

## **Preventing Corruption in Public Works— Rediscovering the Function of Surety Bonding System**

**Xiaomei Deng**

Vice-Director, Engineering Management Institute, Department of Construction Management  
School of Civil Engineering, Tsinghua University, Beijing

### **Abstract**

Surety bonding system is a familiar tool on transferring the performance risk of a contract in construction area, but seldom is it to be connected with preventing corruption in construction area. The author find that: when a well designed surety bonding system works together with, the open tendering and biding procedure for public works can become much more transparent and efficient. However, in normal practice, there are some factors causes the system malfunction in term of anti-corruption, such as low penalty, improper surety, or the monopoly of surety market. The paper will discuss these factors and their impacts in detail, and will give advice on how to improve the function of surety bonding system so as to use it as an anti-corruption tool in construction area..

### **Keywords**

anti-corruption, public works, surety bonding system.

## **1. Introduction**

Surety-bonding system is a familiar tool on transferring the performance risk of a contract in construction area, but seldom is it to be connected with preventing corruption in construction area. However, surety-bonding system may become a very useful tool for anti-corruption in public works, provided that the system is well designed. It may bring much more transparent and efficient to open tendering and biding procedure, and bring much more self-discipline both to the contractor and the public owner, and eventually save public money. The surety-bonding system as an anti-corruption tool for public works will be discussed in detail as follows.

## **2. Normal procedure for anti-corruption in public works & its failure**

### **2.1 Free discretion of Public owner should limited**

Compared with private works, public works are most vulnerable for corruption in construction area. There's no doubt that a private owner will implement a private work with caution, because the private owner itself will undertake all the loss for his bad decision. However, a public owner may behave differently, because the public rather than the public official in charge will eventually pay for the loss. Therefore, it is meaningful to limit the free discretion of a public owner.

## **2.2 Normal procedure for anti-corruption in public works & its failure**

It is unwise to count on the faith of a public owner and concentrate all the decision-making power on his hand. Therefore, open tendering and bidding system becomes the normal procedure for public works procurement. The idea hereof is to balance the power of the public owner by a bidding-evaluation-committee, of which the members are always reputable professional and experts, who are expected to give independent and indifferent judgment so as to protect public money. However, the members are in fact on the same position when mention to pay for their bad decision. How can we be sure that the members will not be bribed! Therefore, there is no surprise that corruption can still be heard now and then, even though open tendering and bidding procedure is followed. Obviously, the normal procedure is not as accountable as it assumed to be.

## **3. How Surety-bonding system brings more transparency to public works?**

### **3.1 Contract bonds as tools for anti-corruption in construction area**

Surety-bonding system is used normally to transfer the performance risk of a contractor, so called contract-bonding system, of which two important bonds related with the topic of this paper are bid bond and performance bond. Bid bond guarantees that the bidder is serious and will enter the contract if it is awarded. When the bidder wins, a performance bond is then required to substitute the bid bond, otherwise the contract cannot be valid, and the bid bond will be called for the bidder's failure to enter the contract. Performance bond is used to guarantee that the contractor will perform the contract duly and honestly, and any loss due to his non-performance can be compensated from the surety at the amount to the limitation of the bond.

When a bond is issued, the surety is at the risk: He may eventually undertake the loss due to his bad decision for bonding a bad contractor. Obviously, the financial pressure of a surety to write a bond is much higher than that of either a public owner or a bidding-evaluation-committee member to award the contract, but rather close to that of a private owner. The idea of using the surety-bonding system as an anti-corruption tool is that: To make the decision-making situation of a public work close to that of a private work. As far as the decision-making situation of a surety is most similar with a private owner, why not count more on the surety?

When with an effective contract bonding system, the awarding decision-making of an open bidding procedure can be simplified to the most: just to choose the lowest responsive bidder among the bonded bidders. Even if this is a wrong decision, it is not the problem of the public owner, but the problem of the surety and of the contractor, because the bond has protected the public money. With an effective contract bonding system, the bidding procedure can be so simple and transparent that almost no corruption opportunity can exist.

