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THE EFFECT OF A CEO'S ATTITUDE AND THE LEARNING PROCESS ON INTERNATIONAL GROWTH: THE MEDIATING EFFECT OF THE LEARNING PROCESS AND THE MODERATING ROLE OF DOMESTIC MARKET MUNIFICENCE

ABSTRACT

This study focuses on the importance of learning processes as international business processes, which mediate between a CEO's attitude towards internationalization and international growth. In addition, this study deals with the moderating role of the domestic market munificence between the learning process and international growth. To verify the hypotheses, this study uses 102 Korean firms and the results obtained are as follows. Learning processes show positive effects on international growth. Furthermore, internal and external learning processes have mediating effects between a CEO's attitude and international growth. The domestic market munificence has a negative moderating role with the internal learning process on international growth.

Key Words: business process, CEO's attitude towards internationalization, learning process, domestic market munificence, international growth

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INTRODUCTION

There have been continuous debates over which factors are important in affecting a firm's performance directly. The upper echelon perspective focuses on a firm's subjects,¹ such as the CEO, board of directors, and so on (Hambrick and Mason 1984). The resource-based view (RBV) emphasizes a firm's internal resources and capabilities rather than the external competitive environment (Wernerfelt 1984, 1995; Barney 1991). Recently, however, some questions have been raised as to whether a specific direct mediator is needed to explain the relationship between such factors as a firm's CEO, its resources and performance (Finkelstein and Mooney 2003; Ray, Barney and Muhanna 2004; Reuber and Fisher 1997; Kogut and Zender 1992, 1993; Jung and Cho 2006; Jung 2004; Bartlett and Ghoshal 1993; Doz, Santos and Williamson 2001).

As an example of the upper echelon perspective, Finkelstein and Mooney (2003) insisted that the decision-making process is more important than the simple governance structure, such as the composition of the board of directors. In the resource-based view, Ray, Barney and Muhanna (2004) insisted that measuring the effectiveness of a business process is more reasonable than using a firm's overall performance as a yardstick for assessing the effectiveness of its resources. That is to say, they stressed the existence and importance of the business process between resources and performance, while Finkelstein and Mooney (2003) emphasized the importance of the decision-making process.

In terms of internationalization, such as export, foreign direct investment (FDI), and the like, Reuber and Fisher (1997) also suggested that small and medium-sized enterprises (SMEs) could occupy an advantageous position even without a specific ownership advantage and the investment of time and resources on a huge scale, if they develop a certain mechanism (or international business process) pertaining to the acquisition of the necessary knowledge and resources.

A common feature of the above studies lies in their attempts to find more direct factors regarding a firm's performance and, in effect, they suggest a business process. Kogut and Zender (1992, 1993) emphasized the 'governance structure mechanism' as a business process. Jung and Cho (2006) insisted on the importance of the mechanism as a business process and also insisted that the existing resource-based view and the upper echelon perspective focused on 'what firms have' such as resources, capabilities, and the

¹"Subjects" refers to the members of a firm who have power in making an important decision, such as the CEO, board of directors, and so on.

ability of their CEOs. However, they insisted that ‘what should firms do?’ in terms of the business process is more reasonable and important in explaining a firm’s success. In internationalization, business process-related studies have also been conducted, such as the ‘New Form’ of Bartlett and Ghoshal (1993) and the ‘meta-national organizational process’ of Doz, Santos and Williamson (2001), among others.

The essential goal of this study is to determine whether the learning process affects international growth in terms of the firm’s international performance. In turn, this study researches whether the learning process has a mediating effect between a CEO’s attitude towards internationalization and international growth. This study also tries to investigate the moderating role of domestic market munificence between the learning process and international growth.

This study consists of the following. First, we examine the basic theories and build hypotheses based on existing studies and realities, and then we verify the hypotheses with Korean firms using hierarchical and multiple linear regression analyses. Finally, we outline the major implications and propose a future research direction.

LITERATURE REVIEW AND HYPOTHESES

Learning Process for International Growth

The gradual pattern of a firm’s internationalization process can largely be attributed to two factors – the lack of ‘knowledge’ and the ‘uncertainty’ associated with the decision to internationalize (Andersen 1993). If a CEO (subject of a firm) is interested in gaining experience of and involvement in a foreign market, a firm can learn and accumulate knowledge more actively and thereby overcome the lack of ‘knowledge’ and ‘uncertainty’ little by little, and finally go abroad incrementally. Therefore, the learning process of a firm is an important factor in the international process (Johanson and Vahlne 1977, 1990; Barkema and Vermeulen 1998; Bartlett and Ghoshal 1987).

