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An Analysis of International Competitive Bidding Process

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Abstract—*Construction industry has always played a key role in development, transformation of societies and cultures. In the recent past construction activity has served as stepping stone for various other industries. In this research paper an attempt has to make for analyzes the peculiarities of the bidding process and find ways to increase the probability of acquiring the international project with complete understanding of all the major and minor issues, risks, etc will help in realizing desired profits.*

Keywords*: International project, competitive bidding, risk analysis, risk mitigation.*

1. INTRODUCTION

Construction industry is one of the oldest forms of industry, second only to Agriculture. It has provided a framework for all the other sectors like agriculture, power, transportation, industries, health, education, etc. over the years it has gained momentum and is becoming a much more organized sector serving as a trigger for economic revolution. Over the years Indian construction industry has been highly disorganized with a large number of Niche players resulting into sluggish growth of the industry. In the past two decades a booming economy with a need for amplified rate of work in the infrastructure and allied areas. With the emergence of new ventures, industries, there has been a tremendous increase in demand for good work environment, corporate offices and new production units. As the economy grows and the per capita increases the need for better standard of living also increases, this increase demand for more housing projects day by day. The construction industries in set in motion the process of economical growth in the country; investment in this sector contributes 6.5% of GDP growth. Every Re. 1 investment in the construction industry causes a 0.8 increment in GDP as against Rs 0.20 and 14 in the fields of agriculture and manufacturing industry, respectively.

In this research paper an attempt has to make for analyzes the peculiarities of the bidding process and find ways to increase the probability of acquiring the international project with complete understanding of all the major and minor issues, risks, etc will help in realizing desired profits.

2. NEEDS OF INTERNATIONAL PROJECTS

- Expansion of individual firms to the global world.
- Merger and acquisitions: Today the number of individual companies doing business in just one country or area has greatly diminished.
- Requirement for a global presence to be viable in an industry; any industries either construction, banking, automobiles there is a drive for global presence.
- Access to human resources: Specialized skill in term of work, technology can be greatly achieved if projects are operated at international level.
- Lower cost of operation: With economies of scales and flexibility in moving and locating operations to lower cost locales, the cost of doing business is reduced.

3. CONSTRUCTION AND PROJECT OPPORTUNITIES

Project exports from India did commence with a modest beginning in the late ‘Seventies’. The petro-dollar boom of ‘seventies’ generated by sudden and sharp escalation of oil prices opened the flood-gates of developmental activities in the countries of Middle East region. Indian companies did take advantage of this scenario and entered the overseas project market. Subsequently, India’s successful entry in the international projects market enabled the construction and engineering sector to emerge as a major factor in the Indian economy. Since then, Indian project exports have evolved over the intervening years, exhibiting expertise in a wide range of activities. The nature of projects being undertaken now by the Indian companies in India as well as overseas reflects the technological maturity and industrial capabilities of our country. Indian companies have established very good reputation in a wide variety of industrial (turnkey/engineering) projects, apart from the civil construction project exports. Our economic strengths and capabilities are vast and varied. Currently, Indian construction industry, employing over 30 million workers, next only to the agriculture sector, is largely un-organized, operating through two lakh contractors and contributes 6% of the GDP.

4. COMPETITIVE BIDDING

Competitive Bidding, whether international or domestic, helps a buyer in making purchase decision after obtaining a good market response. It is a careful and comprehensive method. Its major elements are:

- The client invites contractors to quote for a particular work/ project.
- The client first decides what he wants, and informs the contractor about the specifications of the project, inspection methods, competence of bidders, payment terms and schedules. The normal way of informing the contractors is by advertising in newspapers. Contractors are then to submit their bids by a given date.
- The client informs the contractor about the terms and conditions of contract for the project.
- The client assures the secrecy of bids received, until these are publicly opened.
- The client evaluates the bids, and makes a final selection. If necessary, he or she seeks clarifications from the bidders before selecting a supplier.

Competitive bidding too, takes more time than other forms of purchase. A client has to advertise, give an adequate time to suppliers to study requirements and prepare bids. The extra time taken while assessing the competence of contractors and the quality of goods is considered worth it for making a sound decision.