### **3.2 Non-contract bonds as tools for anti-corruption in construction area**

Some non-contract bonds can also be considered as tools for anti-corruption in construction area, such as Public Official Fidelity Bonds, which guarantee that the public official will duly and honestly perform his duty on the position, and any loss due to his non-performance or mal-performance can be compensated from the surety at the amount to the limitation of the bond.

Similarly the surety is at the risk of bonding a bad official. However, the surety can transfer the risk to the public official himself by collecting strict indemnities, which must be the official's personal property. Public official is most vulnerable to be bribed, but with the bond, he needs to calculate much more carefully whether it is worth to accept bribes. Even though bond cannot radically make the officials clean, it can efficiently raise the threshold of bribes, and hence reduce corruption. Obviously, Fidelity Bonds can be used

on whomever at high risk of being corrupted, such as the bidding-evaluation-committee members, designers, and any other important professionals, etc.

#### **4. Barriers that hamper the function of surety-bonding system and its cure**

Surety-bonding system has the potential to become a very useful tool for anti-corruption in public works, but why people seldom notice it? The reason is that there are many barriers that hamper the anti-corruption function of surety-bonding system works. Therefore, it is important to find out what they are and how to get rid of them.

##### **4.1 Low Penalty**

Penalty is the largest amount that can be called from a bond. For a contract bond, one can compare the amount of a bond with the price of the contract it bonded. If the ratio is relatively high, i.e., the 100% performance bond in the US can be called *high penalty bond*. Comparing with this, the 10% performance bond widely used in the international market is relatively low. Therefore, the latter can be called *low penalty bond*.

The main concern for a surety when underwriting a bond is to control his risk to an acceptable level. The less the risk is, the better. Under a certain penalty requirement, there are mainly three ways for a surety to control his underwriting risk:

- A. Underwriting carefully to choose good principal, who may have least chance to be in default, so called performance-based underwriting;
- B. Collect collaterals from the principal, as more as possible, so as to reduce the surety's own risk exposure, so called indemnity-based underwriting; or
- C. Limit the surety's liability strictly based on default, so called on-default bond or conditional bond.

If the bond is expected to be used as an effective screening tool, performance-based underwriting is a must. However, not all the bonds are issued via a performance-based underwriting. Performance-based underwriting is complicate and costly to the surety. Whenever it is possible to issue bonds via indemnity-based underwriting, performance-based underwriting is avoided. Risk exposure is the minus between the amount of the bond limitation and collateral. Obviously, the higher the risk exposure, the more effective performance-based underwriting can be expected, and the more indemnity-based underwriting, the less the needs of performance-based underwriting.

In practice, the surety cannot only consider how to control its own risk, but also how to provide an acceptable and sufficient protection to the beneficiary at a feasible transaction cost. Only for low penalty bond, indemnity-based underwriting is feasible, because the collateral is not too much to be available. The higher the penalty, the less chance for a surety to collect enough collateral, and the higher chance to execute strict performance-based underwriting, and the more effective of the surety-bonding system to function as an screening tool in biding procedure. If surety-bonding system is expected to work as an anti-corruption tool, high penalty bonds rather than low penalty bonds should be used.

##### **4.2 Inappropriate surety**

The reason to use surety-bonding system as an anti-corruption tool is based on that a surety's decision is most close to a private owner's decision. However, the condition is that the surety can only get benefit from its right decision via effective performance-based underwriting, and have no other interests related with public works itself. However, sometimes surety may have chance to get some other benefit rather than the surety business itself, i.e., the surety itself is corrupted. The following two situations should be noticed:

#### **4.2.1 Substitute contractor as surety**

In Japan before 1996, a substitute contractor is a must for a contractor to get any contract. Here, the substitute contractor is in fact a surety: He will take over the job whenever the bonded contractor cannot performance the said contract. Obviously, all the contractors are interested in public works. How the awarded contractor can get support from the substitute contractor, a former competitor? A possible solution is bid rigging: the chance to win a contract is in fact arranged by the collaborative bidders. Given that there are enough public works to bid, every bidder will eventually have a chance to win a job. In practice, serious bid rigging was observed in Japanese construction market before the substitute bonding system was abandoned (Deng, et al. 2003). To avoid this problem, specialized sureties should be developed to provide the services.

