

The Relationship between the Control Level of Foreign Subsidiaries and Performance in the Chinese Market*

Byoung-Goo Kim**, Gyu-Bae Kim***

Received: July 31, 2015. Revised: July 15, 2015. Accepted: August 15, 2015.

Abstract

Purpose – There is a lack of research on how much corporate control is sufficient for effective subsidiary business-related decision making. To address this research gap, this study analyzes the impact of the level of control of a Korean corporation's headquarters on its overseas subsidiary performance.

Research design, data, methodology – The study's sample comes from the Overseas Korean Business Directory of KOTRA. A multiple regression analysis empirically confirmed the relationship between the headquarters level of control over the subsidiaries and their performance.

Results – The results show that the greater an organization's headquarters control over strategic issues, the greater the subsidiary's non-financial performance. However, quick decision-making through decentralization promotes the rapid selection of successful new products that can provide a competitive advantage.

Conclusion – This study shows that the impact of control levels on subsidiary performance depends on the type of control involved. Specifically, while low levels of control over operational issues had a positive (+) influence on subsidiary non-financial performance, high control levels led to improved non-financial performance with regard to strategic issues among the subsidiaries.

Keywords: Multinational Company, Headquarter, Foreign Subsidiary, Control Level, Subsidiary Performance, Chinese Market.

JEL Classifications :M10, M16.

1. Introduction

The issue of how much control over business-related decision making should be granted to overseas subsidiaries has long been important for multinational corporations (Hedlund, 1981; Doz and Prahalad, 1981; Garnier, 1982; Paterson and Brock, 2002). Controlling and giving autonomy to subsidiaries is also an important issue for business leaders. In order to maintain a high level of global efficiency, multinational corporations must accomplish two conflicting goals at the same time: 1) the internal integration of their headquarters and overseas subsidiaries; and 2) responsiveness to local markets (Doz, Bartlett, and Prahalad, 1981; Doz and Prahalad, 1984). To achieve these goals, multinational corporations must maintain a careful balance between properly centralizing business-related decision-making issues at headquarters and decentralizing them to overseas subsidiaries. The ultimate goal of multinational corporations in regulating the control of subsidiaries is to maximize the subsidiaries' performance.

Overseas subsidiaries perform business activities in local environments that are different from those of their headquarters; thus, allocating the decision-making authority to the headquarters and subsidiaries accordingly is of great importance. In other words, it is about whether the headquarters must centralize decision making and increase control over the overseas subsidiaries or decentralize the subsidiaries and give them autonomy. Recently, research on the performance of overseas subsidiaries and how this relates to decision-making control has received increased attention.

However, existing research on this topic in the field of international management is insufficient. In order to bridge the research gap, this study analyzes how the level of control of Korean corporations' headquarters over overseas subsidiaries influences those subsidiaries' business performance. Although existing research on international management has examined the control of headquarters over overseas subsidiaries (Jarillo and Martinez, 1990; Birkinshaw and Morison, 1995; Kim and Kim, 2010), it has not addressed the relationship between the headquarters' level of control and the subsidiaries' performance.

Moreover, existing studies on this topic have several shortcomings. One significant issue is the measurement of con-

* This work was supported by the National Research Foundation of Korea Grant funded by the Korean Government(NRF-2014S1A5A8018528)

** First Author, Assistant Professor, Division of Global Business, Hanshin University, Korea. E-mail: bgkim@hs.ac.kr.

This Work was Supported by Hanshin University Research Grant.

*** Corresponding Author, Assistant Professor, Dept. of Business Administration, Daejeon University, Korea. E-mail: gbkim@du.ac.kr.

control levels; most past studies have used limited measures to assess control levels, leading to inaccurate measurements. This study aims to overcome these limitations by taking decision-making issues related to local subsidiaries into account. In addition, while preceding studies have pointed out that the characteristics of specific issues must be considered in measuring the levels of decision-making control, most have not carefully considered the relevant characteristics; this has led to inconsistent results. With this in mind, this study aims to consider both operational issues and strategic issues affecting the levels of control over decision making.

Another limitation of previous studies has been the relevance of their survey subjects. In measuring the level of control of headquarters over subsidiaries, most past researchers have not administered surveys to local subsidiaries and have focused on only corporate headquarters. This may be because it is difficult to conduct surveys among overseas subsidiaries, as their return rates are low. As such, even though past studies have emphasized that conducting surveys among overseas subsidiaries provides the most accurate measurement of control levels, such research has been insufficient in reality. This study aims to address this by conducting direct surveys among Korean subsidiaries in China. The core research questions investigated in this study are as follows:

- ✓ Does the level of control exercised by headquarters over overseas subsidiaries influence the subsidiaries' performance?
- ✓ Does the extent of this influence differ according to the control issues involved (operational issues vs. strategic issues)?
- ✓ How does the level of control more specifically influence financial and non-financial performance?

The remainder of this paper is organized as follows. Chapter 2 reviews the existing literature and presents the hypotheses. Chapter 3 explains the empirical research methodology employed in this study. Chapter 4 presents the empirical results. Finally, chapter 5 offers a discussion and conclusion and discusses this study's implications and limitations.

2. Literature Review & Hypotheses Setting

2.1. Definition of Control

Even though "control" and "autonomy" are widely used academic terms, their precise definitions are not uniform and they are applied diversely depending on the research purpose or field of study. In international management, control is defined as that which regulates activities within an organization and induces organizations' members and subordinate units to perform the given tasks efficiently to contribute to the achievement of the organizational goals (Baliga and Jaeger, 1984; Child, 1973; Mintzberg, 1979). Control is also seen as a process that focuses on a goal or purpose by exerting power or authority (Cray, 1984).

In organizational control research, the concept of autonomy is contrary to that of control. In this context, an autonomic organization is defined as one in which the subordinate units have the ability to make decisions on certain issues by themselves (Brooke, 1984). In recent literature, autonomy has also been defined as the degree of power over strategic decision-making and operational decision-making held by overseas subsidiaries of multinational corporations (O'Donnell, 2000). Taggart (1997) regards autonomy as a decision-based process that evolves through bargaining between the center and periphery of an organization. The autonomy of subsidiaries can also be defined as the degree of ability that they have to not depend on their headquarters and perform business activities and investments based on their own decisions (Forsgren and Pedersen, 1998).

