

Global Market Competitiveness of Korea Construction Company

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Abstract

Korea's overseas construction has been developed mainly quantitative growth to qualitative growth than in recent years to enter the overseas construction market starting from entering Thailand in 1965. But look at the flow of current in the overseas construction market, construction companies are simply resource development in developing countries and underdeveloped countries are capital scarce, not only requires the construction business, the private power generation project construction funds to the contractor to demand an increase in investment development projects, such as Development trend because it is foreign investment construction projects, including the financial forms, such as requiring up to one trillion months has increased its importance is growing gradually. These overseas construction market and in view of the trends in resource development market, Korea construction company stable revenues in the future overseas construction creation and sustainable growth, and by national activate the investment development overseas construction projects in order to reliably ensure in conjunction with the resource development of the resource Korea International competitiveness of construction companies, there is a need to ensure the revival construction market, resource exploitation rights. This study investment development International theoretical concepts of construction projects and properties, overseas the advancement than to identify entry strategies such as the construction market system improve settlement and competitiveness of Korea construction company, of high value-added investment development through the development of overseas construction projects based on the fact that the provision of electricity, including qualitative leap forward in the future is to achieve the investment development overseas construction business expansion plan enabled construction companies in Korea.

Key words: *Foreign investment project, IPP projects, Overseas construction*

1. Introduction

Korea's overseas constructions began with 1965 Thailand Highway project, which with the government full support the foreign constructions became a core export market and 1970 middle east project help economic growth, but after 1997 IMF dropping Country credit rate forced construction market to lay down worker.

By middle of 2000 construction market grew due to the rise of the oil price central Asia plant order rise but 2008 financial crisis halted that growth. Also, Korea construction company worked with a total adjustment turnkey format that had a disadvantage to the contractors, overall it was weaker than the high valued overseas projects. For a continuous growth of Korea overseas project and resources there is a need to stimulate construction investment and development for a better national image and trust.

This research analysis academic paper, related books, government statistics,

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international contractor association, *etc.* to find the problem and compare with first countries construction policies and system and adopt it for Korea's construction growth.

2. Theoretical Perspective of Foreign Investment Construction

2.1. Definition of Foreign Investment Construction

Foreign Investment construction is Overseas construction projects during the financial scheme that contractor provide the money to construct or have the rights to sale the project major cases are PPP(Public Private Partnership), BOT(Build Operate Transfer), BTO(Build Transfer Operate), BOO(Build Own Operate), SOC(Social Overhead Capital) [1].

2.2. Present Condition of Investing Overseas Construction

Since the mid-2000s, ordering form in the Abroad Construction Market is changing not to the general subcontracting business ordinarily conducted by Ordering organization resources but to Construction type of financial provision that builder not only procures business planning but also arrange the finance directly or to the Investment Developing form that the business owner him or herself develops the business field, invests and procure the finance.

This phenomenon happens not only in Latin American countries and the developing countries in Asia increasing demand for the infrastructure development but also in middle, high-income countries like Eastern Europe countries or the United States, which shows the ordering change from the BTL(Build-Transfer-Lease) conducted ordinarily before to the more developed various form of the private business.

According to World bank computed total of foreign investment construction progress in under developed & developing country, people can read off it is about 16% to assumed that overseas construction business market scale is 700 billion USD.

2.3. Foreign Construction Orders Changes

Foreign investment projects has been a bidding system. But now change in system has been seen, Owner money is not a big factor now. Now is a combination of factors like Ordering resource, condition, competitive method.

Table 1. Foreign Construction Orders Changes [2]

Division	AS-IS	TO-BE
Ordering resource	The rich domestic and international capital-oriented orders	PF, PPP and BOT
Ordering condition	Exclusive(Price oriented)	Mutual consultation
	Localized	Expansion and diversification of the range required
	Using its own manpower & equipment requirements	Technology transfer, payment in Kind
	Obligations to subcontract Local businesses	Enlarge duty ratio, a joint Induction
Construction type	Civil/ Architecture predominantly infrastructure-related facilities	Predominantly industrial infrastructure, Investment development
Contractor selection	Bidding	Addition negotiation after Bidding

Contractor requirements	Emphasis on experience and construction skills	Project creation, Emphasis on comprehensive Management capabilities
Compete	Minor competition	Multiple competition
Market	Developing Countries	Resource Development
Business Activity	Localized	International

But our country but overseas construction orders and continue for more than \$ 60 billion annually since 2010, business investment is still a situation that development not been activated. Recently, about a five-year look classify our country overseas construction orders as orders by type, but the general also development projects accounted for the largest share with 84 percent, domestic enterprises and a lack of performing experience and financing capabilities, on Concession development investment project for reasons such as momentum weakened, it can be seen that staying in the 3% level. In contrast, the United States, France, for the major industrialized countries such as Germany, development investment proportion of orders was accounted 65-75%[3].

