

RISKS BORNE BY FOREIGN CONTRACTORS DOING BUSINESS IN TURKEY

M. Talat Birgonul and Irem Dikmen

Middle East Technical University, Civil Engineering Department, Ankara, Turkey

In parallel to the increased demand for infrastructure projects, the number of foreign construction companies working in the Turkish construction market has increased considerably starting from the 1990s. Although Turkish construction market is known to be among the markets that have the highest growth potential, Turkey's high risk rating shadows its attractiveness for foreign investors. As well as the necessity of foreign contractors to effectively manage the country risks, they also face with the challenging task of designing organizational solutions and managerial approaches that are necessary to adapt to market conditions. The objective of this research has been to identify risks faced by foreign contractors that had worked and/or have been working in Turkey and analyse the impact of these risks on the project success. For this purpose, a questionnaire has been designed which is answered by 39 foreign contractors. Within the context of this paper, risk assessments of foreign contractors on the project success will be presented in the light of the survey results. Results demonstrate that, construction-related, financial and legal problems have the highest impact on the project success. Poor communication, organizational and cultural differences with local partners, delays in progress payments, poor dispute resolution mechanism and political instability are among the major difficulties faced by foreign contractors. Majority of the defined risks are impossible to eliminate but impacts can be decreased by effective risk transfer strategies which can be possible mainly by forming successful joint ventures and collaborations during different stages of the construction value chain.

Keywords: construction market, foreign contractors, project success, risk, risk impact.

INTRODUCTION

The higher the capital intensity of a particular construction activity, the greater the likelihood that advanced industrialized countries will dominate in that market (Bon, 1992). Turkish construction market is known to be an attractive market for contractors from advanced industrialized companies because of huge demand for infrastructure projects. Turkish construction market is in the World Top 50 markets with a 1998 spending of 12 803.80 million US \$ (ENR, 1999). As pointed out by many researchers (e.g. Seymour, 1987), developing countries are attractive markets for contractors from industrialized countries as they can use their competitive advantage stemming from their technical know-how and financial resources in these markets. However, a strategic decision about which market to enter is a critical one as doing business in developing countries involves risks which the foreign investors are not usually familiar with. An international market entry decision requires that a company should not only consider the risks associated with the project itself but the risks at the market and country levels as well. Success of an international construction project highly depends on how well these risks are managed. Management of risks require development of effective operational, financial, organizational and managerial

strategies to cope with project complexities due to host country factors. Adaptation capability appears to be a critical success factor for foreign companies doing business in international markets.

The aim of this paper is to present findings of a questionnaire carried out to investigate the problems faced by foreign companies doing construction business in Turkey. Based on the experiences of these companies, objective of this paper is to identify potential risk factors that may affect the success of a project adversely. Using the Turkish case as an example, potential investors planning to work in developing countries may become more aware of likelihood and impact of risks on the project success and evaluate attractiveness of an international project considering these issues. In the forthcoming parts of this paper, some general information about contents of the survey, profile of respondents and reasons for doing business in Turkey will be presented. Finally, problems experienced during different stages of projects and risks due to specific country factors will be discussed.

GENERAL INFORMATION ABOUT THE RESPONDENTS AND CONSTRUCTION BUSINESS IN TURKEY

Following are some important remarks about the questionnaire and profile of respondents which will facilitate the evaluation of survey results:

- The aim of the questionnaire was to gather expert opinion about risks faced by foreign contractors doing business in Turkey. The questionnaire comprises of five major parts: demographic information about respondents, international contracting experience, work experience in Turkey, risks at different stages of project realization and potential impact of risks on project success. The questionnaire has been sent to 48 foreign contractors during the year 1999, which was a recession period for Turkey. There is no organization that keeps record of exact number of foreign contractors working in Turkey. So the companies have been traced by gathering information from client organizations and personal contacts. The number of returned questionnaires is 39. Consequently, the return rate is around 81% and it is hypothesized that the sample is representative.
- The survey questions have been replied by senior managers, regional directors or project managers of foreign companies doing business in Turkey. The method of administration is by face-to-face interviews (70%) and sending/receiving information via e-mail and fax (30%).
- Target population of the survey is foreign construction companies that have worked or still been working in Turkey. Involvement in most of the phases of project cycle, mainly the execution phase, is the major criterion for the selection of companies. Companies that have been involved in a project only during the design phase or worked as consultants are not included in the target population.
- The majority (75%) of the respondent companies have been operating in the construction business for more than 20 years and 62% of the companies have a turnover of more than 100 million US \$ in 1998. Most of the companies appear in the ENR 1998, Top 225 Contractors Survey. It can be argued that foreign companies doing business in Turkey are large size construction companies having high financial strength and technical competencies.
- Majority of the respondent companies (90%) are specialized in the construction of transportation and hydraulic structures. The number of companies that are

specialized in building projects is rather low when compared to those specialized in infrastructure projects. This is in accordance with the above argument which is related with the size of companies. Infrastructure projects require high technical and financial capabilities which are usually owned by large size construction companies.

- Respondents are international companies experienced in construction all over the world. 72% of the companies are working/has worked in more than 10 countries. None of them declared that Turkey is the only international market they are operating in. 90% of the companies are involved in international construction for more than 10 years.
- Responses of foreign contractors demonstrate that majority of the foreign investors penetrated into the Turkish market in the beginning of 1990s. 70% of the respondents entered the Turkish market after 1990 and nearly 60% had their first jobs in Turkey during the last 5 years. This coincides with the beginning of utilization of foreign funds for infrastructure projects and private sector participation models in Turkey. Build-Operate-Transfer (BOT) projects are in the agenda of Turkish government starting from 1990s, making the energy sector very attractive for foreign investors.
- Out of 39 respondents, 37 of them are involved in construction of hydraulic structures (dams, irrigation systems etc.) and 20 of the respondents carried out transportation projects in Turkey. Construction activities carried out in Turkey coincide with the specialization areas of the companies. The number of foreign companies involved in building projects is only 3. This implies that competitive advantage of foreign investors is their technical know-how and financial strength. Construction jobs having lower capital requirements and technical complexity are not attractive for foreign contractors as they have to compete with local contractors in these kind of jobs.
- Major client of foreign contractors is the Turkish government. Survey results demonstrate that 91% of the projects were carried out for the public sector whereas the remaining 9% were carried out for the private sector.
- According to the survey results, foreign contractors never acted as general contractors in construction jobs carried out in Turkey. They are either parties in a consortium (51%) or in a joint venture (36%). Results show that foreign contractors usually enter the Turkish construction market by forming joint ventures for different stages of the construction value chain. They undertake joint ventures and other forms of collaboration with local contractors as they are not familiar with the regulations and in response to political risks. Joint venturing with local parties is seen as an effective adaptation strategy.

REASONS FOR ENTERING THE TURKISH CONSTRUCTION MARKET

Table 1 summarizes the significance of motivation factors for doing business in Turkey. Results demonstrate that higher profitability in construction works is the major reason why foreign contractors are willing to work in Turkey. Higher profitability expectation implies that either the costs are expected to be lower or profit margins are higher due to low competition. In fact, the second argument is more valid for the Turkish case, as the entry barrier is very high for infrastructure projects that

require financial and technical competencies. A local company usually can not compete with a foreign company where the major competitive advantage is availability of financial sources and technological know-how. High growth potential of the Turkish construction market *al.so* received significant ratings from the respondents (approximately the same as the higher profitability in construction works). This implies that profitability in the short term and long term are both significant reasons for entering the Turkish construction market. Low demand in home country is less important than higher profitability which implies that major motive for foreign contractors is opportunities in the Turkish market rather than threats in their home country. This result is in accordance with the findings of a questionnaire study carried out by Crosthwaite (1998) about the motivation factors of British construction companies working abroad.