"Centralization" and "decentralization" are other terms that are used with roughly the same meaning as control and autonomy (Brooke, 1984; Garnier, Osborn, Galica, and Lecon, 1979; Gupta and Govindarajan, 1991). Centralization involves the official authority and hierarchical mechanisms in a corporation's decision-making process. It can be defined as the degree of concentration of decision-making rights within a certain part of an organization (Robbins, 1990; Rodrigues, 1995). The level of centralization or decentralization in an organization is determined by the amount of decision-making rights delegated to the executives of subsidiaries by the headquarters (Gupta and Govindarajan, 1991).

Ghoshal and Nohria (1989) categorize organizational control into three types: 1) centralization, which grants subsidiaries a low level of power in decision-making, 2) formalization, which involves systematic rules and procedures for carrying out decision making, and 3) normative integration between the headquarters and the subsidiaries. This study bases its analysis of headquarters' levels of control over the decision-making of subsidiaries on existing studies (Doz and Prahalad, 1981; Gates and Egelhoff, 1986; Edwards, Ahmad and Moss, 2002; Luo, 2006; Johnston and Menguc, 2007).

2.2. Importance of Control

For corporations, the purpose of control is to induce workers and subordinate organizations to move toward corporate goals and perform given tasks effectively. Organizational control is important for smooth communication between multinational corporations and their overseas subsidiaries. Such corporations are faced with environments in which they have to maintain both regional responsiveness, through local management, and global integration, to cope with the changes in the global business environment (Doz and Prahalad, 1981). As multinational corporations become more globalized, their organizational structures become more complicated, making it difficult to directly monitor their subsidiaries' activities. Moreover, if the headquarters of these companies cannot deal with diverse environmental changes and satisfy the needs of overseas subsidiaries, the necessity for decentralization and the delegation of rights to subsidiaries increases. If headquarters continue to maintain the same control levels under such circumstances, control costs will increase and

excessive control will have a negative influence on flexibility and efficiency, which are necessary to address the environmental changes faced by subsidiaries (Barlow, 1953; Cray, 1984; Eisenhardt, 1989a; Mosakowski, 1997). However, giving too much autonomy to subsidiaries leads to overall inconsistency in corporate business activities and can cause opportunistic or deviant behavior among subordinate organizations (Van de Ven, 1986).

The control of multinational corporations over overseas subsidiaries involves many challenges, caused by cultural gaps and environmental differences. Cultural and market differences cause difficulties in applying headquarters' policies or systems to overseas subsidiaries (Hofstede, 1980) and in understanding the information and conditions involved in the business activities of subsidiaries (O'Donnell, 2000). Determining the level of control that should be applied to overseas subsidiaries is therefore a significant issue for multinational corporations.

2.3. Hypotheses Setting

Past studies on the influence of control level on firm performance have mostly considered international joint ventures (Killing, 1983; Schaan, 1983; Geringer and Herbert, 1989; Yan and Gray, 1994; Geringer and Woodcock, 1989; Franko, 1971; Ramaswamy, Gomes, and Veliyath, 1998; Madhok, 1995; Beamish, 1985). These studies have focused on potential conflicts between the partners of joint ventures. Regarding the relationships between control levels and the business performances of joint ventures, they have found that either one of the partners must take control over the management of joint ventures or decision making must be balanced among the partners.

Moreover, existing studies on headquarters' control over subsidiaries and the relationship between the degree of autonomy and business performance have mostly been exploratory, while empirical research on this topic has been insufficient (Andersson, Forsgren, and Pedersen, 2001; Young and Tavares, 2004). These studies argue that excessive control by headquarters keeps multinational corporations from strategically realizing the benefits offered by their independent subsidiaries (Pearce, 1999; Rugman and Verbeke, 2001; Andersson et al., 2002). Frey (1998) also argues that excessive intervention by headquarters decreases the self-determination and self-esteem of subsidiaries and reduces fundamental motivation, while excessive surveillance and control by headquarters cause the managers of subsidiaries to engage in opportunistic behaviors.

The above-mentioned studies confirm that managers of subsidiaries who are under excessive surveillance and control are more likely to lose their identities and desire to work toward the goals of their companies (Osterloh and Frey, 2000). The results of existing studies imply that excessive surveillance and control by headquarters is highly likely to have a negative influence on the performance of subsidiaries. They also indicate how important it is for headquarters to maintain a balance between control and autonomy, which are complementary attributes of management.

This study aims to expand the scope of existing research on

the relationship between corporations' decision speeds and performances by examining the relationship between subsidiary control level and performance. It also aims to analyze the influence of the degree of headquarter control over local operational and strategic issues on the performance of subsidiaries (Young and Tavares, 2004).

Research on the relationship between quick decision-making and business performance was first conducted by Bourgeois and Eisenhardt (1988), who argued that when decisions are made more quickly through decentralization, the sales performance and profitability of firms increase. The results of later studies also demonstrate that quick decision-making leads to better performance in rapidly changing industries and highly uncertain circumstances (Eisenhardt, 1989; Judge and Miller, 1991). Based on this, the following hypothesis was formulated:

<Hypothesis 1> The lower a headquarters' control level over its overseas subsidiaries for each issue type, the higher the financial performance of the overseas subsidiaries.

<Hypothesis 1-1> The lower a headquarters' control level over its overseas subsidiaries' operational issues, the higher the financial performance of the subsidiaries.

<Hypothesis 1-2> The lower the headquarters' control level over its overseas subsidiaries' strategic issues, the higher the financial performance of the subsidiaries.

Quick decision-making through decentralization promotes the prompt selection of successful new products that can provide competitive advantages (Jones, Lancot, and Teegen, 2000) and enables more rapid adoption of highly efficient process technologies among existing industries (Baum, 2000), which positively influences the launch of newly improved products, new product processes, and technology developments (Venaik, Midgley, and Devinney, 2005). This indicates that quick decision-making through decentralization provides competitive advantages for corporations in dynamic outlets or non-dynamic environments, allowing them to take advantage of opportunities before they disappear (Stevenson and Gumpert, 1985; Baum and Wally, 2003). It also implies that the decentralization of organizations plays a significant role in enabling overseas subsidiaries to make quick and accurate decisions that allow them to adjust to changes in their local market environments and trends in the practices of competitors.

