

# Measures to Expand Market Inroads into the Vietnamese Construction Market

Jung-Ho Yu\*, Hyoun-Seung Jang\*\*, Soon-Wook Kwon\*\*\*, and Bo-Sik Son\*\*\*\*

Received July 11, 2012/Accepted January 25, 2013

## Abstract

To the construction industry that had recently suffered from a depressed domestic construction economy, the overseas construction market offers a foothold to overcome the limitations of the domestic market. In order to promote the continuous growth and development of overseas construction exports, Korean construction companies need to secure overseas market information, and to be strongly competitive. However the Korean construction industry has weaknesses in its ability to obtain information and experience, which are the most important factors in entering the overseas construction market. Therefore, this study aims to suggest business entry road maps by business types, in order to enter the Vietnamese construction market, which presents abundant development potential. To measure the Vietnamese construction market, a market entry evaluation model, which integrates the evaluation scores of marketability and competitiveness, was utilized to analyze the market entry potential by project types. According to the analysis results, general building projects and infrastructure projects in Vietnam in the long term are projected to expand from the currently dominant private investment projects, to a larger scope, along with the increase of public investments. In particular, as for public investments in the general building field, market entries will be smoother in the form of Public-Private Partnership.

Keywords: Vietnam, construction market, marketability, competitiveness

## 1. Introduction

The total value of overseas construction project orders awarded to Korean construction companies is renewing its record every year. Under the annual goal of overseas project orders worth 200 billion won, the Korean government is also making great efforts, including changes in systems and policies. To the construction industry that had recently suffered from a depressed domestic construction economy, the overseas construction market offers a foothold to overcome the limitations of the domestic market, and to make a new leap forward along with the government's diversified efforts.

Meanwhile, the Korean construction industry has weaknesses in its ability to obtain information and experience, which are the most important factors in entering the overseas construction market, and also presents a lack of systematic market entry strategies (Lee *et al.*, 2007). In particular, construction companies with no experience in overseas construction projects are facing difficulties in collecting overseas information.

Recently, South Asian countries including Vietnam are experiencing a growth of construction demand due to their economic growth. According to market forecasts (Global Insight, 2011), the Asian market share in the global construction market

is expected to reach 42.3% in 2018 (Fig. 1).

In order to respond to such a global construction trend, and promote the continuous growth and development of overseas construction exports, Korean construction companies need to secure overseas market information, and to be strongly competitive. In this context, this study aims to suggest business entry road maps by business types, in order to enter the Vietnamese construction market, which presents abundant development potential.

This study will first identify types of business entries, based on the cases of the inroads of domestic construction companies into the Vietnamese market. Secondly, this study will analyze marketability by project types and work types, through a survey of the domestic players experienced in entering the Vietnamese

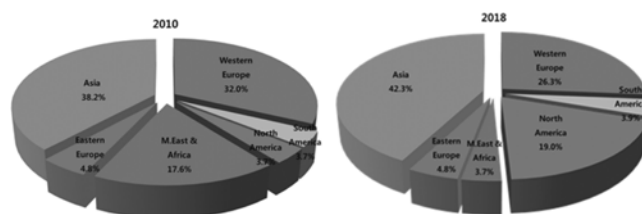


Fig. 1. Changes in Regional Market Size

\*Member, Associate Professor, Dept. of Architectural Engineering, Kwangwoon University, Seoul 139-701, Korea (E-mail: myazure@kw.ac.kr)

\*\*Member, Associate Professor, School of Architecture, Seoul National University of Science & Technology, Seoul 139-743, Korea (Corresponding Author, E-mail: jang@seoultech.ac.kr)

\*\*\*Member, Associate Professor, Dept. of Architectural Engineering, Sungkyunkwan University, Suwon 440-746, Korea (E-mail: swkwon@skku.edu)

\*\*\*\*Assistant Professor, Dept. of Architectural Engineering, Namseoul University, Cheonan 331-707, Korea (E-mail: bsson@nsu.ac.kr)

market, and analyze the competitiveness of domestic construction players. Finally, this work will draw strategic directions to expand inroads into the Vietnamese construction market. To this end, business implementation strategies will be examined in current, short-term, and long-term perspectives, using a market attractiveness analysis model.

## 2. Literature Review

In reviewing the existing studies aimed for the expansion of the overseas construction market, Park *et al.* (2008) analyzes the requirements from the overseas construction industry for Korean construction companies to facilitate their overseas market inroads, and benchmarks the overseas construction support systems in advanced countries. Based on this, he suggests a financial guarantee plan for overseas construction projects in the country's overseas construction support system, measures to link Official Development Assistance (ODA) and construction projects, the establishment of an overseas construction trade center, and an establishment plan for new business models. Song (2009) proposes measures for the country's small and medium construction companies to effectively manage risks, and provide systematic supports based on existing reference data, so that companies would continue the recently growing overseas market inroads. Kim *et al.* (2009) analyzes real options to improve market volatility and uncertainty, instead of employing the existing discounted cash flow method. Through this, he suggests a model that supports companies in their rational decision making, by helping them evaluate market entry plans through an integrated consideration of decision making factors, such as the matter of entry, country, and project type.

