THE ROUTE MAP OF TURKISH INTERNATIONAL CONTRACTING SERVICES – LESSONS LEARNT AND RECOMMENDATIONS FOR THE FUTURE

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ABSTRACT

THE ROUTE MAP OF TURKISH INTERNATIONAL CONTRACTING SERVICES – LESSONS LEARNT AND RECOMMENDATIONS FOR THE FUTURE

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International contracting services of the Turkish construction companies started at the beginning of 1970s have great importance on Turkish construction sector and Turkish economy. With increasing and decreasing annual amounts from 1970s to the present date due to several economic, political and social factors; international contracting services showed a tremendous increase compared to the 1972 level. In the 38-years period between 1972 and 2010, Turkish contractors completed a lot of projects in different countries with a great success. The success achieved in the past and today led the Turkish construction sector to expand its goals and to set quite ambitious figures as its future targets.

Within this period from past to the present, in addition to the opportunities, Turkish companies also faced a lot of difficulties and problems; and gained a considerable experience from the lessons learnt from them. This study aims to investigate the lessons learnt as a result of opportunities and problems faced by the Turkish construction sector -that has serious and ambitious targets for the future. In the light of these lessons learnt, it is targeted to define what has to be done for retaining the current successful position of the sector and achieving its future goals.

Keywords: Turkish Construction Industry, International Contracting Services, Lessons Learnt,

TÜRK YURTDIŞI MÜTEAHİTLİK HİZMETLERİNİN YOL HARİTASI – EDİNİLEN DERSLER VE GELECEĞE YÖNELİK TAVSİYELER

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Türk firmalarının 1970'lerde başlayan yurtdışı müteahhitlik hizmetleri, Türk inşaat sektörü ve Türk ekonomisi açısından oldukça önemlidir. 1970'lerden günümüze kadar ekonomik, politik ve sosyal faktörler neticesinde yıllık bazda artış ve azalışlar gösteren yurtdışı müteahhitlik hizmetleri, günümüzde 1972 yılındaki seviyesine göre çok önemli bir artış göstermiştir. 1972-2010 yılları arasındaki 38 senelik dönemde Türk müteahhitleri yurtdışında pek çok ülkede sayısız projeyi başarı ile tamamlamıştır. Geçmişte ve günümüzde yakalanan bu başarı Türk müteahhitlik sektörünün hedeflerini büyütmesini ve oldukça iddialı rakamları kendisine hedef olarak belirlemesini sağlamıştır.

Geçmişten günümüze bu süreç içerisinde Türk firmaları yakaladıkları fırsatların yanında pek çok güçlük ve problemle de karşılaşmış; bunlardan pek çok dersler çıkararak önemli tecrübeler edinmiştir. Bu çalışma, geleceğe yönelik ciddi ve iddialı hedefleri bulunan Türk inşaat sektörünün geçmişte karşılaştığı fırsatlar ve problemler neticesinde edindiği dersleri incelemeyi amaçlamaktadır. İnşaat sektörünün mevcut başarısını koruması ve gelecek hedeflerini yakalaması için sektörün edindiği dersler ışığında neler yapılması gerektiğinin belirlenmesi hedeflenmektedir.

Anahtar Kelimeler: Türk İnşaat Sektörü, Uluslararası Müteahhitlik Hizmetleri, Edinilen Dersler

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LIST OF ABBREVIATIONS

- **CIS** Commonwealth of Independent States
- **EPC** Engineering Procurement Construction
- **FERB** Foreign Economic Relations Board
- **GDH** General Directorate of Highways
- **GDP** Gross Domestic Product
- **GNP** Gross National Product
- **IMF** International Monetary Fund
- **NATO** North Atlantic Treaty Organization
- **OECD** Organization for Economic Co-operation and Development
- **OPEC** Organization of the Petroleum Exporting Countries
- **SHW** State Hydraulic Works
- **TCA** Turkish Contractors Association
- **TEUCI** Turkish Employers Union of Construction Industry
- TL Turkish Lira
- TSI Turkish Statistical Institute
- **TSR** Turkish State Railways
- **UFT** Undersecretariat of Prime Ministry for Foreign Trade
- **UN** United Nations
- **UNSC** United Nations Security Council
- **USA** United States of America
- **USSR** Union of Soviet Socialist Republic

CHAPTER 1

INTRODUCTION

Since the countries develop their economical relations with each other, the amount of trade is growing day by day all over the world. Thus, growing economical relations and trade amount lead to a global economy rapidly. In such a world, it is inevitable that some of the services break their borders and spread worldwide.

When the international trade is examined, it is seen that the international construction services takes a significant place in the world trade. In today's liberal economy, if a construction project is to be undertaken in a country, the contractor should not be necessarily from that country. Instead of the origin, the clients have some other concerns such as price, timely completion, quality, experience and so on. Hence, in addition to the native companies, other international companies are also being involved in the tender processes of the projects.

There are several factors driving the international construction services. One of the most important factors is the growing rate of construction in developed countries is not enough for the construction companies in these countries. In other words, the companies should search for new markets to maintain their financial situation.

Another important factor driving the international construction is the need of accumulation of necessary experience and technology. Especially in the developing countries, large scale projects are started to be planned to improve and develop the infrastructure. The developing economies and increasing financial abilities of these countries encouraged them to undertake such projects. However, most of the construction companies of developing countries do not have enough technological ability, experience or financial ability to undertake such large scale projects. This situation leads to involve international companies as a contractor or partner in mentioned type of projects.

In some cases, though there are local companies having enough technology and experience, some other factors like the price, completion date, quality of the works etc. again lead to the involvement of international companies as mentioned before.

Being one of the most important developing economies in the world, Turkey also undertook a lot of large scale projects. During these projects, Turkish companies gained a lot either from their partners or from their own experiences and started to have the accumulation of knowledge and technology. This accumulation encouraged them to go out of the borders of Turkey and search for new markets. In 1960s and 1970s, financial difficulties of Turkish economy led to a slowdown in the investments. This situation proved the necessity of searching for new markets for Turkish companies if they want to survive. In the presence of this necessity, a Turkish company, STFA, got the first overseas job in Libya and started the international construction adventure and history for the Turkish companies.

This achievement started a new era in the Turkish construction industry. Turkish companies were awarded a lot of projects and completed them with a great success all over the world. Certainly, various problems and difficulties were also faced depending on several factors during this 40 years period. This research aims to examine the route map of international Turkish construction services and the factors affected them; also to develop a future projection considering the past experiences. For this purpose, a survey study was conducted within the scope of this research. With this survey, it was aimed to reveal the problems and opportunities faced in the past based on the experiences of professionals from the sector; and the lessons learnt from these opportunities and problems. By examining and using the lessons learnt based on professional experiences it is aimed to define what has to be done for the future development of international construction services.

This thesis is structured in one introductory chapter, three main chapters and a conclusion chapter.

In the second chapter, the development of Turkish construction services abroad is examined. As a factor of this development, first of all, history of construction sector in Turkey and the development of international construction services are presented. Moreover, the effects of the factors, namely, economical, political and social factors on international construction services are examined in details. While examining the factors significant in the past, literature related to the topic was frequently reviewed.

In the third chapter, method of research is presented. A brief information like administration or content of the survey designed for data collection is explained.

In the fourth chapter, the survey results are introduced. The answers of the respondents are compiled and examined for the lessons learnt. Within the light of these lessons learnt, the recommendations based on professionals' experiences will be developed. In addition, discussion of results will be made in this chapter.

In the fifth chapter, the conclusion is made by presenting a brief summary of the study conducted. The current study is compared with the previous researches and ideas for the future researches are revealed.

In addition to the main text, a sample of the survey conducted and its cover can be found in Appendix-A.

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CHAPTER 2

THE ROUTE MAP OF TURKISH CONSTRUCTION SERVICES

2.1 General Information about the Development of Turkish Construction Industry

2.1.1 Before Turkish Republic

For understanding the development of Turkish contracting services abroad, the history and background of the Turkish construction industry should be examined first.

Certainly, the history of construction is not limited with the history of Turkish Republic. Construction activities had taken place in the Turkish territories for centuries since Turkish states have started to settle cities.

Batmaz et al. (2006) state that the integration of Ottoman economy with the capitalist world economy brought infrastructure demand due to the desire of economical development and the years this integration has started should be taken as the starting point of the contracting services. According to Kasaba (1993), the middle of the eighteenth century is accepted by the Ottoman Economy historians as the beginning of this integration (Cited in Batmaz et al., 2006).

In the eighteenth century, after the technological gap between Europe and Ottoman Empire revealed, some precautions were taken to close this gap. Engineering schools within the body of the army were established and ambassadors were sent to Europe to examine technological developments (Batmaz et al., 2006).

According to Tekeli and Ilkin (1990), in the nineteenth century, several edicts and official documents published show that the concept of "development" changed significantly and the country was started to be taken as the land that a nation lives on instead of being the property of the ruler. Tekeli and Ilkin further stated that the construction of roads, railways, harbors and water channels were considered as the ways of development of this "land". It can be concluded that the mentioned change increased the demand in the construction of infrastructure projects. In addition, the edicts published and agreements concluded in this period discuss and indicate the method of finance – that is one of the important factors for the formation of the construction industry - for these projects (Ünsal, n.d.).

In the middle of the nineteenth century, construction activities have accelerated in the Ottoman land. The first road constructions between Bursa – Gemlik, Bursa – Mudanya and Trabzon – Erzurum have been started; however, late completions of the roads forced the authorities to search for new methods such as obligatory labor recruitment from the towns on the route of the road (Tekeli and İlkin, 1989).

At the same period, the interest of other countries on Ottoman Empire increased due to economical reasons. This interest became one of the most important factors shaping the infrastructure development in Ottoman Empire; hence, the raw material demand of Great Britain combined with the Ottoman Empire's desire of economical and infrastructure development led to Izmir -Aydın railway which was the first railway in the country (Batmaz et al., 2006). A British company has been awarded the concession of this line and the construction the first railway line in Ottoman Empire started in 1856 (Turkish State Railways, http://www.tcdd.gov.tr/home/detail/?id=267 last access October, 2010).

During the integration of Ottoman Economy to the world, one of the most important elements was telecommunication infrastructure. After the invention of the telegraph, the importance of this new discovery was noticed by the Ottoman Empire and first telegraph line was constructed between Istanbul and Edirne (Tekeli and İlkin, 1992). Tekeli and İlkin further stated that foreign concession applications for the telegraph lines were rejected and the whole investment was undertaken by contracting under the control of the state due to the strategic importance of communication for the state and relatively low investment costs. Batmaz et al. (2006) state that the construction of the first telegraph line was the first considerable tender in Ottoman Empire.

At the end of nineteenth century and at the beginning of twentieth century, important infrastructure developments were undertaken as well. To connect Bagdad to Istanbul, a line between these cities was being planned at the end of nineteenth century; and to achieve this plan, a German group was awarded the concession of the line segments between Istanbul - Bagdad part by part and the line reached Konya in 1893 (Tekeli and İlkin, 1992). In 1903, Ottoman Empire entitled the same group for the concession of the line between Konya and Bagdad (Batmaz et al. 2006).

Tekeli and İlkin (1992) suggest that Hejaz Railway is one of the most important projects in this period. Tekeli and İlkin further stated that having special geopolitical importance, to provide external finance for this project was very difficult; thus, all cost was financed by internal resources and it led to the use of domestic personnel and material. According to Tekeli and İlkin, Hejaz Railway - 1500 km in total length and completed in 8 years - provided a very important experience to the Ottoman Engineering since it depended mostly on Ottoman labor.

Hence, it can be concluded that the period before Turkish Republic provided the necessary conditions for the establishment of the construction industry to appear. The important factors of a strong industry partially appeared in this term. However, finance of the development demand was not strong enough to provide sustainability of this development though internal and external sources were tried to be used by the state. Tekeli and Ilkin (1999) stated that the road and communication investments in this period were carried out by the state; on contrary, the investments on railways and harbors were held by the concessions awarded to foreign companies (as cited in Batmaz et al., 2006).

2.1.2 During Turkish Republic

After the First World War and Independence War, Turkish Republic was born from the ashes of the Ottoman Empire. Following the long war years, the necessity to develop the country and to reach the level of modern world became obvious. Despite the efforts on development in the last period of the Ottoman Empire, it was clear that there was a very large gap between Europe and Ottoman Empire. Hence, development of the country was among the most important items in the agenda of National Great Assembly of the new Turkish Republic and a comprehensive development program involving infrastructure investments was prepared by the government (Tekeli and İlkin, 2001).

Although there was a great desire to develop and civilize the country immediately, the lack of resource was a great constraint on the developments. For a country that is below the level of modern world in every area, there was a necessity to initiate development programs in all these areas. However, considering the resources available, the first priority of the Turkish governments was the development of the transportation for the unification of the national market; and the development of large scale irrigation projects to increase the agricultural production (Emiroğlu and Ünsal, 2006).

By 1923, Turkish Republic inherited 4.000 km railway (TSR, http://www.tcdd.gov.tr/home/detail/?id=267 last access October, 2010), and 18.350 km road – 4.000 km of which is in acceptable condition – (Turkish

Republic General Directorate of Highways - GDH , http://www.kgm.gov.tr/ Sayfalar/KGM/SiteTr/Kurumsal/Tarihce.aspx last access October, 2010) from the Ottoman Empire. Comparing modern world, this transportation infrastructure was not sufficient and a railway network to provide the unity of the transportation network was aimed to be established all over the country.

Tekeli and Ikin (2001) divide the period that was focused on railway construction into three parts. According to Tekeli and İlkin, the first period between 1922 and 1927, the railway construction was undertaken by local contractors with limited internal resources; however, because of the insufficient budget allocated, the speed of construction was slower than expected. For this reason, between 1927 and 1933 – in the second period, railway investments were awarded to the foreign contractors who were required to provide finance as well (Tekeli and İlkin, 2001). Tekeli and İlkin further state that the financial issues were mostly tried to be solved by loans that were arranged by the foreign companies; however, though this method was seen useful at the beginning of the period, then several problems were faced and some of the lines were completed by Turkish contractors. Again, unsatisfied by the performance of this method, the government started to search for the new methods which will provide to employ Turkish contractors. Bond issue and internal borrowing which was used in 1932 for the first time was considered as the solution of this problem and this method was widely used starting from 1933 (Tekeli and İlkin, 2001). According to Tekeli and İlkin, since the contractors were not required to provide finance, Turkish contractors also started to participate in the tenders and they used their competitiveness in price as an advantage and started to get the tenders from foreign companies to whom they were serving as subcontractors. Akkaya (1989), in his memories, tells that a Turkish company - Simeryol- was awarded the construction of Sivas-Malatya line with a proposal 50% cheaper than the lowest foreign proposal. Following this tender, all railway tenders

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were awarded to Turkish companies and local contractors handled the railway projects in the country.

Railway construction continued with a great acceleration till the beginning of 1940s. After 1940, there has been a slow down in the railway construction due to the conditions of Second World War. To understand the acceleration of the railway construction till 1940, total amount of railway constructed till 1950 can be observed. In the young Turkish Republic, 3.578 km of railway was constructed during the period of 1923-1950 and 3.208 km of this rail network was constructed within the period of 1923-1940 (TSR, http://www.tcdd.gov.tr/home/detail/?id=267 last access October, 2010).

Tekeli and İlkin (2004) stated that during the First World War and Independence War, the necessity of interconnection of country's important centers was deeply felt by the authorities and the connection of the main centers by means of railways became the first priority in the early years of the Turkish Republic. On the other hand, due to the nature of the railway transportation, railways were affecting a narrow region around the line and they were not be able to reach all the regions in the country. According to the transportation policy accepted at that time, roads were considered as complementary to the railways. Railways were the means of inter-country transportation and they had national nature; on contrary, roads were the ways to reach to the main railway lines and they had the local nature. (Tekeli and İlkin, 2004).

In 1929, Directorate of Roads and Bridges were established within the body of Ministry of Development. However, the economic depression that took place all over the world in that period made the country to wait till the end of 40s for a thrust in the road construction (GDH, http://www.kgm.gov.tr/ Sayfalar/KGM/SiteTr/Kurumsal/Tarihce.aspx last access October, 2010). During 30s, despite the lack of finance, a considerable amount of road construction was completed. As Ergüvenç (2006) states in his memories, several methods were used in the road construction in that period. Some of the projects were awarded to the contractors and completed in this way. On the other hand, some projects were held by the state itself and completed by several methods including obligatory labor force which obliges the citizens to pay tax for the construction or to work personally in the construction of the road.

According to Tekeli and İlkin (2004), at the beginning of 40s, the importance of roads was revealed and a restructuring in road construction was planned. They further stated the new perception about the roads that they were not complementary to railroads; instead, it is a way of transportation that may transport any kind of goods or passengers by itself as an alternative to the railways. The Minister of Development at that time, Ali Çetinkaya, mentioned that the nearby trade centers should be connected via all-weather roads even though there is a current railway on this route (Cited in Tekeli and İlkin, 2004). This is a proof for the change in the transportation policy of the government in that period. As a result of this fact, between 1940 and 1946, the budget allocated to road construction exceeded the budget allocated to railway construction for the first time (Tekeli and İlkin, 2004).

After the Second World War, the structure of the world changed considerably. European countries ended up with a great devastation and Soviet Union which was looking forward to expand the influence area was increasing its power. In such an environment, United States initiated a financial aid program for the recovery of exhausted European countries. Turkey – being a country affected deeply from the war- was also involved in the Marshall Aid program started in June, 1947, that was aiming to heal European economy and to provide political strength to Europe against Soviet expansion (Üstün, 1997).

In the scope of this aid, \$5m of \$100m military grant as a result of Truman Doctrine was allocated to road construction and another \$5m was provided

from the Marshall Aid itself in addition to the machinery granted by United States and significantly supported the road construction technology (Ünsal, n.d.).

According to Tekeli and İlkin (2004), in 1948, the government –in cooperation with USA- prepared a road investment plan involving the construction of new routes; reconstruction and maintenance of the existing routes for nine years period (Table 2.1). Tekeli and İlkin further added that due to the significant changes in the road construction technology during the Second World War, It has been obvious that the Turkish contractors did not have the enough experience to apply the new techniques and complete the road constructions by themselves. Till the contractors gain experience, the road constructions again started to be undertaken by the state due to this technological concern. Hence, at the end of mentioned program, a very valuable highway engineering potential accumulated besides the construction of the necessary road infrastructure of the country (Tekeli and İlkin, 2004).

Maybe one of the most important developments in the road construction was the establishment of General Directorate of Highways in 1950. Within the body of general directorate, regional organizations all over the country and machinery necessary for the mechanized road construction were established; and taking the personnel training to the first priority, planning, studying, construction and maintenance works of the roads were held with a great acceleration (GDH, http://www.kgm.gov.tr/ Sayfalar/KGM/SiteTr/ Kurumsal/ Tarihce.aspx last access October, 2010).

	Length of the Planned Road (km)			
	First 3 year- period	Second 3 year-period	Third 3 year- period	Total
Road Construction	7.184,00	7.011,00	8.353,00	22.548,00
Asphalt Pavement	6.000,00	6.000,00	6.000,00	18.000,00

Table 2.1: The summary of the 9-year road investment program of Ministry of Development

Source: Tekeli and İlkin (2004)

When the investments within the period of 1923-1950 are examined, it is seen that the hydraulic works are the second important investments coming after the railways. Hydraulic investments were not only formed of irrigation projects but also involving the drainage of swamps and reclamation of new agricultural land. Moreover, drainage works had a great importance since it helped the fight against the malaria disease which was a very deep trouble at that time threatening the public health (Ünsal, n.d.). Malaria was such a great problem at that time that it was even threatening the development projects by infecting the labor. Akkaya (1989) was mentioning in his memories that even cemeteries were organized at the construction sites due to loss of lives caused by malaria.



Figure 2.1: A view from a road construction from the middle of 1940s (Source: General Directorate of State Highways, n.d.)

Considering the hydraulic works, dam investments had a considerable place in that period. The most significant example of the dam investments is the Çubuk I Dam which was supplying the potable water to Ankara, the new capital of the Turkish Republic. Following the completion and taking into operation of Çubuk I Dam - the first dam completed in the Turkish Republic history – in 1936, four more dam constructions were completed in different regions of the country within 1938-1949 periods (General Directorate of State Hydraulic Works - SHW, http://www.dsi.gov.tr/kurumsal/ tarihce.htm last access November, 2010). In addition, the previous experiences showed that a separate body responsible for the countries hydraulic works was strongly necessary. For this purpose, Hydraulic Works Organization transformed into General Directorate of State Hydraulic Works and one of the most important state investor organizations has been established in 1954 (General Directorate of State Hydraulic Works - SHW, http://www.dsi.gov.tr/kurumsal/ tarihce.htm last access November, 2010).

From the early 60s, dam constructions started to accelerate and increase their importance in the Turkish construction history. When SHW records are examined, it is seen that sixty six dam was constructed and taken into operation in the 1960-1975 period. According to Ünsal (n.d), in the same period, tenders of eighty four dams were held, and several important dam studies the constructions of which will be completed later were prepared. However, starting from the middle of 70s, some difficulties decreased the acceleration of the construction industry.

Again referring back to 1950-1960 period–another important footnote for Turkish construction- Turkish contractors started to appear in the port and harbor construction projects. Before this period, though there were a few Turkish contractors who undertook port and dock projects, mostly these kind of projects were undertaken by foreign contractors (Unsal, n.d.). Akkaya (1989) stated that the state was aiming to replace foreign companies with national contractors; hence, it started to own the heavy equipments and provide them to the local contractors free of charge in port and dock constructions. Akkaya further stated that in 1961, Ereğli Steel Factory Port project was awarded to a Turkish company and all the port, harbor and dock constructions were undertaken by Turkish contractors after this date.

Another important milestone for the Turkish construction history was the North Atlantic Treaty Organization (NATO) membership of Turkey. After the Second World War, in 1949, North Atlantic Treaty was signed and NATO was established by twelve countries. Three years after the signing of the treaty, Turkey also joined the NATO together with Greece. At that time it was an important act to involve Turkey in the organization since it relieved the Soviet pressure for access to important strategic naval routes (North Atlantic Treaty Organization-NATO, http://www.nato.int/cps/en/natolive/ topics_52044.htm #About last access November, 2010).

After Turkey joined the organization, in 1953, the law numbered 6095 was issued to regulate the construction works of joint NATO infrastructure in Turkey. By this law, the legal basis of the construction works of the infrastructure was set up.