As mentioned above, the control of headquarters over subsidiaries can be seen as involving control over both operational and strategic issues. It is important that headquarters delegate decision-making on operational issues to subsidiaries and maintain low levels of control, because overseas subsidiaries have particularly useful and accurate front-line environmental information that is required for making appropriate decisions on operational issues (Baum and Wally, 2003). Most of the

changes faced by overseas subsidiaries involve competitors' products, economic environments, and consumer tastes, which are closely related to operational issues. In order for subsidiaries to make quick decisions to respond to local environmental changes based on accurate information, they must be given decision-making rights that allow them to improve their performance.

The advantages of the decentralization of decision making over operational issues to overseas subsidiaries of firms have attracted the attention of several researchers of leadership and organization theories (Adler and Borys, 1996; Jung and Avolio, 1999). They argue that the decentralization of business management increases employee motivation, loyalty, and creativity, resulting in the development of new and improved products (Sims, 1996). Moreover, decentralizing power and giving subordinate organizations control over matters such as employment, promotion, and production processes results in increased responsiveness to the market environment as well as improved financial performance (Schminke, Ambrose, and Cropanzano, 2000).

With regard to strategic issues, subsidiaries are likely to gain access to accurate information on local environment and market situations more quickly compared to headquarters. However, since headquarters might perceive strategic issues as more important than operational issues, they are highly likely to impose higher levels of centralized control over them. Nevertheless, even if the subsidiaries' control level is not low enough for the subsidiaries to make decisions independently, as long as it is low enough that headquarters discuss their decisions with subsidiaries, the subsidiaries can more flexibly cope with the issues in local business activities, which is likely to have a positive effect on their performance. Based on this, the following hypothesis was developed:

<Hypothesis 2> The lower a headquarters' level of control over its overseas subsidiaries for each issue type, the higher the non-financial performance of the overseas subsidiaries.

<Hypothesis 2-1> The lower the headquarters' level of control over its overseas subsidiaries' operational issues, the higher the non-financial performance of the subsidiaries.

<Hypothesis 2-2> The lower the headquarters' level of control over its overseas subsidiaries' strategic issues, the higher the non-financial performance of the subsidiaries.

On the other hand, imposing a high level of headquarter control over strategic decision-making could benefit a corporation (Adler and Borys, 1996). Literature on this topic shows that business performance is improved when a business leader clearly defines the goals and strategies of an entire corporation, shows strong leadership regarding important issues affecting the overall corporation, and makes appropriate decisions (Jung and Avolio, 1999; Kirkman and Rosen, 1999; Locke and Latham,

1990). Recently, Phan (2000) has argued that strategic decision-making that greatly influences an entire corporation must be led by top executives at headquarters in order to achieve greater business performance. This indicates that strategic decision-making must be highly controlled in order to increase business performance. Therefore, the following exploratory, competing hypothesis has been developed:

<Hypothesis 3> The higher a headquarters' level of control over its overseas subsidiaries' strategic issues, the higher the performance of the overseas subsidiaries.

<Hypothesis 3-1> The higher the headquarters' level of control over its overseas subsidiaries' strategic issues, the higher the financial performance of the overseas subsidiaries.

<Hypothesis 3-2> The higher the headquarters' level of control over its overseas subsidiaries' strategic issues, the higher the non-financial performance of the overseas subsidiaries.

3. Methodology

3.1. Sample and Data

This study analyzes Chinese subsidiaries of Korean corporations that are engaged in production, and in some cases, sales. The study's survey used the 2007/2008 Overseas Korean Business Directory (Vol.2:China), published by KOTRA. A random sample of 690 Chinese subsidiaries of Korean companies was selected as the object of the study. Corporations that had been engaged in production activities for less than two years as of 2008 were excluded, as were small-scale subsidiaries with fewer than 100 employees or one million dollars of investment and firms that did not have headquarters located in Korea. The survey measured the variables related to the hypotheses of this study, as these were mostly related to internal organizational management and could not be acquired from secondary sources.

The survey was administered through several means, including email, fax, and phone calls. To increase return rate, the top-level managers of the selected firms in China were called directly, given an explanation of the purpose of this study, and requested to cooperate. An effort was also made to administer the survey to Korean employees at the senior management level, and if that was not possible, management-level employees were included. As a result, 123 questionnaires were returned by the surveyed corporations between May 2009 and October 2009 (18.1% return rate). Among them, 12 questionnaires were excluded because of inconsistent responses or irrelevant data, and the remaining 111 were used in this study.

Most preceding studies have measured subsidiary control lev-

els by surveying companies' headquarters instead of their subsidiaries; this increases the likeliness of the surveys being more unreliable in comparison to those actually administered to subsidiaries (Jaussaud and Schaaper, 2007). Thus, this study targeted subsidiaries in order to address this shortcoming.

3.2. Dependent Variables

Performance can be defined in a narrow sense, by considering only financial performance, but in a broad sense, by including non-financial performance as well (Venaik, Midgley, and Devinney, 2005; Venkatraman and Ramanujam, 1986). This study aims to measure both the financial and non-financial performance of subsidiaries, as corporations with low control levels or high autonomy among their subsidiaries are likely to have a great influence on both.

As objective financial statements could not be obtained from Korean subsidiaries in China, a survey was used to measure subjective satisfaction. The subsidiaries' performance was measured through four questions on financial performance and five on non-financial performance, and all questions were based on existing studies (Luo and Peng, 1999; Dhanaraj et al., 2004).

Financial performance was measured on a five-point scale in terms of 1) average sales growth; 2) profitability; 3) market share; and 4) attainment of goals. Non-financial performance was measured on a five-point scale in terms of 1) number of new or functionally improved products that have been launched; 2) number of new or improved production processes; 3) amount of improvement in marketing, sales, and service; 4) amount of improvement in intelligibility of relative markets; and 5) amount of improvement in R&D.