4.1 National Competitive Bidding (NCB)

Domestic competitive bidding is confined to the contractors in a client's country. Many governments, as a matter of national policy, normally adopt this method in domestic industry. Even non- government clients quite often prefer domestic bidding for the following reasons:

a. Payment terms are easier as no foreign exchange is involved.
b. It is easier to contact contractors personally,, without the need of visas and foreign currencies to visit abroad.
c. Inspection visits to the contractor's manufacturing units are convenient.
d. The domestic firms may offer better maintenance facilities.
e. There is no need to know laws.

4.2 International Competitive Bidding (ICB)

A buyer may find that domestic competitive bidding would not suit its purpose. There could be several reasons for this-

a. Few domestic contractors
b. High domestic prices
c. Non-acceptable specifications of domestic materials
d. Very limited number international manufacturers of highly specialized equipments.

The first thing a client should check is whether his or her country's government allows the import of the proposed good/ equipments/ services. This is usually the main hurdle.

5. RULES AND PRACTICES IN COMPETITIVE BIDDING

Just as social rules govern our lives in daily conduct and interactions with others, rules and practices of contracts help client and contractor arrive at reasonable decision. The first item on the agenda of a proposed project is an estimate of cost. Before a client invites bids, he or she has to have a reasonable idea of the likely cost. Enquiries for others who recently purchased a similar product are one source. Experts on the subject may also help. Some minimum common points of different countries are taken into account while writing bidding documents. It is, of course, possible to lay down conditions of contract, which are all in favor of the client, without any obligations on its part. A look at the bidding documents of the Government of India, the World Bank, and the ADB shows that course basically fall into three categories these are Conditions of contract, Invitation to bid and Employment norms.

6. CONSTRUCTION PROJECT PHASES

From beginning to end of a construction project it undergoes a number of phases characterized by many tasks aimed at identifying, planning, designing, and constructing the proposed facility. Such phases and tasks may be grouped into two main stages as shown in fig 1; preconstruction stage and construction stage.

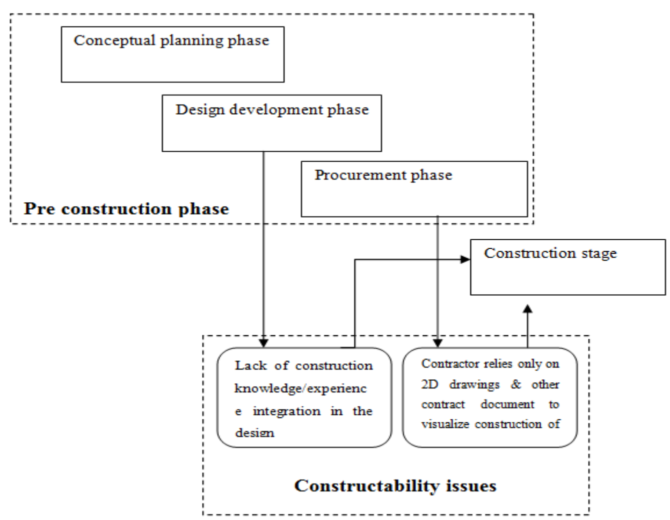

Fig. 1: Construction Project Phases

RISK ANALYSIS FOR SELECTION OF PROJECT

Project Risk Analysis and Management is a process which enables the analysis and management of the risks associated with a project. Properly undertaken it will increase the likelihood of successful completion of a project to cost, time and performance objectives. Risk probability matrix is used as initial analysis to classified risk factors from the highest until the lowest risk which called risk ranking. The function of risk ranking is to know that the highest risk have to be given treatment first before the others. Every step in international bidding process is critical and all aspects should be considered and great deal of attention should be given to all pre tender and post tender activities. Various risks in international project greatly hamper the progress thus these have to be thoroughly analyzed and suitable mitigating techniques shall be considered.