Lee *et al.* (2007) derives problems in the overseas market inroads of domestic construction companies, and then suggests a new strategy through a SWOT analysis on the problems, such as project orders focused on industrial structure and insufficient governmental support policies. In addition, Park *et al.* (2004), using the SWOT analysis method, compares and analyzes the competitiveness of domestic construction engineering companies in Russia, Libya, and Indonesia that have large market potentials, suggests their problems and difficulties through interviews with relevant experts, and analyzes the improved technical expertise of domestic construction engineering companies, and the causes for their lowered external competitiveness. Based on such activities, he suggests measures to facilitate overseas market inroads by domestic companies.

This study is a continuance of existing studies, and intends to develop areas where market entry strategies and road maps suited to the specific characteristics of target entry markets have not, thus far, been suggested.

## 3. Project Participation Types in the Vietnamese Construction Market

Figure 2 below indicates the market inroads into Vietnam, for three years from 2008 to 2011 (International Construction

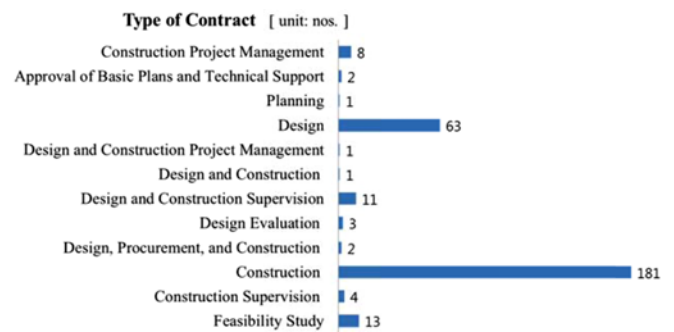


Fig. 2. The Number of Contracts by Korean Companies in the Vietnamese Construction Market (2008-2010)

Information Service, ICAK). Construction contracts accounted for the largest share at 181 cases, followed by design contracts at 63 cases and construction management contracts, including feasibility studies, at 21 cases. These are significantly high numbers of contracts, compared with those in other Asian countries. Therefore, Vietnam is expected to be a country of high market entry potential for Korean construction players in the future.

As with the number of contracts, the contract values of Korean companies in the Vietnamese construction market exhibit a dominant share of 'construction' in terms of contract type, as shown in Fig. 3 (International Construction Information Service, ICAK). On the other hand, 'design' contracts comprise a lower portion in terms of their value, compared with their number. In particular, there was only one design and construction contract, but its value amounted to \$428,770,000, which confirms a larger value share per contract, in comparison with other contract types. Consequently, market inroads equipped with a multiple structure that additionally covers construction or construction supervision, are considered as more desirable than inroads with the sole task of design.

The types of project participation that are complete or currently underway in the Vietnamese construction market, by various construction project types, are shown in Table 1. The ordering organizations can be divided into the private sector, government organizations, and public corporations. The work types are segmented into general building, infrastructure, and industrial structure projects. The types of project participation are segmented into design, construction supervision, construction, and project

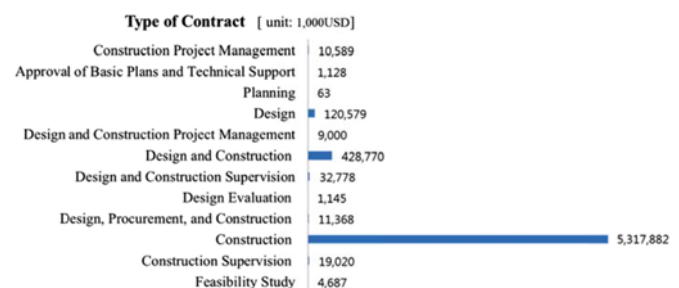


Fig. 3. The Contract Values of Korean Companies in the Vietnamese Construction Market (2008-2010)

Table 1. The Status of Vietnam's Project Orders, Project Types, and Project Participation Types