Past studies have shown that such measurements of subjective performance are highly correlated with objective performance indices, and thus, offer a suitable means of measuring performance (Dess and Robinson, 1984; Robinson and Pearce, 1988; Venkatraman and Ramanujam, 1987; Love, Priem, and Lumpkin, 2002).

3.3. Independent variables

Control, which is the dependent variable in this study, was measured by examining how headquarters give direct orders or determine how matters related to the local business activities of subsidiaries are to be addressed. For example, if headquarters do not officially delegate the right to deal with local business activities to their overseas subsidiaries, this indicates the highest level of control. In order to measure the control levels of headquarters over overseas subsidiaries, decision-making items were determined, modified, and supplemented based on existing studies (Ghoshal, Korine, and Szulanski, 1994; Gates and Egelhoff, 1986; Govindarajan, 1988; Hedlund, 1981), and 11 decision-making issues were measured on a five-point scale (1 = headquarters make all decisions, 3 = headquarters and subsidiaries have equal influence, 5 = subsidiaries alone make decisions). The 11 issues were: 1) personnel policy (employment

and discharge); 2) marketing activities (product advertisement and sales system); 3) R&D activities (new product development/new technology implementation); 4) production activities (e.g., production plan establishment); 5) financial activities (budget plan); 6) enhancement or modification of existing products; 7) M&A and joint ventures; 8) personnel affairs of executives; 9) R&D investment and budget; 10) withdrawal and restructuring; and 11) raising additional funding (additional investment). The lower the values for each of these items, the higher the headquarters' control level. As such, in the empirical analysis, these questions were reverse-coded to avoid confusion and facilitate interpretation, so that the higher their values, the higher the control levels. Operational issues (1–6) and strategic issues (7–11) were evenly distributed. Control level, which is the independent variable in the study, was used to divide the issues into operational issues and strategic issues.

3.4. Control Variables

The age of subsidiaries was measured on the basis of their year of foundation in China, in accordance with existing studies. Market entry mode was divided into two types: wholly owned and joint ventures. Joint ventures were measured according to the following scale: 1 = less than 20% of the subsidiary was Chinese-owned; 2 = 20%–50% of the subsidiary was Chinese-owned; 3 = 50% of the subsidiary was Chinese-owned; 4 = from 51%–100% of the subsidiary was Chinese-owned; and 5 = 100% of the subsidiary was Chinese-owned. Reverse coding was repeated to avoid confusion, so that the higher the number, the higher the percentage of shares owned by Korean firms. A dummy variable related to industry type was divided into: labor-intensive industries (e.g., leather shoes, textile and clothing, food and beverage, printing, wooden furniture, non-metal production) and technology- and capital-intensive industries (e.g., electrical and electronic, machinery and equipment, primary metal, assembly metal, chemical, rubber, plastic). A value of 0 was given to labor-intensive industries, and a value of 1, to technology- and capital-intensive industries. The size of headquarters was measured according to the number of employees at the headquarters (Taggart and Hood, 1999). In this study, for the age of the subsidiaries and size of the headquarters, a natural logarithm was used to analyze values in order to ease the distortion of distribution.

4. Empirical Analysis

4.1. Reliability and Validity

As a part of this study, multiple regression analysis was carried out to empirically confirm the relationship between headquarters' level of control over subsidiaries and subsidiaries' performance, by expanding the analysis of determinants. Prior to empirical analysis, verification of the internal consistency of the measurement items for each variable was conducted. As shown in <Table 1>, the items were found to be internally consistent,

and the value of Cronbach's alpha was above 0.6 (the generally accepted level) for control over operational issues, control over strategic issues, non-financial performance, and financial performance. A factor analysis was also conducted to verify the validity of the measurement items for the independent and dependent variables. For the analysis, factors were extracted based on the "eigenvalue > 1" criterion by using varimax rotation, which is an orthogonal rotation in principal component analysis. A factor analysis (refer to <Table 2>) showed that all variables had significant factor loadings and that all items explained approximately 76% of the total variance, indicating a relatively high level of variance explanation power. The factor loadings of the measurement items for each factor were above 1.5, which is the generally accepted level, providing evidence of discriminant validity and convergent validity.

<Table 1> Factor Analysis

ITEM	1	2	3	4	Cronbach's alpha
Control 2	.915	-.157	-.209	.042	0.937
Control 4	.893	-.089	-.093	-.076	
Control 5	.860	-.064	-.142	.127	
Control 6	.848	.012	-.151	.007	
Control 1	.828	-.251	-.157	-.060	0.905
Control 3	.780	-.091	-.184	.116	
Non-fiana 2	-.101	.883	-.139	.045	
Non-fiana 5	-.070	.874	-.014	.185	
Non-fiana 3	-.082	.871	.060	-.006	0.904
Non-fiana 1	-.200	.833	.076	.072	
Non-fiana 4	-.061	.743	-.054	.132	
Fiana 2	-.184	-.049	.943	-.018	
Fiana 4	-.180	.029	.909	-.025	0.772
Fiana 3	-.115	-.120	.833	-.006	
Fiana 1	-.331	.083	.728	-.072	
Control 7	.148	.105	-.258	.827	
Control 8	-.145	.174	.122	.783	0.772
Control 9	.101	-.037	-.153	.769	
Control 10	.024	.146	.129	.706	
Eigen-Value	4.695	3.745	2.228	1.981	
Variance(%)	31.605	20.873	11.724	10.429	
Cumulative V(%)	31.605	52.477	64.201	74.630	

4.2. Correlation Analysis

In order to test this study's hypotheses, a correlation analysis of variables was conducted prior to a multiple regression

analysis. The results of the correlation analysis are shown in <Table 2>. As can be seen from these results, the correlation coefficient among independent variables was not high. However, VIFs (variance inflation factors) were still used to verify any issues of multicollinearity.