Schroeder et al. (2002) considered the learning process as a proprietary process. They emphasized that the role of learning and knowledge generation within the plant was to generate a proprietary process and equipment. Proprietary processes and equipment are created via a process of path-dependent problem solving, and they mediate between learning and performance. Learning by itself will not lead to superior performance, but must be embedded in a tangible *process* or in equipment for superior performance to occur.

Most scholars who investigate MNCs regard learning as an instrument with which to obtain 'rent' from internalized processes (Calvet 1981). Of course, this learning does not come to fruition automatically. For example, the mere existence of diversity does not enhance learning; it only creates the potential for learning. To exploit this potential, the organization must consider learning as an explicit objective, and must create mechanisms and systems that enable such learning to take place. In the absence of explicit intention and appropriate mechanisms, the learning potential may be lost (Ghoshal 1987).

Generally speaking, learning processes can also be classified as internal and external (Schroeder et al. 2002; Kogut and Zander 1992). Internal learning includes the training of multifunctional employees (Gerwin and Kolodny 1992) and the incorporation of employee suggestions (Hall 1987) into process and product development, etc. These practices lead to an adaptable work organization and positive performance, though their impact on performance is often underestimated (Gerwin and Kolodny 1992). Furthermore, these practices are 'routine-changing routines' that are suggestive of the path-dependent development of manufacturing processes (Nelson and Winter 1982).

External learning is defined as inter-organizational learning through problem solving with customers and suppliers. The certification of suppliers' production methods by customers, and the establishment of ongoing customer-supplier relations, suggest that customers are an important source of routines (Dyer and Singh 1998). External learning² also occurs through long-term relational contracting with suppliers (Gerwin 1993). This can take many forms, including supplier input into new product or process design, and supplier involvement in quality, and in continuous improvement practices and routines.

Similarly, Kogut and Zander (1992) divided learning into internal and external. They analyzed the knowledge of the firm by distinguishing between information on prices and know-how. Through internal (e.g., reorganizing, accidents, experiments) and external (e.g., acquisitions, joint ventures, new people) learning, knowledge may be recombined. At that point, a firm needs 'combinative capability'. Combinative capability emphasizes the ability to combine and exploit the existing knowledge of a firm and elicits a good performance from the environmental opportunities of technology and market division, etc.

The evolutionary economics perspective of Nelson and Winter (1982) focuses on why individual firms have different processes in terms of accumulating knowledge. They also

² Organizations regularly engage in problem solving with other organizations in ways that function as routine-changing routines (Nelson and Winter 1982; Teece et al. 1997).

pay attention to the differences in firms' actions and performance. From this perspective, a firm explores continuously to acquire and develop knowledge, which can help it to confront various environments. However, this exploration process has a path-dependent characteristic. If a firm is too heavily dependent on a currently successful path, it runs the risk of being weeded out by not adapting to the rapidly changing environment. Therefore, in order to evade such a trap, a firm's exploration process should be run in parallel with the exploitation of existing knowledge and the exploration of new knowledge (March 1991). When this necessity for *exploration* and *exploitation* is applied to international growth, internal learning is needed to enhance knowledge through exchange among divisions or between branches and the head office. External learning is also needed to monitor foreign technology, foreign design trends, and so forth sensitively, and to develop knowledge continuously through intimate communications with foreign suppliers.

To sum up, learning is an important process to a firm's international growth. The creation of new knowledge also depends on which capabilities a firm has when it encounters new knowledge and experience, and on what it makes of them as a process or how it assimilates the new resources (or knowledge) and heritages, etc. Based on the above research, this study defines the learning process as *an organizational process by which the members of a firm learn various ways of international operation for international growth* and suggests the following hypotheses:

Hypothesis 1: The level of the learning process of a firm is positively related to its international growth.

Hypothesis 1a: The level of the internal learning process of a firm is positively related to its international growth.

Hypothesis 1b: The level of the external learning process of a firm is positively related to its international growth.

CEO's Attitude towards Internationalization and International Growth

To manage a firm strategically, the importance of the CEO or the board of directors has been emphasized for a long time, and this had led to the formation of the 'upper echelon perspective' (Hambrick and Mason 1984). According to the latter, to understand an organization it is important to ascertain which factors influence the CEO's values and cognitive structure (Finkelstein and Hambrick 1996).

Especially as firms have gone in pursuit of internationalization gradually, many scholars have become interested in the relationships between the attributes, attitude,

recognition of a firm's subjects and the drive for internationalization (Tihanyi et al. 2000; Calof and Beamish 1995; Dichtl et al. 1984; Wiedersheim-Paul et al. 1978; Perlmutter 1969).