Ordering Organization	Type of Ordering Organization	Title of Project	Type of Construction	Type of Project	Type of Project Participation
TID-PVFC	Private	Dolphin Plaza	General Building	Private Investment Project	Construction, Design Service, Construction Supervision Service
HaiBinh-Dong RiWon	Private	Habico Tower	General Building	Private Contract Project	Construction, CM(for fee), Design Service, Construction Supervision Service
Hanoi North Ankaing JVC	Public Corporation	North Ankaing New City Project	General Building	Public Investment Project	Design Service
Doosan Heavy Industries & Construction Co Ltd	Private	Habico Multipurpose Complex	General Building	Private Contract Project	CM (for fee)
The Foreign Ministry	Government Organization	The Foreign Ministry Office	General Building	Public Contract Project	CM (for fee), Design Service, Construction Supervision Service
Sabecoland Co.	Public Corporation	Sabeco Tower	General Building	Public Contract Construction	CM (for fee)
M & C	Private	Sai Gon M&C Tower	General Building	Private Contract Project	Construction
Petro VietNam	Public Corporation	Camau 2 × 750 mw Combined-Cycle Power Plant Project	Industrial Structure	Public Contract Construction	Construction
Ministry of Transportation	Government Organization	Can Tho Bridge	Infrastructure	Public Investment Construction	Construction
Novaland	Private	Sunrise City	General Building	Private Contract Project	Construction
Ministry of Transportation	Government Organization	Sai Gon East-West Highway	Infrastructure	Public Investment Construction	Construction
Bitexco	Private	Bitexco Financial Tower	General Building	Private Contract Project	CM (for fee)
Bitexco	Private	THE manor housing project	General Building	Private Investment Project	CM (for fee), Construction Supervision Service
DUC MANH	Private	VINH TRUNG PLAZA PROJECT	General Building	Private Investment Project	CM (for fee), Construction Supervision Service
Hirand vina co.ltp	Private	Apartment	General Building	Private Contract Project	Design Service
Vinalines	Government Organization	Vanphong Harbor Project	Infrastructure	Public Contract Project	Construction
HCMC People's Committee	Government Organization	Thu Thiem Tunnel	Infrastructure	Public Contract Project	Construction
EVN(Electricity of Vietnam)	Public Corporation	Pha Lai Thernal Power Plant	Industrial Structure	Public Contract Project	Design Service
Vietnam Expressway Corp. (3 cases)	Government Organization	Noibai-Laocai Expwy Const.	Infrastructure	Public Investment Project	Design and Construction

management.

Currently, the Vietnamese construction market indicates that construction companies enjoy a more lively participation in the general building field among various project types, than in the infrastructure and industrial structure fields. In particular, as for private projects, the market inroads into construction and design service projects are vibrant, while the overall types of project participation exhibit a wide variety, extending to construction management services. On the other hand, in the infrastructure and industrial structure fields, market entries among public contract projects are found to be only in construction.

Thus, for the expansion of inroads into the Vietnamese construction market, active measures are required for the participation of a number of construction players in various

project types. If relevant measures are drawn up, this will help further facilitate inroads into the Vietnamese market in future. A business entry model for Vietnamese construction projects is composed as shown in Table 2, based on the data about the current status of business entries in Table 1.

The types of project participation by domestic companies in the Vietnamese construction market can be largely divided into public projects and private projects. Among them, public projects are segmented into government-driven public contract projects, and aid/loan projects (public investment projects) supported by international financial institutions. Private projects can be segmented into private contract projects ordered by local private companies, and private investment projects, including self-investment projects and foreign investment projects. In

Table 2. Types of Project Participation according to Vietnamese Construction Project Types

Type of Work	Type of Project	Type of Project Participation
General Building	Private Investment Projects	CM (for fee), Design Service, Construction Service, Construction, Design and Construction
	Private Contract Projects	CM (for fee), Design Service, Construction Supervision Service, Construction
	Public Investment Projects	Design Service, Design and Construction
	Public Contract Projects	Design and Construction, CM (for fee), Construction Supervision Service, Construction
Infrastructure	Private Investment Projects	-
	Private Contract Projects	-
	Public Investment Projects	Construction (Overseas Loan Project)
	Public Contract Projects	Construction
Industrial Structure	Private Investment Projects	-
	Private Contract Projects	-
	Public Investment Projects	-
	Public Contract Projects	Construction

addition, Public-Private Partnership (PPP) projects that are executed in cooperation between private and public sectors are observed as one of the country's project types.

#### 4. Expansion of the Inroads into the Vietnamese Construction Market

##### 4.1 Survey

With the aim of establishing a market entry strategy for the Vietnamese construction market, the potential for market inroads by project types can be measured by marketability and competitiveness. Marketability can be measured in terms of attractiveness of the target market, levels of competition, and

barriers to market entry. Competitiveness can be measured in terms of the capability of project management, marketing capability, tangible assets, and intangible assets (Porter, 1990, 1991; Monitor, Company, 1991; Rugman and D'Cruz, 1991, 1993). If both marketability and competitiveness in a project field are high, the entry potential into the respective field can be judged as high. Meanwhile, if marketability is high but competitiveness is low in a field, or, if competitiveness is high but marketability is low, their entry potentials are considered as relatively low. If both marketability and competitiveness are low, the entry potential is considered as almost zero. The detailed criteria for the evaluation of marketability and competitiveness are as shown in Table 3.

