Problems and a Solution Proposal for Abnormally Low Tenders in Construction Works Procurements

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Abstract

This paper discusses the reasons and consequences of abnormally low tenders which are one of the major problems in public procurement process. To be able to offer an effective solution to this problem surety bond system is analyzed in this study. In this framework, surety bonds contract and the practices in the world, the risks that can be guaranteed by the surety bonds and the advantages that the surety bonds can provide are examined.

Keywords: *abnormally low tender, construction works tender, surety bond.*

Introduction

Abnormally low tenders (ALTs) are tenders which are lower than the limit value determined by the Public Procurement Authority (PPA). In this study, the reasons for the emergence of the abnormally low tenders (ALTs), the evaluation of the ALTs, the risks caused by the ALTs, the precautions taken in the current system, the problems experienced and alternative solution suggestions in construction work tenders within the scope of Public Procurement Law (PPL) were discussed. Then, in order to understand the existing ALT evaluation system more clearly, the process of inquiry of the ALTs in construction works tender was touched briefly and comments were made on whether the system is effective or not. In addition, by discussing the issues such as the reasons for the ALTs submitted by the contractors, the reasons for the acceptance of the ALTs by the administrations etc., the situation regarding the formation of the proposals in the construction works tenders was tried to be explained completely. By determining the risks created by ALTs, the guarantees taken to eliminate these risks in the current public procurement system were examined and their effectiveness were evaluated.

In the current system, it has been determined that the risks arising from the beginning of a procurement to the completion of the work are tried to be eliminated with the required bid bond and performance bond at the rates determined within the scope of the legislation. However, it has been observed that these bonds are insufficient to fully cover the losses of the administration. In this study, "surety bond" application, which is applied in other countries in order to minimize such risks, was examined. Also it was examined whether surety bonds are

effective or not about not being signed of the contract by contractor who won tender, not being paid of salaries of subcontractors, workers and suppliers, being compensated for the public loss caused by incomplete work due to the contractor's fault etc. As a result, a more effective solution proposal was tried to be offered to the ALT problem, and the surety bond system, which is thought to protect both public administrations and tenderers from time, labor and financial losses, was considered as the most appropriate way to solve these problems.

In the literature review, it has been seen that there are studies in which ALTs are examined from different perspectives. In addition, there are some statistical studies related with this topic. But there is no study offers a solution to problems encountered in the evaluation of the ALTs and the elimination of the risks emerged with these tenders.

In his study, Karacan (2008) examined the reasons for the emergence of ALTs, and carried out statistical studies by conducting a survey. He also included research on *limit value* determination which plays an important role in determining ALTs. Çiçek (2009) included information about the structure of the Public Procurement Authority (PPA) and the public procurement system in his master's thesis titled "The Application Problems of Public Procurement Law at Number 4734 at Construction Affairs and Solution Proposals". In this thesis there was no an effective solution proposal regarding the evaluation of the existing ALTs, it was mentioned that the PPA should play a more effective and guiding role in the evaluation of the ALTs. Savaş (2012), in his study, addressing the processes until the contract is signed in the construction works tenders, explained what should be done by the parties in terms of the ALT evaluation and expressed the points to be considered at this stage. Atabeyli (2014) examined the compliance of legislation, to which PPA is subjected, with the legislation of the European Union in her study. She evaluated that the problems related to the ALT evaluation in the construction works tenders can be reduced by setting concrete criteria in this regard.

Low Tender Price

Cost estimate is inherently difficult for construction works due to lots of different parameters and uncertainties. This situation is a fact that should be taken into account while both preparing and evaluating the tender. The step of preparing the tender is the most important part of procurement process for tenderers. That step effects the result of procurement directly. Targets of contracting companies in a construction work can be stated as following;

1. Maximizing the profit (Minimizing the loss)
2. Accelerating the fund recycling of firm
3. Keeping to produce and employ
4. Creating personal status on administration and managers by undertaking prestige projects
5. To meet owners-entrepreneurs who may be the potential source of many jobs in future
6. To enter to new geographic areas (Harrison, 1981)

While contracting companies target maximizing the profit, on the other hand, they have to tender with lower price than other tenderers because of competition principle of procurement. Consequently, contracting companies have to optimize this cost issue to be able to win the contract. Contractors constitute tender price by calculating quantities and *costs for themselves*. In addition, they add some profit according to their risk perception. This price includes some certain direct costs such as personnel salaries, equipment and material costs, and their expenses, and some uncertain indirect costs, such as financial costs (Park, 1979). However, it is a well-

known fact that the exact cost of work becomes clear at the end of the completing work. The important points in determining profit margins by contractors are given in Figure 1 (Gencer, 2002).