Dichtl et al. (1984) proved that there is a correlation between the characteristics of a manager and internationalization in their studies on firms in Germany and Japan. They found a number of differences between export-experienced and non-export-experienced managers by investigating four dimensions: psychic distance; objective characteristics of managers; subjective characteristics of managers; and attitude towards exporting in general. Added to the Korean firms in this study, Park (1999) carried out comparative research about the characteristics of top managers of SMEs in Korea, Japan, and Germany. Perlmutter (1969) classified the international perspective into ethnocentric, polycentric, and geocentric, and stressed that the CEO's attitude was an important factor in influencing a firm's internationalization.

Kobrin (1994) pointed out that large MNCs did not consider international experience as an important factor in expatriate selection and that a firm's geocentric mindset was not linked to the importance of international experience. However, Calof and Beamish (1995) asserted that a top manager's individual geocentric mindset was linked to international experience. Therefore, it is reasonable to conclude that the difference of focus between large MNCs and SMEs subject-related research could be the relationship between a *firm's* characteristics and its *top manager's individual* characteristics (Chandler and Hanks 1994; Mintzberg 1988). The foreign knowledge and experience of a CEO (Reuber and Fisher 1997; Sambharya 1996) and international entrepreneurship (McDougall and Oviatt 2000)³ are related to these studies, too.

Mediating Effect of the Learning Process

As stated above, a CEO's attitude will affect the international growth of a firm. However, the essential assertion of this study is that, between a CEO's attitude and international growth, there is the mediating effect of the learning process as a kind of business processes. As discussed, Finkelstein and Mooney (2003) emphasized not only the governance structure such as the composition of the board of directors but also the

³ Notably, one of the most important recent trends is that of international entrepreneurship (McDougall and Oviatt 2000). Though traditional theories have mainly dealt with large MNC's internationalization, it is necessary to build a new theory of international entrepreneurship in accordance with the advent of international new ventures whose activities are international from their inception.

decision-making process as a business process; namely, when the board of directors makes a decision within the specific environment with which they are confronted.

Meanwhile, Park and Lee (2004) conducted an empirical test to determine whether an international alliance has a mediating effect between top management diversity and internationalization. Their study measured the international alliance tendency using the number of a firm's international alliances out of the total number of strategic alliances in a given year. If this idea is applied to this study, we can consider an international alliance as a kind of learning process in a firm's internationalization; namely, the learning process, which in the above case is an international alliance, is relevant to the mediating effect between a CEO's international characteristics and international growth. Based on the abovementioned studies, the following hypotheses can be suggested.

Hypothesis 2: The learning process of a firm will have a mediating effect between its CEO's attitude towards internationalization and international growth.

Hypothesis 2a: The internal learning process of a firm will have a mediating effect between its CEO's attitude towards internationalization and international growth.

Hypothesis 2b: The external learning process of a firm will have a mediating effect between its CEO's attitude towards internationalization and international growth.

Moderating Role of Domestic Market Munificence

The domestic market environment can significantly affect the performance and internationalization of a firm (Morgan 1999). If a domestic market is fully matured, a firm can have an interest in internationalization, which can be an alternative means to overcoming the situation. By contrast, if the domestic market has a high level of munificence in sales, there is a low possibility that a firm will pursue foreign markets desperately.

During intense periods of environmental uncertainty, the decision maker (subject) within the firm will seek an alternative means of returning to a point of fit with the environment (Wiersema and Bantel 1993). For example, Ali and Camp (1994) suggested that when firms are faced with an unfavorable outlook for their respective domestic industries, decision makers tend to favor the foreign market entry mode. Porter (1990: 109) said that the willingness and ability of firms to compete globally is partly a function of other determinants such as pressure from domestic market saturation or local rivalry and the pull through of international demand. Reid (1984) also insisted that firms experiencing environmental uncertainty in their home markets are stimulated to pursue

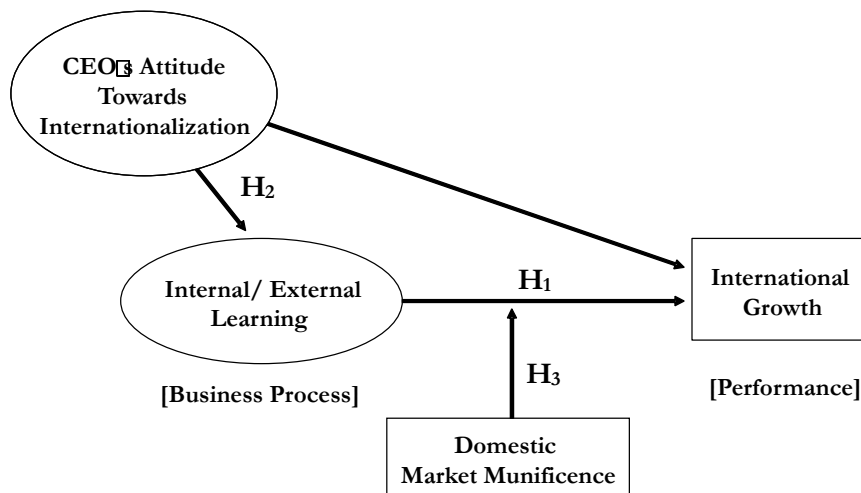
expansion strategies towards markets where they can ultimately exercise their comparative advantages in production and management.⁴