Batmaz et al. (2006) stated that the mentioned infrastructure provided several benefits to Turkey such as currency input and an accumulation of valuable experience in engineering and construction services. Batmaz et al. added that besides financial and technological contribution, NATO infrastructure projects also led today's largest Turkish construction companies to grow (Batmaz et al., 2006).

For the period examined up to here in this research, a very important factor on the development and construction activities should be mentioned. This factor is the lack of trained and qualified personnel that was a chronic problem inherited from Ottoman Empire. Although Ottoman Empire attempted to increase the trained technical staff, it was not enough to meet the demand in the country and the problem showed itself after the foundation of the Turkish Republic. Akkaya (1989) is explaining this situation in his memories and stating that there were maximum 300 Turkish engineers available at the beginning of the 30s and in the state organizations, mostly foreign engineers were employed due to lack of trained technical staff at that time. Unfortunately, this shortage was not only involving engineers, there were shortage of qualified master workers and foremen as well. Ergüvenç (2006) discusses this issue in his memories that Turkish master workers were not enough at the beginning of the 30s and most of the transportation structures including roads and bridges were constructed by employing Bulgarian or Hungarian master workers.

After the foundation of the Turkish Republic, the necessity to train gualified engineers and other technical staff was felt immediately and some precautions were started to be taken to overcome this shortage. Naval Engineering School that was founded in 1793 and restructured several times before was transformed into a modern engineering institute that educates engineers in railway and hydraulics divisions and the engineers graduated from this institute took very important roles in the development period of the Turkish Republic. In 1944, this institute was transformed into Istanbul Technical University (ITU) which is one of the most important sources of Turkey today to meet qualified technical personnel demand of the country (Istanbul Technical University, 2010, http://www.itu.edu.tr/?itu-hakkinda/ tarihce last access November, 2010). Similarly Technician Institute, which will be transformed to Yıldız Technical University later, educated and trained valuable technical personnel who took part in the development program (Yildiz Technical University, 2010, http://www.yildiz.edu.tr/en/history.php last access November, 2010). In the middle of 50s, a university that will contribute to the development of Turkey and Middle East countries was planned to be founded. For this purpose, Middle East Technical University was established and started education in 1956 (Middle East Technical 2010, http://www.odtu.edu.tr/about/history.php last access University. November, 2010). Following the Middle East Technical University, Karadeniz Technical University started education in 1963 in Trabzon and it has the title of being the first university established in a city other than Ankara or Istanbul (Karadeniz Technical University, http://www.ktu.edu.tr/kurulus.php last access November, 2010).

While trying to overcome personnel shortage with relatively long range plans such as increasing the number of institutions that train engineers and technicians, on the other hand foreign contribution was being used as mentioned in this study before. Emiroğlu and Ünsal (2006) mention that after the Great Economical Depression in 1929, a lot of engineers, architects and technicians came to Turkey due to the economic recession in their countries and joined the development activities all over Turkey. In addition, during 1940s the university members and professors who had to leave Germany and Switzerland joined the academic staff in Turkey and contributed to the education of engineers (ITU, http://www.itu.edu.tr/?itu-hakkinda/tarihce last access November, 2010).

After all these efforts, Turkey would be able to train its technical personal including engineers, architects and technicians by itself in a short time and even would be able to export this manpower for international construction services of Turkish companies.

As a summary of the development from 1923 to the early 70s, Batmaz et al. (2006) state that in the 1923-1946 period, the first thrust of the development program took place. Though the deep economical problems faced in this period especially railway projects and large sized hydraulic projects created large sized contractors. Similarly, Tekeli and İlkin (1993) examined the same period for its effect on emergence of large scale Turkish contractors and concluded that railway projects initiated in this period had a very important effect on creating large scale Turkish contractors. In addition, Arsan (1961) claimed that providing finance for the projects with internal borrowing ended the advantage of foreign companies and the preconditions for the emergence of large scale local contractors were completed (as cited in Tekeli and İlkin, 1993).

Batmaz et al. (2006) further state that Turkey had its second development thrust within 1950-1960 period. Considering the dams started to be constructed; a lot of airfields, headquarter buildings, ports constructed within the scope of NATO infrastructure, this second thrust provided a larger scale of capital accumulation for the construction industry. According to Batmaz et al., the second thrust also provided an enormous experience for Turkish construction and today's giant construction companies such as Tekfen, ENKA, GÜRİŞ, and GAMA were established in that period.

2.2 International Experience of the Turkish Contractors

After the development programs held in the first half century of the Turkish Republic, a considerable construction industry was established and Turkish construction companies significantly improved themselves within that period. Hence, those companies -with experience they gained and enthusiasm- were looking for new opportunities to grow up. However, economical slow down at the end of 60s has started to be deeply felt and the necessity to widen the market has occurred (Batmaz et al., 2006). Batmaz et al. further state that that during 60s, only studies and explorations were made and there were not a definite target market; on the other hand, due to the increase in oil revenues, Middle East and North Africa can be considered as the main targets.

According to Akkaya's (1989) memories, in 60s, NATO projects were almost the only works available both to local and foreign contractors. For this reason, there was a very strong competition in the country and this situation led Sezai Türkeş, partner of Akkaya in today's famous STFA company, to start market research in foreign countries, namely in Saudi Arabia in the same period. Akkaya further stated that the research did not lead any result and they did not attend any tenders in Saudi Arabia at that time. A few years later, in 1972, STFA was awarded the Tripoli Harbor in Libya and became the first Turkish contractor in an international project (STFA Construction, http://www.stfa. com/ construction/page.aspx?nodeld=84&pageld=151 last access November, 2010).

Following this milestone, the internationalization of the Turkish construction companies started during the mid-1970s while Turkey was dealing with serious economic and political problems due to the withdrawal of the international development funds following the military action by Turkish Army in Cyprus (Tavakoli and Tulumen, 1990). Oz (2001) states that the sanctions imposed on Turkey because of Cyprus and the oil price boom that led the world economy to a recession badly affected the Turkish economy. Oz, however, added that the boom in the oil prices turned to be an advantage for the Turkish construction companies and they had the chance to penetrate into the North African and Middle Eastern markets whose wealth increased because of the oil income.

Turkish Contractors Association (n.d.) divides the international construction experience of the Turkish companies into three periods and explains those periods as:

2.2.1 1970-1979 Period

Being the first foreign market, Libya had a special importance for the Turkish contracting services abroad in that period. According to TCA (n.d.), at the beginning of the period, Turkish contractors were mostly importing the necessary technology from the European countries and undertaking their projects. Within ten years period, their activities started to expand other Middle Eastern countries such as Kuwait and Iraq. In 1970-1979 period Libya became the first country with a share of 68,28 % when the total work amount is considered. As seen in Figure 2.2, Saudi Arabia became the second country after Libya with 14,32% that Turkish contractors were active (TCA, n.d.).

In the same period, the main areas of activity of Turkish companies were housing 29,8%, transportation structures 17,07% and ports and harbors 16,79% (Figure 2.3).



Figure 2.2: Distribution of international works of TCA member companies by country (1972-1979) (Source: TCA, 2009a)



Figure 2.3: Distribution of international works of TCA member companies by type of project (1972-1979) (Source: TCA, 2009b)

2.2.2 1980-1989 Period

According to TCA (n.d.), this period had great importance due to since the transformation from the closed economy of 1970s took place starting from 1983 and new concepts like "liberal economy" and "privatization" added to the Turkish economic literature.

In the same period, important infrastructure investments such as dams, highways and telecommunication projects, created the opportunity for Turkish companies to increase their technical and managerial capabilities by partnering foreign companies; and to get acquainted with the global finance system as well (TCA, n.d.).

Batmaz et al. (2006) point out the existence of another important market for Turkish construction companies in this period and state that following the natural gas barter agreement signed with Union of Soviet Socialist Republics (USSR) in 1984, two protocols in 1986 and 1988 were signed with USSR. In the first protocol, it was concluded that 70% of the gas price would be covered by trade. Moreover, in the second protocol, it was concluded that 24% of the total gas price would be covered in exchange with construction services provided by Turkish companies (Özkan, 2002. Cited in Batmaz et al., 2006). The importance of this milestone for the construction history was mentioned by several researchers in their researches related to Turkish construction (Giritli et al., 1990; Oz, 2001).

According to TCA (n.d), Libya kept its importance in this period and retained the first place with 54,56%. Saudi Arabia and Iraq were the second and third countries in which Turkish companies were mostly active with 21,79% and 14,38% respectively (Figure 2.4).


Figure 2.4: Distribution of international works of TCA member companies by country (1980-1989) (Source: TCA, 2009a)

When the project types are examined it is seen that housing and urban infrastructure projects were the most important types of works that were held by the Turkish contractors at that time (Figure 2.5).



Figure 2.5: Distribution of international works of TCA member companies by type of project (1980-1989) (Source: TCA, 2009b)

2.2.3 1990-1999 Period

TCA (n.d.) research mentions that there were economic recession and political instabilities in Libya and Middle East within this period. Libya was suffering from the economic embargo imposed on it. Meanwhile, Iraq invaded its neighbor state Kuwait and as a response to this action an international military operation held against Iraq (US Department of State, 2010b). This situation led Turkish contractors to search for other possible markets. At that time, restructuring and openness policy of the Soviet Union ended with the de-structuring and new independent republics were established. The

situation in that period encouraged Turkish contractors to penetrate Commonwealth of Independent States (CIS) market (UFT, 2010a). Almost 60% of the completed projects in this period took place in CIS countries. Another important aspect of this period is a considerable diversification in the target markets (TCA, n.d).

According to TCA (n.d.), Libya lost its place in the first rank with a share of 14,22% in this period and became the second largest market after Russian Federation. Though the economical crisis that was spread to Russia from Asia at the end of 90s, Russia still become the most popular market among the Turkish companies with a share of 34,69%. Kazakhstan and Turkmenistan markets also emerged and took the third and fourth places with 7,31% and 6,66% respectively (Figure 2.6).

Despite the decrease in the share housing projects still got the first place in this period with 25,44%. After housing transport projects and industrial facilities were the most popular projects with 12,70% and 9,03%.







Figure 2.7: Distribution of international works of TCA member companies by type of project (1990-1999) (Source: TCA, 2009b)

2.2.4 2000-2010 Period

Following the economical crisis in 2001, a rapid increase took place in the international contracting activities of the Turkish construction companies. TCA (n.d.) claims the decrease in domestic market, attractiveness of the overseas jobs, and the increased competitiveness of Turkish subcontractors were the three main reasons for the rapid development in this period.

UFT (2010a) mentions that the development in this period was a result of economic growth took place till the economic recession in 2008. UFT stated the factors of the economic growth as the increased infrastructure and superstructure investments held by the developing countries; and the wealth increase in the oil and gas producing countries because of the increasing oil and gas prices.

Year	Number of Countries	Number of Projects	Total International Contract Value	Average Contract Value of a Project	
2000	22	76	\$1.027.297.528,00	\$13.517.072,74	
2001	24	110	\$2.453.507.032,00	\$22.304.609,38	
2002	32	127	\$2.437.976.735,00	\$19.196.667,20	
2003	36	284	\$4.232.000.888,00	\$14.901.411,58	
2004	37	411	\$11.034.518.629,00	\$26.847.977,20	
2005	35	402	\$11.436.927.241,00	\$28.450.067,76	
2006	36	520	\$20.225.566.699,00	\$38.895.320,58	
2007	43	543	\$23.944.756.592,00	\$44.097.157,63	
2008	38	567	\$23.733.692.829,00	\$41.858.364,78	
2009	41	411	\$20.260.389.389,00	\$49.295.351,31	

Table 2.2: The international contract values of the Turkish companies within 2000-2009 period

Source: UFT (2010b; 2010c)

In this period, the diversification in the market has been increased and Turkish companies started to take place in new markets. According to TCA (n.d.), this situation created a relative decrease in the share of the countries when compared with the previous period; however, as mentioned, the main reason for this issue is the appearance of the new countries as new markets. In addition, an increase in the diversification of project types and in the project value took place within the same period. Moreover, some companies started to specialize in some specific construction types such as international airports, railways and metro systems having more added values (TCA, n.d.). As it is seen in UFT data in Table 2.2, the increasing trend in the average project value is also an indicator of the fact that the Turkish companies started to undertake more complex projects with larger scale.

2001 and 2008 economic crises were the important milestones affected the international construction activities in that period. The effects of these recession periods on Turkish international construction will be further examined in this research in details.

In 2000-2010 period, Russian Federation kept the first place with a share of 15,8%. Libya and Turkmenistan followed Russia with 13,1% and 11,6% respectively (Figure 2.8).



Figure 2.8: Distribution of international works of Turkish companies by country (Source: UFT, 2010b)

2.2.5 1972-2010 Period in General:

During 38-year period between 1972 and 2010 (including first 9 months), the total value of the projects completed by Turkish companies in other countries reached up to 176,5 billion \$. Within this period, the number of the projects completed or in hand exceeded 5600 in 83 different countries. The amount of awarded projects increased up to 23,7 billion \$ in 2008 from the value of 109 million \$ in 1972 (UFT, 2010b; 2010c).

As a summary of the chronological development of international construction services of Turkish companies, the destination of Turkish companies started with the oil exporting countries during the 1970s. Libya and S. Arabia had the great majority of the works undertaken within that period. After 1980, till the end of 80s, the distribution of the works by country did not differ very much. The great majority of the works completed were in the oil exporting countries such as Libya, S. Arabia and Iraq. However, Soviet Union and its heir countries came into the picture as new markets in this period. During 1990s, the number of projects in the former Soviet Union republics dramatically increased and they outnumbered most of the Middle Eastern countries that were important markets in the previous years for Turkish companies.

After 2000, the markets of Turkish contractors diversified significantly. Unlike the previous periods, this diversification provided a balance between the markets, instead of focusing on one specific region. Moreover, the diversification brought a rapid increase in the amount of projects awarded within this period. As a result, with the increasing experience, Turkish contractors started to be the actors of global construction market.

2.3 Factors Affecting International Contracting Services of Turkish Construction Industry

During the past 38 years, from the first project abroad to the present time, several factors shaped the route of international construction activities of Turkish construction companies. Some of these factors were internal factors the source of which originated from the company itself. As some of them mentioned before in this research, Turkish construction companies gained enough experience, managerial skills, educated and trained personnel, and relatively enough financial accumulation. These factors were very strong motivators to drive Turkish companies to foreign markets.

On the other hand, besides company related factors, there were some external factors that the sources are not from the companies. These factors are taken as economic and political factors; and social factors in this research.

In 1970s, as mentioned before, one of the most important factors that shape the construction activities were the poor economic conditions in Turkey. Actually, this situation was not very different all over the world due to the increasing oil prices except oil producing and exporting countries. Due to the sharp increase in the oil prices, oil exporting countries gained a considerable wealth and diverted this wealth to the new investments which opens the door for Turkish contractors to the international contracting.

In 1980s, the conjuncture was globally more complex for all the global actors. First of all, Turkey was beginning to integrate to global economy by introducing liberal economy policies into its economical system. Again as mentioned in this research before, it was a very important chance for Turkish construction companies -that already took place in the international arena- to integrate global economy as well. In that period, Libya –the most important market for Turkish companies- started to suffer because of the sanctions started by US. This situation would get deeper in the 1990s and it would

affect the activities of Turkish companies in that country. Also in 1980s, another important event that affected the Turkish construction activities in Middle East was Iran-Iraq war. In addition, Turkish companies also started to get acquainted with USSR in the same period.

In 1990s, the temperature in the Middle East region was warmer. The political situation in this region was instable due to the aggression between Iraq and Kuwait, which later turned to an invasion of Kuwait by Iraq. As a result of this act, a military intervention by the allied forces under the authority of United Nations occurred in the region. By that time, the fall of the Soviet Union and the establishment of the new independent countries created a new market for the Turkish companies that were seeking for new markets due to the instabilities in Middle East.

On the economic side, the conjuncture was very active in that period as well. The economic crisis originated from Asia and hit Russian Federation at the end of 90s terribly affected Turkish construction activities abroad, especially in Former Soviet Union Countries, or mostly Russia.

The 2001 crisis again badly affected the struggling economy of Turkey and caused a deep recession in the domestic market as well. After this crisis, Turkish companies went out again, but this time with a greater thrust. The main reason for this thrust might be the awareness of the importance of foreign markets for the companies of a country having such a fragile economy.

After 2001, the relatively good economic environment encouraged the growth of the international activities of the Turkish companies till 2008 economic recession which was deeply felt by the world economies.

Besides economic and political factors, social factors were also very important on shaping the international activities of the Turkish construction companies. Several social factors such as religion, language and culture had contributed to the international activities either in a positive or negative way. As a result, the mentioned factors are considered as main significant factors that affected and shaped the Turkish international construction services. For this reason, these factors will be examined in a more detailed way in the coming part of this research. Certainly there were various other factors in this 38-years period; however the ones considered as major factors will be discussed here and the minor factors will be omitted.

2.3.1 Economic and Political Factors

2.3.1.1 Oil Crisis in 1970s and Oil Price Increases

According to Koopman et al (1989), oil price was steady in nominal terms and it fell considerably in real terms till the beginning of 70s. They further state that the first major price jump in this period occurred in 1973-1974 period in the presence of Yom-Kippur war between Israel and several Arabic nations. Scneider (2004), claims that the price jump was not only occurred because of Yom-Kippur war, but also because of the economical situation involving high oil demand, high growing rates and depreciated USD. He states that, when these factors combined with Organization of the Petroleum Exporting Countries (OPEC) embargo imposed on Western countries as a reaction to Yom Kippur War, the price of oil guadrupled in a short time. According to Schneider, the second jump in the oil price took place within 1979 and 1980 period which follows the revolution in Iran and just before the outbreak of war between Iran and Iraq. However, the further increase was prevented by new non-OPEC countries' productions and by increasing the production of OPEC countries. As a result of these issues, as illustrated in Figure 2.9 and 2.10, the crude oil price increased from 3,4\$ to 11,2\$ in 1973-1974 period during the first shock and to 31,5\$ in 1980 during the second shock before decreasing again by the late 1980s (Backus and Crucini, 2000).



Figure 2.9: Oil price in the international market per barrel (Source: OECD, Economic Outlook, various years; UN: Monthly Bulletin of Statistics, various years. In Koopmann et al., 1989)

Sen and Babali (2006) stated that during the Gulf War started in 1991, the oil wells in Kuwait were destroyed. The second Gulf War in 2003, on the other hand, also caused Iraq oil fields to be destroyed (Sen and Babali, 2006). Sen (2004) claims that the second Gulf War seriously disturbed the oil supply from Iraq and led to a second oil shock. Bielecki (2002), in his research, claims that Yom Kippur War in 1973, Revolution in Iran in 1979, the war between Iraq and Iran, and the Gulf War started in 1991 decreased the daily production for 3-5,6 million barrels.



Figure 2.10: Crude oil prices with 2008 US Dollars (Source WTRG Economics, 2009)

Koopmann et al. (1989) stated the earnings of the OPEC countries during the price shocks in 1970s. As it can be seen from Table 2.3, from 1978 to 1980, the revenues from oil and oil products increased from 133 billion USD to 279 billion. Considering the amount of production, it can be concluded that this increase in the revenue did not occur because of any increase in the production. On contrary, it occurred due to the sharp increase in the price.

Export of Crude Oil and Oil Products						
Year	Million barrels per day	USD (billion) (year)				
1960	7,9	\$5,40				
1970	22,2	\$14,80				
1971	23,8	\$19,60				
1972	25,9	\$22,10				
1973	29,5	\$34,60				
1974	29,1	\$113,50				
1975	25,6	\$106,70				
1976	29,3	\$129,10				
1977	29,4	\$141,40				
1978	28	\$133,20				
1979	28,9	\$197,10				
1980	24,9	\$278,60				
1981	20,1	\$255,60				
1982	16,4	\$200,80				
1983	15,4	\$160,40				

Table 2.3: Oil exports of the OPEC countries, 1960-1983

Sources: OPEC: Annual Statistical Bulletin, 1979 and 1981; Oil and Gas Journal 21.11.1983; Shell Briefing Service, May 1984 (German Edition). In Koopmann et al. (1989)

Obviously, the price increase in oil also increased the revenues of the oil exporting countries. To compare the increase in the revenues with the gross domestic product (GDP) growth rates, several OPEC members' GDP growth rates are examined in Table 2.4. To give an idea about the scale of the growing rates, Turkey's situation was also involved in the table. As it is seen from the table, during the oil shock period, OPEC countries had very high rates of GDP growth. Iran can be seen as the exception of the high rates since the second shock in 1979-1980 period is related to Iran and it seriously hindered its production which led to a problematic economy in that period.

Similarly, the decrease in oil price and revenues started from 1981 should definitely make a contribution to the negative growth rates of S.Arabia and United Arab Emirates. In the table, two important countries –Libya and Iraqwere not included since GDP growth rates data of these countries at that period is not available in World Bank database.

Country	1970	1971	1972	1973	1974	1975	1976
Algeria	8,86	-11,33	27,42	3,81	7,49	5,05	8,39
Iran	9,84	12,98	16,29	5,53	9,38	5,75	17,73
Saudi Arabia	12,03	19,94	23,49	25,62	27,49	5,23	12,72
United Arab Emirates	-	-	-	-	14,50	6,23	15,04
Turkey	3,23	5,57	7,43	3,26	5,59	7,17	10,46
Country	1977	1978	1979	1980	1981	1982	1983
Algeria	5,26	9,21	7,48	0,79	3,00	6,40	5,40
Iran	-1,30	-7,48	-7,12	-13,23	-5,20	12,96	12,61
Saudi Arabia	7,00	-0,97	9,83	6,52	4,69	-11,10	-8,22
United Arab Emirates	17,44	-2,34	24,89	26,42	2,84	-8,25	-5,39
Turkey	3,41	1,50	-0,62	-2,45	4,86	3,56	4,97

Table 2.4: GDP growth rates of some OPEC member countries and Turkey, 1970-1983 (%)

Source: World Bank, 2010

From the beginning of the first price shock till the early 80s, the oil price and the corresponding revenues increased –roughly- ten times without an excessive increase in the production. As a result of the increased revenues, the oil exporting economies grew with ambitious rates and this situation led to a serious increase in the wealth of these countries. However, according to

Fabritius and Petersen (1981), a part of extra oil revenues were spent by OPEC for investments or buying goods and services.

Hence, the appearance of Turkish construction companies first in Libya and Saudi Arabia; than Iraq and Kuwait at the beginning of 1970s was not a coincidence. It was a combination of conjuncture with the entrepreneurship of the technically and financially matured Turkish contractors.