<Table 2> Correlation matrix

Variables ^a	Means	St. dev	1	2	3	4	5	6	7	8
1. NONF	2.868	0.632	1							
2. FINA	2.773	0.814	-0.003	1						
3. OPER	2.827	0.940	-0.231*	-0.397*	1					
4. STRA	3.977	0.604	0.192*	-0.127	0.096	1				
5. INDUS	0.351	0.480	0.076	-0.026	0.146	0.200*	1			
6. MODE	0.874	0.333	0.076	0.044	0.003	-0.093	-0.118	1		
7. SAGE	9.991	4.372	0.024	0.08	-0.16	-0.016	-0.12	-0.007	1	
8. HQSIZE	6.080	1.408	0.155	0.124	-0.045	0.045	0.292**	-0.117	-0.031	1

Significant at the 0.05 level

** Significant at the 0.01 level

4.3. Results

To empirically confirm the relationship between headquarters' level of control over subsidiaries and subsidiaries' performance, a multiple regression analysis was conducted. The independent variable, control level, was divided into level of control over operational issues and that over strategic issues, and the dependent variable, autonomy, was examined in terms of satisfaction levels for both financial performance and non-financial performance. The results are shown in <Table 3> and <Table 4>. In interpreting the results, the differences between the performance types were analyzed by considering non-financial performance as the dependent variable in Models 1 and 2 and financial performance as the dependent variable in Models 3 and 4.

As can be seen from the results, the adjusted R2 was, respectively, 13.3% and 17.8% in Model 2 and Model 4, which are the main models of this study. There was no problem with the suitability of the models, as the F value was significant at the 1% level. As the maximum value of VIFs was 1.176, it was inferred that multicollinearity was not a problem in the regression equation of this study.

Conclusions and discussion based on the results of the empirical analysis are presented in the following section. The analyses of the results focus on the full models for Model 2 and Model 4.

<Table 3> Regression results for non-financial performance

		Model 1		Model 2		
Variables ^b	VIFs	<i>b</i>	<i>t-value</i>	<i>b</i>	<i>t-value</i>	
Indep. Variables						
OPER	1.059			-0.248	-2.635	***
STRA	1.048			0.206	2.206	**
Control Variables						
DUSY	1.176	0.045	0.452	0.041	0.419	
MODE	1.017	0.122	1.275	0.119	1.291	
SAGE	1.038	0.028	0.291	-0.009	-0.101	
HQSIZE	1.110	0.155	1.550	0.134	1.391	
Adj. R		0.041		0.133		
F-stat.		1.126		3.218		***
N		111		111		

* $p < 0.1$; ** $p < 0.05$; *** $p < 0.01$ (two tailed)**<Table 4>** Regression results for financial performance

		Model 3		Model 4		
Variables ^b	VIFs	<i>b</i>	<i>t-value</i>	<i>b</i>	<i>t-value</i>	
Indep. Variables						
OPER	1.059			-0.382	-4.174	***
STRA	1.048			-0.099	-1.092	
Control Variables						
DUSY	1.176	-0.058	-0.572	0.022	0.223	
MODE	1.017	0.015	0.156	0.002	0.017	**
SAGE	1.038	0.077	0.793	0.023	0.251	
HQSIZE	1.110	0.144	1.435	0.105	1.124	
Adj. R		0.020		0.178		
F-stat.		0.697		3.763		***
N		111		111		

* $p < 0.1$; ** $p < 0.05$; *** $p < 0.01$ (two tailed)

ization's level of control is over both operational and strategic issues, the greater its non-financial performance will be. According to the empirical analysis of the non-financial performance of subsidiaries and headquarters' control levels, Hypothesis 2-1 was supported ($t = -2.635$, $p < .01$). Hypothesis 2-2, which predicted that a lower level of control over strategic issues would lead to greater non-financial performance, was not supported. However, the competing hypothesis, Hypothesis 3-2, was supported ($t = 2.206$, $p < .05$). This confirmed that the higher an organization's level of control is over strategic issues, the greater its non-financial performance will be.

The results regarding Hypothesis 2-1 empirically support the argument that quick decision-making through decentralization promotes the rapid selection of successful new products that can provide a competitive advantage (Jones, Lancot, and Teegen, 2000) and positively influences the launch of newly improved products, new production processes, and technological development as per the changes in local economies and competitive environments (Venaik, Midgley, and Devinney, 2005). This result also reiterates the fact that it is important for headquarters to maintain low control levels and delegate decision making on operational issues to overseas subsidiaries, which have useful, accurate front-line environmental information that is required for making decisions on operational issues (Baum and Wally, 2003). Local subsidiaries are likely to face many situations in which they must make prompt and rapid decisions on operational issues, owing to changes in local consumers and competitors, including changes in competitors' products, economic environments, and consumer tastes. This study supports the hypothesis that delegating decision-making rights to subsidiaries to allow them to make quick decisions and deal with local environmental changes based on accurate information positively influences their performance.

Hypothesis 2-2 was rejected, but its competing hypothesis, Hypothesis 3-2, was supported. This result is in accordance with past research, which has found that business performance is improved when headquarters clearly define the goals and strategies for their entire corporations, show strong leadership with regard to important issues affecting the overall corporation, and make the right decisions (Jung and Avolio, 1999; Kirkman and Rosen, 1999; Locke and Latham, 1990). It also conforms to the arguments presented by Phan (2000), who finds that decision making on strategic issues that greatly influence an overall corporation must be led by skilled top executives at the headquarters so that greater business performance can be accomplished. Prior studies have been limited to exploratory research on specific cases, but through this study, their arguments regarding the relationships between control level and performance have been empirically supported.

The results of this study have significant implications. Existing studies on the control of subsidiaries have analyzed control without distinguishing between operational and strategic issues and focus on only operational issues. Therefore, the results of the analyses of the influence of control level on subsidiaries' performance were inconsistent. The results of this study show that the influence of control level on subsidiaries' performance

5. Discussion and Conclusion

5.1. Relationship between Level of Control and Non-Financial Performance

Hypotheses 2-1 and 2-2 predicted that the lower an organ-

depends on the type of control involved. More specifically, while low levels of control over operational issues by headquarters had a positive (+) influence on subsidiaries' non-financial performance, high control levels led to improved non-financial performance with regard to strategic issues among the subsidiaries. It is for this reason that the results of past studies have provided inconsistent results with regard to the relationship between control levels and the performance of subsidiaries.