Therefore, we can infer that this domestic market munificence will affect the learning process. Then, even though the existing learning process has a positive effect on international growth, the effect of it will be reduced when domestic market munificence is good. That is, the trend of domestic market sales, the current domestic market size, and the outlook of domestic market sales will affect the global learning process. Thus, the direction of their effects will be negative between the learning process and international growth. As such, the following hypothesis can be suggested.

Hypothesis 3: The better the domestic market munificence, the more negative the moderating effect will be between the learning process and international growth.

The research model of this study can be summarized as Figure 1.

Figure 1: Research Model



⁴ Meanwhile, the role of the domestic market can be different according to the exploration and exploitation process. In the case of the former, it is possible that an MNC will implement internationalization even though there is good situation in its domestic market munificence.

EMPIRICAL ANALYSIS

Sample

Korea is ranked 11th in the world in terms of the size of its economy and some of its industries are world leaders. One of the reasons for Korea's rapidly growing economy is the trend towards internationalization in such countries as China, India, and the United Arab Emirates. Therefore, investigating the internationalization of Korean firms can be helpful to understanding the new features of more advanced emerging markets in terms of internationalization.

Though trade and FDI are representative forms, there are lots of the other forms of internationalization such as licensing, strategic alliance, etc. For this study, we selected samples, which consist of highly export-oriented firms listed on the Korean Stock Exchange (KSE). As the selected sample firms have little experience of foreign direct investment, the degree of export (or foreign sales) can be used as a representative variable in a test of internationalization.⁵ As a reference, in the case of the degree of internationalization, the ratio of foreign sales to total sales (Grant 1987; Tallman and Li 1996) is most commonly used as an objective method of measurement.

For an empirical test, this study selected sample firms by two stages. First, we selected firms from highly export-oriented industries in Korea that were founded before 2000 and still in operation as of June 2005. Second, firms with an export ratio of over 4% were selected from within the respective industries, because we discovered by means of a pilot test that those firms whose export ratio is below 4% can distort the overall results. Some similar studies also have limitations in the ratio of foreign sales in the selection of the sample (Ito 1997; Jung and Cho 2006). The characteristics of the selected samples are summarized in Table 1. Of the 545 targeted firms, 113 firms responded to our survey; however, 11 of these were excluded because of unreliable or missing responses, etc. Thus, a total 102 samples were used for the test.

The major data collection tool was a survey consisting of a structured questionnaire, while some data were obtained from a database in KIS-LINE.⁶ To design the questionnaire, we carefully examined the existing literature and conducted interviews with a few IR managers and analysts. Most multiple items were measured on a 5-point Likert

⁵ Of course, because of the market failure and the superiority of hierarchy to transfer knowledge (Kogut and Zander 1992, 1993), for a firm to learn via internationalization, the governance structure should be that of hierarchy, not that of market.

⁶ KIS-LINE provides some kind of Korean firms' information about sales, profit, performance, and so forth. (www.kisline.com).

scale, and only the dependent variable was measured on a 10-point Likert scale. The survey items were evaluated primarily by the firms' respective IR managers, as they were responsible for explaining each firm's vision, strategy, and performance.

Table 1: Summary of Sample Characteristics

(Unit: The number of firms)

Industry	Total	Target	Sample
Chemical industry (including biotechnology)	183	103	23
Electric or electronic industry (including telecommunications)	218	190	36
Automobile (including transportation equipment)	70	64	19
Computer and machinery for business	20	15	2
Medical treatment, optical instruments	31	28	7
Assembly of metal products (including related machinery and equipment)	191	145	15
Total	713	545	102

Dependent Variable

As a dependent variable, we came up with a new concept, namely 'international growth' as an indicator of perceived international performance, which is different from the degree of internationalization and is based on a behavioral approach. The behavioral approach towards internationalization is based on the theory of the growth of the firm (Penrose 1959), and the behavioral theory of the firm (Cyert and March 1963), and urges that the internationalization of a firm is an incremental process (Johanson and Vahlne 1977).

