsidiary. The output measures are return on investment/equity, net/operating profits, productivity, customer satisfaction and quality and they were rated on a scale from 1 (not at all important) to 7 (very important). The Cronbach alpha was 0.6174.

Formalization

Formalization is here operationalized as the extent to which knowledge transfers in headquarter-subsidary exchanges are formalized. This was rated from 1 (not at all) to 7 (very much).

Social control

The construct social control was constructed by adding the number of managers participating in visits, teams and training annually. The Cronbach alpha of the construct was 0.7439.

Independent variable

be language used in the interview. The subsidiary may not have had a staff member with sufficient knowledge of English.

The independent variable is *language fluency*. The general manager rated his or her staff's ability to speak and write the language used in communicating with headquarters (in most cases English). By staff we here mean only those people in the subsidiary engaged in international communication and exchanges with the headquarters. The staff was rated on a scale from 1 to 7 where seven indicated a complete command of the communication language. The variable language fluency was created by taking the mean of the oral and the written communication skills where the Cronbach alpha was 0.7250.

Control variables

MNC home base. The location of the headquarters has proven to be an important factor determining the control mechanisms used by headquarters. European corporations have a tendency to rely on social control to a higher extent than their American counterparts (see for example Egelhoff, 1984; Hedlund, 1984). In order to account for the MNC home base effect, Europe (0) and U.S. (1) were included as dummy variables.

Degree of internationalization. The degree of internationalization of the MNC might affect control mechanisms. Studies (e.g. Hedlund, 1984) have shown that newly internationalized, especially European corporations tend to rely more on social control than corporations with operations in many countries. Degree of internationalization is measured by the number of countries in which the MNC has activities.

Ownership structure. As a corporation might have the possibility to control wholly owned subsidiaries more tightly than joint ventures, ownership has been added as a dummy variable (0=WOFE, 1=JV).

Establishment mode. The establishment mode can also affect the control mechanisms the headquarters will use. The establishment mode was included in our study as a dummy variable (0=Greenfield, 1=Acquisition).

Subsidiary type. Subsidiary type might be a factor influencing the control mechanisms. Subsidiary type is a dummy variable where manufacturing subsidiaries are treated as the base case and sales subsidiaries are compared to these.

Subsidiary role. Previous research has shown that MNCs differentiate between subsidiaries depending on the role it has in the MNC (Ghoshal & Nohria, 1989; Jarillo & Martinez, 1990). Therefore, in accordance with subsidiary size, a subsidiary having a more strategic role might on one hand be more autonomous or on the other hand more tightly controlled. Subsidiary role is here operationalized as the subsidiary having a local responsibility (0) or having a responsibility beyond its local activities (1).

Subsidiary size. The size of the subsidiary can also influence the control mechanisms used by the headquarters. A larger subsidiary might have more autonomy as it can operate more independently (Ghauri, 1992). However, the headquarters might also control it more tightly as a larger subsidiary might be more important to the success of

the whole MNC. Subsidiary size is here operationalized as the annual sales of the subsidiary.

Subsidiary age. Previous studies (see for example Hedlund, 1984) have shown that subsidiary age may affect the mechanisms used by the headquarters to control its subsidiaries. Headquarters tend to use a higher degree of formal control (centralization, formalization, output control) in older subsidiaries and a higher degree of informal control in younger subsidiaries. Subsidiary age is here defined as the number of years the subsidiary has belonged to the MNC.

Subsidiary location. The location of the subsidiary has also been added as a dummy variable (0=Finland, 1=China) in the regression analysis on the full sample. This is due to the fact that subsidiaries might be controlled differently in different cultures. Also, since all MNCs in the study are Western, the psychic distance is larger between the headquarters and the Chinese subsidiaries than between the headquarters and the Finnish subsidiaries.

Table 2 contains summary statistics of the variables used in this study, including means, standard deviations and Pearson correlation coefficients.

 Insert Table 2 here

4. Results

Regression analyses were performed for each of the control mechanisms. First a regression on the full sample was performed and thereafter on the Finnish and Chinese sample respectively. The results of these analyses are presented in Table 3.

 Insert Table 3 here

Three of the four full models were significant. The centralization and social control models were significant at $p < 0.001$ and the formalization model at $p < 0.05$. The only model not being significant was that for output control. Two of four models were significant for the Finnish and Chinese sample respectively. The social control model was significant for both Finland ($p < 0.005$) and China ($p < 0.001$). However, whereas the centralization model was significant for the Finnish sample ($p < 0.001$), the formalization model was significant for the Chinese model ($p < 0.05$).