2.3.1.2 Liberal Economy in Turkey in 1980s

Until 1980s, Turkey had a mixed economical system that the trade activities were under the control and regulation of the state up to a certain extent. However, due to the conjuncture in the world, some difficulties started to be faced in the world economy and this situation affected Turkey as well. At the end of 1970s, Turkey started suffering economic problems such as foreign exchange crisis, low growth and high inflation rates (Rodrik, 1990). At the beginning of 1980s a new trend, liberalization, started to influence Turkey. At that time the first step of the liberalization process started with the new economic program that was supported by International Monetary Fund (IMF) and initiated on January 24, 1980 (Feridun, 2008). Onis (1998) counts some of the important components of this program as follows: "liberalization of the foreign trade regime and market interest rates, removal of exchange rate controls and privatization of state economic enterprises".

Before examining the development of liberalization process of Turkey in that period, it could be wiser to check how liberalization can affect the industries or specifically construction industry. Dornbusch (1992), in his research on trade liberalization, investigated the results of restrictions on trade and the benefits of liberalization. He stated that the import restrictions have negative effects on the "quality, variety and availability of technology". Since technology is an important parameter for the construction industry, it is possible to conclude that the liberalization would create a pace for the construction sector. Dornbusch (1992) further stated the benefits from liberalization in his study three of whom are vital for the construction industry. According to Dornbusch, liberalization could bring:

"access to better technologies, greater domestic competition, transfer of know-how".

Undeniably, better technology should enhance all industries- including construction- involving the means of production. However, in an inward oriented economy it is not easy to access the up to date technology. Hence, it is reasonable to support the idea of the construction industry would benefit from the liberalization process. On the other hand, a stronger domestic competition should lead the companies to expand their activities to the new markets and transfer of know-how should provide them the necessary background for any kind of undertakings either at home or abroad. Hence, when these advantages are considered, liberalization process in 1980s should positively affect the construction industry. Moreover, this period that the liberalization of the economy started became an important milestone for domestic and foreign construction services.

With that economic program and liberalization, Turkey aimed to struggle against high inflation rates and support its growth with increasing its export. Also, another important component of economic growth –public investments-shifted from manufacturing industry to infrastructure investments in this period (Rodrik, 1990). Those public investments involving large scale hydraulic, transportation and telecommunication projects resulted in cooperation and joint ventures between foreign and Turkish companies. This close cooperation provided Turkish companies very important opportunities to improve their technical and managerial skills; also to meet and understand global finance system (TCA, 2009).

Starting from 1980, the new wind in the economy showed its effect in the economic indicators. As can be seen in Table 2.5, liberalization and new

economic program brought a pace to the economy at the beginning of 1980s. After the three digit inflation rate in 1980, inflation was nearly under control and kept a steady trend till the end of 80s. Being an important parameter by affecting the construction materials' prices, control of inflation was an important issue for the construction sector who suffered due to high inflation before. Similarly, the open economy enforced the growing rates of GDP for the same period. Following the positive economic indicators, the size of the construction sector also started to grow by the help of public investments and good economic environment and construction sector enjoyed high growing rates till the end of 1980s (Table 2.5).

Table 2.5: Rates of construction sector growth, GDP growth and inflation in Turkey, 1979-1989 (%)

Year	Construction Sector Growth Rate (%)	GDP Growth Rate (%)	Inflation Rate (%)	
1979	0,6	-0,6	58,7	
1980	8,7	-2,4	110,2	
1981	2,1	4,9	36,6	
1982	-9,3	3,6	30,8	
1983	17,4	5,0	31,4	
1984	11,8	6,7	48,4	
1985	13,6	4,2	45,0	
1986	11,0	7,0	34,6	
1987	14,9	9,5	38,8	
1988	-5,4	2,1	73,7	
1989	6,1	0,3	63,3	

Source: Turkish Statistical Institute (TUIK), 2010; Annual inflation – Consumer prices, World Bank, 2010

In this period, as mentioned before, was a very bright area for construction sector and a lot of important projects were mutually undertaken by Turkish and foreign contractors. Within 1983-1987 period, domestic construction sector had an average growth rate of 13,7%. Obviously, the relatively good environment for construction sector in that period contributed the development of Turkish construction companies and their acquaintance with the global economy provided them the ability to be more active in foreign markets. Although this pace was lost at the end of 1980s due to unsuccessful policies of the governments (Ertugrul and Selcuk, 2001), Turkish contractors enjoyed the steady economic environment and gained experience from the conjuncture that contributed to their competitiveness in foreign markets.

2.3.1.3 Sanctions on Libya

Libya enjoyed its increased revenues from oil due to the rapid increase in oil prices during 1970s and diverted some of these revenues to investments which open the gates of this country to Turkish contractors as mentioned before in this study. However, the decreasing oil prices since 1983 reversed this boom and reduced the revenues of Libya.

The problems in Libya regarding construction started to reveal itself at the beginning of 1980s. According to Batmaz et al. (2006), following the oil price boom, the number of Turkish contractors rapidly increased in Libya some of whom were not qualified enough, but they were trying to take advantage of this boom; and Turkish banking sector encouraged such contractors by issuing guarantee letters without enough feasibility studies. Also the late payments from Libyan side as a result of decreased revenues in 80s badly affected the performance of Turkish companies and all these factors were the signs of a difficult period for Turkish companies (Batmaz et al., 2006).

In 1980s, the political conjuncture of Libya contributed to the complexity of the economy of the country. Close relations with USSR and relations with terrorism disturbed Libya's relations with the U.S. and other Western countries. In these years, some terrorist activities linked to Libya led the U.S. first cancel its diplomatic relations with Libya, and then -in 1986- impose a complete sanction prohibiting all import and export, travel to and from this country (U.S. Department of State, 2010a). Following the U.S. sanction, United Nations (U.N.) established an embargo on Libya in 1993 with United Nations Security Council Resolution 883 involving the freeze of Libyan assets in other countries and prohibition of equipment trade (United Nations Security Council, 1993). According to World Bank research (2006), since the sanctions prohibited the western oil companies' activities in Libya, the whole Libyan economy which was highly dependent on oil revenues was badly affected from this situation. At that time Libya seriously suffered from the lack of spare parts, raw materials and technology necessary for the maintenance and operation of industrial facilities. This situation led the Libyan government to slow down the pace in investments (World Bank, 2006).

Struggling economic conditions of Libya and slow down in the investments directly affected the position of Turkish companies in this country. Table 2.6 shows the variation in the amount of Turkish contractors' awarded contracts in hand within 1992-2009 periods. After the U.N. sanctions in 1993, the contract amount awarded to Turkish companies started to decrease.

1992	1993	1994	1995	1996	1997	1998	1999	2000
467,90	477,80	90,30	261,60	247,50	56,50	60,50	0,00	0,00
2001	2002	2003	2004	2005	2006	2007	2008	2009
56,10	231,60	165,50	123,60	253,00	1.785,00	5.256,90	3.391,50	4.156,10

Table 2.6: Annual project values awarded to Turkish construction companies in Libya (millions of USD)

Source: UFT, 2010b

Regarding the environment, it was a necessity for Turkish companies to divert their target market at that period due to the recession and the problems in Libyan market started at 80s but which actually showed itself in 90s. Expanding through the former USSR countries, Turkish companies diversified their market but it does not necessarily mean that the Libyan market lost its importance for the Turkish contractors.

In 2003, UN was satisfied with the cooperation of Libya with international organizations and normalization of its relations with the other countries; hence lifted the embargo on Libya with its Security Council Resolution 1506 (UNSC, 2003). Following the U.N. action, the U.S. also terminated it sanction on Libya and the relations of Libya with the world started to be reestablished (U.S. Department of State, 2010).



Figure 2.11: GDP Growth rates of Libya between 2000 and 2009 (Source: World Bank, 2010)

Withdrawn sanctions provided Libya the opportunity to increase the income and to continue the investments planned. As Figure 2.11 shows, the GDP growth rates that involve consecutive significant positive figures after the withdrawal of the sanctions verify the pace in the economy in that period. Similarly, as seen in Table 2.6, the amount of contracts awarded to Turkish companies in this period started to increase with a considerable acceleration. This situation continued till the global recession in 2008. However, despite the global recession, the total amount of contracts awarded to Turkish companies between 2003-2010 reached up to nearly 17,5 billion \$ (UFT, 2010b). Hence it is the indicator that a new period started for the Turkish companies in Libya as the negative effects of the sanctions disappeared.

2.3.1.4 Financial Crises

Either before or after the liberalization of economy, economic difficulties were faced very often in Turkish economy history. However, some difficulties – namely crises- had very deep and sudden impacts on the economy and the economic activities including construction.

According to Ankara Chamber of Commerce report (2005), since foundation of Turkish Republic, 15 economic crises hit the economy. If 2008 global crisis took place after this report is also considered, the number of the crises affected Turkish economy becomes 16. However, only the major crisis that affected the international construction activities of Turkish companies will be discussed here. Also major global crisis will be discussed throughout the chapter.

2.3.1.4.1 1994 Crisis

After the relatively steady economic environment of 1980s, again negative indicators started to take place in Turkish economy in 1990s. This period is

even called "lost decade" by Yeldan (2001) and he mentions that the economy was in a cycle of "growth-crisis-stabilization-artificial growth". Poor economic policies of the governments together with the volatile global economy made Turkish economy suffered in this period.

Following the convertibility of Turkish Lira (TL) and capital liberalization completed at the end of 1989, the inward flow of the foreign currency appreciated TL and depreciated foreign exchange which caused a boom in import and a decrease in export (Celasun, 1998). Contradicting the export led growth policy in 1980s, this situation increased the deficit in foreign trade of Turkey. Celasun (1998) further stated that the high deficit rate in the budget and high amount of debt to finance this deficit led to a very serious economic crisis in 1994. Celasun also added that Turkey suffered a significant contraction, TL depreciated more than 50% against USD, half of the Central Bank foreign currency reserves were lost, interest rates and inflation terribly



Figure 2.12: Growth rates of construction sector in Turkey and GNP between 1992 and 1996 (Source: Turkish Statistical Institute, 2010)

increased as a result of this crisis. As a consequence of the economic crisis, similar to the overall economy, construction sector also suffered due to the economic conditions. Within this period, as can be seen in Figure 2.12, construction sector faced a negative growth and recovery was slower than the general economic recovery. As demonstrated in Figure 2.13, inflation rapidly increased in that period and reached to three digit values. This situation badly affected the construction sector that is very sensitive to high inflation rates. In addition, high interest rates brought by high inflation rate diverted the capital to the interests instead of investments.



Figure 2.13: Inflation rates in Turkey between 1992 and 1996 (Source: World Bank, 2010)

2.3.1.4.2 1997 Asian and 1998 Russian Economic Crises

In 1997, another crisis spread to other Asian economies through Thailand. Asian economies emerged recently with their export led growth policy and achieved high growth rates in 1980s and 1990s. Being one of those countries, Thailand started to suffer its appreciated currency, decreasing export and growing budget deficit in the middle of 1990s. In the middle of 1997, due to the withdrawal of the short term capital – so called "hot money"the crisis broke out and a massive devaluation and a serious decrease in foreign exchange reserves occurred in Thailand (Climent and Veneu, 2003). This situation affected the nearby Asian economies in a short time and the crisis spread to other Asian countries. The Asian economic crisis had limited effects on Turkish economy. Its effect was mostly because the Asian countries were producing and exporting similar products with Turkey; hence the devaluations in these countries might increase their competitive ability and decrease the share of Turkish export in other markets (Karluk et al., 1999).

In 1998, the economic crisis in Asia showed its effect and consequences in other regions as well. The economic and political situation in Russia combined with Asian economic crisis resulted in a depression in Russian economy also. In the middle of 1998, Russia devaluated its currency – Ruble - and declared a moratorium for 90 days for its increased short term debt (Economic Research Center, n.d.). Unlike Asian economic crises, crisis in Russia more seriously affected Turkish economy and Turkish construction sector. In 1998, the share of Russian market in international construction services of Turkish companies was around 30% according to UFT (2010b) values. Due to the financial problems in that period, Russia suspended most of the construction projects and the progress payments of the foreign contractors were delayed (UFT, 2010d). This situation decreased the activities of Turkish contractors in Russia for a certain time. As seen in Figure 2.14, the total value of the projects awarded to Turkish contractors in Russia started to decrease in 1998 and made its bottom in 1999 within 1997-2007 period. The normalization could only start in 2003 and the negative effects of the crisis started to dissipate following 2003.

The effect of this crisis on Turkish economy was not only limited with the economic relations between Russia and Turkey. Turkish companies' activities in other former Soviet republics (Middle Asian and Caucasian states) were also affected from the crisis. Due to the strong economic relations of the former Soviet republics with Russia, the crisis affected these countries' economies and caused a significant stagnation in mentioned economies (Bilgin, 2002). Considering more than 50% share of former



Figure 2.14: The values of projects awarded to Turkish contractors in Russia between 1997 and 2007 (Source: UFT, 2010b)

Soviet republics in foreign construction market of Turkish companies, the economic stagnation in the mentioned markets definitely affected the activities of Turkish contractors in a negative manner. For the whole Common Independent States (CIS) market, after several years the effects of the crisis and the signs of stagnation could diminish.

2.3.1.4.3 1999 and 2001 Crises

According to ACC (2005) report, when Asia and Russia economic crises broke out, Turkey was applying a new economic restructuring and disinflation program and trying to decrease the expenses. According to the report, the growing deficit in the budget and the short term capital escape from Turkey during Russian crisis led the crisis spread to Turkey. At the same time, a devastating disaster – Marmara Earthquake – that hit the country in 1999



Figure 2.15: Growth rates of construction sector in Turkey and GNP between 1998 and 2006 (Source: Turkish Statistical Institute, 2010)

made the economical situation worse and again the all economic indicators turned down and supported the crisis situation. Despite the attempts for new program implementations in cooperation with IMF, a serious crisis broke out in 2001 with the help of the political instability in Turkey (Yeldan, 2005). Yeldan (2005) further states that Central Bank lost a very large amount of its foreign reserves and the interest rates sky rocketed after the crisis hit the country.

The effect of these series of crises to the Turkish economy and the construction sector was very severe. As it is seen in Figure 2.15, the negative growth rates during the crisis years were faced both in Turkish economy and construction sector.

It is also obvious that the construction sector was affected from the crisis relatively later than the economy itself; however, the recovery of the construction sector was also later than the recovery of the economy. In addition the crisis had a deeper effect on the construction sector when the rates of growth were compared.

Due to the declined domestic economy, the importance of the expansion to foreign markets became obvious for the Turkish contractors after the series of crises in that period. Ocal et al. (2006) conducted a research investigating the Turkish companies' perceptions and reactions against crises. The research was based on 2001 crisis that had crucial effects on both economy and construction sector. In the research, it is found out that although a great majority of the companies do not have systematic crisis management approach, "diversification to new markets" was considered as one of the best solutions by the managers to get through the 2001 crisis. UFT (2010b) values regarding the international contract values of Turkish contractors also supports and proves this idea. The values show that after the 2001 crisis, Turkish companies benefited the relatively good economic environment and increasing demand in the world and increased their amount of signed

contracts in foreign markets. Similarly, Turkish companies increased the number of their target markets after the series of crises. As it is seen in Figure 2.16, Turkish companies were undertaking projects in 20 and 24 different countries during 1999 and 2001. However, just after 2001, they increased the number of countries and they started to take part in a wider geography which is an indicator of diversification.



Figure 2.16: Values of international contracts signed by Turkish companies (millions of \$) and the number of countries where Turkish contractors signed contracts between 1998 and 2004 (Source: UFT, 2010b)

2.3.1.4.4 2008 Global Crisis

In the middle of the first decade of 2000, a steady growth has been observed in the world economy and Turkish economy after a series of crises. This conjuncture continued till another serious global crisis originated from USA broke out in 2008. Low interest rates till 2007-2008 in USA pumped the insecure loans especially for housing and the difficulties in repayment of these loans in combination with weak regulation and supervision triggered the panic and became the key elements of 2008 crisis (Naude, 2009). Naude also claimed that the developed and developing markets were affected by several ways from this crisis. According to Naude, Europe was soon affected from the crisis via banks since their relation with US financial environment. Developing markets, however, affected by the failures in banking systems and decreased lending, decline in exports and reduction in capital inflows. According to Durmus (2009), Turkey also suffered a decrease in capital inflow and it would definitely be affected from the crisis maybe not through financial sector but via manufacturing sector as it was agreed by the wide consensus.

As agreed with a consensus, the economic parameters of Turkey confirmed a downward trend in the economy due to 2008 crisis (Figure 2.17). As it is seen in the figure, construction sector was hit by the crises in a more severe way than the overall economy. The trend in the construction sector turned down when the first signs of the crisis appeared in 2008, however the overall economy could maintain a slightly positive figure with the help of the relatively high growth in the first half of 2008.



Figure 2.17: Growth rates of construction sector in Turkey and GDP between 2004 and 2010 (Source: Turkish Statistical Institute, 2010) * (2010 values are based on the first 9 months)

Similarly, the amount of international contracts signed by Turkish companies also decreased as a result of this global recession (Figure 2.18). Most of the developed economies, especially Europe took some precautions including reducing the expenses and spending. This situation together with the capital escape from the developing economies decreased and postponed the construction investments and led to stagnation in construction sector all over the world.



Figure 2.18: Values of international contracts signed by Turkish companies between 2004 and 2010 (millions of \$) (Source: UFT, 2010b) * (2010 values are based on the first 9 months)

In conclusion, crises are the most undesirable and inevitable realities of the worldwide economic system. It has been observed that the crises are one of the major factors shaping the economic activities. Being finance-intensive, construction sector is also vulnerable against crises. Furthermore, most of the time it becomes among the sectors hit first by crises and healed last. As a result of this fact, Turkish construction including international services is also sensitive against crisis. However, increasing diversification in the international construction services definitely decreases the vulnerability of Turkish construction sector and even sometimes creates opportunities for Turkish companies.

2.3.1.5 De-Union of USSR

The economic relations of Turkey with Soviet Union started to improve beginning from 1930s. Later on, several partnerships between two countries were established and several industrial facilities were constructed in Turkey with Soviet financial and technical support (Foreign Economic Relations Board-FERB, 2005). However, the main milestone between two countries regarding the Turkish contracting services was the natural gas barter agreement signed in 1984 and the protocols signed in 1986 and 1988. As mentioned before in this research, after the protocols signed, it was concluded that Turkey would pay the 24% of the gas price purchased by construction services (Batmaz et al., 2006).

Economic difficulties faced forced USSR to apply a restructuring program called "perestroika" at the end of 1980s. Anyway, even such precautions could not prevent the economical difficulties. Due to the economical and political factors, USSR was dissolved in 1991 with the resignation of the secretary general of Communist Party, Mihail Gorbachov (FERB, 2008). After the fall of USSR, instead of a planned economy controlled from one center, several independent states that were eager to switch to liberal economy were founded. Some of these states were the Middle Asian and Caucasian states that Turkey has common cultural and social background. This conjuncture accelerated the activities of Turkish contractors in former Soviet Union republics and as Valentin et al. (2007) stated, the Turkish companies were among the first ones who took part in the re-development of Russia, Middle Asian and Caspian states.

One important milestone among the Turkish contractors' activities in Russia was the construction of social houses constructed for the Red Army soldiers returning back from East Germany between 1993 and 1995 (FERB, 2008).



Figure 2.19: GDP growth rates of Azerbaijan, Russia, Kazakhstan and Turkmenistan between 1991 and 2001 (Source: World Bank, 2010)

However, after the fall of USSR all former Soviet Union republics – or with the name of the new union, Commonwealth of Independent States (CIS) – suffered due to lack of adaptation to liberal economy. As seen from Figure 2.19, four CIS countries including Russia had very low negative growth rates in the first years of liberal economy. The Middle Asian countries who were enjoying the USSR funds to balance their deficits felt the economic difficulties in a deeper way since there were no USSR funds anymore.

Also the economic crisis that hit Russia and affected CIS countries in 1998 led the negative growth rates and economic problems to continue till the end of 1990s.

Similarly, the relatively high amount of contracts signed by Turkish contractors in CIS countries with the effect of housing projects for the Red



Figure 2.20: Values of international contracts signed by Turkish contractors in CIS countries between the years 1991 and 2005 (millions of \$) (Source: UFT, 2010b)

Army soldiers could not continue due to the economical challenges in these countries. The forthcoming crisis lowered the amount of contract signed dramatically to the values below 1 billion \$ in 2000. Following 2002, the contracts signed in CIS countries started to increase with the improving economic conditions of CIS countries and improving global economy as well (Figure 2.20).

The fall of USSR did not only present CIS countries as new markets to Turkish contractors but also the former communist East European and Balkan countries attracted the interest of Turkish companies. Starting from 1990s, Turkish contractors investigated the possible opportunities in these states and they were awarded a significant amount of contracts in this region as well.

The collapse of Soviet Union started a new era for the global economy and involved new open economies to the world economy. By using the geographical advantage and entrepreneurship, Turkish contractors took advantage of this new formation and diversified their activities into these young markets. Despite all economic and political difficulties faced up to now, the economic relations including construction services improved within this period.

2.3.1.6 Political Instabilities in the Markets of Turkish Contractors

When the markets of Turkish contractors are examined it would be noticed that most of the countries have risky environments due to economic or political reasons. The adventure of Turkish contractors started in North Africa, then expanded to Middle East and CIS countries and then diversified drastically in the nearby geography. Middle East, North Africa and Caucasia that have a considerable share in Turkish construction activities abroad have been in politically problematic situations very frequently. Since construction activity is very sensitive against political risks those political problems affected the international construction activities in these regions.

One of the earliest political problems around Turkey following the internationalization of construction services was the war between Iraq and Iran. Following the revolution in Iran and rise of Saddam Hussein – a key figure in Iraq history – in Iraq, a war started between two countries after the invasion of Iran by Iraq. The war lasted for eight years till 1988 and when it ended it left massive casualties and devastated economies for both countries without any significant economic or territorial gain (US Department of State,

2010b; 2010c). During the war period between 1980 and 1988, Turkish companies' signed contracts valued around 1,3 billion \$ in Iraq (UFT, 2010b). The amount of projects in Iran was less significant – less than 100 million \$ - within the same period. Though Turkish contractors were searching for the opportunities that may be available after the war, it is very obvious that Turkish contractors' activities were badly affected in these countries due to devastated economies and unsafe environment. Akkaya (1989) stated in his memories that his company attempted to settle in Iran and planned to be ready for the opportunities which will be available when the war ends; however since the war lasted for a long time, they could not sign more contracts except three port projects in that period.