Table 1: Risk Probability Matrix for Project

A	Political aspect	• A non - conducive politic climate for investment. • Leak of law enforcement. • Misuse of political power. • Clean government doesn't achieve. • Exceeded NGO involvements in investment plan. • Leak of people approval in surrounding areas.
B	Regulation and policy aspect	• Regulation in export-import limitation. • Influences of increasing in taxes policy. • Influences of domestic product and resources use policy. • Policy in stopping subsidy. • Complicated and difficult bureaucracy in giving construction permission. • Complicated and difficult bureaucracy in giving operational permission. • Policy in increasing of loan interest rate.
C	Social and cultural aspect	• Investment plan doesn't influence in increasing surrounding citizen welfare. • Investment plan doesn't give new work field for surrounding citizen. • Investment plan doesn't influence in increasing land price in surrounding location. • Investment plan influence exchange in people behaviour.
D	Environment and spatial plan aspect	• Decreasing land price in location and surrounding due to investment plan. • Exchange in city plan due to investment plan. • Air pollution happened in location due to project. • Ground water pollution happened due to project. • Noise pollution happened due to project.
E	Financial aspect	1 Payback Period longer than expected. 2 Break Even Point (BEP) longer than expected. 3 High of Debt / Equity Ratio 4 Profits achieved don't like expected. 5 Fluctuation in foreign curency. 6 Increasing in loan interest rate. 7 High overhead cost. 8 Exceeded investments in unappropriate time. 9 Cancellation in giving loan. 10 Exceeded loan.
F	Economic aspect	1 National economic growth doesn't match the projection. 2. Uncontrolled inflation. 3. Currency devaluation. 4. Increasement in regional minimum payment for workers.

7. FUNDING OF INTERNATIONAL CONSTRUCTION PROJECTS

Business may often base their financial decisions on nominal rather than real exposure, as is the accustomed practice. However, given the differences between nominal & real exchange rate changes, the real economic exposure should serve as the basis. Construction companies, whose profits are significantly, lower than the average profits of other business with direct foreign investments, are more vulnerable to adverse foreign exchange rate developments.

Another financial consideration is the increasing competition in the international construction market. This may reduce market share or narrow future profit margins. Big companies are vulnerable in this respect in the area of high technology projects as bases of their financial requirements are included in the working capital, handing insurance & equipment financing.

Table 2: Methods of Choosing Contractors or Suppliers For Funding

ORGANISATION	METHODS OF CHOOSING CONTRACTORS OR SUPPLIERS
World Bank	Competitive Bidding, Contractors or suppliers of Member Countries or Switzerland
Inter-American development Bank (IDB) (Ordinary Capital)	Competitive Bidding, Contractors or suppliers of Member Countries or from countries contributing to the bank
Inter-American development Bank (IDB) (Special Operations! Concessionary Terms)	Competitive Bidding, Contractors or suppliers of Member Countries
Asian Development Bank (ADB) (Ordinary Capital)	Competitive Bidding, Contractors or suppliers of Member Countries
Asian Development Bank (ADB) (Special Operations! Concessionary Terms)	Competitive Bidding, Contractors or suppliers in countries Contributing to the fund, or in some cases in developing Countries
ADELA Investment Company	Competitive Bidding

8. FASTEST GROWING GLOBAL CONSTRUCTION MARKETS

8.1 Rise of China and India

Asia Pacific region estimated to grow by 125% in next decade In terms of construction, India and China expected to show highest growth rates:

- China expected to be world's leading construction market by 2018 – expected to be valued at circa US$2.5 trillion by 2020 (19.1% of global construction output)

- India expected to see double-digit growth in residential and non residential markets (becoming the world's third largest construction market by 2020)

8.2 Middle East and Africa

Construction market expected to grow by 83% up to 2020:

- Nigeria – will be fastest growing market in Africa – result of increased wealth and urbanization

- South Africa – recent boost due to hosting FIFA World Cup expected to continue rapid growth over next decade

- UAE – despite recent downturn, construction market expected to show positive growth overall to 2020

8.3 America and Europe

- North America – expected to see highest-growth of any developed country.
- Result of double-digit annual growth in residential construction
- Brazil – construction market expected to grow ahead of FIFA World Cup (2014) and Olympic Games in Rio (2016)
- South and Central America – growth markets expected to be Mexico, Colombia and Argentina
- By comparison, Western Europe – expected to see lowest growth of any developed region.
- Eastern Europe – expected to grow by 100% in next decade –led by Poland and Russia:

– Russia: as a result of rapid expansion, construction market expected to be worth $335bn pa by 2020

– Poland: construction market expected to be one of 10 fastest-growing markets in next decade.

8.4 Japan

- Total construction output in 2020: estimated to be US$100bn pa lower than in 2003
- A result of decline in population and an infrastructure sector constrained by government debt
- Has already been overtaken by China as world's second largest construction market; expected in next decade that India will overtake Japan as third-largest construction market
- NB: Example of future dominance of emerging markets over developed countries.