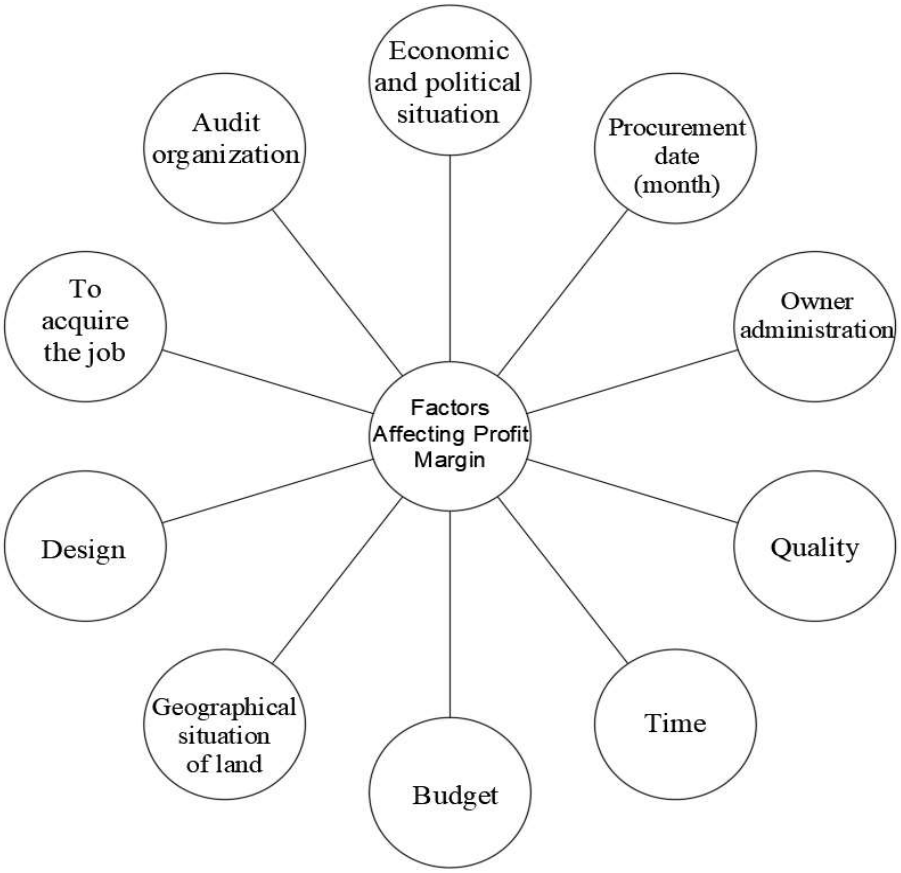


Figure 1: Factors affecting profit margins.

In the light of all of these evaluations aforementioned, it is normal to exist very different tender prices. However, although the tender prices are based on logical foundations for the contractors themselves, it is quite natural that contracting authority wants to question the authenticity of these tender prices and secure themselves.

Competition of tenderers is one of the most important principles of procurement process. That's also the main reason of low tender prices. While it is aimed to increase the efficiency and innovation in the competitive procurement system, questioning the rationality of the prices resulting from the competition is also vital in terms of whether the work can be done in the prescribed quality. In general, the reasons of ALTs by tenderers are low owning costs of tenderers, incorrectly prepared tenders or to offer consciously ALT as a strategy. Especially tenderers who are in financial trouble may adopt such a strategy with such a high risk appetite in order to survive and tend to make aggressive offers. In addition, considering the large number of companies operating in the sector and the ease of entering the sector, the probability of occurrence of ALTs increases. Due to the intense competition, tender price offers can be made even under costs. These type of tender prices cause decreasing of quality in public projects. Possible reasons of preparing a low price by tenderer, the roots related with this reasons and solution proposals are shown in Table 1.