In addition, a survey questionnaire was designed for the periodic

Table 3. Areas and Items for the Evaluation of Marketability and Competitiveness

Marketability		Competitiveness	
Areas of Evaluation	Items of Evaluation	Areas of Evaluation	Items of Evaluation
Market Attractiveness	<ul style="list-style-type: none"> <li>- Size of the target market</li> <li>- Profitability of the target market</li> <li>- Marketability of the target market</li> </ul>	Capability of Project Management	<ul style="list-style-type: none"> <li>- Ability to manage the pre-design phase</li> <li>- Ability to manage the design phase</li> <li>- Ability to manage the procurement phase</li> <li>- Ability to manage the construction phase</li> <li>- Ability to manage the post-construction phase</li> </ul>
Levels of Competition	<ul style="list-style-type: none"> <li>- Levels of competition in the target market</li> <li>- Superiority levels of major competitors in the target market</li> <li>- Likelihood of potential competitors' entry into the target market</li> </ul>	Capability of Marketing	<ul style="list-style-type: none"> <li>- Ability to collect market and project ordering information</li> <li>- Ability to draw up and present project proposals</li> <li>- Ability to analyze project feasibility</li> <li>- Financing skills</li> <li>- Marketing skills (installment-sale / lease)</li> </ul>
Market Entry Barriers	<ul style="list-style-type: none"> <li>- Requested levels of technical expertise in the target market</li> <li>- Requested levels of legislative/institutional compliance in the target market</li> <li>- Likelihood of resources procurement in the target market</li> </ul>	Tangible Assets	<ul style="list-style-type: none"> <li>- The number, experience, and specialization levels of human resources</li> <li>- Ability to secure funding</li> <li>- Levels of the information management system infra</li> <li>- Levels of the local office and the information collection network</li> <li>- Levels of the organization exclusively</li> <li>- Levels of the organization exclusively responsible for overseas projects</li> </ul>
<p>※ An increased score in competition levels indicates a corresponding decline in competition levels. An increased score in market entry barriers indicates a corresponding loosening in market entry barriers.</p>		Intangible Assets	<ul style="list-style-type: none"> <li>- Levels of specialized technologies and knowhow</li> <li>- Levels of the company's brand name and reputation</li> <li>- Ability to manage the relationships with customers/ordering bodies</li> <li>- Ability to manage partnerships or execute J/V</li> <li>- Ability for global supply (workforce/equipment/construction materials/companies, etc)</li> </ul>

Table 4. The Status of Subjects Experienced in Vietnamese Construction Projects in the Survey

Field \ Experience	1~5 Years	6~10 Years	11~15 Years	16~20 Years	21~25 Years	25~30 Years	30 Years ~	Total
General Building	4	5	1	9	13	12	8	61
Infrastructure	6	3	-	-	3	3	-	15
Industrial Structure	-	-	5	4	4	1	-	14

evaluations of marketability and competitiveness, by defining the current status and the prospects within the next three to five years as short-term prospects, and the prospects after five years as long-term prospects. The survey conducted one month (January 12, 2011~February 11, 2011) and 130 surveys were distributed to various construction companies. This survey involved 81 people (survey returned rate: 62.3%) engaged in Vietnam-related construction businesses (an average experience of 17.5 years). 52 questionnaire copies from the general building field, 15 copies from the infrastructure field, and 14 copies from the industrial structure field were analyzed. The distribution of total experiences for the subjects is shown in Table 4.

#### 4.2 A Model for the Evaluation of Market Inroads by Project Types

In this study, a market entry evaluation model, which integrates the evaluation scores of marketability and competitiveness, was utilized to analyze the market entry potential by project types (Fig. 4). This model was built through a simplified application of the basic concept of the TOPSIS (Technique for Order Preference by Similarity to the Ideal Solution), which is one of the multi-criteria decisions making models. The TOPSIS is based on the concept that an alternative suggested as the value of a multi-criteria decision making question should be located at the shortest distance from the PIS (Positive Ideal Solution), and at the farthest distance from the NIS (Negative Ideal Solution). From the geometric perspective, the TOPSIS means that a selected alternative should have the nearest Euclidean distance from the PIS, and the farthest Euclidean distance from the NIS. In other words, by converting alternatives into their distances from the PIS and NIS, an alternative relatively closest to the ideal solution is selected as an optimal option (Chakladar and Chakraborty, 2008). The basic concept of the evaluation model

of the market entry potential by project types proposed in this study is to measure the distance from the origin (0, 0) to a certain measurement point (x<sub>i</sub>, y<sub>i</sub>) of marketability and competitiveness, on a plane coordinate system with two axes of marketability (x) and competitiveness (y), and to assess that a greater distance represents a larger potential for market entry.

‘A’ quantifies the current potential for market entry, by taking into account the current levels of marketability and competitiveness. Likewise, ‘C’ quantifies the market entry potential in the next five years, exhibiting relatively long-term prospects. ‘B’, as the distance between the current and future prospect values, measures the growth (short-term prospects) of market entry potentials from the present time to the point of five years later, in other words, over the next three to five years. However, even if the future conditions are worsened, compared to the present time (CA), B always has a positive value. Thus, even if B has a positive value, this doesn't lead to the evaluation that the future market prospects would be always brighter than the current market conditions. Thus, in case the future prospects are worse than the current status (CA), a caution is required to project, that as for the short-term prospects (B), the market entry potential over the next three to five years would decline even if B has a positive value. Such content can be more conveniently understood in visual terms, when analyzed with graphs.