Two years after the end of Iran-Iraq war, Iraq invaded its small neighbor country, Kuwait in 1990. Following the invasion, joint forces acting under UN resolutions drove back Iraq forces in 1991. After 1991, Iraq started to be controlled by UN and other leading countries, however since it failed to cooperate with UN for the inspections, it was invaded by a US-led joint forces in 2003 (US Department of State, 2010b). This intervention resulted in the fall of the totalitarian regime and formation of a new political structure in Iraq.

According to Sen and Babali (2007), all these instabilities in Middle East led to the destruction of oil fields and the corresponding decreases in the oil production of related countries. Considering the high dependency of these countries on oil revenues, the effect of the instabilities was severe on these economies. As a result of this, Turkish companies could not sign significant amount of contracts within these geographies during 1990s.

However, following the regime change in Iraq, the construction sector started to grow with a great acceleration. Re-construction of the countries destroyed infrastructure and superstructure brought a pace to the construction activities in the country. Turkish contractors also benefited from the investment
environment and increased their awarded contracts in Iraq after 2003 (Figure 2.21)



Figure 2.21: Values of international contracts signed by Turkish contractors in Iraq between 2002 and 2010 (millions of \$) (Source: UFT, 2010b)

Another important milestone affecting the political situation in Middle East was the 9/11 terrorist attack to USA. Relied upon the evidences that the terrorists were based in Afghanistan, a joint international force led by USA conducted a military operation to overthrow the regime supporting terrorism and to bring political stability to the country in 2001 (US Department of State, 2010d). Following the stabilization of the political environment in Afghanistan, re-construction thrust started with the help of the funds allocated by the international community. According to US Department of State Background Notes (2010d), starting from 2001, 50 billion \$ fund was allocated by international donations for the re-construction of Afghanistan and a great majority of these funds were used to finance infrastructure development. This re-construction thrust provided opportunities for the Turkish companies and

Turkish contractors started to enter this market that they are not very familiar with. However, compared to the size of the funds allocated, it is possible to conclude that the amount of works awarded to Turkish companies was relatively low (Figure 2.22).



Figure 2.22: Values of international contracts signed by Turkish contractors in Afghanistan between the years 2002 and 2010 (millions of \$) (Source: UFT, 2010b)

As a result, the wars, clashes and political instabilities shaped the conjuncture in the Middle East and nearby regions very frequently. Due to the nature of construction, it is one of the sectors that are very sensitive against political conditions. Thus, such characteristic of the construction sector had detrimental effects on the amount of works during war times. However, following the end of the wars, the re-construction thrust of the countries for renewing and repairing their damaged infrastructure and superstructure brought acceleration to the volume of construction works. Turkish contractors, as brave entrepreneurs, also attempted to search for such

opportunities after the wars and tried to compensate their low construction volumes during war years in mentioned countries.

2.3.2 Social Factors

Besides economic and political factors; social factors had a great importance on the development of Turkish contracting services abroad. International construction involves the interaction between two or more parties coming from different cultures, having different point of views to the events, using different languages, having different religions and traditions. Inevitably, the differences or similarities between parties somehow affect the construction activity in a positive or negative manner.

Chan and Tse (2003) mention that the international activities require more cultural awareness and sensitivity regarding the personnel management since the difficulties such as language, communication, cultural differences and environment of a different country are involved. As mentioned in Chan and Tse's research, language is an important item since it is the most important way of communication. Comu et al (2010) also noticed the growing challenge of dealing with linguistic and cultural differences with increasing globalization; and the complexity of managing these issues as well. They mentioned that one of the most important issues in a linguistically diversified environment is being able to to communicate sufficient and effective enough to manage the diversified workforce. Comu et al. held a research comparing the performances of diversified and non-diversified project environments. According to the research, the performance was considerably lower in the diversified collaboration environment. However, after several projects –when parties get used to deal with the language and culture related problems, the multi-cultural project environment highly outperformed the mono-cultural project and enjoyed the benefits of diversification. However, Melitz (2007) is stricter on the language diversity issue and claims that the common language

better promotes the trade between the societies since it provides direct communication. Similarly, Hutchinson (2002) states the difficulties in communication resulted from language differences as a major barrier to trade and claims that the common language increases the trade amount between two countries.

Another important concept of social factors, cultural differences, also became the subject of several researches. Chua et al. (2003) define the culture as "the general pattern of values, attitudes and behavior in one nation that distinguishes it from other culture groups" and mention that when the difference between host culture and home culture of a foreign company is larger, the difficulties that the company faces will be larger as well. Chua et al. considered cultural differences as a reason for the cost growth and listed the factors of cost growth caused by cultural difference as: "Lower labor productivity, lack of construction technology and skills, differences in management philosophy, lack of transparency in bidding process, nepotism and overvalue of relationship, bureaucracy in government approval system, negotiation instead of litigation in dispute settlement and language barriers".

Maybe one of the most important milestones in this topic is Hofstede's (1991) research stating the five dimensions of culture as "power distance, individualism vs. collectivism, masculinity vs. femininity, uncertainty avoidance and long term – short term orientation" (Cited in Ozorhon et al., 2010). More important than the definition, effect of the culture to international trade activities should be investigated and the results should be examined to take the necessary precautions to promote trade. Cultural differences are one of the most important factors increasing the disputes between the parties in the international construction projects and they can hinder the management of international projects (Chan and Tse, 2003). Gunhan and Arditi (2005) also support the idea that the difficulties in international projects are mostly caused by the cultural differences affect even the parties. Furthermore, they mention that the cultural differences affect even the foreign

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investment choices (Fisher and Ranasinghe, 2001. Cited in Gunhan and Arditi 2005). In addition, business partners from similar cultural tendencies may result in the minimization of the communication bottlenecks and the enforcement of relationships (Griffith, 2002). Griffith further states that since communication is based on cultural principals the lack of fit on this basis may create hurdles for developing effective international relationships. Ozorhon et al. (2010) considered the familiarity with the host country conditions as one of the factors on international joint venture performance and accepted the dimensions of host country conditions as: "familiarity with the language, business practices, political and legal system, economic environment, industry structure and national culture of the host country".

Anyway, not all the researches in the literature are pessimistic about the cultural diversity and multi-cultural project environment. Ely and Thomas (2001) and Jehn et al. (1999) expressed that the diversity provides different point of views and knowledge against complex problems faced (Cited in Ochieng and Price, 2010). Ochieng and Price (2010) stated that the crosscultural communication in international construction projects is the key for the success and they addressed that this issue can be managed. Ramaprasad and Prakash (2003) introduced "Emergent Project Management" concept that involves combining "local knowledge" coming from bottom to top with global management methods. They stated that the local knowledge is very vital in global projects and they gave two very striking examples in their paper for this issue. In their first example, named "local time", they stated that there are several dates important for Indian people that are not mentioned in the official calendar and on those dates it is impossible to have the workers at the site. They added that the only way to gather this information is to consult local knowledge. Their second example, named "unclean feet", is as follows with their own words:

"A multi-national project in India had an aggressive project manager from the USA. During one of his routine checks he observed masonry of an unacceptable quality. The project manager in his eagerness to reject bad quality workmanship, and possibly to teach a public lesson to others, dismantled the newly constructed masonry by kicking it down in the mason's presence. This "act of kicking" by the project manager infuriated the mason. The mason immediately jumped up and caught the manager by the scruff of his shirt and was ready to shower blows on him. In a country where it is considered a great disrespect even to point at things with ones foot, the project manager had committed an unpardonable mistake by kicking the mason's work. Had it not been for the timely intervention of people around, the project manager would have been hospitalized with injuries".

With this example, researchers mentioned that the action of kicking may be "colloquial" for the country of origin such as kicking the tires of a car to check if they are suitable or not. However, in India it is a taboo and insult even to show with the feet (Ramaprasad and Prakash, 2003). As understood from the examples, to be aware of the local culture, to combine it with the "global knowledge", and to manage the differences for avoiding conflicts is vitally important in international projects. Another research focused on Russia – which is one of the most important markets for Turkish companies- also mentioned the importance of combination of local and global management enriched by the national experience and cultural values in the transition economies such as Russia (Voropajev, 1998).

The mentioned issues show a great importance for the Turkish construction companies that acted in 83 different countries -as mentioned before in this research- and should be examined with a special care. Turkish construction companies took part in such a wide variety of geography and definitely faced the difficulties and situations mentioned here in the literature review. However, the increasing success and long term presence of the Turkish companies in these countries makes the academic and professional world to think about the ways that Turkish companies struggle with these difficulties.

The first issue that comes into mind is the cultural similarity between the Turkey and the countries that Turkish companies are active. North Africa, Middle East, Caucasia, Some parts of South Russia and Balkan region lived under the authority of Ottoman Empire for a long time and this situation led to the bilateral relations between the Turkish and native society. As mentioned before, since there is not a very large cultural distance between Turkish culture and the other mentioned cultures, huge conflicts that totally prevent the establishment or management of business should be avoided in an easier way. In Turkish Employers Union of Construction Industry (TEUCI) and Dünya Newspaper's (2010) publication, the Turkish ambassadors of several countries were interviewed. The Turkish ambassador at Albania stated that Turkey and Albania have very good economic relations due to the common culture coming from the deep history and living in the same geography. He also expressed that the Albanian nation's attitude as taking Turkey as a brother nation can be deeply felt. Similarly, Turkish ambassadors at Algeria, Libya, Macedonia, Sudan and Tunus also mentioned the good relations enforced by the common culture retrieved from the past and common history. Moreover, ambassador at Pakistan stated that it is even a privilege to be a Turkish in Pakistan due to the friendly relations coming from the past (INTES and Dünya Newspaper, 2010).

This condition is in compliance with the previous studies mentioned in this research and supports the idea that similar cultures increases communication and promotes good relations. However, it is impossible to claim that there is a perfect cultural fit between Turkey and the nations that Turkish construction companies are present. The problems aroused because of such social factors and these problems also affected the international construction activities of Turkish contractors and even sometimes shape them. Having such a considerable effect, social factors are crucial as well as economic and

political factors for the construction activities abroad. Hence they should be investigated in details considering their effects on the Turkish contracting services abroad.

CHAPTER 3

RESEARCH METHODOLOGY

Turkish construction sector –the roots of which lean back to Ottoman Empireshowed a considerable improvement during the early times of the Turkish Republic and gathered a very important experience and capital as mentioned before in the previous chapter of this research. During 1970s, the conjuncture of the world and Turkey encouraged the Turkish contractors to search for the new markets abroad and some pioneer companies started the international construction adventure in this period. From 1970s to the present time the volume of international works of Turkish contractors increased with a high acceleration and the activities started in a few countries spread to a very wide geography today.

Within the four decade from the beginning of the construction abroad up to now, Turkish companies faced a lot of problems as well as opportunities. Most of the time, these problems or opportunities were the results of some factors that may be grouped as political, economic and social factors. Turkish companies learned very valuable lessons from these problems and opportunities and gathered a solid experience from them.

After the success achieved up to now, the Turkish construction sector updated its targets and started to aim higher positions in the international construction market. The updated targets for the coming years considering the work amounts are quite ambitious that a special effort should be paid by all the related parties to achieve these goals. For the guidance to the Turkish construction sector to achieve its future targets, the best guide could be again the experiences of the sector itself. As mentioned, the history of international contracting services is full of problems and opportunities faced. The lessons learnt from the opportunities and problems could be used as guidelines for the future. However, the lessons learnt from past experiences should be gathered and compiled; then they should be evaluated for this purpose.

Before this research, Tavakoli and Tulumen (1990) looked into the Turkish construction industry topic and briefly examined the situation of the industry abroad. Giritli et al. (1990), Dikmen and Birgonul (2003) and Kazaz and Ulubeyli (2009) similarly examined the situation of the international contracting services of Turkey and defined the strategic perspectives, strengths and weak points of the Turkish companies. Korkmaz and Messner (2008) also defined the strengths and weak points of Turkish construction companies and compared them with US companies. However, these researches mostly concentrated on diagnose; since treatment is not possible without it. As an example of a similar research to this research thesis, Oz (2001) also investigated the strengths and weaknesses of the Turkish construction companies within Porter's (1990) framework; and defined some problems and solutions for the Turkish construction industry abroad. But, like most of the other researches, Oz also handled the topic from "competitiveness" point of view and "lessons learnt from professionals' own experiences" concept was not included.

Similarly, some publications and reports – most of which were on country basis – were published by several governmental and non-governmental organizations. However, they rarely represented the whole international construction market.

After observing the literature, it was revealed that the focus on "lessons learnt" concept is rare in the past researches. In this research it is aimed to

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investigate the development of the Turkish companies' construction services abroad; to reveal the opportunities and problems faced during that process; and to gather the lessons learnt from all these opportunities and problems. The experience gained during that process by the professionals is accepted as an important asset and it is also aimed to construct recommendations based on this experience for the achievement of the future goals. For this purpose, a survey – details of which will be explained in the following parts of this chapter – was prepared and conducted to gather the experiences and recommendations of the sector professionals.

3.1 Administration of the Survey

To collect data from the sector professionals, a survey was prepared and used. 76 professionals who have a wide background on international contracting were chosen by using personal contacts. While choosing the professionals, a special attention was paid to represent the international contracting as a whole. Professionals were chosen from different age groups, having experiences from different countries and different type of projects to well represent the markets of Turkish contractors. Due to the geographic distance between the professionals and the author, the survey was sent to 69 professionals by e-mail, and 6 professional were interviewed by face to face meetings. The face to face interviews conducted took from 1 to 2 hours depending on the depth of the topic discussed and the subjects that the professional desired to mention. For the professionals who participated by e-mail, a cover page explaining the purpose of the research and survey was presented. For the face to face interviews, a brief explanation on the purpose of the research and survey was given in addition to the cover page.

3.2 Content of the Survey

The survey attached to the cover letter has two pages in total. A copy of the survey can be at the end of the research in Appendix-A. The survey is composed of two parts details of which will be explained below in the following items.

3.2.1 General Information

In the General Information part of the survey it is aimed to gather information about the background of the participants. Their total year of experience both in construction sector and in international construction; and their current position is asked in the first three questions. Then they are asked to list the countries that they have worked; and they are requested to indicate the number of projects and the project types that they were involved in these countries. The information gathered here is used to provide basic statistical data such as average experience and also to provide implications about the suitability of the respondent set. The profile of the participants should be evaluated and they should well represent the construction sector. As an example, if all the participants have experience in one country or in one type of project, then the survey answers would be far away from representing the whole Turkish construction sector abroad. As a result, with the mentioned data, the background and suitability of the participants is evaluated since the research depends mainly on the respondents experiences.

3.2.2 Problems/Opportunities, Lessons Learnt and Recommendations

In this section of the survey, three questions are asked to the respondents. The questions are related to the problems and opportunities that they faced according to their experience, the lessons learnt from these problems and opportunities; and finally their recommendations for achieving future goals in the light of the lessons learnt. The multiple choice questions are avoided for providing a freedom for the participants to state whatever in their mind. It is thought that the multiple choice questions may limit and direct the respondents. The details of the questions are given below.

3.2.2.1 Problems and Opportunities Faced

In this part of the survey, the participants are asked to explain the problems and difficulties that faced in addition to the opportunities and conveniences in the past projects abroad that they were involved. While explaining the problems and opportunities, they are asked to consider the economic, politic and social conditions of Turkey and the related country in that period. They are also requested to mention if they think that the economic crisis, new political formations; social, cultural and historical ties and differences; and technological developments in that period affected the formation of these problems and opportunities in a positive or negative manner.

3.2.2.2 Lessons Learnt

In this section of the survey, participants are asked to state what kind of lessons Turkish construction industry should gather within the light of their experience and problems/opportunities they faced.

3.2.2.3 Recommendations for Achieving the Future Goals

In the final part of the survey, brief information about the current position of Turkish construction sector is mentioned. And the Turkish construction industry's ambitious future targets for the international contracting are reminded to the professionals. And within the light of their experiences and the lessons learnt, they are asked to tell their recommendations for the Turkish construction industry to keep and improve the current success; and to achieve the assertive future goals.

CHAPTER 4

RESEARCH FINDINGS

The results of the survey and the discussion on the results will be presented in this chapter. The survey was sent to 70 professionals by e-mail and 30 of them replied. In addition, 6 people answered the survey through face to face interview. In general, the total response to the survey is 36 out of 76 and the rate of response correspond to 47,4%.

When the general information about the respondents is considered, it would be seen that they represent the international contracting sector with a very good spread. It is seen that the professionals who replied the survey have background from different countries, different types of projects and different experiences. The details of this data will be presented below in the General Information part of this chapter.

Hence, a very good diversification and homogenous representation of the sector from a diversified background provided the reliability of the survey and research as well.

4.1 General Information

In this section, the general information about the respondents will be presented. In addition, statistical information in terms of averages and standard deviations will be revealed as well.

One of the indicators of professionals' competency is their years of experience in the construction sector. According to the results, the average

experience of the participants in construction sector is 13,5 years with a standard deviation of 9,2 years. Similarly the average of the international experience of the group is 9,4 years with a standard deviation of 8,0 years. When the respondents' current positions are considered, 7 of the respondents have high level managerial positions, 15 of them are middle level managers, 11 of them are senior engineers and 3 of them have academic-consultant positions.

Besides the high average experience, the spread of the respondents' current positions also created a valuable diversification. Since the respondent group represent various positions, it is possible to expect that a wide variety of ideas and opinions from every hierarchical level will be provided to the research.

Another data collected in this section of the survey is the locations of the projects that the respondents were involved. 33 participants stated the countries that the projects they were involved located in. The total number of these countries is 25. Two of the participants filled out the survey with their project team or with the colleagues in their company. Naturally they mentioned all the locations that the rest of the contributors have been to. They stated that these locations include CIS and Middle Asian countries, North and West African countries and Middle Eastern countries. One of the respondents -who has a high level managerial position in one of the reputable companies- mentioned that he was involved in business development and tender phases of a lot of projects in various geographies that is important for Turkish contractors. Since the number of projects he was involved is guite high, he preferred to explain the locations in such a way instead of counting the countries one by one. In total, when all the respondents and contributors are concerned, the respondent group has an experience in more than 30 countries.

When the project numbers are considered, 2 of the respondents did not mention any number since they dealt with a lot of projects due to their high level managerial or consultant position. With the other participants who mentioned the number of projects that they were involved, the total number of projects that formed the basis of this researched is more than 250. Similarly, the type of the projects showed a great variety. The respondents stated that their experience relies on various types of infrastructure, superstructure, building and housing, industrial facility, transportation infrastructure, energy facility and military facility projects.

Hence, from the general information about the respondents, it is possible to conclude that the participant group represents the construction sector very well. They have considerable experience in different project types in different locations that have importance for the Turkish construction companies. Also the diversification in their current positions may provide different point of views to the subject.

4.2 Opportunities and Conveniences Faced

The answers of the respondents were evaluated and the opportunities they mentioned were identified. The discussions on the same topic were grouped and a set of opportunities were formed. The frequencies of the items were determined and the items starting from the highest frequency to the lowest will be further discussed here in this section. In addition, the opportunities are tabulated in Table 4.1 according to their frequencies.

No	Opportunities-Conveniences	Frequency
1	Increasing oil and gas prices and the increasing infrastructure investment in oil and gas producing countries	11
2	Cultural similarity	10
3	Necessity for new investments in developing countries	7
4	Risk taking and risk management ability of Turkish companies	6
5	Qualified manpower	4
6	Relatively less affected regions from the economic crises	4
7	Fall of USSR and new independent states	4
8	Increasing support of the Turkish state and developing bilateral relations with other countries	4
9	Bilateral relations between the project parties	3
10	Reconstruction activities after wars and conflicts	3
11	Easy adaptation of the personnel to the environment	3
12	High quality cheap labor optimization	3
13	Being an investor from being a contractor	2
14	EU funds in Balkan countries encouraging the investments	2
15	Interaction with the Western companies	2
16	Insufficient local contractors in the local markets	2

Table 4.1: The frequencies of the opportunities and conveniences

Increasing oil and gas prices and the increasing infrastructure investments in oil and gas producing countries: Eleven respondents emphasized increasing oil and gas revenues allocated to investment created very big opportunities for Turkish construction sector. Since finance is one of the essential components of a project, it is a common opinion in the respondent group that the countries that have rich natural resources presented numerous opportunities for the construction companies. Especially during the price booms, their ability to allocate more funds to the investments increased and more projects became available. One respondent gives the situation in Russian Federation as an example and stated that the payment delays from the state employers or private large scale employers were very rare due to the high revenues from oil and gas especially during price booms. Another professional who has solid experience in Middle East and Middle Asia told that the oil and gas revenues had significant effect on the projects planned and initiated in these regions. One of the respondents having experience in Qatar supported this argument by calling attention to the world's one of the largest natural gas reserves located in Qatar. The construction professional further remarked that mentioned natural gas revenues had a considerable share in the finance of the projects awarded to Turkish companies.

Cultural similarity: Ten respondents stated that the cultural similarity between the market countries and Turkey created important opportunities and conveniences both before and during the projects. One of the respondents mentioned that the cultural similarity helped Turkish companies to work even in unsecure environments such as Afghanistan and Iraq. He further stated that such a comfort provided Turkish companies a higher competitiveness than the Western companies in these countries. Another construction professional pointed out that the similar historical, cultural and religious backgrounds provided both the preference of Turkish companies during selection process and an easier adaptation of the personnel to that

country during the execution of the project. Similarly, other respondents stated that the similar cultural background, historical ties, or language similarity eased both the adaptation of the project team to the social environment and the acceptance and admittance of the personnel by the local people.

Necessity for new investments in developing countries: When the markets of the Turkish companies are examined, it will be seen that a great majority of the countries are counted among the developing countries. Some of these countries gained their independence recently, some of them are rich considering the natural resources but the main common point for most of them is having an old or insufficient infrastructure. Seven of the survey participants pointed out this issue and mentioned that most of those countries started a thrust for constructing or renewing their infrastructure. One of the survey attendees who has experience in Russia told that Russia has been in the necessity of wide infrastructure investments. He further stated that the country has a very large territory and because of that the current old infrastructure is not enough since the establishment of the country after the fall of USSR. One other participator gave the example of Libya and claimed that after the sanctions a very buoyant construction market occurred because of the same reason. According to all the respondents who support this idea, the need for the infrastructure investments in Middle East and Middle Asia in addition to other countries such as Russia and Libya created very important opportunities for Turkish companies in different periods in the past.