In the case of a behavioral approach, a survey method by a structured questionnaire is commonly used (Eriksson et al. 1997). Cavusgill (1980) explained the international process model by a behavioral model with such assumptions as the shortage of information, the importance of perceived risk, and uncertainty. Ray et al. (2004) measured 'the effectiveness of business processes' as a dependent variable with a structured questionnaire, and Eriksson et al. (1997) used 'perceived cost' as a dependent variable in the internationalization process.

The purpose of this study, based on a behavioral approach, focuses not simply on the 'static perspective', which affects international growth directly, but on the 'dynamic perspective', which is related to the 'mediating effect' of the learning processes between a CEO's attitude and international growth and to the 'moderating role' of domestic market munificence.

Table 2: Measured Questionnaire

Questionnaire	Cronbach's Alpha
CEO's Attitude towards Internationalization	0.920
<ol style="list-style-type: none"> 1. CEO is interested in firm's internationalization. [interest] 2. CEO has an open-mind towards firm's internationalization. [openness] 3. CEO copes with firm's internationalization actively. [activeness] 	
Learning Processes [Mediators]	
Internal Learning Process	0.826
<ol style="list-style-type: none"> 1. There are many active suggestions, which are related to the development of product and process in international growth. 2. To carry out international growth related-business, employees have been trained and educated continuously. 3. There is active sharing of knowledge and know-how, which is acquired from international activities. 4. International cross-training of employee between divisions or head office-branch is accomplished actively. 	
External Learning Process	0.821
<ol style="list-style-type: none"> 1. Foreign customers have actively involved in production and design process. 2. Sensitive monitoring of foreign technology, foreign design trend, etc., is accomplished well in major business. 3. There is intimate communication with foreign suppliers about quality, the trend of design, etc. 4. There is close communication with foreign customers about quality, delivery of goods, etc. 	
Domestic Market Munificence [Moderator]	0.747
<ol style="list-style-type: none"> 1. What do you think of the trend of domestic market sales in your major product? (decrease ↔ increase) 2. What do you think of the domestic market size of your firm's major product? (small ↔ large) 3. What do you think of the outlook of domestic market sales in your major product? (decrease ↔ increase) 	
Dependent Variable: International Growth	
What do you think of the results of international growth during recent 4 years?	

Independent Variable, Mediator, and Moderator

As most of the samples are SMEs, and CEOs have more power, this study focuses on a CEO's *individual* characteristics rather than on a 'firms' characteristics.⁷ Generally speaking, articles regarding the effects of a CEO's characteristics on internationalization can be classified into a CEO's attitude (Dichtl et al. 1984, 1990; Perlmutter 1969; Calof and

⁷ In contrast to this study, Park and Lee (2004) measured a TMT (top management team)'s diversity of foreign experience as a *characteristic of firms* using $\frac{\text{TM}}{\text{TMT}}$ the ratio of foreign-born members in the TMT, $\frac{\text{F}}{\text{TMT}}$ the ratio of members in the TMT with foreign educational experience, and $\frac{\text{TE}}{\text{TMT}}$ the ratio of members in the TMT with foreign-task experience.

Beamish 1995) and a CEO's experience (Sambharya 1996). In particular, this study dealt with three items pertaining to a CEO's attitude towards internationalization, which are measured as the interest, openness, and activeness of a CEO in a firm's internationalization (Dichtl et al. 1984, 1990; Perlmutter 1969; Park 1999) (Table 2). As the Cronbar's alpha of it is 0.920, there is no statistical problem for the variable in terms of reliability.

Learning processes as mediating variables are deduced from existing studies such as those by Schroeder et al. (2002), Gerwin and Kolodny (1992), Kogut and Zander (1992), Johanson and Vahlne (1977, 1990), and so forth. The four detailed items of the internal learning process, including employees' suggestions, employees' training, and knowledge sharing, international cross-training, are deduced from Hall (1987) and Gerwin and Kolodny (1992), while the four items of the external learning process, such as the involvement of foreign customers in the production process, monitoring of technology, communication with foreign suppliers, and communication with foreign customers, are deduced from Dyer and Singh (1998) and Gerwin (1993), among others.

The three items of domestic market munificence, namely the trend of domestic market sales, the current size of the domestic market, and the outlook of domestic market sales, are inferred from existing studies such as Morgan (1999), Wiersema and Bantel (1993), Ali and Camp (1994), Porter (1990), and Reid (1984), among others.

Control Variable

Five control variables are used, the rationale for which is as follows.

Age: A firm's age could affect foreign sales in that older firms may have experiential advantages that enable them to sustain international growth. Oviatt and McDougall (1997) suggested that age-related factors affect a firm's access to foreign markets. On the other hand, Autio et al. (2000) proved empirically that the age of a high-technology firm at international entry is negatively related to its subsequent growth in international sales. In this study, 'age' covers the period from the respective firms' foundation to June 2005 and is used as a variable by taking a logarithm.