Table 2. Investment Overseas Construction Portion of S.Korea [4]

(Unit : Million dollars, %)

Year	Division		Amount	Ratio
2010	Contract Type	General Contract	51,150	71
		Builder's financier	18,604	26
	Investment Development Type		1,826	3
	Total Orders		71,580	100
2011	Contract Type	General Contract	52,818	89
		Builder's financier	3,346	6
	Investment Development Type		2,980	5
	Total Orders		59,144	100
2012	Contract Type	General Contract	63,576	98
		Builder's financier	1,073	2
	Investment Development Type		231	0
	Total Orders		64,880	100
2013	Contract Type	General Contract	51,776	79
		Builder's financier	10,900	17
	Investment Development Type		2,536	4
	Total Orders		65,212	100
30.Sep. 2014	Contract Type	General Contract	40,942	85
		Builder's financier	6,183	13
	Investment Development Type		1,128	2
	Total Orders		44,696	100
Total Amount	Contract Type	General Contract	260,262	84
		Builder's financier	40,106	13
	Investment Development Type		8,701	3
	Total Orders		309,069	100

2.4. Profit of Investing Overseas Construction Projects

Investment projects have a higher profit rate than normal construction projects. Normal construction project have a limited profit rate but investment project can vary due to contractor.

Table 3. Profit Comparison [5]

Division	New city	Hobor	Crude Installation	Road	Environment equipment
General Contract comparison(%)	250.3%	55.9%	71.6%	213.2%	96.2%

Investment development overseas construction projects mainly been the geographical location carried out in close Asia and the Middle East, plain development construction in comparison of high detail 0 kinds and area yield of the new city Asia, ports in Asia, the road Asia, the Middle East's oil facilities and Latin America, the Middle East's gas facilities were in Asia, environmental equipment.

Table 4. Profitable Area Comparison of General Contract

Division	Asia	M-Asia	Europe	N- America P-ocean	M-Latin American	Africa
New city						
Hobor						
Road						
Crude Installation						
Gas Installation						
Environment equipment						

3. Necessity of Investment Overseas Construction

Overseas construction orders is rather to add to the difficulties of domestic builders to cause serious problems in the most profitable and the total fixed turnkey EPC contract (Fixed Price Lump Sum Turn Key) form increased sharply since 2010. Total fixed turnkey EPC contracts are very difficult to obtain adequate profit structure in order contracts is likely to cost increases contractor positions because of the purchaser advantage to induce intense competition order to target a number of contractors. It is also very risky contracts likely to contract the purchaser is in a position to apply because the contractor how to offset the risk of possible cost increases during the project all the risks due to increased costs. While the investment development business, business opportunities, the capital contribution, to participate in plant design / purchase / construction, commissioning and facility operation, including all phases of a project to reduce the risk of low order by carrying out bulk, next to the employers as operating income and dividend income can be considered to obtain high-value-added business model.

Meanwhile, the United States and Europe with the support of government resources major companies mainly have to go to get the resources development rights in the resource powers, belatedly entered the resource development of competitive countries are

development rights instead of resources that the infrastructure to provide large-scale assistance to resource-weapon States trying to ensure that such resources are secured.

These overseas construction in light of the market and trends in resource development market our country is also a need to ensure resource exploitation rights by activating the investment development overseas construction development projects in conjunction with resource development in order to reliably ensure the continued growth and resources of future overseas construction. Korean public was accumulated considerable technology infrastructure development for economic growth, construction companies have a need to expand its business in accordance with the competition domestic infrastructure construction market is stagnation deepen abroad. If you're overseas development by building significant accumulation of public and private construction companies are advancing the technology to work on development projects with foreign investment are expected to help each other.[6].

Also trend in the order form through investment development way in the world increases, which may have ordered, such as resource development and power plant construction in developing countries are capital scarce increases, funds purchaser is required for the business and the business conducted during the possible various risks because the analysis is that it can be imputed to the employer. Therefore, domestic enterprises will also need to enter the investment business development in overseas markets, according to these flows.

4. General Process of Investment Overseas Construction

The investment development overseas construction business is divided into four stages as a business pre-evaluation stage commercialization phase, project implementation phase, the operating phase.

First, the project pre-assessment phase of the project excavations, pre-feasibility study (FS, Feasibility Study), because to do the negotiation or bidding, including domestic companies seen as the most vulnerable part of the government or public authority as a plan to advance cooperation has been studied much.