#### 4.3 Directions to Expand Market Inroads by Project Types

##### 4.3.1 General Building Projects

The results of the potential for market entry in the general building field, through the analysis of marketability and competitiveness, are as shown in Fig. 5.

The current status of the general building field in Vietnam,

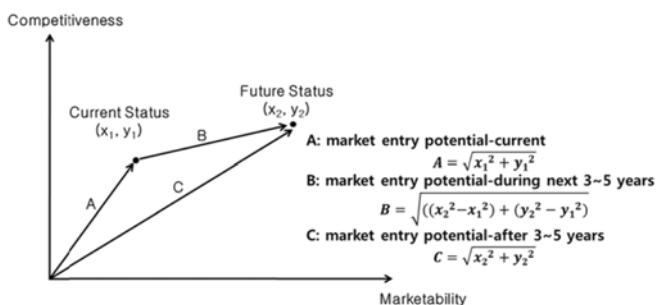


Fig. 4. An Evaluation Model for Market Entries through Marketability and Competitiveness

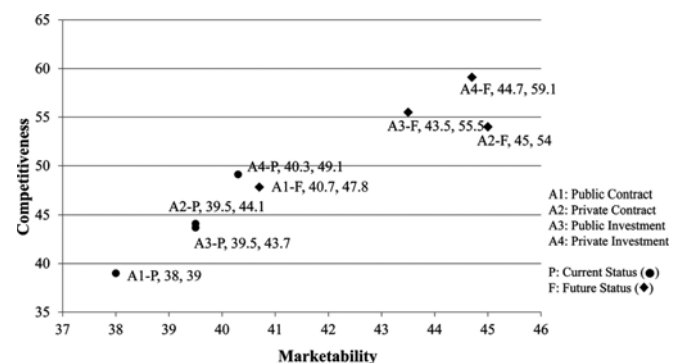


Fig. 5. Marketability and Competitiveness of the General Building Field

Table 5. Evaluation Result in the General Building by Project Types

Project Type	Evaluation	Current		Short-Term Prospects		Long-Term Prospects	
Public Contract	Marketability	38.0	54.5	2.7	9.2	40.7	62.8
	Competitiveness	39.0		8.8		47.8	
Private Contract	Marketability	39.5	59.2	5.4	11.3	45.0	70.3
	Competitiveness	44.1		9.9		54.0	
Public Investment	Marketability	39.5	58.9	4.0	12.4	43.5	70.5
	Competitiveness	43.7		11.8		55.5	
Private Investment	Marketability	40.3	63.5	4.4	10.9	44.7	74.1
	Competitiveness	49.1		10.0		59.1	

Table 6. Expected Types of General Building Projects by Time Period

Time	Expected Project Types in the General Building Field
Present	Private Investment Projects > Private Contract Projects $\approx$ Public Investment Projects > Public Contract Projects
Short-Term Prospects	Public Investment Projects > Private Contract Projects $\approx$ Private Investment Projects > Public Contract Projects
Long-Term Prospects	Private Investment Projects > Public Investment Projects $\approx$ Private Contract Projects > Public Contract Projects

which is examined based on marketability and competitiveness, indicates that private investment projects are most promising in this field (Table 5).

If the current competitiveness is 49.1 or above in private investment projects, the potential for market entry into this project type can be considered as existent. However, the current marketability remains at 40.3, suggesting that competition among Korean companies is inevitable. In order to overcome such a situation, we need to find certain measures to facilitate the participation of Korean construction companies in overseas private investment projects. When reviewing by the components of competitiveness, analysis shows the ability to manage projects to be the lowest among the components. This raises the urgent need to strengthen the capability of project management for smooth market inroads into the general building field.

In terms of short-term prospects, the most improving project type was found to be public investment projects. However, it should be noted that the growth of competitiveness (11.8), rather than the growth of marketability (4.0), was critically influential on this result. While the overall marketability slightly increases, such a positive assessment on future marketability was mostly due to an increase in attractiveness of the target market (7.5), among the detailed evaluation items. Therefore, Korean construction

players will need to secure vibrant market entries into general building field by improving competitiveness. From a long-term perspective, the improvement level in marketability was analyzed to be insignificant, which is likewise interpreted as resulting from an improved level of competitiveness. Thus, the strengthening of competitiveness is considered as essential to secure the potential for consistent market entries into the general building field. Specifically, among the components of competitiveness, the enhancement of competitiveness in tangible assets was analyzed to be comparatively insufficient.

#### 4.3.2 Infrastructure Projects

When the infrastructure field in Vietnam is examined based on marketability and competitiveness, private investment projects (58.6) and public contract projects (57.8) were revealed to be promising at present, with a minor gap between them (Fig. 6).