Table 1. Reasons of ALTs by tenderers.

<table>
<tr><th>Reasons of ALTs by Tenderers</th><th>Root</th><th>Solution Proposals</th></tr>
<tr><td>Low calculation cost</td><td rowspan="2">- Misinterpreting the project and specifications
- Lack in tender documents
- Uncertainties</td><td rowspan="4">- To prepare tender documents correctly

- To give enough time for tender preparation

- Strong preliminary process</td></tr>
<tr><td>Extremely optimistic attitude</td></tr>
<tr><td>Idea of change in contract details at the time it is not preferable for administration</td><td>- Knowledge about lacks of tender documents and to use it a strategy</td></tr>
<tr><td>Risk taking in a bad condition economically (Dimitri et al., 2006)</td><td>- To survive economically
- To keep the continuity of the works
- To take work experience certificate</td></tr>
<tr><td>Large number of tenderers (De et al., 1996)</td><td>- To reduce profit margin
- Competition</td><td></td></tr>
</table>

ALTs can have large negative effects on the construction sector and on the country's economy. Therefore, efforts towards reducing or completely eliminating the effects of the ALT problem encountered in construction works become important. The ALT problem is not only a problem specific to Turkey, it is also included in the legislation of many countries in terms of its importance and different precautions are taken in different countries in order to protect it from possible damages. However, given the problems arising from ALTs, it is of utmost importance in terms of preventing construction works tenders from being awarded to a tender below the actual cost of the project. In addition, realizing this is a very complex and difficult task. In Table 2, possible acceptance reasons of ALTs by administrations, the roots related with this reasons and solution proposals are shown.

Table 2. Acceptance reasons of ALTs by administration.

<table>
<tr><th>Reasons of Acceptance of ALTs by Administrations</th><th>Root</th><th>Solution Proposals</th></tr>
<tr><td>Misevaluation of tender price</td><td rowspan="2">- Lack of experience
- Lack of knowledge</td><td rowspan="3">- Employment of experienced engineers

- More transparent procurement process</td></tr>
<tr><td>To not be able to consider quality, control and transfer costs, maintenance and repair costs etc. (Günbay, 2008)</td></tr>
<tr><td>Media and public pressure</td><td>- Inadequate transparency
- Lack of trust to procurement process by public</td></tr>
</table>

Evaluation of Legislation Related to ALTs Evaluation Process

According to PPL Article 38, "After evaluating all tenders, tender commission shall determine those that are abnormally low compared to the other tenders or the estimated cost determined by the contracting authority. Before rejecting these tenders, the commission shall request from the related tenderers, the details relating to components of the tender that are determined to be significant, in writing and within a specified period.

The tender commission shall evaluate the abnormally low tenders taking into consideration the written explanations documented on the following aspects:
a) economic nature of the manufacturing process, the services provided and the method of works,
b) selected technical solutions and advantageous conditions to be utilized by the tenderer in supply of the goods and services or fulfilment of the works,
c) the originality of the goods, services or works proposed.

As a result of this evaluation, the tenders of the tenderers whose written explanations are found insufficient or who fail to make a written explanation shall be rejected."

From the aforementioned law, it is understood that the tenders that are below the determined *limit value* specific to the procurement will be determined by the administration as ALT and the relevant tender owner will be asked for a documented explanation regarding the ALTs before these offers are rejected by the administration. In addition, it is understood that the tenders determined to be abnormally low are the ones that should be rejected and that destructive competition is wanted to be prevented. On the other hand, if there are tenders that can be explained within the framework of the provisions of the related Law, such tenders are allowed to be accepted without refusal, as a matter of public welfare. To accelerate evaluation process of ALTs, with a law amendment in 06.02.2014, PPA was authorized to be able to reject tenders below *limit value* without requesting any explanation in construction works tenders, the estimated cost of which is up to ½ of threshold value. Besides this prerogative, PPA was authorized to determine *limit value* and criterions for querying of ALTs too. In 06.07.2014 a new amendment more was carried out. With the arrangements made, in procurements, estimated cost of which is up to 1/3 of threshold value, administration was enabled to award the contract to the lowest valid tender without asking for an ALT description, to award the contract to the first valid tender above the limit value or to query for ALTs. In the current situation, according to PPL, tender commission is authorized to make decision for ALTs as in Table 3.