5.2. Relationship between Control Level and Financial Performance

Hypothesis 1-1 predicted that the lower an organization's level of control is over operational issues, the greater the financial performance of its subsidiaries will be, while Hypothesis 1-2 predicted that the lower an organization's level of control is over strategic issues, the greater its subsidiaries' financial performance will be. Hypothesis 3-1, the competing hypothesis for Hypothesis 1-2, predicted that the higher an organization's control level is over strategic issues, the greater its financial performance will be. An analysis of the hypotheses relating to the financial performance of subsidiaries and headquarters' control level found that Hypothesis 1-1 was supported ($t = -4.174$, $p < .01$), but Hypotheses 1-2 and 3-1 were rejected due to insignificance.

A few inferences can be drawn from these results. First, they suggest that the control activities of headquarters have a greater direct influence over subsidiaries' non-financial performance than over their financial performance. In particular, levels of control over operational issues more strongly influence both non-financial and financial performance, because lowering headquarters' level of control over subsidiaries has a positive (+) influence on non-financial performance in areas such as developing new, improved products by increasing employee motivation, loyalty, and creativity (Sims, 1996; Venaik, Midgley, and Devinney, 2005). In addition, the quick decision-making made possible by decentralization promotes the prompt selection of successful new products that can provide competitive advantages, influencing subsidiaries' non-financial as well as financial performance (Jones, Lancot, and Teegen, 2000). Therefore, maintaining low levels of control over operational issues has a positive (+) influence on subsidiaries' financial performance, which supports Hypotheses 2-1 and 1-1.

Overall, this study's results concerning the influence of headquarters' levels of control over subsidiaries' financial performance is inconsistent. This confirms the presence of important factors other than headquarters' control that may have a greater influence on the financial performance of Korean subsidiaries in China; these factors might include local business environments and headquarters' support of subsidiaries. In particular, subsidiaries' financial performance is highly likely to be influenced by external factors such as local economy and competitive environment in the investing country. According to the Grand Survey 2009, published by KOTRA (2009), the business environment for Korean corporations in China has deteriorated owing to the in-

flation of wages and intensification of competition. Moreover, business conditions in the Chinese manufacturing industry are becoming increasingly complicated owing to internal environmental changes in the country, such as the expansion of items prohibited by the Chinese government, the consolidation brought about by the Labor Relations Act, and the depression of the export market caused by the 2008 global financial crisis. Owing to these conditions, the percentage of corporations facing financial deficits have continued to increase from 20.9% in 2006 to 32.2% in 2007, and then, to 34% in 2008. This trend is even more pronounced in the manufacturing industry. Among the determinants of subsidiaries' financial performance, internal factors may also have a great influence. For instance, factors such as internal business strategies and marketing capabilities are likely to influence subsidiaries' financial performance directly.

5.3. Conclusion and Implications

In this study, to examine the relationship between headquarters' control levels and subsidiaries' performance, control was subdivided into control over operational issues and control over strategic issues. The results of this study have several important implications. First, the influence of headquarters' level of control over subsidiaries' performance differs according to the control issues involved. This is especially true with regard to subsidiaries' non-financial performance. More concretely, while subsidiaries' non-financial performance was found to improve when headquarters exercised low levels of control over operational issues, the same result was found when headquarters' levels of control over strategic issues were high. This indicates that one of the reasons that prior studies have provided inconsistent results regarding the relationship between control and performance is that they have merely analyzed operational issues in control activities or have not distinguished between operational issues and strategic issues.

The managerial implications of the results are that headquarters must differentiate between control activities according to the characteristics of the decision making issues. In other words, for operational issues that are directly related to the local business activities of subsidiaries and which require accurate and quick responses to local environmental changes, headquarters must lower their level of control over subsidiaries so that the subsidiaries can carry out business activities that are suitable to local conditions. Giving more autonomy to subsidiaries in decision making on operational issues has a positive influence on non-financial performance, such as the launch of newly improved products and new product processes that suit local conditions and attributes, and can improve the financial performance of subsidiaries as well.

However, with regard to decision making on strategic issues, headquarters should increase their control over overseas subsidiaries to positively influence the non-financial performance of the subsidiaries. When headquarters implement a high level of control over the strategic issues of subsidiaries, clearly defining how the goals and strategies of the overall corporation apply to the subsidiaries and ensuring that skilled top executives from

headquarters lead decision making on important issues affecting the whole corporation have a positive (+) influence on the subsidiaries' performance (Phan, 2000). Moreover, it is important that headquarters maintain a proper balance in control levels over operational and strategic issues, by ensuring that lower levels of control are applied over operational issues, and higher levels, over strategic issues.

5.4. Limitations

Although this study has contributed new findings to existing research on control levels and subsidiary performance by analyzing control levels specific to operational and strategic issues, it has some limitations. First, the study primarily aimed to analyze the influence of headquarters' levels of control over subsidiaries' performance, so the impact of external factors other than headquarters' control levels was not considered. As mentioned above, external environmental changes in local economies and management can directly influence subsidiaries' financial performance, as can internal factors affecting headquarters and subsidiaries. Therefore, in future research, these factors must be considered in order to more accurately assess subsidiaries' performance determinants.

Second, the object of analysis in this study was limited to Korean corporations in China. Thus, the results may not be applicable to overseas subsidiaries in other countries. Future analyses should consider the conditions of overseas subsidiaries in other countries to produce generalizable results. This study was also limited to the manufacturing industry. Most Chinese corporations are still engaged in and make large investments in the manufacturing sector (Kim and Youn, 2014), making it an appropriate focus for this study. However, growth in the wholesale, retail, and service industries is on the rise. With this in mind, future research must consider a wider variety of industries and their characteristics, by targeting corporations in diverse fields.

Finally, this study involved a direct survey of overseas subsidiaries, and thus, faced a low return rate as a result of practical difficulty. As such, its sample size was limited. It is also likely that the results of the analysis may have been distorted owing to individuals' subjective perspectives, as data was collected from only one respondent in each corporation. Collecting data from multiple respondents in each corporation may help overcome this shortcoming.