In reviewing by the components of competitiveness, tangible assets and intangible assets scored 45.5, which is slightly lower than marketing capability (47.0) and the capability of project management (46.8). In marketability, the levels of competition

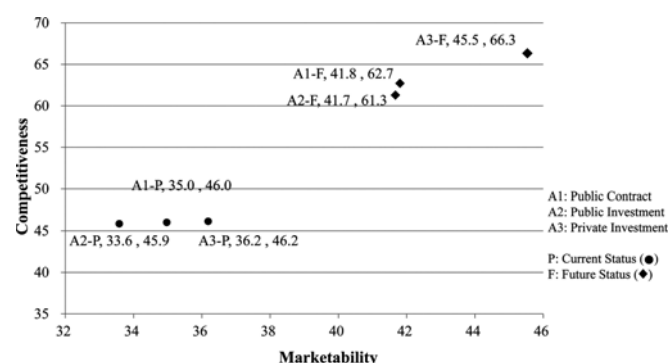


Fig. 6. Marketability and Competitiveness of the Infrastructure Field

Table 7. Evaluation Result in the Infrastructure by Project Types

Project Type	Evaluation	Current		Short-Term Prospects		Long-Term Prospects	
Public Contract	Marketability	35.0	57.8	6.8	18.0	41.8	75.4
	Competitiveness	46.0		16.7		62.7	
Public Investment	Marketability	33.6	56.8	8.1	17.4	41.7	74.1
	Competitiveness	45.9		15.4		61.3	
Private Investment	Marketability	36.2	58.6	9.4	22.2	45.5	80.5
	Competitiveness	46.2		20.2		66.3	

Table 8. Expected Types of Infrastructure Projects by Time Period

Time	Expected Project Types in the Infrastructure Field
Current	Private Investment Projects $\approx$ Public Investment Projects > Public Contract Projects
Short-Term Prospects	Private Investment Projects > Public Investment Projects $\approx$ Public Contract Projects
Long-Term Prospects	Private Investment Projects > Public Investment Projects $\approx$ Public Contract Projects

(29.9) and entry barriers (32.2) were observed to be lower than the attractiveness of the target market (46.5).

Such results indicate that infrastructure field has a high level of attractiveness, but also presents strong competition and high entry barriers in the current market. The project type that is expected to improve most in the short term was revealed to be private investment projects, as shown in Table 8. However, it is noteworthy that during this period, the improvement of competitiveness (20.2) in private investment projects was significantly more influential on the outcome, compared with the improvement of marketability (9.4).

In the long term, private investment projects are forecast to still be promising in Vietnam's infrastructure field. In terms of marketability, compared with the attractiveness of the target market (65.2), levels of competition (35.1) and entry barriers (36.4) were significantly lower, necessitating corresponding measures. Therefore, the strengthening of competitiveness is considered essential in securing the potential for consistent market inroads into this field. Specifically, among the components of competitiveness, the ability for project management was analyzed to be relatively low.

#### 4.3.3 Industrial Structure Projects

The results of market entry potential in the industrial structure projects, through the analysis of marketability and competitiveness, are as shown in Fig. 7. Meanwhile, industrial structure projects are an area of low repetition, and the number of industrial structure projects investigated in this study was much lower than those of general building or infrastructure projects. As a result, the establishment of medium and long-term market entry strategies, by dividing into project types, has limitations in this field. Therefore, this study conducted an analysis on marketability and competitiveness of the industrial field in Vietnam without division into project types. However, the entry potential into the overall industrial structure market in a target country is projected to be similar to the prospects of the country's economic development. This projection is also in accordance with our analysis results.

The current competitiveness in Vietnam's industrial structure projects scored 51.9, suggesting a good potential for market inroads into the industrial structure field. On the other hand, the

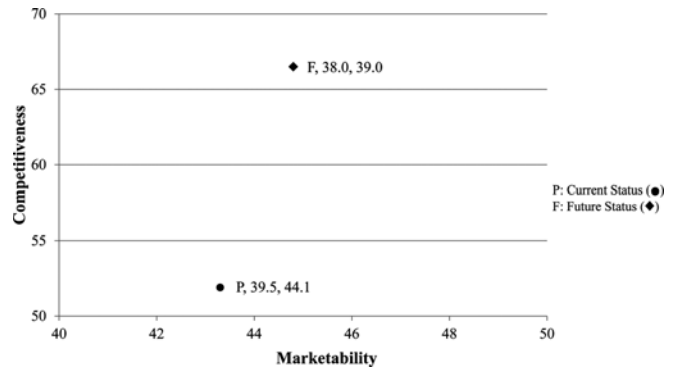


Fig. 7. Marketability and Competitiveness of the Industrial Structure Field

current marketability marked a high level at 43.3. When reviewing by the components of competitiveness, the capability of project management (58.5) posted the highest level, followed by intangible assets (52.7), marketing capability (50.3), and tangible assets (46.0). As shown Table 9, the scores of marketing capability and tangible assets were lower than the average of competitiveness (51.9), suggesting the need for reinforcement in the respective areas. In addition, in reviewing by the components of marketability, attractiveness of the target market scored 47.4, which is higher than the levels of competition (40.9) and entry barriers (41.5).