ROA (Return on Assets): Many scholars such as Penrose (1959) stressed that firms that are competitive in the domestic market should be able to internationalize more easily. Therefore, it is natural to control a firm's performance. ROA in 2000 is used as a performance-related control variable (Sanders and Carpenter 1998; Tihanyi et al. 2000).

Export Ratio (Foreign Sales / Total Sales): Export ratio is also related to international growth (Autio et al. 2000). Therefore, to control the initial state of the learning process, this study used the ‘foreign sales / total sales’ in 2000 year.

Industry: Most of the prior studies controlled the industrial variables (Gomes and Ramaswamy 1999; Autio et al. 2000). The impact of the business process on foreign sales is likely to show differently according to the industries. For example, in industries that experience rapid innovation, such as the high-tech industry, firms should upgrade their business process continuously because they are required to meet rapidly evolving customer needs. In more stable manufacturing industries, rapid innovation in the business process may be detrimental beyond a certain point. In such industries firms probably maintain the business process stably over time. Therefore, swift change is not a necessary condition for creating profit and ensuring survival. Rapid change, innovation, and investment can lead to a dangerous state of affairs for firms in those industries. To reduce the differences between industries, we excluded in advance low export-ratio manufacturing industries such as food and beverages, textiles, rubber, paper, publishing, and so forth.

Leverage: Leverage also can be used as a control variable (Tallman and Li 1996; Grant et al. 1988). The coefficient of the leverage variable is predicted as negative because debt can constrain the growth of a firm’s value (Myers 1977). On the other hand, this variable can be positively related to international growth, because firms that are deeply in debt can be spurred to ‘go abroad’ in a desperate bid for survival. Cheong (2002) insisted that firms that finance themselves with lots of loans experience less pressure and therefore can go abroad aggressively. However, the results of the empirical test conducted by Cheong did not show any significant results.

The country-related variable can be considered as a control variable (Gomes and Ramaswamy 1999; Autio et al. 2000). However, as this study used only one country – Korea, the proposed model does not have to control the country-related variable. Although R&D expenditure may also be considered as a control variable (Kogut and Singh 1988), sometimes there are problems in using it (Spender and Grant 1996). For example, when total sales are low, R&D expenditure can show a high imbalance (Eisenhardt and Schoonhoven 1990). Furthermore, in the case of SMEs, it is either

difficult to evaluate the related expense or there is little R&D expenditure anyway (Autio et al. 2000). Therefore, we did not include that variable.⁸

RESULTS

Table 3 shows the mean, standard deviation, and correlation among the variables. The mean of the export ratio, leverage, age by taking logarithms, and ROA were 37.52, 170.16, 3.16 and 6.62 respectively.

There are some correlations that are significant, as follows. ROA shows a negative correlation with leverage and age. It implies that high leverage and old age are related to a negative effect on a firm's performance, such as ROA. The domestic market munificence (MKT) is also negatively related to the export ratio (or foreign sales as a proportion of total sales). On the other hand, the CEO's attitude towards internationalization (subject, SUB) shows a robustly positive correlation with the internal and external learning processes. From this, we can infer a robust, positive relationship between a CEO's attitude and the learning process. And, the internal learning process also shows a positive correlation with domestic market munificence. This means that if the domestic market munificence is good enough, the internal learning process can be developed more rapidly than the external learning process. Table 4 is presented as Model 1, Model 2, and Model 3 to test Hypothesis 1.

In Models 1 and 2, the internal and external learning processes respectively have a significant impact on international growth ($p < 0.01$). In Model 3, both variables show statistical significance simultaneously ($p < 0.01$), and the adjusted R^2 of Model 3 is higher than that of Models 1 and 2. Therefore, Hypothesis 1 is verified.

Age showed a significantly negative effect on Models 1 and 3. Therefore, we can infer that the older a firm is the more negative it can be in terms of international growth. Aside from d1 (chemical industry) in Model 1, and d2 (electric or electronic industry) in Models 1 and 3, the other control variables related to industries did not show any statistical significance, probably because we excluded in advance lowly export-oriented industries when we selected the sample firms.

⁸ The presence of subsidiaries in foreign countries is expected to have a significant influence on the learning process of the firm. Therefore, 'the role of subsidiaries' can also be considered as one of the independent variables or as a control variable. However, in this study most of the sample firms have few subsidiaries. Therefore, we exclude the variable for this study.