9. PROJECT SELECTION STRATEGY

The need for a project selection and priority system stems from the following observations:

- Organizations frequently pursue many projects simultaneously. Almost inevitably, the number of small and large projects in a portfolio exceeds the available resources such as funds, equipment, and competencies.

- Projects are taking place in organizations. Politics exist in every organization and can have a significant impact on project selection. Many projects within companies are associated with the term “sacred cow.” We often use this term to describe a project sponsored by a high ranking official.

- Without an effective project selection and priority system, the capacity overload coupled with project politics will lead to frustration, confusion, and inefficient use of resources.

The Selection Process

Rarely is the situation where we “must” select a project; otherwise, the organization will fail or will suffer from a severe loss. If a project falls in the “must” category, we ignore all other selection criteria. The question is when we place a project in the “must” category. The answer is when the majority of the organization stakeholders agree that the project is crucial and we need to implement it. There is no other choice but to implement the project in order to ensure the continuity of the organisation. For all remaining projects, we will use multiple selection criteria, which link the project to the organisational strategy.

Proposals Screening

Proposals for projects come from internal and external sources. In most situations, organisations have more proposals on hand, than they can pursue. These proposals have to go through a screening process. Fig. 2 shows a screening process used by one of my clients. The prerequisites for implementing an effective screening process are:

- Publishing of the selection criteria so that self-evaluations are carried out by sponsors before they are submitted to the priority team

- Publishing guidelines and templates for developing a business case which will facilitate the valuation process by the priority team

Selection Criteria

We need to base the project selection criteria on the organizational critical success factors and strategic goals. Failure to select the right factors will render the priority and selection process useless.

10. RISK MITIGATING STRATEGY

Types of Risk Mitigation Instruments:

- **Credit Guarantees** cover losses in the event of a debt service default regardless of the cause of default (that is, both political and commercial risks are covered with no differentiation of the source of risks that caused the default).
- **Partial Credit Guarantees** (PCGs) cover "part" of the debt service of a debt instrument regardless of the cause of default. Multilaterals and a few bilateral agencies offer PCG instruments. The objective of a PCG is to improve both the borrower's market access and the terms of its commercial debt (that is, to extend the maturity and reduce interest rate costs) through the sharing of the borrower's credit risk between the lenders and the guarantor.
- PCGs traditionally have been used by developing country governments or public entities (state-owned utilities, for instance) to borrow in the international bank market or to support a bond offering in the international capital markets.
- **Full Credit Guarantees or Wrap Guarantees** cover the entire amount of the debt service in the event of a default. They are often used by bond issuers to achieve a higher credit rating to meet the investment requirements of investors in the capital markets. In selected developing countries, private monoline insurers have been active in issuing wrap guarantees for bonds issued by infrastructure project companies (toll road companies, for instance).
- **Export Credit Guarantees or Insurance** cover losses for exporters or lenders financing projects tied to the export of goods and services.7 Export credit guarantees or insurance cover some percentages of both political risk and commercial risk (together, termed *comprehensive risk* guarantee or insurance).
- **Political Risk Guarantees or Insurance** cover losses caused by specified political risk events. They are typically termed Partial Risk Guarantees (PRGs), which may be termed as Political Risk Guarantees (PRGs), or Political Risk Insurance (PRI) depending on the provider.

Trends In Risk Mitigation

- **Regulatory risk**: the risk of losses as a result of adverse regulatory actions by the host government and its agencies (for example, a regulatory agency)
- **Devaluation risk** of local currency: the risk of losses arising from unfavorable movement of foreign exchange rates (for example, devaluation of local currency for infrastructure projects that earn revenues in local currency while expenses, costs, and financing are largely denominated in foreign or hard currency)
- **Sub sovereign risk:** the risk of losses as a result of breach or repudiation of contracts or nonperformance by the sub national host government or sub national contractual counterparties, or both; action or inaction by the local host government having a material adverse impact on the project; and similar situations.

11. CONCLUSION

Thus we can conclude through our study that for any Indian Construction company the best path to expansion would be its domestic market itself along with selective international market. A company should aspire to grow along with the growing Indian economy and bidding for national projects along with international presence in developing nation. The huge quantum of work in domestic market may force many of the projects to be made open for International Competitive bidding. Countries like China, Nigeria and other African countries shall be future for international projects by Indian Companies.

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