This outcome means that the strong attractiveness of the given market leads to corresponding fierce competition. Moreover, our analysis revealed that there are difficulties in market inroads into this field. This is interpreted as caused by the difficulties in fulfilling the conditions required for project participation, such as PQ (Pre-Qualification), including similar project performances in the past.

When observing short-term prospects, the overall marketability exhibits a slight increase, including a substantial jump in attractiveness of the target market to 14.2. However, the levels of competition and entry barriers are predicted to decline to -5.7 and -3.9, respectively. This offers a projection that the market inroads into this field will grow more difficult, along with tougher competition with other players.

For long-term prospects, unlike the current status, marketability

Table 9. Evaluation Result in the Industrial Structure by Project Types

Project Type	Evaluation	Present		Short-Term Prospects		Long-Term Prospects	
		Marketability	Competitiveness	Marketability	Competitiveness	Marketability	Competitiveness
Total	Marketability	43.3	67.5	1.5	14.7	44.8	80.1
	Competitiveness	51.9		14.6		66.5	

Table 10. Current Status and Prospects for the Facilitation of Vietnam's Projects by Project Types

	Public Projects		Private Projects	
	Public Contract	Public Investment (Aid/Loan Projects)	Private Contract	Private Investment
General Building			◆ ●	◆ ●
Infrastructure		◆ ●		●
Industrial Structure	○		○	

(◆ : Facilitation, ○ : Under Market Formation, ● : Promising)

(44.8) was revealed to be lower than competitiveness (66.5). In marketability, attractiveness of the target market (61.6) was observed to be higher than the levels of competition (35.2) and entry barriers (37.6). This suggests that marketability will improve according to the demand increase from economic growth, but the levels of competition will also grow fierce alongside it. Entry barriers were also found to be lower than the attractiveness of the target market, which is analyzed as the result of the difficulties in fulfilling the conditions required for project participation. In particular, from the review by the components of competitiveness, the capability of project management was significantly high (71.0), while intangible assets (68.7), marketing capability (65.8), and tangible assets (60.4) were comparatively low. Therefore, these areas will need to be further strengthened.

#### 4.4 Implications

The current levels of Korean companies' participation in the Vietnamese market by project types, which were analyzed through the case study and expert interviews, are outlined in Table 10. General building and infrastructure projects in Vietnam are projected to expand from the current focus on private investment projects, to a wider range of project types in the long term, along with increased public investments. In particular, public investments in the country's general building field exhibit the form of PPP (Public-Private Partnership), and the infrastructure field is characterized in the form of ODA loan projects.

In observing the results of market analysis by project types, public contract projects through bidding are expected to gradually decline in Vietnam. Therefore, Korean construction players will need to develop their projects with a focus on public and private investment projects in the general building field, aid and loan projects that are effective in securing stable financing and enhancing profitability in the infrastructure, and selective order-winning activities in the industrial structure field. In the meantime, while it is important for Korean companies to obtain orders through competitive bidding, by demonstrating their abilities based on overseas project experiences as they have done to date, they will additionally need to strengthen their competitiveness to win orders, by proposing measures for securing finances to ordering organizations in an initial phase of their projects. In such investment projects, smooth flows of the funds to be invested in the projects, and the collection of the invested

funds, are important factors. As a result, relevant market analyses should be conducted beforehand. The competitiveness related to this may require the ability to manage the pre-design phase. In addition, the ability to manage partnerships, or execute J/Vs (Joint Ventures), will be necessary to reduce those risks with a high chance of occurrence.

## 5. Conclusions

In this study, among South Asian construction markets that have recently shown abundant development potentials, a time-periodic analysis on the directions to enter the Vietnamese construction market by project types was conducted, based on the coordinates of marketability and competitiveness. According to the analysis results, general building projects and infrastructure projects in Vietnam in the long term are projected to expand from the currently dominant private investment projects, to a larger scope, along with the increase of public investments. In particular, as for public investments in the general building field, market entries will be smoother in the form of PPP. For public investments in the infrastructure field, market entries will be more convenient, by adopting the form of ODA projects. Such analysis results have certain implications. As overseas projects become gradually more complex and larger, and the scale of individual project units becomes larger, the financing of project costs is emerging as the most important issue to ordering organizations. Accordingly, if contractors can provide ordering organizations with the solutions to such an issue, the chances of winning orders will increase. This study carried out a survey based on experts who have completed, or are currently executing projects in the Vietnamese construction market, within a relatively limited scope, in other words, the measures for Vietnamese construction market inroads by project types. As a result, this work couldn't deal with various strategies for overseas market inroads. However, this work is still considered to provide the basic data that can help Korean construction companies who plan to enter the Vietnamese market strengthen their medium and long-term capabilities. To complement this study, further research will be necessary, which establishes the strategies to expand project orders from the Vietnamese construction market through advanced approaches, such as project types by work types, and the scenario of target project types for market entry.