Table 1: Reasons for doing business in Turkey (Average score is calculated by using a Likert scale of 1 to 5)

Reasons	Most Significant	Significant	Neutral	Less Significant	Least Significant	Average score
Higher profitability- short term	25%	40%	30%	5%	0%	3.85
High growth potential-long term profitability	30%	40%	16%	7%	7%	3.79
Low demand in home market	15%	10%	0%	45%	30%	2.35

As the major aim of the companies is to maximize profitability, foreign contractors should determine the risk factors that may lead to a gap between expected and actual profit levels; which is usually due to external risk factors stemming from the macroeconomic and socio-political environment in Turkey.

SOURCES OF RISK DURING DIFFERENT STAGES OF PROJECT REALIZATION

In this section, risk factors that have significant impacts on cost, time and quality of a construction project undertaken by a foreign company will be identified in the light of the experiences of 39 foreign contractors. Problems faced by foreign contractors are grouped under 11 categories within the questionnaire. Following are the major findings ;

Problems during the design phase

Before the respondents opinions about the problems that occur during the design phase are discussed, it should be mentioned that about 70% of the respondents were involved in the design process of the projects that were carried out in Turkey. The most significant problem faced by the foreign contractors was denoted to be the lack of coordination and communication with the client organizations which are usually the governmental bodies. Majority of the respondents denote that the lack of data for design and delay in the delivery of necessary project information are norms rather than exceptions in the Turkish construction industry. Because of high bureaucracy and poor communication between the parties, the information necessary for design process can not be reached by the contractors on time resulting in extensive delays in project realization. Another very significant problem stated by the respondents happened to be the different expectations of client. In majority of the projects, client does not want to spend time on the design phase and prefers to start up the project before completion of

design. Clients give higher priority to time aspects without considering the significance of problems that may occur during the execution stage of the project as a result of incomplete design. In addition to these very important problems, unfamiliarity with local codes/practices is denoted to be another risk factor having an average importance level. Finally, geological, climatic and geographical conditions in Turkey is considered to be of negligible importance during the design phase.

Problems related with supply of materials

The most significant problem about the supply of materials happened to be related with the custom clearance of imported materials. More than 90% of the respondents evaluated this factor as significant. The custom regulations in Turkey are outdated and bureaucratic procedure is very complicated. Respondents note that, it takes a considerable amount of time to withdraw materials from the customs which may result in extensive delays. The second important factor related with the supply of materials is the poor quality of locally available materials. As the local materials do not usually conform with international standards, foreign contractors spend more time on quality control. Problems related with transportation, unconformity of imported materials with Turkish practice and prices of local materials are denoted to have average significance levels.

Problems related with supply of equipment

Similar to the problems related with supply of materials, the most significant problem faced by the foreign contractors happens to be the custom clearance of imported equipment. The second important problem is related with repair and maintenance of the equipment. As the professional service that should exist for repair and maintenance of equipment is usually unavailable locally; foreign contractors prefer to employ professionals for repair and maintenance works which increases costs. Lack of skilled operators, unavailability of spare parts and transportation are listed among the problems that have average significance.

Problems related with labour and staff

The most significant problem related with labour and staff is denoted to be the lack of skilled labour, poor quality of workers and technical staff. 95% of the respondents complain about difficulty of working with poor quality/uneducated labour which significantly deteriorates the quality of final product. The problem about the technical staff is not related with their engineering knowledge or technical skills but about communication skills. Respondents also mention that educability of staff is very low and they are not usually able to teach them new topics. As a result of difficulty of finding high quality labour in Turkey, foreign contractors tend to import staff from abroad. However, due to bureaucratic difficulties, it is not seen as an effective solution.

Problems related with infrastructure

Effective communication is known to be among the critical success factors of any project; so data exchange and information flow is of vital importance. Some of the respondents state that major problem related with infrastructure is lack of effective telecommunication facilities. In fact, importance of this problem depends on the geographical location. It can be a serious problem in eastern parts, whereas telecommunication facilities can be reached easily in the rest of Turkey. Moreover, local availability of power sources happens to be another important problem as stated

by the respondents. The irregular and frequent electricity cuts in rural areas are denoted to be among the significant problems.