Risk taking and risk management ability of Turkish companies: The participants remarked that the international experience provided the Turkish contractors to improve risk taking and risk management abilities. Since Turkish companies are active in the regions that have high political, economical and social risks; risk taking ability and risk management become a vital concept for construction sector. Six professionals emphasized the importance of risk taking and risk management abilities of Turkish

companies. One of the participants claimed that the Turkish companies tend to take risks more than the companies from developed countries and it offers Turkish companies significant opportunities. Other respondents mention that the ability of successful risk management learned by Turkish companies during international experience put the companies to an advantageous position among the others and provided valuable opportunities up to now.

Qualified manpower: Four respondents considered having a qualified manpower - which can be considered as a strength of Turkish companies actually - as an important opportunity for international contracting. According to the supporters of this idea, gualified personnel gathered from domestic and international activities increased the competiveness of Turkish companies and led to the new opportunities for them. A sector professional having experience in Russia mentioned that the quality of concrete and scaffolding workmanship of Turkish companies resulted them to be very popular in Russian construction environment. A sector professional who has an experience in CIS region and North Africa uttered that the ability of Turkish companies to offer an optimization between "high quality" and "cheap labor" provided the opportunities that they needed. Similarly, a professional who is acting as a tender department manager in Middle East region remarked that Turkish companies recruited highly gualified stuff especially at the site and they were preferred since they could offer this qualification with relatively cheaper price compared to Western companies. As a result of this idea, he claimed having and being able to offer qualified manpower as an important opportunity for Turkish companies.

Relatively less affected regions from the economic crises: Obviously economic crises are one of the most important factors on international construction. However, four of the respondents declared that the economic conditions of target countries during economic crises offered opportunities for Turkish companies. They argued that the regions that Turkish companies are present were less affected from the previous crises and located in the center

of the activities of most companies in these periods. The examples of the professionals are usually concentrated in Middle East and North Africa due to relatively less integrated economies of countries in these regions. Three of these professionals mentioned the name of Libya as relatively less affected country. Two of the participants also said that the Middle East had kept its importance though being slightly affected by crises. One of the participants pronounced that the companies had that opportunity as a result of geographical diversification which may help to reduce the economical risks.

Fall of USSR and new independent states: The new formation in the former USSR countries was taken as an important factor and an important opportunity by four of the participators. The professionals mentioned the advantages of the formation of new countries that have potential for development. One of the professionals told that the Turkish companies benefitted from the formation of Middle Eastern and Caucasian republics by using the historical and cultural ties. Another participant stated that the change from centralized economy to liberal economy especially in Russia and Middle East encouraged the new investments and Turkish companies to participate in these countries. In addition, according to one respondent, the Turkish identity became more likely to be used as a common cultural concept especially in Middle Asia and brought an advantage to the Turkish companies. All four respondents considered this item as a very important opportunity when the work volume of Turkish companies in CIS countries is considered.

Increasing support of the Turkish state and developing bilateral relations with other countries: Before it was a common thought that the state was not paying full effort to support the Turkish construction companies abroad. It was a common idea that Chinese, Japanese or Western states were supporting and backing their construction companies abroad but it was taken as a weak point of Turkish construction sector. However, in this research it was surprisingly seen that four of the respondents mentioned this

situation started to change. One of these respondents emphasized the importance of bi-lateral relations between the market countries and Turkey; and claimed that the relations affect all kind of activities from daily life to construction permits or procedures applied. Another attendee declared that the diplomatic representatives of Turkey in other countries – which was impossible to go inside and ask for help in the past – started to increase their support to contractors recently. The same issue is confirmed by another participant and especially the developing relations with the Middle Eastern and North African countries were emphasized. In addition he pointed out the efforts of the state for solving some problems by bi-lateral discussions and agreements. Three professionals agreed on the fact that the progress in the effort of the state is not enough. But, anyway, it is a step forward to solve the problems and it already created serious opportunities for Turkish contractors in the mentioned regions.

Bilateral relations between the project parties: Three of the respondents told that the ability of establishing bilateral relations with the other parties offered important opportunities to Turkish companies. They state that in most of the countries that are important markets for Turkish companies, the relations with the local authorities or the employers are still vital for establishing business. In these countries, instead of a systematic tender and contractor selection method, relations between the persons and the organizations shape the selection process. The ability of Turkish companies and Turkish managers to establish close relations with all the related parties is accepted as a very strong skill among all the respondents who uttered this issue. Furthermore, they claimed that the companies faced a lot of opportunities as a result of this strength.

Reconstruction activities after wars and conflicts: Three of the respondents considered the reconstruction thrust following the wars or conflicts in Middle East as very important opportunity for Turkish contractors. Due to geographic proximity and cultural relations, Turkish contractors were

among the first companies who took part in the re-construction and development of the turmoil regions. All three respondents gave the Afghanistan and Iraq examples. They mentioned that the companies who took part in the re-development and the maintenance of the destroyed infrastructures in these countries faced the opportunities in these regions.

Easy adaptation of the personnel to the environment. Three respondents stated that the Turkish personnel gained a very important adaptive ability during the international contracting activities. Since Turkish companies took place in very different countries with very different geographic, cultural, political and economic conditions, the work force who is directly subject to these conditions gained a substantial experience, a flexible and adaptive characteristic considering all these aspects. One participant remarked that the Turkish workers worked in the difficult environments between +50 degrees and -50 degrees without much complains. Also the ability of Turkish personnel to learn rapidly the technical and daily language of the region they worked makes it an important asset for the Turkish companies. All three respondents agreed on the fact that the flexible and adaptive characteristics of the personnel offered valuable opportunities to the Turkish companies.

High quality-cheap labor optimization: Three of the respondents uttered that the Turkish companies learned how to combine high quality and relatively cheap labor compared to Western companies. They mention that the Turkish contractors used the advantage of its cheap labor compared to Western companies; on the other hand they are capable of providing higher quality than the companies that are more advantageous about cheap labor like Chinese companies or the others. Considering these comments, it is possible to conclude that the Turkish companies offered an optimization between the high quality of Western companies and price advantage of some companies - like Chinese companies- derived from cheap labor. Professionals declared that the mentioned ability of Turkish contractors offered valuable opportunities both for them and for employers.

Being an investor from being a contractor: Two of the respondents remarked another important opportunity for Turkish companies in the foreign markets. They mentioned the importance of acting as an investor rather than a contractor only and added that several Turkish companies had various opportunities with this method in Russia and Romania. One important precondition for capturing this opportunity stated by the respondents is the ability to provide finance. According to the professionals, Turkish companies that could provide finance and take necessary risks, enjoyed more opportunities compared to Western companies that have conservative approach against these markets.

EU funds in Balkan countries encouraging the investments: After the political change in the Balkan countries, some of them became EU members and some of them were nominated as candidate countries for membership. Two of the respondents referred this issue and stated that there has been a steady fund inflow from EU to these countries. Due to the EU criteria, the candidate countries should reach a certain level considering different areas, and they should maintain these level during the membership as well. The professionals indicated this necessity when the infrastructures of these countries – especially Romania, Bulgaria and Former Yugoslav Republic of Macedonia – are considered and they stated that the EU fund to finance the development programs created several opportunities for Turkish companies acting in these countries.

Interaction with the Western companies: Since participating in international projects, it is inevitable to interact with the companies from other countries. Especially in Middle East and North Africa, Western companies are also active as contractors or consultants. In this case, Turkish companies cooperated with such companies in the mentioned geographies. However, surprisingly only two of the respondents mentioned this situation as an opportunity for Turkish companies. According to the attendee, this interaction provided a very important experience for the Turkish companies; they

noticeably improved their managerial and technological skills. And the improved skills dramatically contributed to their competitiveness.

Insufficient local contractors in the local markets: Since the countries that Turkish companies take part are developing countries, their construction market was not very well established as well. During 1970s, 80s and 90s, the local contractors in these countries were behind the Turkish and Western companies considering the technology, structure and management skills. Hence, as two of the professionals stated, this situation appeared as an advantage for Turkish companies and they provided the services that these countries needed.

4.3 **Problems and Difficulties Faced**

When the answers of the professionals were examined it is observed that they mentioned more problems than advantages. Thus, it is an indicator that the problems of the sector are quite evident and the sector professionals are more concentrated on the problems. Similar to the opportunities, the problems and difficulties mentioned by the participants were evaluated and the similar topics were grouped under the same headings. The problems mentioned were listed in Table 4.2 and they are discussed in details in the following paragraphs.

Table 4.2: The frequencies of the problems and difficulties

No	Problems - Difficulties Faced	Frequency
1	Increasing cost of employing Turkish labor and decreasing quotas allocated by the countries - employment of local labor	18
2	Unfamiliarity with the local legislations	13
3	Shortage of qualified manpower leading to the employment of local manpower	12
4	Cultural differences	12
5	Unaccepted or expensive guarantee bonds	11
6	Lack of adaptation to the local standards	10
7	Instable political conditions, discretionary attitudes, one-man regimes	8
8	Economical crises and changes in the currency rates	8
9	Bad reputation as a result of the past	6
10	Difficulties in providing finance	6
11	Excess amount of personnel circulation	5
12	Tight accounting and banking systems	5
13	Lack of pre-investigation and feasibility studies	4
14	Competition among Turkish contractors in international markets	4
15	Holidays affecting the project schedule	4
16	Insufficient support from Turkish state	4
17	Equipment and material procurement	4
18	Structure and characteristics of the Turkish companies	4

No	Problems - Difficulties Faced	Frequency
19	The problems from the past affect the attitude of the local community	3
20	Adverse climate and geographic conditions	3
21	Turkish driving licenses are not valid in some countries	2
22	Contract conditions and lack of contract management	2
23	Turkish construction materials	2

Table 4.2: The frequencies of the problems and difficulties (continued)

Increasing cost of employing Turkish labor and decreasing quotas allocated by the countries – employment of local labor: When the answers of the professionals were evaluated, it is observed that the most frequent problem faced by professionals is the increasing cost of employing Turkish labor and decreased worker quotas allocated by the host countries. Eighteen respondents remarked these two issues as the factors that make the employment of the Turkish labor force more difficult. According to the participants, the cost effectiveness of the Turkish labor which was considered as one of the strengths of Turkish companies in the past started to disappear. They mentioned that the cost of the employment of Turkish labor force started to increase in the recent ten years and it started to affect the cost competitiveness of the Turkish companies. Most of the attendees who mentioned this item as a problem stated that Turkey will soon lose its cost competitiveness against other rival companies. Two of the respondents added that the social security insurance premiums charged by the Turkish government also contributes to the increase of the costs and has a reducing effect on the employment.

Similarly, a great majority of the group complained from the low worker quotas allocated by the host countries. It is observed that the major countries that have an important share in international contracting activities of Turkish companies made the allocation of the quotas more difficult and they significantly decreased the amounts. It is also stated that the applications for the quotas should be completed a long time before the project starts and a long bureaucratic procedure should be followed. One professional claimed that such quotas results in unfair competition in countries like Romania since the EU country members are not affected from such quotas.

According to the respondents, these issues resulted in the employment of local labor or work force from third party countries in the recent projects and started to have significant effects on the project success. One participant claimed that the local labor provided from some Asian or African countries have significantly lower efficiencies than Turkish labor. However, most of the respondents agreed that they are widely used since they are cheaper and more available. As a result, this situation appeared as a problem in front of the Turkish companies when the efficiency and the adaptation of this work force are considered.

Unfamiliarity with the local legislations: Another important problem that the Turkish companies faced is voted as the unfamiliarity with the local legislations by thirteen respondents. The professionals indicated a lot of problems related to this issue that led to loss of money and time. Four of the participants drew attention to the effect of custom formalities and they mentioned that the companies suffered very frequently due to the unfamiliarity with the custom regulations especially in the countries that have heavy bureaucracy and tight custom regulations. They further told that in some countries, the custom regulations may change very frequently so it

requires a specialization on this issue to avoid delays in the delivery of materials. Even one respondent claimed that the legislation in some countries are not very suitable for the execution of international jobs and requires special attention. Another participant stated that the local legislations should not be learned during the execution of the projects. As an example, he mentioned that opening a bank account or establishing a company may take up to one year some countries and this situation may definitely lead a delay in the project schedule. Almost all the respondents who indicated this problem agreed on the terrible effects of this problem on the project success and they uttered that the unfamiliarity with the local legislation may not only result in a decrease in the profit but also lead very serious losses.

Shortage of qualified manpower leads to the employment of local manpower: Though the qualified manpower is considered as a strength of Turkish construction companies, twelve of the respondents mentioned that a shortage in the qualified Turkish manpower started to occur and the demand of the companies could not be met. Most of the respondents who support this idea remarked that the number of companies and the number of international projects grew with a rapid acceleration but the qualified manpower did not increase with the same rate. The professionals indicated the most important problem as the shortage of personnel who can speak the language of the host country. Though Turkish employees are fast learners, it is not considered enough by the professionals and it is stated as a handicap for the adaptation and effective communication with the local people. Similarly, the lack of personnel who has a good comment on the local quality, health and safety and environmental standards is considered as another item related to unqualified manpower.

Cultural differences: Depending on the region, culture can be a binding or separating concept. Though it created a lot of opportunities for Turkish contractors, twelve respondents voted for it as a problem faced by Turkish companies. It is obvious that the most of the countries that Turkish

companies are present have close cultural values and ties with Turkey. However, there are absolutely differences between the cultures and it is important to be aware of these differences. Five of the supporters indicated language difference as an important contributor to this problem and they stated that the problems due to communication differences are inevitable even with the presence of translators. Since the employers, consultants, subcontractors or workers can be from different nations, problems related to language differences take an important place. Traditions and customs are considered as other important factors on culture related problems which may obstruct mutual cooperation by some participants. Some professionals, on the other hand, told that the different point views originated from different cultural backgrounds also avert the establishment of good relationships between the parties of the project. It is also stated that the understanding each other's cultural point of view is important for the adaptation of the workers to the local community and the acceptance of the foreigner company by the local community. Otherwise it is inevitable to have problems and strife between the communities and even xenophobia and racism may occur as three of the respondents stated.

Unaccepted or expensive guarantee bonds: Guarantee bond problem was indicated by the eleven survey participants as the second frequent problem faced in international contracting services. According to the respondents, the foreign employers do not accept the guarantee bond provided from Turkish banks. One professional explained this situation by the bad reputation of the Turkish banks that created difficulties on the payment of the bonds for the compensation of the employers' damages in the past. As a result of this attitude, the guarantee bond is not accepted and Turkish companies should receive bonds from the foreign correspondent banks against the counterguarantee of the Turkish bank. The attendees pointed out the double commission fee occurred and stated that this double fee decreases the competitiveness of the Turkish companies by increasing the costs.

The professionals also declared that it is very difficult to receive guarantee bond from Turkish banks even if it is accepted by the employers. The reluctance of the banks to issue guarantee bonds due to the banking legislation and the high commission fees are indicated as the difficulties of receiving bonds from Turkish banks.

Professionals agree on the reality that in each case Turkish companies' competitiveness is affected in a negative way sometimes it prevents the proposal of the reasonable prices for the tenders.

Lack of adaptation to the local standards: The Turkish contractors are active in very different countries from very different regions. Most of these countries use different quality, health and safety, environmental protection etc. standards. Ten participants stated that the Turkish companies have problems with working under different standards due to lack of adaptation. A great majority of the group agreed on that the concepts like quality, health and safety, and environment are not paid enough attention in Turkey and the related standards are not very strict. For this reason, Turkish contractors face problems when they work in countries that implement very strict quality, health and safety and environmental standards. The professionals told that the Turkish contractors had these difficulties in Middle East, North Africa and in CIS countries in the past. The professional further pointed out that the incompliant works with the standards led to conflicts with the employer, employer dissatisfaction and bad reputation for the Turkish companies.

Instable political conditions, discretionary attitudes, one-man regimes: Eight respondents indicated the importance of the political conditions of the market and stated that it has a vast effect on the project. Since Turkish contractors are mostly active in the politically risky countries, it had serious effects on their activities. One of the things that the professionals complained on this issue is the change of political conditions after signing the contract. They remarked that the conditions of the project may also be affected following the change in the political situation and unforeseen delays and costs may occur due to the new situation. Similarly, in some countries, oneman regimes hinder the running of the statutory structure in the country. The professionals faced such situations frequently and told that the desires of the leader of the country can create serious problems for the contractors. As an example, they explained that the leader of the country may ask for something which is not in compliance with the contract, postpone the payments without any significant reason, shift the budget to any other area and so on.

Economical crises and changes in the currency rates: Another important problem faced by Turkish contractors is the economical crises and the rapid changes in the currency rates. Eight of the participants claimed this issue and mentioned that crises and changes in the currency rates have severe effects on the current and possible projects. The employers that are governmental or private entities are affected by the crisis and the investments significantly decreased during these periods. Similarly, the financial abilities of the contractors are also badly affected by the crisis according to the professionals.

On the other hand, the respondents told that the rapid changes in the currency rates due to devaluations or crises may adversely affect the costs if it is not foreseen at the beginning of the projects. They especially mentioned the case that the signed contract is in the local currency and stated that such situations created serious problems for Turkish contractors in the past.

Bad reputation as a result of the past: Six of the respondents declared bad reputation as an important problem for Turkish contractors. They drew attention to the importance of bilateral relations in the construction sector and mentioned the importance of trust between the parties. Unfortunately some incompetent contractors in the past violated the trust of the employers against Turkish companies by unfulfilled project scopes and created bad references for other competent Turkish companies. One respondent mention

that the effects of the Turkish contractors who could not finish the job or who could not provide the desired quality is still remembered by the authorities of some countries. Hence, it significantly lowers the chance for Turkish companies to compete in these markets. Similarly another professional discussed the low credibility of the Turkish contractors abroad. According to him, this issue shows itself when the companies apply for loans from the banks, propose deferred payments to the subcontractors or when they are subjected to the control of local authorities. The respondent further added that the bad reputation of the Turkish companies may lead to the negative attitude of the related parties in such issues.

Another participant referred one reason which damages the reputation of the Turkish companies. He remarked that the Turkish companies tend to divide and generate new companies from their structure. By the help of the entrepreneurship, new companies are formed and they are also interested in the projects in the same market. However, since most of them do not have the necessary technical and managerial background, their attempt tends to fail and result in unsatisfied employers and damaged reputation of Turkish companies.

Difficulties in providing finance: Since finance is one of the most important components of a project, the difficulties in providing finance attracted a considerable attention from the survey participants. Six of the respondents stated that the Turkish contractors had serious difficulties in providing financial packages for the projects. Especially in the developing countries that cannot finance the project by themselves, it is common application to require the tender participants to provide their own financial packages. The professionals stated that it is very difficult for Turkish companies to arrange financial packages with reasonable conditions to provide their competitiveness in the tenders. However, countries with strong financial ability – like China, Korea - provide their companies very competitive financial packages and contribute to the competitiveness of their companies. Anyway,

the professionals agreed on the fact that the situation is mostly related to the economic conditions of Turkey and they admit that it is not practical to expect Turkish state to provide the same opportunities with China to its contractors.

Similarly, private banks also hesitate to provide loans for such construction projects since they are mostly in risky regions and –as one professional stated- they are not eager to share the risks with the contractors due to the structure of banking system in Turkey. For this reason, even if they provide financial packages, they are far away from being competitive with their high rates and commissions.

The reputation and credibility of the Turkish companies are other dimensions of this problem as well. According to the attendees, due to the low credibility and the bad reputation coming from the past makes it very difficult for the Turkish companies to provide competitive finance from the international finance institutions.

Excess amount of personnel circulation: Five of the respondents indicated too high personnel circulation rate as an important barrier in front of the organizational learning and mentioned it as a very important problem for Turkish construction companies.

The professionals drew attention to two important reasons for this problem. The approach of the companies to the employees is considered as the first reason and it is mentioned that the companies the manpower in project basis instead of considering for long term. And new personnel for every project increases the adaptation period and decreases the efficiency. In addition, the experiences gained cannot be transferred to the other projects and the mistakes cannot be avoided and would be repeated in the other projects. A respondent explained this situation as "each time they had to discover America again".

As a second reason, the attitude of the company to the employees is counted. One professional said that some companies do not consider their manpower as the main resource they have and they try to minimize the costs related to the personnel. As an example of this situation, not providing the social and financial conditions promised in agreement stage is mainly mentioned by the professionals.

Tight accounting and banking systems: Five of the respondents complained about the tight accounting and banking systems that create serious difficulties for the currency movements and money transfers. The complaints are especially about the former communist countries. One respondent stated that the money transfers can take quite long time which may result in cost and time overruns. Another respondent said that the problems in banking system is mostly because the banking system is not completely stabilized in former communist countries after switching to the liberal economy. The participants also indicated the tight accounting systems that bother Turkish companies by including more paper works and money charges due to incorrect documentation etc. All these factors are considered by the professionals as important source of problems for Turkish companies in the past.

Lack of pre-investigation and feasibility studies: Lack of necessary preparations before entering into a market and undertaking a project is considered as an important problem for Turkish companies by four survey respondents. The respondents told that the Turkish companies, having the confidence of the success in other countries, were choosing to undertake a project in a new country first and then make necessary investments such as establishing an office, studying local legislation, identifying competent local subcontractors, planning of logistics etc. However, since different countries have different conditions, the lack of vital pre-studies affected the projects and caused considerable losses for Turkish companies in the past.

Competition among Turkish contractors in international markets: Four respondents stated that the excessive competition among the Turkish
contractors in international markets is a significant deficiency for Turkish construction.

One of the professionals stated that the domestic market in Turkey is not enough to feed that much construction companies; and for this reason, a very large number of companies are diverted to foreign markets. And this situation yields a very tight competition between the Turkish companies in international markets from time to time. Participants stated that the competition is very beneficial up to a certain extent; however, some incompetent Turkish companies choose the way to lower the proposal to illogical levels for surviving this competition. As a result, such projects cannot be finished within the desired quality and time limits, or sometimes cannot be finished at all. In addition, it considerably reduces the margins of profit for Turkish companies in most of the projects

Holidays affecting the project schedule: Excess amount of holidays in some countries are considered as important problems affecting the project schedule by four professionals. They drew attention to this problem and added that it may result in major delays if it is not considered at the beginning of the project during planning stage.

Another concern mentioned by one professional for the Muslim countries is the holy month Ramadan. The respondent stated that during this holy month, the efficiency of the workers decreases, the working hours of the official institutions may change, and inconsiderable time shifts may occur between the host country and Turkey.

Insufficient support from Turkish state: Despite the recent attempts and increasing support of the Turkish state, four respondents stated the lack of state support as a problem for the international contracting.