References

- Adler, P. S., & Borys, B. (1996). Two types of bureaucracy: enabling vs. coercive. *Administrative Science Quarterly*, March, 61-89.
- Andersson, U., Forsgren, M., & Holm, U. (2002). The Strategic Impact of External Networks: Subsidiary Performance and Competence Development in the Multinational Corporation. *Strategic Management Journal*, 23, 979-996.
- Andersson, U., Forsgren, M., & Pedersen, T. (2001). Subsidiary Performance in Multinational Corporations: the Importance of Technology Embeddedness. *International Business Review*, 10(1), 3-23.
- Asakawa, K. (1996). External-Internal Linkages and Oversea Autonomy-Control Tension: The Management Dilemma of the Japanese R&D in Europe. *Transactions on Engineering Management*, 43, 24-32.
- Baliga, B. R., & Jaeger, A. M. (1984). Multinational Corporations: Control Systems and Delegation Issues. *Journal of International Business Studies*, Fall, 25-40.
- Baum, J. R. (2000). A Longitudinal Study of the Causes of Technology Adoption and its Effect upon New Venture Growth. *Frontiers of Entrepreneurship Research*, 2, 1-12.
- Baum, J. R., & Wally, S. (2003). Strategic Decision Speed and Firm Performance. *Strategic Management Journal*, 24, 1107-1129.
- Beamish, P. W. (1985). The Characteristics of Joint Ventures in Developed and Developing Countries. *Columbia Journal of World Business*, 20(3), 13-19.
- Birkinshaw, J., & Morrison, A. (1995). Configurations of Strategy and Structure in Subsidiaries of Multinational Corporations. *Journal of International Business Studies*, 26, 729-754.
- Bourgeois L. J., & Eisenhardt K. (1988). Strategic Decision Processes in High Velocity Environments: Four Cases in the Microcomputer Industry. *Management Science*, 34, 816-835.
- Brooke, M. Z. (1984). *Centralization and autonomy: A Study in Organization Behaviour*. London and New York: Holt, Rinehart and Winston.
- Child, J. (1973). Strategies of Control and Organizational Behavior. *Administrative Science Quarterly*, March, 1-17.
- Cray, D. (1984). Control and Coordination in Multinational Corporations. *Journal of International Business Studies*, Fall, 85-98.
- Deal, T. E., & Kennedy, A. A. (1982). *Corporate Cultures: The Rites and Rituals of Corporate Life*. Addison-Wesley.
- Dess, G. G., & Robinson, R. B. (1984). Measuring Organizational Performance in the Absence of Objective Measures: The Case of the Privately-held Firm and Conglomerate Business Unit. *Strategic Management Journal*, 5, 265-273.
- Dhanaraj, C. M., Lyles, A., Steensma, H. K., & Tihanyi, L. (2004). Managing Tacit and Explicit Knowledge Transfer In IJVs: The Role of Relational Embeddedness and the Impact on Performance. *Journal of International Business Studies*, 35, 428-442.
- Doz, Y., Bartlett, C., & Prahalad, C. K. (1981). Global Competitive Pressures and Host Country Demands. *California Management Review*, 3, 63-74.
- Doz, Y., & Prahalad, C. K. (1981). Headquarters Influence and Strategic Control in MNCs. *Sloan Management Review*, 23, 15-29.
- Doz, Y., & Prahalad, C. K. (1984). Patterns of Strategic Control within Multinational Corporations. *Journal of international business studies*, 15, 55-72.
- Edwards, R., Ahmad, A., & Moss, S. (2002). Subsidiary