Table 3: Mean, S.D. and Correlation among Variables

	1	2	3	4	5	6	7	8	9	10	11	12	13
1. Exp_00													
2. LEV_00	.18*												
3. LN_Age	.13	.052											
4. ROA_00	-.155	-.383***	-.446***										
5. d1	-.064	.164*	.373***	-.188*									
6. d2	.245**	-.032	-.133	.103	-.399***								
7. d3	-.04	-.111	.097	-.125	-.258***	-.353***							
8. d4	-.135	-.011	-.275***	.172*	-.076	-.104	-.068						
9. d5	-.063	-.018	-.172*	.162	-.146	-.200**	-.13	-.038					
10. SUB	.038	.15	.001	-.032	-.03	.003	-.179*	.079	.144				
11. IN_LE	-.049	.069	.121	-.028	.137	-.088	-.082	.008	.086	.425***			
12. EX_LE	.121	.048	.03	.065	-.167*	-.034	.142	-.069	-.02	.257***	.000		
13. MKT	-.305***	-.039	-.057	-.013	-.011	-.026	.027	.089	-.087	.148	.268***	.142	
Mean	37.52	170.16	3.16	6.62	0.23	0.35	0.19	0.02	0.07	0	0	0	0
S. D.	27.88	1602.31	0.56	12.69	0.42	0.48	0.39	0.14	0.25	1	1	1	1

*p < 0.10; **p < 0.05; ***p < 0.01 (two-tailed test)

d1: Chemical industry (including biotechnology); d2: Electric or electronic industry (including telecommunications); d3: Automobile (including transportation equipment); d4: Computer and machinery for business; d5: Medical treatment, optical instruments; Intercept: Assembling metal product (including related machinery and equipment)

Table 4: Regression Analysis between Learning Process and International Growth

Variables	Dependent Variable: Valuation (International Growth)					
	Model 1		Model 2		Model 3	
	B	S.E	B	S.E	B	S.E
Intercept	4.767***	.517	4.581***	.588	4.932***	.485
Exp_00	.003	.003	.001	.003	.002	.003
LEV_00	.000	.000	-.000	.000	-.000	.000
LN_Age	-.326**	.155	-.269	.177	-.385*	.146
ROA_00	.007	.007	.004	.008	.003	.006
d1	-.435*	.246	-.175	.286	-.247	.235
d2	-.474**	.218	-.384	.252	-.358*	.207
d3	-.112	.245	-.186	.279	-.111	.229
d4	-.308	.541	-.003	.619	-.126	.508
d5	-.342	.322	-.051	.367	-.228	.302
IN_LE	.452***	.071			.446***	.066
EX_LE			.267***	.083	.257***	.068
R ²	.376		.189		.460	
Adj. R ²	.307		.100		.394	
F-statistic	5.472***		2.116**		6.981***	

*p < 0.10; **p < 0.05; ***p < 0.01 (two-tailed test)

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Table 5: The Mediating Effect of Learning Process

Variables	Dependent Variable: Valuation (International Growth)							
	Model 4		Model 5		Model 6		Model 7	
	B	S.E	B	S.E	B	S.E	B	S.E
Intercept	4.502***	.573	4.765***	.510	4.613***	.561	4.920***	.486
Exp_00	.002	.003	.003	.003	.001	.003	.002	.003
LEV_00	.000	.000	.000	.000	.000	.000	.000	.000
LN_Age	-.260	.172	-.335**	.154	-.296*	.169	-.385*	.146
ROA_00	.009	.008	.007	.007	.006	.007	.003	.006
d1	-.234	.276	-.364	.246	-.116	.274	-.228	.237
d2	-.428*	.244	-.443**	.216	-.353	.240	-.352*	.207
d3	.008	.278	-.032	.246	-.023	.271	-.074	.234
d4	-.354	.604	-.368	.535	-.190	.594	-.166	.511
d5	-.275	.358	-.368	.318	-.172	.353	-.248	.304
SUB	.312***	.081	.144*	.079	.259***	.082	.066	.078
IN_LE			.392***	.077			.420***	.074
EX_LE					.194**	.083	.239***	.072
R ²	.225		.398		.269		.465	
Adj. R ²	.140		.324		.180		.392	
F-statistic	2.639***		5.404***		3.014***		6.437***	

*p < 0.10; **p < 0.05; ***p < 0.01 (two-tailed test)

Table 6: The Moderating Effects of Domestic Market Munificence

Variables	Dependent Variable: Valuation(International Growth)			
	Model 8		Model 9	
	B	S.E	B	S.E
Intercept	4.777***	.484	4.813***	.481
Exp_00	.004	.003	.004	.003
LEV_00	.000	.000	.000	.000
LN_Age	-.357**	.144	-.348**	.143
ROA_00	.005	.006	.005	.006
d1	-.252	.231	-.282	.231
d2	-.382*	.204	-.398*	.204
d3	-.118	.226	-.153	.224
d4	-.182	.501	-.355	.504
d5	-.169	.299	-.273	.301
IN_LE	.406***	.068	.367***	.070
EX_LE	.228***	.069	.204***	.069
MKT	.143*	.072	.145**	.072
LE_IN * MKT			-.110*	.062
LE_EX * MKT			-.069	.062
R ²	.483		.506	
Adj. R ²	.413		.426	
F-statistic	6.932***		6.364***	