One respondent stated that the Turkish state has a reason for abstaining from supporting the Turkish companies directly and pointed out this reason as the past actions of some irresponsible companies in the past that damaged the reputation of all Turkish companies and the attitude of the employers against Turkish companies. It is also stated that the government should have an organizing and regulating role in the international contracting and such problems like incompetent companies acting abroad and damaging the reputation of other Turkish companies could be avoided if the state functioned an organizing and regulating role.

Another respondent remarked the importance of bilateral relations between the countries for increasing the amount of works in these countries. The respondent added that some Western states perform serious lobbying activities for their contractors on the basis of bilateral relations and this situation creates a disadvantage for the Turkish companies.

In general, it is mentioned by several respondents that the lack of state support resulted in a great disadvantage in the past. However, most probably the recent efforts of the state to support the sector revived the hopes of the professionals and only three of them stated this problem as a significant one.

Equipment and material procurement: Four respondents pronounced equipment and material procurement is an important problem due to the nature of some countries. One professional indicated the effect of instability of the local market especially in the countries that have their sovereignty recently or established liberal economy recently. The mentioned market conditions definitely created problems regarding the material or equipment procurement. Another respondent told that the different geographical conditions also hinder the procurement of materials and equipments. Despite the developing technology, still there are some limitations in the transfer of materials and equipments and some extreme conditions may create obstacles and stand as a problem against the procurement. The same professional also added that the differences in the machinery with the host country may also hinder the maintenance of these equipments. He explained the situation as the transferred machinery to the project are from another

country may be different than the machinery in the host country and the maintenance of the transferred machinery may create problems for the company, even may result in delays in the project schedule.

Again, another complaint about the former communist countries came from one participant: he stated that besides the difficulties in finding necessary equipment and material in the rural areas, most of the time it is impossible to use cash when the large amounts are purchased. He considered this situation as an important problem since the delays in bank transfers directly affect the project schedule and result in unexpected costs.

Structure and characteristics of the Turkish companies: Four sector professionals pointed out the problems originated from the structure or characteristics of the companies. The first argument is the low design capability of the Turkish companies for the international works. One professional pointed out this inability as an important deficiency and told that it frequently causes problems with the employers or consultants.

One other structural deficiency of the Turkish companies is the lack of transparency as one other professional mentioned. This professional claimed that, except only a few companies, most of the contractors' accredited balance sheets or financial situations are not disclosed to public. Hence, it is not possible to have a clear idea about the real size and situation of the companies. He claimed that it may be a key issue which leads to the problems evaluated in the previous paragraphs. For example, the employers, financial institutions, or other companies for possible partnerships cannot evaluate the company due to the lack of such information. And this situation decreases the chance of the companies during selection processes.

Another idea supported by one respondent is the project structure of the companies. The professional mentioned that the most of the companies' yearly turnover abroad is highly dependent on a few major projects. Hence, this situation is considered as a problem since it increases the risks.

The problems from the past affect the attitude of the local community: Since Turkish companies are active mostly in the nearby countries, Turkey had historical relations with most of these countries. Though it contributes to the present relations most of the time, three professionals indicated that it is not the case all the time. They especially mentioned some Balkan and Middle Eastern countries and stated that the local population and even the authorities have negative prejudgment against Turkish community and Turkish companies as well.

Adverse climate and geographic conditions: Despite it is mentioned before in the previous paragraphs due to its indirect effects, adverse climate and weather conditions are considered as a source of problem by three professionals. The professionals mostly focused on the effect of adverse climate on labor efficiency. They told that the adverse climate significantly lowers the efficiency and increases the costs. Also it has a considerable impact on the project schedule since it directly affects the amount of working time. Similarly, as discussed before, the adverse geographic and weather conditions affect the procurement of the equipment and material; and their delivery to the site.

Turkish driving licenses are not valid in some countries: Two professionals mentioned that issue as a serious problem that affects especially the logistics activities in a project. They further added that the EU driving licenses are accepted by the mentioned countries; however, Turkish licenses – despite being a EU candidate – are not accepted. In addition, the procedure is very long and there is a heavy bureaucracy for foreigners in some of these countries if the company decides to obtain local driving licenses for its personnel. Hence, the mentioned problem creates unexpected problems in some countries and serious delays and cost overruns occur especially in logistics activities of the projects.

Contract conditions and lack of contract management: As its importance is understood in the entire world, the contract management is mentioned as a deficiency for the Turkish companies by two professionals. Both respondents agreed on that the Turkish companies had a lot of problems due to lack of contract management and the unexpected costs caused serious losses.

Turkish construction materials: The construction materials produced by Turkey are remarked as an important problem by two of the professionals. One professional who has a middle level managerial position in a construction material producer and supplier mentioned that the amount of Turkish materials used in international projects is lower that it should be. He indicated the main reason for this issue as the insufficient activities of Turkish designers in international area and added that the foreign designers are more likely to promote the products of their own country.

On the other hand, the difficulty in competing with low price products from countries like China is considered as another major problem for promoting construction materials.

4.4 Lessons Learnt Based on the Problems and Opportunities

Following determination of the opportunities and problems, it is possible to investigate the lessons learnt depending on the respondents' experiences. Similar to the opportunities and problems, the lessons learnt are also presented in a tabular form according to their frequencies. In addition, they are discussed in details in the paragraphs below.

No	Lessons Learnt	Frequency
1	To be able to work with local workers or workers from third countries	24
2	Importance of the qualified manpower	22
3	Effect of the social factors in the host country	20
4	Importance of quality	20
5	Importance of preliminary studies about a market	20
6	Importance of trust and reputation	18
7	Knowledge of local legislations and standards	18
8	Benefitting from local sources	17
9	Keeping the countries that have high-potential under focus	17
10	Support of the Turkish state	16
11	Importance of bilateral relations	14
12	Awareness against economic crises	12
13	Effective company structure and management techniques	12

To be able to work with local workers or workers from third countries: Basically there are several reasons that lead to Turkish companies to employ local workers or cheaper worker from third countries. The professionals stated the first reason as the shortage of qualified Turkish manpower due to the increasing number of projects abroad. According to the respondents, the Turkish companies achieved considerable success with its qualified manpower; however increasing number of the contractors and the projects awarded exceeded the capacity of the qualified Turkish manpower. A lot of professionals mentioned the lack of personnel who can speak the local language, who are experienced in the local standards or who have a good command on the local legislations. This fact led the Turkish companies to employ more local manpower in the countries where it is available.

As a second reason, the cost of mobilizing Turkish manpower started to get more expensive day by day. Some professional explained the situation with the increasing wealth in Turkey and some others explained it by the heavy tax burden loaded by the Turkish state. In either case, the reality shows that the cost of Turkish manpower is much higher than employing workers from countries that can supply cheaper labor. Especially workers from South Asian or African countries are mostly started to be used as an alternative to Turkish workers. Hence, this situation confirms the professionals who claim that the Turkish companies will lose their competitiveness based on cheap Turkish labor since the price advantage of the Turkish labor started to disappear already.

Another reason that forces Turkish companies to give up mobilizing 100% Turkish workers is the low quotas allocated for the Turkish workers by the host countries. Low quota complains are especially focused in CIS, Middle Eastern and Balkan countries and most of the professionals said that it is getting more difficult day by day to work with Turkish workers in these regions. The effects of the crises, on the other hand, encouraged theses

countries to decrease the quotas to support the employment in their own market.

The reality of giving up Turkish workers caused some complaints stated by the professionals. Some of the respondents said that the local workers or the workers from third countries mostly have lower efficiency than the Turkish workers. However, since they have very low cost compared to Turkish workforce, it is also possible to decrease the costs with a significant rate. Some professionals who have experience in CIS and Middle East region stated that they included local workforce with more than 90% in their total workforce and enjoyed the low labor costs in their projects. They further added that the efficiency problem is not very dominant and it can be overcome if the manpower is managed and commanded in an effective way.

Hence, the increasing cost and decreasing supply of qualified Turkish manpower combined with the decreasing worker quotas allocated by related countries is faced as a reality by the Turkish companies. This reality led the companies to give up full Turkish worker employment and to employ cheaper labor from other countries or from the local market. Starting to lose the competitiveness derived from cheap Turkish labor, Turkish companies started to prefer employing cheaper labor from other countries to continue being competitive. Despite some disadvantages such as lower efficiency, most of the professionals stated that the Turkish companies should obtain the lessons from the past and they should get used to work with the local or cheaper workforce from third countries since it seriously lowers the labor costs.

Importance of the qualified manpower: Qualified manpower is taken as one of the important strengths of Turkish companies by most of the respondents. However, it is also stated that the qualified manpower potential of Turkey is not enough to supply increasing number of projects abroad.

Hence, a lot of problems due to lack of qualified personnel were also faced in the projects abroad.

A great majority of the respondents who support this idea stated that the manpower who can speak the language of the client, consultant and local people is a valuable asset for the company. It is obviously a true approach since language is an important media of communication.

Similarly, the experience in the local legislations, standards and country conditions are considered as vital for the manpower of a company. One of the project managers among the respondents stated that a staff experienced in the region as much as possible should be organized for the success of a project. He further stated that the personnel who have experience on the local standards such as quality and safety should be provided.

Some of the respondents also said that it is possible – and also beneficial – to employ local experts who are experienced in the issues such as local legislations, standards and country conditions. It is agreed that the local personnel would be more beneficial regarding the customs, accounting and banking regulations; quality and health & safety standards etc.

As a result, Turkish companies appraised their qualified manpower in the past and used it with a considerable efficiency. By the increasing amount of works, the shortage started to appear and companies started to face problems related to the manpower. Both the advantages used and the problems faced taught the importance of qualified manpower as an important lesson to the Turkish contractors.

Effect of the social factors in the host country: In the previous sections of the research, it was stated that social factors such as culture, religion or language may be either an advantage or a disadvantage for the Turkish contractors. Several professionals mentioned the opportunities that Turkish companies had due to the cultural similarities especially with the Middle Asian, Middle Eastern and North African countries. It is observed that the

cultural similarities eased the adaptation of the personnel to the local environment and the acceptance of the foreigners by the local community. One project manager who has a solid background in international construction stated that the Turkish companies enjoy the cultural similarity in some Caucasian and Middle Asian countries that have strong cultural and historical ties with Turkey. Some other participants told that these advantages show themselves even in the unsecure countries devastated with wars such as Iraq and Afghanistan; Turkish companies and Turkish people met less problems than Western companies in these countries due to cultural similarity.

However, a great amount of respondents pointed out the problems faced due to social factors. According to a group of professionals, communication problems tend to occur very frequently due to lack of understanding other party's point of view, way of thinking, customs and traditions etc. Hence, this situation stands as an obstacle in front of the amicable relations with the client, consultants, local authorities and local community.

Although there are similarities and common points, sometimes differences become more dominant and it shows itself as a problem even in the countries we have cultural similarities. Some professionals experienced this situation in the past years and faced problems due to the lack of adaptation of the Turkish labor to the local community. They said that the lack of adaptation led to conflicts between two communities and even resulted in xenophobia in some regions. Similarly, political and historical conflicts coming from the past between the societies deteriorate the cooperation between the parties.

Hence, social structure of the host country is observed as very important factor for international construction by the survey respondents. It is mentioned that the companies should be aware of the conditions of the target country and convey this awareness to their personnel since personnel is the contact point between the parties. For this reason, a special attention was paid by the respondents to the selection of the personnel issue. It is stated that a staff that has experience in the region should be selected.

As a result of the advantages and problems faced in the past by the survey respondents, the companies should consider the traditions and customs of the local community very carefully in the related countries to increase the opportunities and decrease the problems.

Importance of quality: The professional stated that the quality is one of the most important issues which affect the contractor selection in international markets. Quality perception of the Turkish contractors was taken as an advantage up to a certain extent by some respondents in this research. As they pointed out in the previous sections, Turkish companies were able to offer a quality-cost optimization between the high cost-high quality of the Western companies and low-cost-low quality of companies from countries like China. However, among the supporters of this idea, there is a consensus on the fact that the relatively low cost advantage of the Turkish companies will disappear in the short term. In addition, it is a common idea that most of the developing countries that do not require very high quality now will adapt to the developed Western standards and very high quality will be demanded in the international markets soon.

As a result of these facts, most of the professionals supporting this topic indicated that the Turkish construction sector should investigate the past experiences and analyze it very well. Thus, it should take the necessary lessons from the past troubles and should change the "Turkish companies offer less quality than the Western companies" opinion in clients' brains, as one of the respondents stated.

A senior project engineer who has experience both in Turkey and abroad indicated another important aspect related to this topic. He stated that the quality expectation in domestic market is terribly lower than the international market. Certainly, when one leg of the table is shorter it is impossible to place it on a stable base. Similarly, the quality expectation in Turkey should be questioned to support providing high quality abroad.

Importance of preliminary studies about a market: More than half of the professionals complained about the lack of necessary preparation and preliminary studies in Turkish companies before entering a market. As some professionals mentioned Turkish companies' risk taking ability is a strength for them; however, from time to time they ignore the preliminary studies and risk evaluation which may lead to failure in the projects.

One professional explained this issue with the tendency of using the experiences in other countries. The respondent stated that the Turkish companies assume the conditions in different countries as similar and by relying on the experience in one country; they are encouraged to penetrate to another country. The respondent indicated the inconvenience of this attitude and stated that each market has its own characteristics which may seriously affect the project success.

Several respondents stated that the tendency to get a job then to start evaluation of the market is very common for Turkish companies. Even if they made a research for the vital issues before entering the market, they may prefer to investigate some other issues to the later stages of the project. These issues might be seen as minor at the beginning of entering to the market however it was observed various times that they may be very costly and time consuming if they are tried to be solved during the execution of the project. One experienced project manager mentioned that in some countries, it may take up to 1 year to establish a company. He further added that if this case is not considered during the entrance or proposal stage, serious delays may be faced by the company. Some other professionals focused on customs regulations and pointed out that the customs formalities may exceed several months especially in the countries that have heavy bureaucracy. When such a delay occurred during the import of a very vital equipment or material, it is inevitable to have a delay in the project schedule as well. The only way to avoid such problems is considered by most of the professionals as preliminary studies about the market conditions.

Since each uncertainty causes additional risks, these uncertainties should be evaluated and eliminated by preliminary studies before going into the market. Even if it is not possible to eliminate all the uncertainties, there should be awareness about them and they should be considered in the further plans. The respondents stated that all the problems stated in the previous section of this research are possible uncertainties for a new market and they should be evaluated carefully before entering to the new market.

One project manager and one business development manager introduced a more systematic way for entering to a new market and they suggested starting with a smaller project instead of a large scale project. They told that it may be a good and cheap way to familiarize with the market dynamics if the market is completely new and unknown to the company.

As a general consensus in the group of respondents, the Turkish companies enjoyed the benefits of risk taking ability and entrepreneurship in the past. However, the unacceptable risks taken due to lack of prior investigation resulted in serious problems for Turkish contractors. Hence, this issue appeared as an important lesson for the contractors.

Importance of trust and reputation: The importance of trust and reputation for Turkish companies is considered as one of the most important issues considering the past experiences of the professionals. The respondents indicated the mutual trust or bad reputation problem for Turkish companies and stated that the construction sector should learn the necessary lessons from the past experiences. Almost all the professionals who supported this idea gave some examples of companies that discredited the reputation of entire Turkish companies. Several respondents mentioned the companies that received high amounts of advance payments but could not finish the job

properly. According to the professionals' statements, such occasions usually took place in North African and Middle Eastern markets and it is still possible to see the effects of such irresponsible attitude.

Another respondent stated that in the first years of the expansion to the new markets like CIS and Balkan countries, some Turkish companies took advantage of the market conditions – like lack of controls in quality – and tried to decrease their costs by some unacceptable methods. This approach resulted in the low quality, dissatisfied customer and discredited reputation of Turkish companies.

A participant who is a senior engineer in CIS market stated the problem as the lack of long term view in Turkish companies. According to him, some Turkish companies are not able to consider themselves as a long term actor in the current markets and make mistakes due to short term plans. Another middle level manager experienced in Balkan region uttered the importance of having "long term clients". He claimed that the customer satisfaction and established trust may bring further projects to the company from the same client and provide long term business for the contractors in that country.

All the participants who support this idea agreed on the fact that it is very easy to damage the trust between the parties or damage the reputation; however it takes very long time to repair that trust or to overcome the prejudgment of the employers. They mentioned that there is still prejudgment about the Turkish companies regarding the quality issues especially in CIS and Balkan countries and regarding the trust issues in North African and Middle Eastern countries.

Knowledge of local legislations and standards: Construction sector is in touch with legislations due to its nature. It is composed of activities that are the subjects of different disciplines such as accounting, law, administration, engineering etc. Hence, the legislations of these disciplines in different countries play a key role on the success of the company in these countries.

About half of the professionals stated the problems faced by Turkish companies due to non-compliance with the local legislations. Most of the target countries for Turkish contractors are developing or undeveloped countries. Some these countries established recently, some of them adapted to the liberal economy recently and most of them are still in transition period. For this reason, their legislation related to economic activities is not encouraging the entrepreneurs most of the time. Though they are trying to adapt their legislation to the global standards, still a lot of difficulties are faced by Turkish companies. The professionals counted some of the problems as: very tight accounting systems, heavy and slow bureaucracy, excessive customs regulations, difficulties in obtaining work permits etc.

According to the respondents, the main reason to have problems with the legislation is the lack of knowledge about it. Excess amount of taxes or penalties paid; time lost due to incompliance with the customs regulations or bureaucracy are only a few of the consequences Turkish companies faced.

The common idea among the professionals is that the companies should have a very good command on the local legislation. Even if there are difficulties in the legislation itself, it can be considered from the beginning and it can be taken into account. Hence, related solutions can be found and the negative effects can be minimized. However, as the professionals suggested, it can be provided by preliminary studies and also by having qualified personnel experienced in the local legislations. Most of the respondents also stated the benefits of employing local experts or solution partners to get acquainted with the local legislations.

Similarly, it is the same case for the local standards related to quality, safety and environment. Several professionals told about the Turkish companies whose jobs were suspended due to the incompliance with the quality, safety or environmental standards. They said the main reason for the suspension was not the incompetency of the companies; they faced this problem since they did not have a good command on the related standards.

Employing competent personnel who have a solid background on quality, safety and environmental standards in that region is taken as an important measure for preventing such problems. Similarly, it is agreed on that the qualified local personnel should be involved within the company structure.

In addition, a considerable amount of the respondents uttered that it is extremely necessary to make preliminary studies at least a few years before having a project is a new market. The group including very experienced general managers, middle level managers and senior engineers stated that a core qualified personnel should make necessary studies to be familiar with the local legislations completely.

Benefitting from local sources: As mentioned before in the previous sections, local conditions are significant sources of problems in international construction. Some respondents mentioned the problems faced due to the lack of adaptation to the local legislation, local standards; or due to the lack of adaptation to the different social, political or geographical conditions. From their statements, it is possible to conclude that most of these problems are the results of being a foreigner company in a market abroad. One project manager who has solid experience in foreign markets told that even the differences in measurement units, equipment types, geographical conditions and climate may cause serious problems. Similarly, lack of enough knowledge on the customs, accounting or banking regulations are stated as the source of problems by most of the respondents.

Thus, the benefitting from local sources is considered as an important lesson that should Turkish companies gather from the faced problems. The project manager who remarked above arguments supported benefitting from local sources and gave several examples for his arguments. He stated that the local procurement of machinery may ease the procurement of spare parts; or gathering previous weather data from local resources may provide more accurate project schedules. Similarly, local solution partners for the customs are considered as suitable local sources that may be used – or that should be used.

Solution partner concept is very popular among the respondents and they considered solution partners – or subcontractors – as the most important component of local sources. The professionals stated the various benefits of using subcontractors and solution partners such as the specialty they have, local connections they may offer, a good comment on the legislation and so on. However, almost all the participants supporting this idea mentioned the importance of subcontractor selection.

Keeping the countries that have high-potential under focus: It is observed that the construction investments are gathered in the regions that have potential and opportunity for development. The survey participants mentioned some examples of regions that have high potential of investment. CIS countries that have rich natural resources, Middle East and North African countries that have high oil and gas revenues, and Balkan countries that enjoy the EU funds allocated for their infrastructure investments are the main examples stated by the respondents. Similarly, developing countries that require considerable infrastructure investments are considered as highpotential countries by the respondents. One professional added that the countries that are nominated for international organizations such as fairs and sport championships may tend to initiate ambitious infrastructure investments. Hence, the sector professionals pointed out this issue as an important guide for Turkish companies and stated that the Turkish companies should examine the countries according to their potentials.

Support of the Turkish state: Based on the experiences, the survey participants indicated that the support of the state is vitally important for the success of one country's contractors. They mentioned that the Chinese and

Western companies use this support provided from their states as a source of competition against other companies in international environment. However, Turkish companies that lack state support cannot compete with the same conditions with their rivals. For providing the competitiveness to the Turkish companies, state support should be provided. Though the economic conditions and the capability of the Turkish state is not very suitable for unconditional support, the professionals mentioned the means of support that the sector needs immediately. The recommendations based on professionals' experiences will be discussed in the following section in details.

Importance of bilateral relations: Turkish companies mostly operate in developing markets that do not have well established market conditions. Some respondents mentioned this fact and complained about the difficulties faced in tender systems especially in Middle Eastern and CIS countries. The most common difficulty is stated as the tender systems are not transparent enough in some countries. It is also added that the discretionary authority of the clients is an important factor on the selection process of the contractors. In this respect, it is mentioned that developing bilateral relations with the clients and local authorities is very important to be awarded further projects in a country. One of the participants told that some companies are undertaking projects even without participating in a tender by the help of their relations with the clients. Similarly, another professional who is experienced in Russia mentioned that the relations between the Turkish companies and state organizations are not in the desired level. The Turkish contractors' main clients are the private companies and international companies. Hence, this fact leads the Turkish companies out of large infrastructure projects that are being initiated by major state organizations.

As a result, improving the relations with all necessary parties becomes more important in international construction. Thus, it is mentioned by the survey participants that the Turkish companies should be aware of this fact. Awareness against economic crises: The economic crises affect both the domestic and international economic activities. International contracting services are also susceptible to economical crises due to their nature. Since the beginning of the Turkish contracting services in foreign markets, several serious economic crises hit the sector. These crises taught the sector to expand their activities to different regions and to distribute the economic risks. Similarly, the financial structure of the host country and the client started to be considered more seriously and their vulnerability to the crises is started to be examined more carefully by the contractors.

Effective company structure and management techniques: Most of the respondents stated that the management is a key factor for the success of the international projects. Similarly, a well organized company structure is obviously important for establishing necessary management techniques.