Second, the commercialization stage involves the processes of the MOU, signed agreement between the project participants, feasibility studies, Development Plan negotiations. At this stage of the project will assess the feasibility of project financing funds required to finance the project.

Thirdly, project implementation stage is a special purpose company (SPC, Special Purpose Company) was established, permitting, design for the project, and the construction / completion, *etc.* The SPC has the sole purpose of promoting project to project, the company is also known as the owners of the project financing. Type of project economics of the project company, the employer's contribution alone because it is important that a close relationship and bond integrity of business risks and lender group, a joint venture (Joint Venture), acquisition, merger, *etc.* must select the appropriate form.

Fourth, the operating phase, settlement, such as the establishment of the operating company are to invest development experience in business can be seen as part of accumulation possible.

Table 5. General Process of Investment Overseas Construction [6]

Project phase		Content
Main Category	Category	
Business Dictionary Evaluation stage	Project Search	Cooperative countries and government agencies, private companies, business information available through other relevant departments and organizations
	Feasibility	Fieldwork and outline business case analysis

	study	
	Negotiating or bidding	Local government (or business enforcement agencies) and the exchange of ideas and information, business negotiation or bidding. If you participate in the bidding
Commercialization step	MOU	MOU , content of business project decision, Business promotion MOU about local government (or operation agency)and development of infrastructure
	Between project participants Signed agreement	Project participants concluded negotiations on cross-ownership and roles
	Feasibility study	Feasibility assessment undertaken for the full-scale project, the environmental impact assessment carried out
	Development Plan	Local government (or business enforcement agencies) and negotiated development plan
Perform business step	SPC establishment	Special purpose corporation for overseas infrastructure projects (SPC) established
	Licensing	SPC is promoting licensing
	Design	EPC(Engineering, Procurement, Construction) carried out through contracts
	Sale	It corresponds only for new town development
	Construction Completion	Performed by an EPC contract
Operational phase	Calculate	Profit distribution among investors
	Operating company established	The establishment of a separate entity for future operations

5. Comparison of Policies to Support Overseas Construction

In the case of Korea it is supporting the overseas expansion of domestic firms through various institutional support, such as OPIC and USTDA in the United States. In the case of Korea Trade-Investment Promotion Agency (KOTRA) non-financial support of overseas local information provided in the USTDA, foreign buyers invited export counseling and international exhibitions and performing a support, such as trade missions dispatched, if the Export-Import Bank of Korea and Korea Trade Insurance Corporation financial support of import and export financing, foreign direct investment, and supports a variety of insurance related to overseas markets.

The main support programs of the United States and Korea's overseas support agencies, *etc.* There is a difference in the size of the capital amount of support and funding of national support agency but a big difference.

In Japan, new orders likely a large economic impact is large survey planning stage and the operation and maintenance phase until the life cycle of the facility, taking into account the full stage is considered as very necessary preparation for the leap of the future nation building industry as the overseas. .

Thus, South Korea will also be laying the foundation to expand the overseas markets through an invitation to visit, such as government relations professionals in overseas countries against the country's superior construction technology and construction capabilities, in the case of Korea's major support organizations future domestic in the course of construction companies abroad it is necessary to provide an institutional

framework to ensure competition capability.[7]

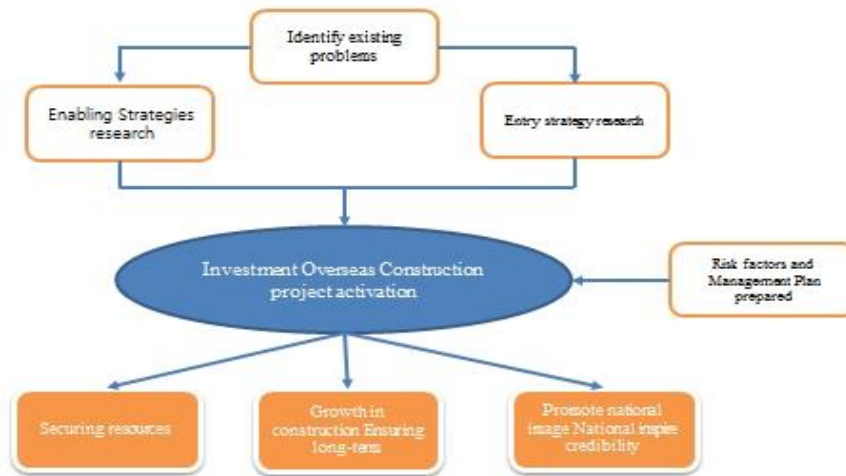


Figure 1. Conceptual Framework

6. Activation of Strategy of Investing Overseas Construction

Difficulties in financing, the local market of area preponderance, poor profitability, financial support foreign investment, can be separated due to factors such as difficulty of the lack of specialized personnel. These problems derive the consequent expansion strategy was unequal distribution of local Jewish strategy, financing strategy, new markets and new product development strategy, management rationalization strategy, global marketing activities, strategy.