- Autonomy: The Case of Multinational Subsidiaries in Malaysia. *Journal of International Business Studies*, 33(1), 183-191.
- Eisenhardt K. M. (1989). Making Fast Strategic Decisions in High-Velocity Environment. *Academy of Management Journal*, 27, 299-343.
- Forsgren, M., & Pedersen, T. (1998). Centres of Excellence in Multinational Companies: The Case of Denmark. In Birkinshaw, J. and Hood, N. (eds), *Multinational corporate Evolution and Subsidiary Development* (pp.141-161), Macmillan Press.
- Garnier, G. H. (1982). Context and Decision Making Autonomy in the Foreign Affiliates of U.S. Multinational Corporations. *Academy of Management Journal*, 25, 893-908.
- Garnier, G., Osborn, T. N., Galica, F., & Lecon, R. (1979). Autonomy of the Mexican Affiliates of U.S. Multinational Corporation. *Columbia Journal of World Business*, spring, 78-90.
- Gates, S. R., & Egelhoff, W. G. (1986). Centralization in Headquarters? Subsidiary Relationships. *Journal of International Business Studies*, 17(2), 71-92.
- Geringer, J. M., & Hebert, L. (1989). Control and Performance of International Joint Venture. *Journal of International Business Studies*, Summer, 235-254.
- Geringer, J. M., & Woodcock, C. P. (1989). Ownership and Control of Canadian Joint Venture. *Business Quarterly*, Summer, 97-101.
- Ghoshal, S., & Nohria. (1989). Internal differentiation within multinational corporations. *Strategic Management Journal*, 10, 323-337
- Ghoshal, S., Korine, H., & Szulanski, G. (1994). Interunit Communication in Multinational Corporations. *Management Science*, 40, 96-110.
- Gupta, A. K. & Govindarajan, V. (1991). Knowledge Flows and the Structure of Control within Multinational Corporations. *Academy of Management Review*, 16(4), 768-792.
- Hatvany, M., & Pucik, V. (1981). An Integrated Management System: Lessons from the Japanese Experience. *Academy of Management Review*, July, 469-480.
- Hedlund, G. (1981). Autonomy of Subsidiaries and Formalization of Headquarters Subsidiary Relationships in Swedish MNCs. In L. Otterbeck (Ed.), *The Management of Headquarters-subsidiary Relationships in Multinational Corporations* (pp.25-78). New York: St Martin Press.
- Ho, Liang-Chun (2013). Relationship Between Stock Price Indices of Abu Dhabi, Jordan, and USA : Evidence from the Panel Threshold Regression Model. *International Journal of Industrial Distribution & Business*, 4(2), 13-19.
- Jarillo, J. C., & Martinez, J. I. (1990). Different Roles for Subsidiaries: The Case of Multinational Corporations in Spain. *Strategic Management Journal*, 11(7), 501-512.
- Jaussaud, J., & Schaaper, J. (2007). European and Japanese Multinational Companies in China: Organization and Control of Subsidiaries. *Asian Business & Management*, 6, 223-245.
- 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.
- Jones G. K, Lancot A., & Teege H. J. (2000). Determinants and Performance Impacts of External Technology Acquisition. *Journal of Business Venturing*, 16, 255-283.
- Judge W. Q., & Miller A. (1991). Antecedents and Outcomes of Decision Speed in Different Environmental Contexts. *Academy of Management Journal*, 34, 449-463.
- Jung D. I., & Avolio, B. J. (1999). Effects of Leadership Style and Followers' Cultural Orientation on Performance in Group and Individual Task Conditions. *Academy of Management Journal*, 42, 208-218.
- Killing, P. (1983). *Strategies for Joint Venture Success*. IN.: Praeger.
- Kim, Nam-Myun, & Youn, Myoung-Kil (2014). Global Distribution Enterprises' Entry into the Chinese Market: Focus on the Three Northeastern Provinces. *International Journal of Industrial Distribution & Business*, 5(3), 25-34.
- Kirkman, B. L., & Rosen, B. (1999). Beyond Self-management: Antecedents and Consequences of Team Empowerment. *Academy of Management Journal*, 42, 58-74.
- Liao, Shih-Chung (2014). Building a Product Design of Innovative Strategy for Creating Enterprise Development. *International Journal of Industrial Distribution & Business*, 5(1), 17-25.
- Locke, E. A., & Latham, G. P. (1990). *A Theory of Goal Setting and Task Performance*. Englewood Cliffs, NJ: Prentice-Hall.
- Love, L. G., Priem, R. L., & Lumpkin, G. T. (2002). Explicitly Articulated Strategy and Firm Performance Under Alternative Levels of Centralization. *Journal of Management*, 28(5), 611-627.
- Luo, Y., & Peng, M. (1999). Learning to Compete in a Transition Economy: Experience, Environment, and Performance. *Journal of International Business Studies*, 30(2), 269-295.
- Madhok, A. (1995). Revisiting Multinational Firms Tolerance for Joint Ventures: A Trust-based Approach. *Journal of International Business Studies*, Spring, 117-147.
- Mintzberg, H. T. (1979). *The Structuring of Organizations*. Englewood Cliffs, NJ: Prentice-Hall.
- Neeraj, Kumari (2015). Up-gradation in Human Resource Management Practices for the Biotech Industry in India. *Journal of Asian Finance, Economics and Business*, 2(2), 27-34.
- Nobel, R., & Birkinshaw, J. (1998). Innovation in Multinational Corporations, Control and Communication Patterns in International R&D Operations. *Strategic Management Journal*, 19, 479-496.
- O'Donnell S. W. (2000). Managing Foreign Subsidiaries: Agents of Headquarters, or an Interdependent Network?. *Strategic Management Journal*, 21(5), 525-548.
- Osterloh, M., & Frey, B. S. (2000). Motivation, Knowledge Transfer and Organizational Forms. *Organization Science*, 11(5), 538-550.
- Pascale, R. T., & Athos, A. G. (1981). *The Art of Japanese*

- Management*. Simon & Schuster.
- Paterson, S. L., & Brock, D. M. (2002). The Development of Subsidiary Management Research: Review and Theoretical Analysis. *International Business Review*, 11, 139-163.
- Pearce, R. D. (1999). Decentralized R&D and Strategic Competitiveness: Globalized Approaches to Generation and Use of Technology in MNCs. *Research Policy*, 28, 157-178.
- Peters, T. J., & Waterman, R. H. (1983). *In Search of Excellence*. New York: Harper & Row.
- Phan, P. H. (2000). *Taking Back the Boardroom: Better Directing for the Millennium*. Singapore: McGraw-Hill.
- Ramaswamy, K., Gomes, L., & Veliyath, R. (1998). The Performance Correlates of Ownership Control: A Study of U. S. and European MNE Joint Ventures in India. *International Business Review*, 7, 423-441.
- Richards, M. (2000). Control exercised by U.S. Multinationals over their Overseas Affiliates: does Location make a Difference? *Journal of International Management*, 6, 105-120.
- Robbins, S. P. (1990). *Organization Theory*. Englewood Cliffs, N.J.: Prentice Hall.
- Rodrigues, C. A. (1995). Headquarters-foreign Subsidiary Control Relationship: Three Conceptual Frameworks. *Empowerment in Organizations*, 3, 25-34.
- Rugman, A., & Verbeke, A. (2001). Subsidiary-Specific Advantages in Multinational Enterprises. *Strategic Management Journal*, 22, 237-250.
- Schann, J. L. (1988). How to Control a Joint Venture even as a Minority Partner. *Journal of General Management*, 14(1), 4-16.
- Schminke M, Ambrose, M. L., & Cropanzano, R. S. (2000). The Effect of Organizational Structure on Perceptions of Procedural Fairness. *Journal of Applied Psychology*, 85, 294-304.
- Sims, H. P. (1996). *Businesses Without Bosses*. New York : Wiley.
- Stevenson, H. H., & Gumpert, D. E. (1985). The Heart of Entrepreneurship. *Harvard Business Review*, 85(2), 85-93.
- Taggart, J. H. (1997). An Evaluation of the Integration-Responsiveness Framework: MNC Manufacturing Subsidiaries in the UK. *Management International Review*, 37, 295-318.
- Venaik, S., Midgley, D. F., & Devinney, T. M. (2005). Dual Paths to Performance: The Impact of Global Pressures on MNC Subsidiary Conduct and Performance. *Journal of International Business Studies*, 36, 655-675.
- Venkatraman, N., & Ramanujam, V. (1986). Measurement of Business Performance in Strategy Research: A Comparison of Approaches. *Academy of Management Review*, 11(4), 801-814.
- Yan, A., & Gray, B. (1994). Bargaining Power, Management Control and Performance in United States-China Joint Ventures: A Comparative Case Study. *Academy of Management Journal*, 37, 1478-1517.
- Young, S., & Tavares, A. T. (2004). Centralization and autonomy: Back to the future. *International Business Review*, 13(2), 215-237.