After numerous successful and unsuccessful experiences in the foreign markets, it is revealed that the Turkish companies should adapt effective business development, cost control, planning, scheduling techniques to their company structure.

A systematic business development including necessary preliminary studies, necessary risk evaluation and precise cost estimation is accepted as an important precondition for the success in the international projects by several participants. Similarly a tight and effective cost control system; a comprehensive and flexible planning that consider all the factors and offer alternative solutions for the possible problems are mentioned by the professionals within this scope. Finally, a schedule considering the effects of the material and equipment procurement, climate, logistics and so on is defined as essential by the professionals.

4.5 Recommendations for the Future of the Sector

After reviewing the answers of the sector professionals, it is possible to conclude their opinions and compile a set of recommendations for the future of the contracting services abroad. However, it is observed that some the participants' recommendations are in sector basis, some of them are in company basis and some of them are in project basis. Hence the recommendations in this section are mainly grouped under three headings as sector-wide, company-wide and project-wide recommendations.

Considering the recommendations, it is observed that there is a consensus in most of the topics discussed. However, some opposite ideas appeared regarding some topics and this situation prevented the statement of a clear recommendation for the related topics. Such items will be discussed below in addition to the subjects on which a consensus has been established.

4.5.1 Sector-wide Recommendations

It is observed that some of the recommendations stated by the respondents are sector - scaled recommendations and should be applied to the entire sector. These recommendations are ranked according to their frequencies and they are presented in Table 4.4. The entire recommendations are explained and discussed in the following paragraphs below.

No	Sector-wide Recommendations	Frequency
1	High quality standards should be set and applied	14
2	Qualified personnel should be employed	12
3	Trust and reputation should be promoted	9
4	Coordination and cooperation of Turkish companies should be organized	9
5	Training of the personnel should be provided	7
6	Guarantee bond problem should be solved	7
7	Finance problem should be solved	7
8	Relations with the related countries should be improved	6
9	Consultant and design companies should be encouraged to expand abroad	6
10	Pre-qualification and the accreditation of the Turkish contractors should be provided	6
11	Procurement of Turkish material and equipment should be promoted	5
12	Risk insurance system should be realized	5
13	Turkish trade and diplomatic representatives abroad should be increased and they should be more active	3
14	Consolidation of the construction companies should be provided up to a certain extent	2

Table 4.4: The frequencies of the sector-wide recommendations

High quality standards: The Turkish contractors offered a quality-price optimization to the clients up to now. They used their competitive price advantage against Western companies that offer high quality. Similarly, they used their relatively high quality as an advantage when compared to companies that may offer lower prices such as Chinese companies. However, the situation started to change and the cost advantage of the Turkish companies against the other companies started to disappear. Some reasons like increasing labor costs are the main contributors in the vanishing of this advantage. Similarly, the companies that may offer low cost labor started to improve the quality they offer and they started to reduce the gap between the Turkish companies. In this case, the best option for the Turkish companies is to establish high quality standards as Western companies and compete with the other companies by using their other strengths like qualified manpower, technology, risk taking ability, high management skills etc.

In addition, the high quality standards will provide customer satisfaction which is key aspect for success in international construction. Providing customer satisfaction, long term relations with the clients can be established and further projects can be awarded to the Turkish companies.

In some of markets that Turkish contractors are active, the clients still do not demand very high quality standards. Since most of these markets are not developed enough and reached to the Western standards, the Turkish companies' methods may fit to the clients' demands and Turkish companies may still be competitive in these markets. However, soon or later these markets will develop and start to demand higher standards from the contractors. In such a situation, Turkish companies who can offer higher quality will have a great advantage and they will be able to compete with their competitors with a great success.

Qualified personnel: One of the most important assets of a company leading to the project success is its qualified personnel. Due to the nature of

international works, they are subjected to more uncertainty and the importance of a qualified manpower is higher in such a work environment. The Turkish companies should employ highly qualified manpower in their projects to struggle the difficulties they may face during these projects.

One of the most common difficulties faced in the international projects is the different languages spoken by different parties. For providing an effective communication between the parties, the personnel should be able to communicate in the language of the client, consultant and the local community. Hence, the staff should be established considering language skills.

In addition, local standards (quality, safety, environmental etc.) and local legislations have a vital importance during the execution of the project. Thus, the personnel should have a good command on these aspects to avoid problems that may lead delays, cost overruns and bad reputation.

The administrative personnel should be very qualified as well as technical personnel. Because a delay in customs formalities or in work permits may cause unexpected delays in the project schedule even though the technical works goes perfect at the site.

Trust and reputation: With a wide consensus it is agreed that the reputation of the contractors and the trust against them is vitally important for the further success of the companies. Hence, the companies should pay special attention to retain their reputations and the trust against them. It should not be forgotten that when one company deteriorate its reputation or the trust of the client, it will affect all the Turkish contractors. In addition, it will be extremely difficult to repair this situation and an extreme effort will be paid to change the attitude of a client whose trust has been deteriorated. It is not only one company's responsibility to pay attention on this issue, but also the whole sector and the government should pay a special care to defend the reputation of the Turkish contractors. A pre-qualification and evaluation

system which will be formed by the sector in cooperation with the state may prevent incompetent companies to undertake the projects that exceed their capabilities. By this way, it is possible to avoid customer satisfaction that may lead to bad reputation for Turkish companies.

Coordination and cooperation of Turkish companies: The relatively small market size and excessive number of contractors in domestic market has driven a lot of Turkish contractors to foreign markets. Hence, the Turkish companies challenge each other as competitors in the tenders abroad. This situation is beneficial up to a certain extent since a competitive environment occurs. However, besides the competition during the tender period, cooperation should also be established between the Turkish companies after the tender processes. The experiences should be shared among the companies and other companies should also gather lessons from one other company's experiences. The Turkish contractors operating in one region should get together and they should be organized under a legal structure. This structure should function in exchanging experiences. In addition it should search for the means of possible cooperation between the Turkish companies. With this respect, Turkish companies in a country can explain their arguments and claims in a more effective way to the local organizations and clients. Hence it would be easier to defend the rights of the companies instead of searching for the rights individually.

Training of the personnel: Due to the increasing number of international projects, the companies started to face the shortage of qualified personnel. The shortage in the blue collar personnel has to be overcome by vocational training. Since the clients started to require certifications for skilled workers, the certification of the skilled workers should be provided. For this purpose, the cooperation between the sector and the educational organizations should be increased. Educational programs should be initiated for the workers and all the skilled workers should be certified by those programs.

Similarly, necessary precautions should be taken for the shortage of white collar personnel and vocational training should be provided for white collar personnel as well. Further academic education should be encouraged in white collar personnel and it should be supported by establishing necessary company policies. In addition, further specialization in engineering should be provided in undergraduate level as well as graduate levels.

On the other hand, university – construction sector cooperation should be increased. The universities should be more interested in the problems of the sector. Similarly, the sector should demand a greater help from the universities and should provide necessary data for the researches on related topics.

Guarantee bond problem: Guarantee bond problem is one of the most chronic problems of the international contracting sector. Though some problems regarding this issue are related to the economic conditions of Turkey, some precautions can be taken.

First of all, the Turkish companies should be provided to obtain bonds with more reasonable commission fees and expenses since high expenses reduce the competitive ability of the contractors abroad. In addition, some of the clients do not accept the guarantee bonds from Turkish banks. In the countries that the bonds from Turkish banks are not accepted, Turkish companies have to obtain a bond from a foreign bank. Against the counterguarantee of the Turkish bank, these foreign banks issue the bonds to the companies and they charge additional commission fees and expenses. It leads to an increase in expenses for the Turkish companies and again reduces the competitiveness against competitors. Government level correspondence and effort should be paid to provide the acceptation of the bonds from Turkish banks in the related countries. Moreover, Eximbank should be used more effectively and it should provide guarantee bonds with reasonable fees and expenses to the competent Turkish contractors.

Providing finance: As a common method, the clients require the contractors to provide a financial package for the finance of the project and consider the competitiveness of the package as a selection criterion frequently. Thus, the companies from the countries that have financial capability obtain an important competitive advantage by providing desired financial packages.

To overcome this situation, Turkish private banks should be more active and they should start taking risk by joining the projects as investors. Similarly, state banks and especially Eximbank should support the competent construction companies and provide loans for the feasible projects.

On the other hand, the companies can establish private funds organized by the TCA and they can even establish a bank which may evaluate the projects and fund them if they are feasible.

Also investment funds should be established by private entrepreneurs and they should invest in the profitable projects offered by the competent Turkish companies.

Relations with the related countries: Inter-country relations have great impacts on the contractor selections for large scale projects. The countries even make lobby activities with their highest level statesmen to support their construction companies in international area.

In such environment, very close relations with the related countries should be established or maintained by Turkish state. The recent attempts to develop bilateral relations should be continued and improved. The problems such as the acceptation of bonds from Turkish banks or the delayed payments from the clients should be negotiated with the related governments. On the other hand, the barter agreements – such as the agreements concluded with USSR and Libya in the past – should be activated more instead of regular trade agreements whenever possible. The high-cost imports of Turkey such as oil, gas and weaponry should be paid back by contracting services in the related countries. A state entity should coordinate and organize the payback of the imported goods by contracting services.

Consultant and design companies: In addition to construction companies, internationalization of consultant and design companies have a great importance for Turkish contracting activities abroad. Consulting and design companies should also be encouraged to operate abroad and necessary incentives should be provided for this purpose. The opportunities for Turkish contractors would be increased by internationalization of the consultant companies. Similarly, the usage of Turkish material in international projects should be promoted by the internationalization of the Turkish design companies. However, the technical abilities of these companies should be improved and should reach the western standards for this purpose.

Pre-qualification and the accreditation of the Turkish contractors: Turkish entrepreneurs have a great skill to smell the work environment and to determine the opportunities in the markets. This characteristic of the Turkish entrepreneurs resulted in an excess number of Turkish contractors in international markets. However, some of these companies are not competent enough to undertake international projects that have higher risks and uncertainties than domestic projects. Hence, these companies may face several difficulties in execution and cannot perform the job in expected quality, within expected time or budget; or sometimes cannot complete the job at all. This situation leads to the customer dissatisfaction and badly effects the trust against the entire Turkish companies and their reputation as discussed in the above paragraphs. As a solution to this problem an accreditation and pre-qualification system should be provided for the Turkish construction industry. An organization with the contribution of the state and the sector itself should be provided to perform this function. Since the current organizations and exercises are not able to perform this function perfectly immediate measures should be taken for the establishment and performance of such a system.

After defining the pre-qualifications of and accreditations with the contributions of the state organizations and sector organizations, the accredited companies should be provided state support and imposed to the international environment as accredited Turkish contractors. And it should be perceived that employing un-accredited contractors is at client's own risk.

In addition, the accredited contractors should be supported by encouragements and incentives provided by the state.

With this method, the number of contractors abroad may decrease however there would be stronger contractors with more power to compete with their international competitors.

Material and equipment from Turkey: The procurement of Turkish material and equipment should also be promoted in international projects. For this purpose, the certification and compliance with the international standards of the materials and equipments should be provided. As discussed in the previous item, Turkish design companies should be encouraged to internationalize and procurement of Turkish products should be promoted. It should be kept in mind that the supply of materials and equipments have high added value than work-intensive activities and may seriously increase the revenues of the Turkish construction sector in international projects.

Risk insurance: The regions that Turkish contractors operate involve mostly risky countries. Hence, Turkish contractors should take various economic and politic risks in addition to the project specific risks. Thus, these risks should be reduced by some efforts such as risk insurance. The Turkish state

should provide such insurance to the contractors and secure their financial situation against political and economic risks that cause serious losses for the companies when they occur. Again Eximbank may be organized to offer such an insurance against a reasonable risk premium to the Turkish contractors that operate in risky regions. In addition, private sector should be more active and study on such insurance types.

Turkish trade and diplomatic representatives abroad: The numbers of the Turkish representative offices should be increased and expanded to the areas that Turkish companies have high interests. They should gather and compile necessary information including economic, political and social data and they should make the information available to the contractors. Especially in the countries that have high potential for the Turkish contractors, trade experts should be appointed and the opportunities should be searched. The sector representatives and experts should also be appointed in these offices and contribute to the market studies of the companies.

Consolidation of the construction companies: The size of the construction companies may be large for domestic market. However, when the international market is considered their size is not sufficient for large scale operations from time to time. The most important disadvantage of relatively small company size is the limitations on the financial capability. This situation seriously deteriorates the competitiveness of the Turkish companies against large scale international companies. If two middle scale companies consolidate, it is more likely that they will achieve more success than they achieve separately by the help of combined financial resources. With this respect, it may be possible to compete with large companies for large scale projects that offer more added value and higher profits.

However, though the benefits of consolidation up to a certain extent are accepted, an opposite idea came from a few respondents. According to these professionals, the current size and number of Turkish contractors provide a dynamic structure to them and high turnover amounts can be reached by focusing on a lot of middle scale projects instead of focusing on a few large scale projects.

Hence, a consensus was not set on consolidation issue since there are different ideas that may be true from different point of views. However, it is agreed that the excess amount of small sized companies would lead to the incompetent companies in foreign markets. For this reason, it may be concluded that the consolidation among the Turkish companies should be provided up to a certain extent and an optimization between the competitive large scale companies and dynamic middle scale companies.

4.5.2 Company-wide Recommendations

Some recommendations of the professionals are in company-scale and they should be considered on company basis. The participants stated what companies should do in individual basis in addition to the sector-wide recommendations. The company-wide recommendations are presented in Table 4.5 and the recommendations are discussed in the below paragraphs.

No	Company-wide Recommendations	Frequency
1	Preliminary studies and market research should be conducted with a special care	10
2	Projects with higher added value should be undertaken rather than labor-intensive works	10
3	Effective management techniques should be applied	9
4	Good command on local legislations should be provided	8
5	Diversification in the countries should be provided up to a certain extent	8
6	High personnel circulation rate should be prevented	7
7	Improved health and safety standards should be set and applied	7
8	Companies should get used to work with the local manpower or workers from the third country	7
9	Local subcontractors and solution partners should be employed	6
10	Design capabilities of Turkish companies should be improved	4
11	Diversification in the project types up to a certain extent and specialization on these project types should be provided	4
12	Organizational learning should be enhanced in the companies	4
13	Research and development should be enhanced	3
14	Institutionalization and internationalization within the companies should be provided	3
15	Turkish companies should consider operating as an investor abroad besides contracting	2

Table 4.5: The frequencies of the company-wide recommendations

Preliminary studies and market research: Entering into new markets brings several uncertainties and difficulties to the companies. Most of the Turkish companies suffered in the past since they relied back to their experiences and successes in other countries and ignored necessary preliminary studies before entering into a market or undertaking a project in another country.

A wide variety of factors - including social, economic and political factors – affect the activities of the companies in other countries. Each of these factors – and a lot of others – are likely to create problems for the project if they are not evaluated. In the previous sections, the problems faced due to these factors were mentioned. Hence, a systematic research before entering into a market is vital for the contractors.

As a first step, an office and a core staff should be established in a new country to familiarize the market. The staff should also involve local experts who have a good command the local legislations and regulations such as customs, law, banking, accounting etc. The legislative infrastructure of the company is to be prepared in that period instead of dealing with it after undertaking a project. The market should be evaluated in details and all possible necessities should be identified. The suppliers in the market, possible subcontractors and solution partners should be identified and contacted.

Similarly, the cultural characteristics of the country should be examined in details to avoid conflicts between the contractors' and host country's cultural aspects. A detailed study should be done on culture, customs and traditions, attitude against the foreigners and such issues. The data gained should shape the behavior of the company in all respects in that country.

Hence, following all the necessary preliminary studies, a relatively medium sized project could be undertaken instead of a very large scaled project as one of the respondents recommended. With this method, the dynamics of the

country may be learned in practice at work but the risks could be minimized at the same time.

Projects with higher added value rather than labor-intensive works: Turkish companies should make effort to undertake projects with more added value instead of labor-intensive projects. The projects that have engineering, design and procurement in their scope should be the targets of Turkish companies. The increasing difficulties of employing qualified Turkish manpower abroad create a significant disadvantage for labor-intensive type of works. In addition, the habit of Turkish companies to handle all sub-works with their own devices decreases the efficiency, increases the costs and prevents benefitting the experience of the specialized subcontractors. Instead of this policy, "general contractor" identity should be obtained and specialized subcontractors, vendors and solution partners should be used. It should be kept in mind that the specialized subcontractors and vendors can be more efficient and they can prevent higher costs due to unfamiliarity with that type of work. The efforts should be shifted on management, organization and planning activities.

Similarly engineering, design and procurement should also be dealt within the scope of the project instead of the classical type of construction that leaves those activities to the client. By including design and engineering, innovative design methods that may reduce the cost and ease the construction can be provided. Including the procurement in the contracts, on the other hand, may increase the profit margins and may prevent the dependency of the job to the other parties.

Hence, instead of classical type of contracting which includes only construction activities, Engineering – Procurement – Construction (EPC) type of construction or lump-sum projects should be set as a target for the Turkish companies. Since Turkish contractors start to lose their low cost labor advantage, they need to compete with their technological capabilities and

management abilities by undertaking such project types instead of laborintensive projects.

Effective management techniques: Turkish companies should apply effective management methods in compliance with the modern standards. Up to date management software should integrated into the management system. As a part of an effective management, strict cost control methods should be used and necessary measures should be taken. Necessary attention should be paid to cost control issue since the competition increases and profitability decreases in the world. It should be kept in mind that cost control is an effective way to increase competitiveness and profitability.

Similarly, resource management and planning should be handled with a special care. Modern software for planning and resource management should be employed in the management process of the project. The efficiency should be increased and costs should be decreased by applying these methods.

Good command on local legislations: To avoid problems resulted from incompliance with the local legislation, a very good command on local legislations should be provided. Companies should establish offices before entering into the markets and they should examine the local legislations in a very detailed way. Especially labor, banking and tax legislation; accounting, customs and currency regulations frequently create serious problems for the foreign companies. Hence, those legislations should be learned up to the smallest detail to avoid problems. In addition, local experts and solution partners who have solid experience on the local legislations should be employed and they should be benefitted for getting familiar with the regulations.

Similarly, following the entrance period to the market, same attention should be paid to the local legislation during the execution of the project. The legislations should be followed with a special care and the changes should be followed.

Diversification in the countries: Most of the countries that Turkish companies undertake projects have higher risks due to their political, economic or social conditions. Their political or economic situation may change unexpectedly or their dynamic social conditions may create problems for Turkish contractors in these countries. In the past, most of the important markets for Turkish companies had complex political situations such as the sharp changes in the governments, wars, conflicts. Since their economy is not stabilized enough, they were subjected to economic crises or difficulties. All these factors contribute to the risks taken by the Turkish companies.

However, it is observed that the diversification in the geographic location distributes the risks and prevents taking high risks due to acting in one risky country. In the past, a lot of Turkish companies experienced this fact by themselves and chose to diversify into new countries when political, economical or social problems were faced in their markets. As an example, expanding to the CIS market after the instabilities in Middle East in 1990s and expanding back to Middle East and North Africa after the economic crises in CIS countries – especially in Russia – were the results of this strategy.

While diversifying the locations, some criteria should be set according to the characteristics of the company. The bilateral relations of Turkey with the target country and the financial ability of the country should be considered carefully. As mentioned by some of the respondents in the opportunities section of this study, oil and gas revenues of oil and gas exporting countries and EU funds for Balkan countries create vast opportunities and these opportunities should be obtained by the Turkish companies. In addition, besides nearby regions, further locations that offer interesting opportunities for Turkish companies such as South Eastern part of Asia, Sub-Saharan and

Southern part of Africa and South America should also be examined and considered as new locations.

On the other hand, some professionals pointed out the fact that expanding into excessive number of countries may also hinder the performance since the control mechanisms are not very well established in Turkish companies. Though they all agreed on the benefits of diversification regarding the risk distribution, they recommended that the diversification should be systematic and it should be under control. It is mentioned that each new country is a new source of expense or a new "adventure" with their words.

Hence, it is agreed that there should be an optimization between diversification and concentration. The risks of concentration should be reduced by expanding to new markets; on the other hand, this expansion should be executed carefully with detailed studies.

High personnel circulation rate: High personnel turnover rate is a serious problem that reduces the efficiency for Turkish companies. Significantly high personnel turnover rates even during the projects may be faced in Turkish companies. This situation decreases the efficiency since each new staff needs an adaptation period; it hinders the organizational learning process in the company and increases the costs since each personnel mobilization has a cost for the company.

To avoid such problems, Turkish companies should employ personnel for a long term period instead of project based employment. By this way, the experiences gained in a project can be conveyed to the other projects and the occurrence of the similar problems in several projects may be avoided. In addition, since the new employment and the necessary adaptation period will be avoided, a higher efficiency will be obtained within the company.

For providing the permanence of the personnel, necessary social and financial conditions should be provided to them. A fair and professional work
environment should be established by integrating objective performance evaluation methods.

Since the competitive structure depending on low labor cost should transform to the competitive power depending on high technology, high managerial and organizational skills, and high quality; the Turkish companies should also adapt themselves to this reality. For this purpose, they should invest more on the most valuable asset – qualified personnel – for achieving mentioned competitive skills. Also, they should pay necessary effort to keep the qualified personnel within their company structure.

Improved health and safety standards: Similar to the quality and environmental standards, high levels should be targeted and achieved in health and safety as well. Since the health and safety standards in Turkey are relatively lower than the Western standards, the Turkish companies may face difficulties on these issues especially in countries that have very strict legislation. Hence the legislation in the related countries should be observed and obeyed strictly. In this respect, undesired events and corresponding damage in the reputation should be provided. "Zero accident" approach should be integrated in the company vision and necessary measures should be taken. In addition, local experts and experienced personnel who have a good command on local legislations should be employed.

Local manpower or workers from the third country: In the recent years, the problems related to mobilizing qualified Turkish manpower started to occur for Turkish companies. The increasing cost of employing Turkish manpower, decreased quotas allocated by the host countries and the shortage in the qualified Turkish manpower can be counted as the main reasons for the employment of the local labor or labor from third countries.

Since local labor or labor from third countries is being used in the Turkish companies for a long time, the feedbacks of this reality started to reveal. The most common complain about the local labor and the labor from third countries is the low efficiency compared to the Turkish labor. With the contribution of the language problem, it is stated that they have lower efficiency than the Turkish labor.

However, their low cost compared to Turkish labor offers a significant decrease in the labor costs and contribute to the competitiveness of the Turkish companies. Thus, Turkish contractors could compete pari passu with the companies that use this labor.