#### **4.2.2 Monopoly of the surety market**

Monopolized surety maybe another source of bid rigging, because the surety may have the motivation to get excessive profit from its monopoly, and may force the all contractors to join bid rigging by reject to underwrite whoever refuse to join the bid rigging. To avoid this problem, the surety market must be kept competitive, so that no one can have the monopolistic power.

#### **4.3 Fail to monitor**

The basic idea of a surety bonding system is to transfer credit risk to the risk source. e.g., because the contractor is the risk source of non-performance, a performance bond is required. When a default arises, the owner can call the bond to cover its loss, and after the surety pays the bond, he can seek indemnity from the contractor. Therefore, the contractor will eventually undertake the loss due to his non-performance. To avoid pay the loss, the contractor will be more careful to perform the contract and to avoid any possible default. Meanwhile, the surety is at the risk of making a wrong underwriting and cannot be totally recovered from the contractor. Therefore, he may improve his underwriting skill as much as possible so that to reduce the possible loss. However, all the above stories are based on an assumption: default will be discovered and the corresponsive loss will be transferred to the surety and the contractor. However, if there were no serious monitor, and most defaults were overlooked, then the system could not make substantial difference. Therefore, serious monitor is recommended together with the surety-bonding system.

### **5. Conclusion**

Surety bonding system is a very potential tool for preventing corruption in construction area. Public works are most vulnerable for corruption in construction area, mainly because the public owner need not pay for the loss due to his bad decision, so do a bidding-evaluation-committee member, which is always needed to balance the power of the public owner for the sake of protecting public money. However, a surety, who underwrites a surety bond for a public work, may behave differently. He may undertake the loss due to his bad decision for bonding a bad contractor in case of contract bonds, which can be watched sometimes in some bonded projects; He may face the same risk for bonding a bad official in case of official fidelity bonds, if an official fidelity bond is also demanded for the public owner. Moreover, the principal, who is the bonded party, is also at the risk of undertaking the loss caused by his own default, and may become more self-discipline on his own behavior. Therefore, surety-bonding system may become a very useful tool for anti-corruption in public works. When a well designed surety bonding system works together with, the open tendering and biding procedure for public works can become much more transparent and efficient. However, in normal practice, some factors may cause malfunction of the system, such as low penalty, improper surety, monopoly of surety market, and lack of monitor. To use the surety-bonding system as an anti-corruption tool, high penalty bonds, a competitive and specialized surety industry and a strict

monitoring system on performance should also be introduced. Meanwhile, high penalty bond is not only good for anti-corruption, but also brings some other benefits to the market, such as public money saving, efficient claim handling, improve fairer relationship between the contractor and the owner, and enough financial protection, etc (Deng, et al. 2004). Therefore, raise the penalty of surety bonds should be the right direction for the future.

## Acknowledgements

Thanks to the National Natural Science Foundation of China for supporting this work under Project 70203004.

Thanks to Chubb & Son and St. Paul Surety, two surety companies, for providing information from the US surety industry.

Thanks to Prof. Kozo Kusakari of Kantogakuen University for providing information from Japan.

Thanks to Neill Stansbury of Transparency International for very insightful discussion on the corruption in construction area.

## References

- Deng, X., Tian, Q., Ding S., and Boase B.(2003) Transparency in the Procurement of Public Works. *Public Money & Management*, Vol.23, No.3, pp 155-162.
- Deng, X. Ding, S. and Tian, Q. (2004) Reasons Underlying High Penalty Mandatory Construction Bonding System. *Journal of Construction Engineering and Management*, Vol. 130, No. 1, 67-74.