It is clear that the difficulties experienced in evaluating the ALTs are effective in making this amendment. It is aimed that administrations take initiative in line with their own preferences. However, awarding the contract on an ALT without any inquiries does not mean that ALTs will not be a risk for the administrations (Uslu & Demirel, 2010).

Surety Bond

Surety bond, which is one of the financing methods that can be an alternative to bank letters of guarantee in construction works, has emerged in the USA and has spread to the world. Unlike the bank letters of guarantee, it is frequently used in the world construction industry due to its unique features. It is possible to define surety bond as a kind of insurance that the loss of the

employer will be covered by a third party (insurance company) in case the party responsible for doing the job does not fulfill the work undertaken.

Table 3. Decision mechanisms to evaluate ALTs.

The method to be applied	Type of procurement
To query of ALTs	- *Compulsory* in all construction tenders, the estimated cost of which is equal to and above 1/3 of the threshold value. - *Optional* in the open procedure, the estimated cost of which is up to 1/3 of the threshold value and in the negotiated procedure made in accordance with Articles 21 (b) and (c) of the PPL.
To award the contract to the lowest tenderer without query of Alts	Up to 1/3 threshold value of estimated cost; - *Compulsory* in restricted procedure and in the negotiated procedure made in accordance with Articles 21 (a), (d) and (e) of the PPL. - *Optional* in the open procedure and in the negotiated procedure made in accordance with Articles 21 (b) and (c) of the PPL.
To award the contract to the first lowest tenderer above the limit value without query of Alts	- *Optional* in open procedure the estimated cost of which is up to 1/3 of the threshold value and in the negotiated procedure made in accordance with Articles 21 (b) and (c) of the PPL.

If the borrower cannot pay the debt arising from the contract due to any reason stated in the policy, usually bankruptcy, the insurance company or the bank, which is in the position of guarantor, guarantees the debtor's debt and compensates the creditor's loss. It is a type of surety that Turkish construction companies, which do business abroad, encounter and is requested by the employer as an alternative to the letter of credit.

In Turkey, in February 2014, the General Conditions of Surety Bond by the Undersecretary of Treasury and in October 2014, the Communique No. 29136 were published in the official gazette and entered into force. Legal basis of surety bond was created with these prescripts in Turkey.

Surety bond is widely used in America, Europe and Asia Pacific. While the entire letter of guarantee requirement in the US market is met by insurance companies, this rate is 95% in South America, 25% in Europe and 50% in Asia Pacific. Surety Bond is mostly used for construction, manufacturing, construction-repair, energy and infrastructure projects, but demand is received from almost every sector (Sandberg, 2004).

The insurance company may directly vouch for the debtor itself or by indirect surety, the bank, credit guarantee institutions or other financial institutions may provide warrant for the debtor's commitment as a guarantor against the beneficiary. Surety bonds can be issued conditionally or on a payment basis at the first request, similar to the bank letters of guarantee. The parties to the surety insurance contract are the creditor of the original debt relationship (administrations in public tenders) and the insurer. The debtor is the relevant person of the contract. The surety bond line is given in Figure 2.