As a result, local labor or labor from third countries appeared as an advantageous reality that the Turkish contractors should get familiar with it. If the efficiency problem is managed with care the cost advantage it offers may be very beneficial for the Turkish companies in international markets.

Local subcontractors and solution partners: As mentioned before in this research, local subcontractors and solution partners have a significant importance for construction sector. Considering the problems created by the lack of adaptation to local regulations, legislations and standards, it is a wise decision for the companies to benefit from local experiences.

Employment of solution partners for dealing legislative issues may save the company to devote a separate personnel and resource for these subjects. In addition, it may be less costly since the solution partner will have a stronger experience and efficiency on the related issues. Similarly, employing specialized and experienced subcontractors may provide to the construction company to focus on some other vital functions for the successful management of the project. Moreover, the local subcontractors and solution partners would probably have better relations with the local authorities which may prevent any conflicts due to any difference in corporate culture.

However, the selection of the subcontractors should be dealt with a special care. The companies selected as subcontractors or solution partners should work in compliance with the high quality, safety and environmental standards set.

Design capability of Turkish contractors: Turkish contractors should improve the design capabilities to be able to handle all the stages of the project. Besides the conflicts with the clients and consultants, some other disadvantages occur due to the insufficient design capability. Most of the time improper designs should be revised according to the needs appeared at the site and it leads additional costs. On the other hand, a comprehensive and technological design which is in compliance with the construction methods of the company may ease the construction, lower the costs and shorten the duration of construction. A good and proper design may provide significant savings on time and money. Thus, the Turkish companies should pay more attention to the design process of the projects and they should increase their design abilities.

Diversification in the project types: It is observed that there are some differences in the respondents' point of views on this topic.

As it is expected, some of the professionals stated that the Turkish companies should specialize on several types of projects. The specialization would provide the companies to gain expertise on some types of construction. With this expertise, the companies may offer higher quality, lower costs, shorter schedules and they can increase their competitiveness in the market.

But some other professionals proposed the diversification in the type of projects is a better strategy for the Turkish companies. Their main argument for this idea is the excess number of contractors in the domestic market. Since the domestic market is not large enough and the number of companies is too high for a limited market, it is not very possible to specialize in one type of project. After completing a project, the companies cannot be very selective for the type of the job since they need new projects to run the company and keep the staff. As a result of this, most of the companies undertake a wide variety of projects in the domestic market.

Similarly, the situation is not very different for the Turkish contractors in international markets. The effects of the domestic market on the contractors again force them to offer a wide variety of services in the international markets as well.

As a result of all the arguments, though there is not a clear consensus, an optimization can be found. Diversification can be promoted in the project types undertaken by the Turkish companies, but there should be some limitations on the diversification and the specialization should be provided at the same time. In the other words, companies should diversify their type of projects up to a certain extent and they should try to maximize their specialization on these types of projects.

Organizational learning: Since similar activities are repeated in different projects various times, organizational learning becomes an important concept for the construction sector. The problems faced, the solutions found, the new methods developed in one project are valuable experiences that should be learnt within the company. These experiences should be transferred to the other projects by well established learning methods. Necessary data bank should be formed within the company and the information such as unit prices, subcontractor details, problems, solutions and correspondence should be kept in data bank.

In addition, one of the most important learning sources – personnel – should be kept in the company. Some part of the personnel's experience is not always possible to keep in data bank. Hence, the best way to access this valuable experience is to keep the experienced personnel in the company. Otherwise, the companies mostly have to "discover America again in each project" as one professional stated.

Research and development: The profit margins in international construction started to decrease recently due to hard competition. Thus, the companies should increase their efficiency and find some other solutions to overcome

profitability problem. At this point, research and development can offer the solution that the construction sector needs. By allocating more resources to research and development, new methods, technologies and construction techniques may be developed. These developments may provide an increase in efficiency and an ease in construction that directly affect the costs. The creative and innovative solutions may compensate the decreasing profits, hence; increase the competitiveness of the companies. It should be remembered that the pioneers of international construction in Turkey were the pioneers of research and development as well. The new methods they discovered contributed significantly to their competitiveness in international markets.

Institutionalization and internationalization: The construction companies should change their profile from family business to institutionalized professional corporate structure. Professional managers who have solid experience in construction market should take the lead and manage the companies according to the liberal market conditions. The vision of the company may be set by the company owners; however, the management should be conducted by professionals.

Similarly, an international structure should be formed within the company and a multi-national work environment should be created. It means that the key positions – even high management positions – may be occupied by local personnel or foreign professionals.

Operating as an investor: Besides contracting services, investment opportunities should also be examined in other countries. Turkish companies should be interested in the development of infrastructure, tourism and real estate projects and initiate them by providing finance. In the long term, these investments may be a good source of income especially during the contractions in the economy. Today some Turkish companies enjoy the revenues from their investments is different countries.

4.5.3 **Project-wide Recommendations**

The projects are the main units of works in construction sector. For this reason, the success in the smallest unit affects the whole structure and contributes to the overall success. Considering this fact, the project-wide recommendations derived from the survey participants will be given below. Similarly, they are presented in Table 4.6

No	Project-wide Recommendations	Frequency
1	Effective project planning should be provided	3
2	During business development stage, all the factors that may affect the project should be considered 2	
3	Good relations with the local authorities and the client should be established	2

Table 4.6: The frequencies of the project-wide recommendations

Effective project planning: The projects abroad tend to be more problematic than the domestic projects. Similarly, the elimination of the problems and the difficulties in the projects abroad may be more costly. Hence, an effective project management should be provided for the projects abroad.

Successful planning is an essential key for the management of an international project. The main approach should be preventing the problems before they occur instead of trying to solve them when they are faced. Some important hints from the professionals for an effective planning and project management are listed below:

- Equipment and material procurement, and logistics issues should be evaluated and they should be dealt before the project starts.
- In adverse weather conditions, what-if scenarios should be developed and alternative solutions should be planned.
- Effects of the factors such as climate, local holidays, transportation and customs formalities should be considered in the project schedule.
- The effect of the local legislation and standards on the project schedule and the work itself should be considered.
- Equipment and personnel should be mobilized in the right time.

Considering all the factors during business development: During the business development phase, companies should take all the factors into consideration. The political conditions of the country should be evaluated and the effect of possible changes in the situation should be considered. Similarly, the economic situation of the country and global economic conditions should be evaluated. In addition, the financial structure and ability of the client should be deeply investigated. In addition, the economic capability of the target country should be well examined and its vulnerability against crisis should be considered as an important criterion for the investment.

Relations with the local authorities and the client: The relations with the other parties during the execution of the project should be continued in an efficient way. Good relations with the other parties may provide other parties' supports during a problem faced in the project. In addition, it may enhance the long term relations between the contractor and the client or the local authorities. It should be kept in mind that there are considerable examples for contractors that undertake projects even without attending tenders due to their close relations with the clients or authorities.

4.6 Discussion of the Results

When the answers of the professionals examined, it is observed that the various problems mentioned in the previous research and sector reports still exist in the contracting services abroad. On the other hand, some of the opportunities mentioned in the previous research started to disappear. In addition, some improvements were stated for some problems mentioned for a long time within the sector.

As mentioned in the above paragraph, some problems of the sector were mentioned by the previous researches and sector reports for a long time and it possible to call these problems as "chronic problems" of the sector. The most evident examples of this category can be counted as:

- Difficulties in providing finance
- Problems in obtaining guarantee bonds, high commission fees and expenses
- Economical crises and changes in the currency rates
- Inabilities of Turkish companies in design
- Excess amount of personnel circulation
- Lack of market research, preliminary study and good command on the local legislation
- Insufficient support from the Turkish state
- Problems resulted from the structure and characteristics of the Turkish companies
- Lack of efforts for training personnel
- Low standards in quality

These problems were mentioned in various sector reports and previous researches (Giritli et al., 1990; Tulumen and Tavakoli, 1990; Oz, 2001; Dikmen and Birgonul, 2003; Korkmaz and Messner, 2008; Kazaz and Ulubeyli, 2009); and each of these researches mentioned at least a few of

these problems. It is almost agreed that some of these problems depend on the economic conditions of Turkey and short term solutions are not expected by the previous researches that investigate these topics and by the survey respondents of the current research as well. However, some solutions and recommendations are provided both in the previous literature and in the current research.

In addition, when the survey results are considered, it is observed that some of the opportunities mentioned in the previous researches turned to be disadvantages for the Turkish contracting sector abroad. As an example, the relatively cheap labor advantage of the Turkish companies started to disappear according to the research results. The respondents stated that the cost of mobilizing large amount of labor to foreign countries is getting more costly day by day. However, in the previous researches, it is stated as a significant advantage of the Turkish companies (Giritli et al., 1990; Tulumen and Tavakoli, 1990). Moreover, in some recent research, this situation was indicated and Chinese and South Korean companies are considered as the main rivals of Turkish companies due to their cost advantage resulted from low cost of labor (Korkmaz and Messner, 2008).

Similarly, insufficiency of the local contractors is stated as another opportunity that starts to disappear. The respondents mentioned that the contractors of the developing countries are improving themselves and the advantage against them should be provided by extra effort such as offering Western standards in quality and technology.

In the previous researches, it is also mentioned that the Turkish companies offer higher quality than the companies that have high competency due to low price – such as Chinese companies. But in the current research, it is observed that the mentioned advantage also started to disappear since the ability of the companies that may offer low prices to offer higher quality is improving each day. Hence, they may take a more advantageous position

soon when they offer higher quality and lower costs – especially with the help of cheaper labor.

On the other hand, by examining the answers of the sector professionals, it is observed that some new problems that were not frequently stated by the previous literature started to appear. Decreasing labor quotas in the related countries and the necessity to employ local workers or workers from third countries; and the shortage of qualified Turkish manpower due to the increasing number of companies and international projects can be the examples of the problems appeared recently in the construction sector.

In addition, it is also observed that some progress has been achieved in the problems that are mentioned in the previous researches and even in this research as well. Recently increasing support of the Turkish state can be the most frequent example stated by the survey participants in this research.

When the results of this research are examined it may be seen that some concepts can be seen in both opportunities and problems sections. For example,

- Cultural similarity
- Risk taking and risk management ability of Turkish companies
- Qualified Turkish manpower
- Increasing support of the state and developing bilateral relations with the countries
- Easy adaptation of the personnel to the environment
- High quality cheap labor optimization

are presented in the advantages section. However,

- Cultural differences

- Lack of preliminary studies and taking correspondent excessive risks
- Shortage of qualified Turkish manpower
- Adverse climate conditions and corresponding adaptation problems
- Relatively lower quality standards of Turkish companies compared to Western companies

are also counted as the problems faced by the sector professionals. There are several reasons of observing opposite ideas in opportunities and problems sections. First of all, some items such as cultural similarity/difference and risk taking ability/excessive risk taking can create both opportunities and problems for the companies depending on the conditions. Similarly respondents stated them as both opportunities and problems depending on their experiences and situations. In addition, some concepts that might be an opportunity in the past might turn into a problem by time and might be considered by the respondents as both opportunities and problems faced.

CHAPTER 5

CONCLUSION

The international contracting services of Turkish companies started in 1972 and developed with a great acceleration since that time. During the period from 1972 to the present time, several factors affected the international construction activities. As a result of the success achieved up to now, the construction sector set very ambitious targets for itself for the future. In the recent summits and conferences of the sector, 100 billion \$ annual project value is set as a target for the 100th year of the Turkish Republic (TCA, 2010).

The aim of this research is to examine the factors affecting the international contracting services of the Turkish companies in the past, and to develop a guideline for the sector to retain its current successful position and to achieve the future goals.

In this study, the experiences gained in the past are considered as the main source for the guidelines to the future. It is aimed to define the problems/difficulties and opportunities/conveniences faced by the sector in the past. In the light of those problems/difficulties and opportunities/ conveniences, the lessons that the sector should learn were sought. And finally, the recommendations are determined by compiling the lessons learnt, problems and opportunities faced.

For this reason, a survey study was conducted within the scope of this research. The experiences and opinions of 36 sector professionals were investigated by the help of this survey. The problems and opportunities faced

in the past were questioned and the answers based on sector professionals' experiences were collected. Similarly, the lessons that should be learnt by the construction sector based on the survey participants' opinions were investigated. Finally, in the light of the lessons learnt and the recommendations for the construction sector were identified.

Before evaluating the answers of the sector professionals, the factors affected the international constructing activities of the Turkish companies were examined in the second chapter of this research. The factors are mainly grouped as political, economic and social factors. In the political and economical factors section, the significant events such as crises, wars, instabilities are investigated. In the social factors section, the main social factors such as culture, language and religion are reviewed. Hence, their effects on the international contracting activities were revealed with the help of the literature.

When the answers to the survey were evaluated, it is seen that the sample group represents a high proportion of the sector members. There were professionals in the group from different occupational positions such as high level managers, middle level managers and senior engineers. It is also observed that their experiences are based on a wide geography involving more than 30 countries in four continents. Similarly, their answers showed that a group experience on very different types of projects was provided.

According to the sector professionals the items below are considered as the opportunities faced:

- Increasing oil and gas prices and the increasing infrastructure investments in oil and gas producing countries due to high revenues
- Cultural similarities
- Necessity for new investments in developing countries
- Qualified Turkish manpower
- Operating in relatively less affected regions from the economic crises

- Fall of USSR and formation of new independent states
- Increasing support of the Turkish state and developing bilateral relations with the countries
- Re-construction activities after wars and conflicts
- Easy adaptation of the Turkish personnel to the environment
- High quality cheap labor optimization
- Being an investor from being a contractor
- EU funds in Balkan countries encouraging the investments
- Interaction with the Western companies
- Insufficient local contractors in the local markets

When the problems are examined, it is observed that various problems some of which revealed in the past and some of which appeared recently were counted. The problems counted by the survey participants are:

- Increasing cost of employing Turkish labor and decreasing quotas allocated by the countries that lead to the employment of local labor
- Unfamiliarity with the local legislations
- Shortage of qualified manpower that leads to the employment of local labor
- Cultural differences
- Problems related to guarantee bonds
- Lack of adaptation to the local standards
- Instable political conditions, discretionary attitudes, one-man regimes
- Economical crises and changes in the currency rates
- Bad reputation as a result of the past
- Difficulties in providing finance
- Excess amount of personnel circulation
- Tight accounting and banking systems
- Lack of pre-investigation and feasibility studies
- Competition among Turkish contractors in international markets
- Holidays that affect the project schedule

- Insufficient support from Turkish state
- Equipment and material procurement
- Structure and characteristics of the Turkish companies
- The problems from the past that affect the attitude of the local community
- Adverse climate and geographic conditions
- Turkish driving licenses that are not valid in some countries
- Contract conditions and lack of contract management
- Turkish construction materials

As it is seen, some items can be seen both in opportunities and problems which means that those items can create advantages or disadvantages to the Turkish contractors depending on the situation. Similarly, some conflicting items in opportunities and problems can be observed. This situation can be explained as the situation might be changed and the related opportunity turned into a problem or the related problem turned into an opportunity within time.

Within the light of opportunities and problems faced, the sector professionals stated the lessons that should be learnt by the sector as follows:

- To be able to work with local workers or worker from third countries
- Importance of the qualified manpower
- Effect of the social factors in the host country
- Importance of quality
- Importance of preliminary studies about a market
- Importance of trust and reputation
- Knowledge of local legislations and standards
- Benefitting from local sources
- Keeping the countries that have high potential under focus
- Importance of the support of the Turkish state
- Importance of bilateral relations

- Awareness against economic crises
- Effective company structure and management techniques

Within the light of opportunities and problems, by the help of the lessons learnt, the recommendations of the sector professionals are compiled. It is observed that the recommendations are in sector, company and project basis. Hence, the recommendations are examined under mentioned three headings. The sector-wide recommendations of the respondents are briefly as follows:

- Western standards in quality should be set and applied. Quality should not be compromised even if the local standards require lower quality.
- Qualified personnel should be employed. All necessary measures should be taken to employ and to keep qualified personnel
- Trust and reputation should be promoted. The actions that may deteriorate the trust and reputation should be avoided
- Coordination and coordination of Turkish companies abroad should be organized
- Vocational and academic training of the personnel should be provided and encouraged
- Guarantee bond problem should be solved. Obtaining guarantee bond with more reasonable conditions should be provided for Turkish companies. Eximbank should be more active and directly provide guarantee bonds to the competent Turkish contractors
- Problems in providing finance should be solved. Methods for providing finance should be developed and the competitiveness of Turkish companies should be provided by these methods
- Relations with the countries that have importance for Turkish contracting services should be improved
- Turkish consultant and design companies should be encouraged to expand their activities to foreign markets

- Pre-qualification and accreditation of the Turkish contractors should be provided. The incompetent companies should be prevented to operate abroad and deteriorate the reputation of the entire Turkish companies
- Procurement of the Turkish construction material and equipment in the projects abroad should be promoted
- Risk insurance system should be realized and the risks that the Turkish companies are exposed in the international environment should be reduced
- Turkish trade and diplomatic representatives abroad should be increased and they should be more active
- Consolidation of the companies should be provided up to a certain extent. However, their dynamic structure should also be retained.

Similarly, the sector professionals stated the recommendations in company basis as follows:

- Preliminary studies and market research should be conducted with a special care
- Projects with high added value should be undertaken rather than labor-intensive works
- Effective management techniques should be applied within the company structure
- Good command on local legislations should be provided
- Diversification in the countries should be provided up to a certain extent
- High personnel circulation rate should be prevented
- Improved health and safety standards should be set and applied
- Companies should get used to work with the local manpower or workers from the third country.
- Local subcontractors and solution partners should be employed as much as possible
- Design abilities of the Turkish companies should be improved

- Diversification in the project types should be provided up to a certain extent should be provided. Also specialization in these areas should be provided.
- Organizational learning should be enhanced in the companies
- Research and development should be enhanced in the companies
- Institutionalization and internationalization within the companies should be provided
- Turkish companies should consider operating as an investor abroad besides contracting

Finally, the project-wide recommendations of the respondents are:

- Effective project planning should be provided
- All related factors should be considered during business development stage
- Good relations with the clients and local authorities should be established

Considering the results of this research, it can be concluded that the research includes the "treatments" in addition to the "diagnose" unlike most of the previous researches. And the main difference from the previous studies that include possible solutions is the "lessons learnt" concept that provides the recommendations to be based on the past experiences directly.

For the future works, a consensus may be sought on the problems, opportunities, lessons learnt and recommendations stated by the sector professionals. Since all these concepts are defined here, the opinion of the professionals about these concepts may be searched and a further consensus may be established on each of the topics.

In addition, the application of these recommendations may also be investigated and the possible application areas can be defined. The items stated by the respondents may be studied for the specific conditions of the companies and management plans specific to the companies may be structured.

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APPENDIX – A

SAMPLE SURVEY

Middle East Technical University, Civil Engineering Department, Construction Engineering and Management Division M.SC. Thesis

"The Route Map of Turkish International Contracting Services – Lessons Learnt, Recommendations for the Future"

The international contracting services of Turkish companies that started in 1972 have an important place for Turkish economy. With increasing and decreasing annual amounts from 1970s to the present date due to several economic, political and social factors; annual value of the projects awarded has risen from 109 million \$ in 1972 to 23 billion \$ in 2008. In 2009, the annual value of the projects awarded decreased by the effect of 2008 global crisis; however, a recovery and an increase is expected in 2010 and 2011. According to Undersecretariat of Foreign Trade 2010 data, Turkish contractors completed more than 5400 projects in 82 countries within 1972-2010 periods. Similarly, the total value of the projects awarded to Turkish companies reached up to 175 billion \$. According to the targets set by the international contracting sector, the planned annual project values for 2011, 2015 and 2023 are aimed as 30, 50 and 100 billion \$ respectively. In this respect, being an important revenue generator, international contracting services is an important economic activity. Thus academic studies as well as studies within the sector should be conducted on this topic.

This study aims to contribute to the sector for using the lessons learnt in the past and achieving the targets set for the future. Within the scope of this study, the opinions and the views of the sector professionals who have international experience will be examined; and the lessons learnt from the problems, difficulties and opportunities faced in the past will be investigated. In the light of the lessons learnt, the

recommendations of the professionals for achieving the future goals will be evaluated and a route will be set for the Turkish companies.

For collecting and evaluating mentioned data, the attached survey was prepared. This survey consists of two sections. In the first section, the experience level of the participants is questioned for statistical purposes. In the first part of the second section, the problems, difficulties and opportunities faced by the professionals and their reasons are questioned. In the second part of this section, the lessons learnt as a result of problems and opportunities are evaluated. Finally in the third part of this section, the recommendations of the Professional for achieving the future targets will be examined.

The survey avoids disclosing the names of the persons, companies or projects. All the information received from professionals will be kept confidentially. The comments of the professionals will be used to set the route to the future of the sector without involving any specific personal or company information.

Thank you for your interest and for your valuable contributions to the research

Aydın Sakın – Graduate Student Prof. Dr. M. Talat Birgönül – Thesis Advisor Assoc. Prof. Dr. İrem Dikmen Toker – Thesis Co-Advisor



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1. General Experience

Year of Experience:yearsYear of Experience in International Projects:yearsCurrent Position:

Please indicate the countries you have worked and the number and the type of projects that you were involved in these countries.

#	Country	Number of Projects and Project Type
1		
2		
3		
4		
5		

2. The aim of this thesis study is to determine the problems-difficulties and opportunities - conveniences that were faced by Turkish construction companies in international projects; to define the lessons learnt and recommendations for the future within the light of the experiences. Please answer three questions below.

2.a) What are the problems/difficulties and opportunities/conveniences faced in the previous international projects that you were involved? Please consider the economic, political, geographic and social conditions of Turkey and the host country in your answers. If you think that the economic crises, now political formations; social, cultural, historical ties/differences and technological developments had positive or negative effects on the formation of these problems/opportunities, please explain them below (There is no limitation for the space, you can use as much space as necessary).

2.b) Within the light of your experiences, considering the problems/difficulties and opportunities/conveniences faced, what are the lessons that Turkish construction sector should learn from the past experiences (There is no limitation for the space, you can use as much space as necessary)?

2.c) According to the targets set by the sector, the planned annual project values for 2015 and 2023 are 50 billion \$ and 100 billion \$ respectively. In 2010, 33 Turkish contractors took place in "The Top 225 International Contractors" list prepared by "Engineering News Record". Turkey had the second place after China who had 54 companies in this list. According to your experiences and the lessons learnt, what should be done to defend this successful position and to reach the set targets for the future within 10 years (short term) and 20 years (middle term) periods? Please specify your recommendations below (There is no limitation for the space, you can use as much space as necessary).