*p < 0.10; **p < 0.05; ***p < 0.01 (two-tailed test)

To test Hypothesis 2, Table 5 is presented as follows. In Model 4, the CEO's attitude towards internationalization (SUB) is significantly positive as regards international growth ($p < 0.01$). In Models 5 and 6, the internal and external learning processes respectively show partial mediating effects between a CEO's attitude and international growth, because both the CEO's attitude and the internal learning process (or external learning process) show statistical significance simultaneously. In Model 7, including the three major variables – a CEO's attitude, and the internal and external learning processes, a complete mediating effect is shown. Therefore, Hypothesis 2 is verified by hierarchical regression analysis.

Table 4 and Table 6 are presented to test Hypothesis 3. The internal and external learning processes are significant in Models 1, 2, and 3. The domestic market munificence (MKT) is significant in Model 8 ($p < 0.10$) and Model 9 ($p < 0.05$), indicating a positive effect on international growth. In Model 9, the domestic market munificence shows a negative moderating role as regards the internal learning process ($p < 0.10$) only. Therefore, we can say that Hypothesis 3 is partly supported by these results.

To sum up, domestic market munificence shows a significantly negative moderating role ($p < 0.10$) with the internal learning process on international growth, while domestic market munificence has no significant moderating role with the external learning process on international growth.

CONCLUSION AND FUTURE RESEARCH

The results of the empirical test are as follows. The internal and external learning processes have mediating effects between a CEO's attitude and international growth. However, the moderating role of domestic market munificence is supported only with the internal learning process.

This study has some important implications as follows. First, by focusing on the business process, which has become important in terms of strategy and the international business field, we were able to identify the mediating effect of the learning process. Therefore, a CEO's attitude towards internationalization and international growth can be linked with the internal and external learning process. Second, we also examined the negative moderating role of domestic market munificence with the internal learning process on international growth. Though hypothesis 3 was partly supported, some meaningful implications are apparent.

Third, the business process perspective of this study can be applied not only to large firms but also to SMEs and international new ventures in internationalization. In particular, this study suggests the theoretical validity of international entrepreneurship in international new ventures, which go abroad aggressively and succeed without large-scale investment and long-term experience. In effect, such a business process perspective could complement some of the limitations of existing studies such as the OLI paradigm, resource-based view, and upper echelon perspective.

Finally, we also found some implications related to Korean firms and context. Recently, most Korean firms have been trying to internationalize, whether they are 'large or small' or 'old or new', for their survival and prosperity. However, they have experienced difficulty in internationalization because of the fast exchange of employees involved in internationalization and the lack of international experience, etc. According to this study, many of these difficulties can be overcome by establishing appropriate 'business processes' such as a learning process. That is, a business process-based strategy is very important to the international growth of firms in emerging markets. In conclusion, this study will provide many scholars, managers, and government officers with a better understanding of international growth and strategy.

Meanwhile, future research focusing on the following suggestions would constitute an additional enhancement to the research presented here. First, this study tested empirically using only manufacturing firms. Therefore, future research may produce different results and implications, particularly if it focuses on service industries such as finance, distribution, and consulting, etc.

Second, in this study, which is based on a behavioral approach, the measurement of the dependent variable is measured by a 10-point Likert scale as a subjective variable. However, future research can develop some objective variables. For example, in the case of the degree of internationalization, there are a number of objective methods of measurement. The most commonly used measures are the ratio of foreign sales to total sales (Grant 1987; Tallman and Li 1996), the ratio of foreign assets to total assets (Daniels and Bracker 1989), and the number of foreign countries in which a firm has subsidiaries (Tallman and Li 1996). The foreign sales to total sales ratio may be viewed as a proxy for a firm's dependence on its overseas markets for sales revenues, while the ratio of foreign assets to total assets provides a measure of a firm's dependence on overseas production. The number of foreign countries in which a firm has subsidiaries captures the dispersion

element encompassing location costs and benefits (Gomes and Ramaswamy 1999). Like the above variables in the degree of internationalization, it will be necessary in future research to find an optimal and objective measurement of the dependent variable (or international growth) by investigating the relevant methodologies.

Finally, though this study dealt with only the learning process as an international business process, other business processes could be developed. For example, the coordinating process could be considered as an international business process.

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