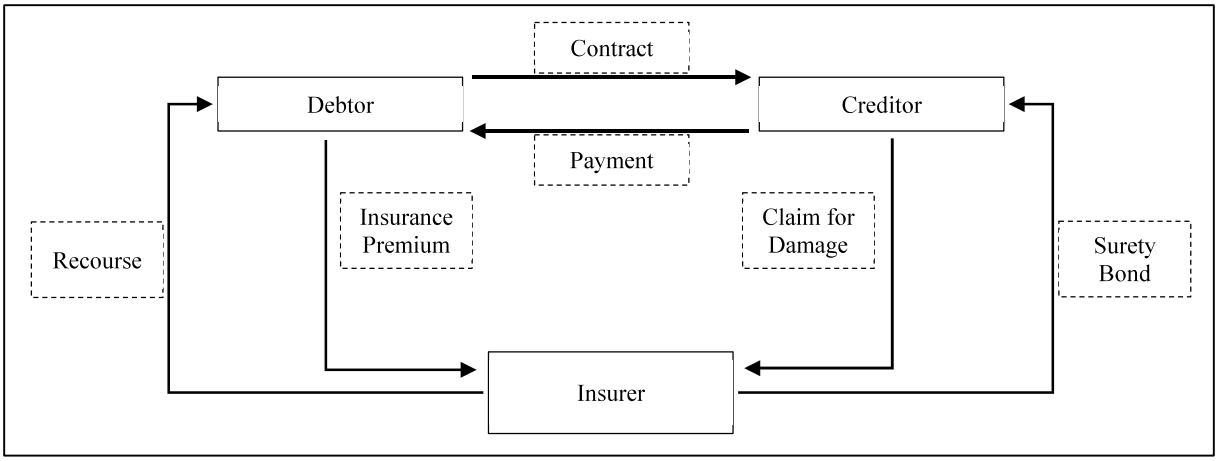


Figure 2: The surety bond line.

In Turkey, surety bond has not been used as in foreign countries. Documents issued for the risks under guarantee under the name of surety insurance are not insurance policies, but *commercial papers*. Therefore, it can be seen as indistinguishable with bank letters of guarantee. Surety bond usage of the foreign countries is quite different from the Turkey. These differences make surety bonds more preferable. For instance, in the application of performance bonds in the USA, if the risk guaranteed by the surety bond contract is realized, the option of the insurer to solve the problem experienced by other methods instead of paying compensation is one of the main differences between bank letters of guarantee and bail insurance (Barru, 2005). These methods are generally;

1. To ensure the completion of the project by agreeing with a new contractor
2. Ensuring the completion of the project by providing financial assistance to the contractor
3. Compensating the sustained damage due to the unfinished project
4. To allow the project owner to complete the job and pay the difference

The project owner (administration) and the insurer may decide together with which of the specified methods will be executed. In the performance guarantee, the upper limit of the responsibility of the insurer towards the project owner is generally 100% of the contract price in money (Donohue &Thomas, 1996).

Conclusions

The determination and evaluation processes of ALTs, which ensure the control of the rationality of bids in construction works tenders, have been challenging both for the administrations and for the tenderers. In addition, the results of this process are far from satisfactory for both parties. The most concrete evidence of this is that most of the objections and complaints made to the PPA consist of ALT inquiries. The most rational way to reduce complaints in this regard is undoubtedly the prevention of ALTs at the very beginning of the procurement. At this point, it is difficult to talk about a method that can be called perfect for the prevention of ALTs. Surety bond system, which has started to be established in our country with a new legal infrastructure but is used frequently in some countries, especially in the United States, stands out as the most effective method in this regard.

The establishment of the legal basis for the bail insurance is an important innovation for our law. Although its legal basis has been established, it is not yet effectively used in our public procurement system. When the established legal relationship with the surety bond is examined, it is seen that a three-legged relationship consists of the insurer (surety), the insurant (the contractor), the insured (the administration). The insurance company can provide guarantee both for the administrations and the tenderers participating in the tender.

In the surety bond system, the tenderers who apply to the insurance company for coverage must present all their information in a clear and transparent manner to the insurance company and prove that the bid price prepared for the tender is a rational offer that will enable the work to be carried out as requested. Insurance companies also examine whether the work can be completed with the bid price of the tenderer in accordance with the contract terms and science and art rules, taking into account the financial and technical capacity of the contractor. Investigation of the mentioned issues is done by experts within the insurance companies, and the contractor that won the tender is provided assurance. In this way, the risk is largely transferred from administrations to insurance companies and contractors. Therefore, a natural auto control system has been established during the proposal preparation stage. In this way, the contractor profile that participates in public tenders will tend to recover spontaneously.

With this system, the probability of the bidder won the tender to become a company that has the power and competence to complete the job by staying within the desired quality and within the foreseeable cost limits increases considerably. However, if the contractor fails to complete the work subject to the tender, the insurance company must use its financial and technical facilities, complete the work and deliver it to the administration, or guarantee to cover all the losses of the administration. As a result, even if the administration decides to award the contract to the contractor with lowest price offer, the risk that the work cannot be completed or the losses cannot be arranged is largely eliminated.

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