Problems during the construction phase

The most important problem that occurs during the execution phase is denoted to be lack of professional subcontractors. Based on their previous experiences, majority of the respondents stated that, due to lack of necessary legal/contractual arrangements in the local construction sector, the probability that a subcontractor does not complete the job on time and in conformance with the given quality standards is very high. Another highly significant problem that frequently occurs in Turkish construction industry is change orders of the client. Because the execution starts before the completion of design, the project is very vulnerable to changes and as the number/size of variations increase, it becomes harder to meet predefined objectives. Problems related with the consultancy services, security problems in some regions and climatic conditions are denoted to be of low-average importance by the respondents.

Problems related with finance

As the government does not have the necessary funds to finance major infrastructure projects, foreign investors are usually required to raise finance from international finance markets. The major financial risk for a foreign contractor doing business in Turkey is the difficulty to find credits as the conditions of a credit package depends on credit rating of a country. Turkey is placed under countries of high risk based on social, economic and political risk ratings decreasing its credibility. Another very significant risk factor is high bureaucracy and delay in progress payments. Especially, during the most recent recession period (1998-1999) of the Turkish economy, the financial sources of the government shrank considerably and funds reserved for construction investments are transferred to other sectors which are in need of urgent cash inflows. High inflation in Turkey is also denoted to be a very important source of risk. Majority of the respondents state that insurance is also a major problem. As most of the insurance companies do not want to retain risks associated with an infrastructure project in a developing country having serious geological and geographical risks, required insurance premiums become very high which is reflected to the cost of the project. Finally, local taxes and problems with local banking system are listed among the low-medium size risk factors.

Problems related with legal system

Dispute resolution mechanisms used in the Turkish construction industry are among the major factors that discourage foreign investors. Majority of the respondents mention the corruption in the Turkish Law System and point out the fact that solution of legal disputes takes a long time increasing the project costs considerably. Turkish laws do not permit international arbitration which is a critical risk factor for foreign contractors.

Problems related with local partners

Among the potential problem areas related with local partners, the most important one is determined to be the poor coordination with the parties. Undefined responsibilities of each party lead to serious problems during construction. Respondents also argue that there exist significant differences between the technological capability, organizational structure and managerial capability of Turkish contractors and foreign contractors. These differences are denoted to be important sources of failure if not managed effectively within the partnership structure.

Problems related with social environment

The major difficulty related with social environment in Turkey is denoted to be the language problem. Different traditions and religion are found to be insignificant by the respondents.

Problems related with political situation

Instability of political environment is denoted to be the most important risk factor by the respondents. Changes in international relations are also known to have a significant impact on projects.

IMPACT OF RISKS ON PROJECT SUCCESS

Impacts of potential problems and risk factors on the project success are given in Table 2. Following are the major findings about effect of each risk factor on the performance (cost, time and quality) of a project:

- The most significant risks that lead to cost increase occur during the construction phase. Poor performance of subcontractors and change orders are the risks that have the greatest impact on the cost of a project. As a result, selection of subcontractors becomes a critical task. An effective contract strategy based on liquidated damages and penalty clauses should be utilized to guard against subcontracting risks. It is apparent that change orders can be minimized if design can be completed before the execution phase. However if the client insists that design and execution shall be carried out in parallel, contractor should add a substantial risk tolerance (contingency) onto the initial cost estimates to take into account of potential problems. Financial risks are also found to affect the cost of a project significantly. Delay in progress payments may lead to serious cash flow problems. Also, unstable economic conditions in Turkey make prediction of future costs and revenues a challenging task. Thirdly, legal risks due to poor dispute resolution mechanism in Turkey are found to affect cost of construction projects significantly. Special effort should be spent for collection of necessary data to support potential claims and an effective documentation system should be utilized to facilitate claim preparation.
- Risks during the construction phase, legal risks and financial risks are also found to affect duration of a project significantly. As time and cost are strongly related, this is an expectable result. Results demonstrate that risks during the design phase have greater impact on schedule when compared with those on cost. Poor coordination between the parties lead to delays in design completion and necessity to start construction before design is complete creates new problems during the execution phase. High bureaucracy is one of the major reasons for delay in project completion. Political instability is also found to affect both time and cost of a project significantly. Political interferences may even lead to cancellation of a project in Turkey.
- Risks during the construction phase have significant effects on quality. When compared with its effect on time and cost, it is clear that design risk has a higher impact on quality. The major reason for poor quality may be incomplete design and poor communication between the parties. Quality of a project is also found to be affected from poor workmanship adversely.
- When ranking of each risk category according to its impact on cost, time and quality is concerned, there exist some significant differences between the places of