Language fluency is positively related to centralization and output control, but negatively related to formalization and social control. However, language fluency was significantly related to formalization, where it was significant at the 0.1 level. The significance level was even higher for the Chinese model of formalization, where language fluency was significant at the 0.05 level.

As to the control variables, degree of internationalization, subsidiary age and the subsidiary location seem to influence centralization, whereas subsidiary type affects output control. Besides language fluency, MNC home base and subsidiary role also seem to contribute to the use of formalization as a control mechanism, while subsidiary size and age as well as entry mode seem to contribute to the use of social control. In addition, MNC home base seems to influence formalization in the Finnish sample, and entry mode formalization in the Chinese sample.

5. Summary and conclusions

This study provided tentative insight into how language fluency affects control and coordination mechanisms used by headquarters. Unlike most prior research on language issues in multinational management, which has adopted a qualitative approach and drawn most of the data from MNCs headquartered in Finland that have expanded through foreign acquisitions, we examined this question in a sample of 164 Finnish and Chinese foreign subsidiaries of Western MNCs. This allowed us to explore broader trends in the relationship between language fluency of subsidiary staff and the combination of control and coordination mechanisms used by headquarters.

The first key finding was that language fluency did indeed influence the nature of headquarter control. Our data show that control and coordination mechanisms used by headquarters varied depending on the language fluency of subsidiary staff. This is in line with some of the indicative findings suggested by prior research (Lindholm, 1997).

Second, we found that subsidiaries, which were not fluent in the shared language used with headquarters, were more tightly controlled than those who demonstrated better language fluency. Thus, foreign units with poor language skills in the sample could not ‘hide behind the language’ and avoid or resist headquarters’ efforts to control. At a more general level, previous research shows that in headquarter-subsidiary and inter-subsidiary communication foreign subsidiaries may be isolated from central information exchanges within the MNC because of limited language skills (Marschan-

Piekkari et al., 1999a). Our data suggest that this translates into more control exercised by headquarters.

Third, our findings demonstrate that headquarters relied more on formalization when controlling subsidiaries with poor skills in the shared language. This was particularly evident in China where the combined effect of psychic distance and poor language skills was likely to result in a considerable amount of formalization. It can be argued that headquarters trusted those units with good language and communication skills. In such cases the need for stipulating standardized rules and regulations was reduced.

The results also suggest that there is a relationship between language fluency, centralization of decision-making and output control, although it was not significant. In other words, subsidiaries with good language skills in the shared idiom had more decision making power and operated in a more autonomous way. At the same time, the amount of output control was increased. One can argue that the increased output control may have compensated for the reduction in centralization of decision-making. This suggests a tendency to combine certain control mechanisms with each other depending on the language fluency of subsidiary staff. .

Contrary to the literature review, the relationship between language fluency and social control was negative, although not significant. Perhaps our measurement of language (we used 'shared language' instead of specifying whether the control was exercised in corporate, parent or subsidiary language) created a situation in which those most affected by language were effectively excluded from social control. The 'shared language' used in social control could have been any language in which the

counterparts had sufficient knowledge, and may be better knowledge than of, for example the common corporate language. Subsequent research into the role of various types of languages (corporate, parent and subsidiary) and assessment of language competence of the entire subsidiary staff (not only those in direct contact with headquarters) are important next steps in building a better understanding about the role of language in the control and coordination of foreign subsidiaries.

Since this field of research is still in its infancy, there are a number of other interesting research avenues to be followed. We found a significant relationship between formalization as a headquarter control mechanism and language fluency of subsidiary staff. We operationalized it as the degree to which knowledge transfer is formalized in headquarter-subsidiary exchanges. In future research, this could be operationalized more broadly to encompass also other type of exchanges between the subsidiary and the headquarters.

Our research was limited to examining language fluency and control mechanisms from the subsidiary perspective. Further studies could include the perspective of the headquarters in order to generate a more balanced view of the challenges associated with controlling foreign units. It is most likely that subsidiary and headquarter staff assess the level of language fluency and its impact on control differently. Moreover, we focused solely on the general manager of the foreign subsidiary as the level of analysis which may have distorted the findings. Subsequent studies should incorporate also other organizational levels.