Figure 2. Activation Strategy

7. Investing Overseas Construction when Advancing to Considerations

There are a lot of foreign investment development projects are variables to consider additional matters to consider in addition to the EPC turnkey type of project.

First, it should be a thorough analysis of the economics of the future cash flow of the project. If you participate in construction investment development business in addition to short-term projects to long-term construction orders should consider operating income and dividend income 20 to 30 years. Therefore, about the risks that could affect the future profitability densely review in advance and shall provide for ways to generate stable earnings, such as signing the contracts, obligations, acquisition agreement (Take or Pay Contract).

Second, we need to closely examine the details of the contract. For overseas business

utilizing a project financing structure it includes many contract terms because the various stakeholders involved is the fact that very many complex contracts and related documents. In particular, the country is under the influence of common law because the massive amount stipulated in the contract that can occur with all applicable requirements. Did not know the details of the agreement also be the case of overseas project contract is written in English, or in many cases the problem is a translation error. Therefore, it is necessary to receive a review of the specialized law firms that know the local conditions well to avoid these risks.

Third, advance the review of country risk, currency risk, such as generating all possible risks and mitigation measures should be prepared. It should establish an appropriate hedging measures, especially because you can encounter great difficulties because of the economic situation political changes, such as the situation of the unpredictable nature of business relevant nation goes abroad. If the project goes forward exchange transactions in developing countries, establishing currency swap and insurance plans that can reduce the exchange rate risk through, *etc.*, to reduce the risk of the political situation in relevant nation must engage the international development finance institutions.

Fourth, if you enter into forms of cooperation between enterprises and raise the capacity to coordinate and manage the project management roles and responsibilities between participants. This is particularly important project management skills that participants are responsible for business operations due to a separate organization. Presence in their respective roles and responsibilities are distinct, but are responsible for the quality of the air and the whole project should improve the coordination of the interests of each organization and project management skills going to lead because we have a joint.

9. Conclusion

This study is the Korea construction companies to grasp the immediate problems and Status and Investment overseas construction markets in order to analyze the trends and status using primarily statistical data which, if necessary practical problems and the country's investment overseas construction projects advance entry strategy, competitiveness plan, risk management plan, research abroad during the consideration of the investment was to activate overseas construction business purposes. investment overseas construction projects from the excavation of the project financing, EPC, construction and operational management to the whole process in a way is true that much of the risk involved with large employers of the project.

Therefore, investment overseas construction projects entered upon a thorough analysis of the future cash flows of the projects and contracts, compulsory purchase agreement (Take or Pay) profitability through such, careful review of the contract, the country risk, analysis and mitigation of such exchange rate risk raise sufficient project management capacity to plan and prepare.

In addition, construction investment abroad establish an appropriate portfolio of business model will require some effort to become the host country in the long term, this income that can be Win-Win project. If investment overseas construction projects and value-added national strategy to develop projects construction companies and government continued interest and support investment overseas construction business will be able to contend with the advanced foreign construction companies, again as protagonist of the Republic of Korea National Economic Activities it will be born.

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References

- [1] J.-S. Lee, "A Study on the Development of Risk Assessment Framework in the international project", Architectural Eng. Graduate. Han-Yang University, (2013).
- [2] International Contractors Association of Korea, "Overseas Construction Promotion Plan Public Hearing", (2007).
- [3] Ministry of Land, Infrastructure & Transport, "The country traffic global creating jobs solution", (2013).
- [4] Ministry of Land, Infrastructure & Transport, "Public-private partnerships to enhance the effects of global development measures", (2014).
- [5] International Contractors Association of Korea, "Activate public-private partnership investment plan for Investment plan abroad infrastructure development projects", Research Service Report, (2008).
- [6] L. U. Seop, "Oversea Construction, Claire?", Construction Journal, (2009).
- [7] P. H. Pyo, "Overseas markets Expansion strategy of the construction industry", Hwanhwa construction Technical magazine, vol. 6, (2013), pp. 16-17.
- [8] S.-W. Ju and L.-S. Jung, "A study on global market expansion strategy of domestic company", GST2015, Jeju, Korea, (2015) December 16-19.

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