some risk factors. Risks related with labour, risks due to incomplete design and problems with local partners have greatest impact on quality. Financial and political risks are the most significant risks that may increase costs. Among all, legal risks have the greatest potential to increase the duration of a project.

Table 2: Effects of risks on the project success (Average score is rounded off to the closest integer to find the significance level)

Problem	Cost	Rank (cost)	Time	Rank (time)	Quality	Rank (quality)
During the design phase	Medium	7	Medium	4	Medium	2
Related with the supply of materials	Medium	8	Medium	6	Medium	6
Related with the supply of equipment	Low	9	Medium	10	Low	8
Related with labour	Medium	5	Medium	7	Medium	3
Related with infrastructure	Low	10	Medium	9	Medium	7
During the construction phase	Medium	1	High	1	Medium	1
Financial	Medium	2	Medium	3	Medium	4
Legal	Medium	3	High	2	Medium	9
Related with local partners	Medium	6	Medium	8	Medium	5
Social	Very low	11	Low	11	Low	11
Political	Medium	4	Medium	5	Medium	10

CONCLUSIONS

Although foreign investors enter the Turkish construction market because of its high growth potential and high profitability, achievability of their long-term and short-term profitability objectives depends on how well the risks are managed. Questionnaire results demonstrate that there are significant risks due to legal system, macro-economic and political environments in Turkey which can affect cost, time and quality of a construction project adversely. Client organizations, which is the government in infrastructure projects, is a major source of risk due to its outdated regulations, poor communication between its bodies and high level of bureaucracy. Delay of progress payments and cancellation of projects due to political changes are very likely to occur in the Turkish construction market. Moreover, availability of resources (skilled labour, equipment, materials) and current subcontracting system constitute significant risks for a foreign contractor. The major risk management strategy should be to effectively scan the Turkish economic and socio-political environment before entering the market and to establish partnerships with local contractors in order to increase familiarity with local practices. Selection of the right partner becomes a critical success factor for a foreign company doing business in Turkey. Differences between organizational cultures, communication styles, risk taking attitudes and managerial capabilities may significantly affect the project performance.

97% of the foreign contractors who responded the survey stated that they wish to work in Turkey once again. The stabilization of economic and political system in Turkey and restructuring of the government organizations are good signals for foreign investors willing to work in Turkey. If country specific risk factors decrease in the short-term as a result of these reforms, Turkey can be among one of the most attractive construction markets with its high demand especially in the energy sector and favourable geographical location for foreign contractors.

REFERENCES

- Bon, R. (1992) The future of international construction: Secular patterns of growth and decline. *Proceedings of Habitat Intl.* **16**(3): 119-128.

- Crosthwaite, D. (1998) The internationalization of British construction companies 1990-96: An empirical analysis. *Construction Management and Engineering*. **16**: 389-395.
- ENR (1997,1998,1999) Top 225 international contractors. *Engineering News Record*. New York.
- Onen, S. (2000) *Problems faced by foreign contractors working in Turkey*. Unpublished MSc thesis, Middle East Technical University, Civil Engineering Department, Ankara, Turkey.
- Seymour, H. (1987) *The multinational construction industry*. London, UK: Croom-Helm.