## References

- Chakladar, N. D. and Charaborty, S. (2008). "A combined TOPSIS-AHP-Method-Based approach for non-traditional machining process selection." *Proceedings of the Institution of Mechanical Engineers, Part B: Journal of Engineering Manufacture*, Vol. 222, pp. 1613-1623
- Global Insight (2011). *Executive overview*, IHS Global Construction Outlook, First-Quarter.
- Kim, J. K. (2010). "2010 International construction outlook." *International Construction Magazine*, ICAK, pp. 37-48.
- Kim, B. I., Kim, D. Y., and Han, S. H. (2009). "Supporting market entry



decisions for global expansion using option + scenario planning analysis.” *Korean Journal of Construction Engineering and Management*, Vol. 10, No. 5, pp. 135-147.

Lee, J. S., Min, K. M., Lee, Y. S., and Kim, J. J. (2007). “Strategies to improve the competitiveness to win project orders in the construction industry for the facilitation of overseas construction market inroads.” *Proceedings of KICEM Annual Conference 2007*, KICEM, pp. 674-677.

Park, W. P., Park, S. H., and Cho, M. Y. (2004). ”Strategies going into other countries throughout analysis of factors which weakens competitiveness in domestic construction engineering companies.” *Korean Journal of Construction Engineering and Management*, Vol. 5, No. 6, pp. 101-109.

Park, W. P., Shin, E. Y., and Lee, K. S. (2008). “Improvement plan going into other countries of domestic construction companies.” *Korean Journal of Construction Engineering and Management*, Vol, 9, No. 6, pp. 225-234.

Porter, M. E. (1990). *Competitive advantage of nations*, Free Press, New York, NY.

Porter, M. E. (1991). *Canada at the crossroads: The reality of a new competitive environment*, Business Council on National Issues, Monitor Company Canada.

Porter, M. E. (1998). *Competitive strategy: Techniques for analyzing industries and competitors*, The Free Press, New York, N.Y.

Rugman, A. M. and D’Cruz, J. R. (1993). “The double diamond model of international competitiveness: Canada’s experience.” *Management International Review*, Vol. 33, pp. 17-39.

Rugman, A. M. and D’Cruz, J. R. (2010). *Fast forward: Improving Canada’s international competitiveness*, Reproduced on KODAK, University of Toronto, Canada.

Song, J. H. (2009). *A study on the methodology to risk management on the korea small/medium sized construction firms for venturing into international market*, MSc Thesis, Hanyang University, Seoul, Korea. [www.icak.or.kr](http://www.icak.or.kr), *International construction information service*, International Contractors Association of Korea.

## Appendix. Summarized Survey Form

### Marketability Questionnaire

Areas of Evaluation	Items of Evaluation	Private Investment Projects		Private Contract Projects		Public Investment Projects		Public Contract Projects	
		AS-IS S ↔ L (1 ↔ 10)	TO-BE S ↔ L (1 ↔ 10)	AS-IS S ↔ L (1 ↔ 10)	TO-BE S ↔ L (1 ↔ 10)	AS-IS S ↔ L (1 ↔ 10)	TO-BE S ↔ L (1 ↔ 10)	AS-IS S ↔ L (1 ↔ 10)	TO-BE S ↔ L (1 ↔ 10)
Market Attractiveness	Size of the target market								
	Profitability of the target market								
	Marketability of the target market								
Levels of Competition	Levels of competition in the target market								
	Superiority levels of major competitors in the target market								
	Likelihood of potential competitors' entry into the target market								
Market Entry Barriers	Requested levels of technical expertise in the target market								
	Requested levels of legislative/institutional compliance in the target market								
	Likelihood of resources procurement in the target market								

Competitiveness Questionnaire

Areas of Evaluation	Items of Evaluation	Private Investment Projects		Private Contract Projects		Public Investment Projects		Public Contract Projects	
		AS-IS S ↔ L (1 ↔ 10)	TO-BE S ↔ L (1 ↔ 10)	AS-IS S ↔ L (1 ↔ 10)	TO-BE S ↔ L (1 ↔ 10)	AS-IS S ↔ L (1 ↔ 10)	TO-BE S ↔ L (1 ↔ 10)	AS-IS S ↔ L (1 ↔ 10)	TO-BE S ↔ L (1 ↔ 10)
Capability of Project Management	Ability to manage the pre-design phase								
	Ability to manage the design phase								
	Ability to manage the procurement phase								
	Ability to manage the construction phase								
	Ability to manage the post-construction phase								
Capability of Marketing	Ability to collect market and project ordering information								
	Ability to draw up and present project proposals								
	Ability to analyze project feasibility								
	Financing skills								
	Marketing skills (installment-sale / lease)								
Tangible Assets	The number, experience, and specialization levels of human resources								
	Ability to secure funding								
	Levels of the information management system infra								
	Levels of the local office and the information collection network								
	Levels of the organization exclusively responsible for overseas projects								
Intangible Assets	Levels of specialized technologies and knowhow								
	Levels of the company's brand name and reputation								
	Ability to manage the relationships with customers / ordering bodies								
	Ability to manage partnerships or execute J/V								
	Ability for global supply (workforce/equipment/construction materials/companies, etc.)								