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Table 1 Basic information about the sample companies

Headquarter location	59 Scandinavia (36.0%) 66 Europe (40.2%) 38 USA (23.2%)
Subsidiary type	106 Manufacturing (35.4%) 58 Sales/service (64.6%)
Subsidiary employees	Mean 379 employees, stdev 820

Table 2 Means, standard deviations and Pearson correlation coefficients of the studied variables

	Mean	Stdev	1	2	3	4	5	6	7	8	9	10	11	12	13	14
1. Centralization	3.32	0.76	**													
2. Output control	5.57	0.91	.06	**												
3. Formalization	3.40	2.11	-.10	.15	**											
4. Social control	20.31	38.62	-.06	.04	-.00	**										
5. Language fluency	5.51	1.03	.04	.00	-.17*	.05	**									
6. MNC home base	0.24	0.43	-.12	.12	.14	.01	-.11	**								
7. Deg. of internationalization	66.79	58.51	-.31**	.12	.12	.18*	-.02	.37*	**							
8. Ownership structure	0.07	0.25	.04	-.04	-.06	.14	-.05	-.15	-.01	**						
9. Establishment mode	0.44	0.50	.28**	-.02	.09	-.13	-.19*	-.00	-.02	-.09	**					
10. Subsidiary type	0.35	0.48	-.09	-.18*	-.09	-.03	-.03	.16*	.15	-.10	.07	**				
11. Subsidiary role	0.60	0.49	-.07	.10	.18*	-.00	-.02	.03	.13	-.13	-.07	-.06	**			
12. Subsidiary size	449.67	896.24	-.15	.04	.02	.26**	-.04	-.02	.20*	^a	.09	-.03	.18*	**		
13. Subsidiary age	14.78	18.51	-.34**	-.03	.07	.03	-.01	.11	.41**	-.08	-.03	.16*	.14	.32**	**	
14. Subsidiary location	0.46	0.50	-.03	-.01	-.08	.11	.20*	-.25*	-.32**	.29**	-.47**	-.32**	-.15	-.28**	-.44**	**

** two-tail p<0.01, * two-tail p<0.05, ^a variable constant in Finnish sample

Table 3 Regression analyses

Data in the table present standardized regression coefficients

	All subsidiaries				Finnish subsidiaries				Chinese subsidiaries			
	Cent	Output	Form	Social	Cent	Output	Form	Social	Cent	Output	Form	Social
Language fluency	.067	.031	-.160 ⁺	-.012	.082	.066	-.060	-.081	.083	.009	-.290 [*]	-.031
MNC home base	-.036	.117	.158 ⁺	-.002	-.089	.158	.215 ⁺	.054	.124	-.145	-.029	-.062
Degree of internationalization	-.267 ^{**}	.121	.164	.070	-.292 [*]	.170	.164	.159	-.138	-.258	-.038	.021
Ownership structure	-.058	.057	-.090	-.118	^a	^a	^a	^a	-.142	-.030	-.192	-.176
Establishment mode	.153	.023	.132	-.249 ^{**}	.175	-.068	-.106	-.252 ⁺	-.119	.062	.368 ^{**}	-.149
Subsidiary type	-.090	-.198 [*]	-.088	.002	-.148	-.250 [*]	-.146	.035	.080	-.142	-.022	-.009
Subsidiary role	-.033	.049	.165 ⁺	-.023	.066	.035	.075	.097	-.080	.254	.305 ⁺	-.019
Subsidiary size	.026	-.035	.032	.652 ^{**}	-.006	-.051	.145	.398 [*]	.011	.059	.044	.775 ^{**}
Subsidiary age	-.300 ^{**}	-.094	.007	-.150 ⁺	-.311 ^{**}	-.186	-.117	-.111	.217	.522 ⁺	.117	-.052
Subsidiary location	-.239 [*]	-.008	.083	-.009								
R	.526	.274	.398	.653	.652	.377	.408	.541	.343	.443	.570	.750
R ²	.277	.075	.159	.427	.425	.142	.167	.293	.118	.197	.325	.563
Adjusted R ²	.215	-.003	.087	.377	.356	.039	.066	.208	-.067	.028	.184	.472
F	4.513 ^{**}	.957	2.205 [*]	8.701 ^{**}	6.187 ^{**}	1.385	1.649	3.422 ^{**}	.638	1.169	2.303 [*]	6.161 ^{**}

⁺ p<0.1, ^{*} p<0.05, ^{**} p<0.01, ^a variable constant