

# ISSUE BRIEF **04.23.19**

## On the Allocation of Public Works Contracts: Risks in Bypassing Procurement Auction Procedures

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### INTRODUCTION

In Mexico, few public work projects have brought as much controversy as the now-cancelled airport in Texcoco, a town just outside of Mexico City. Construction was cancelled because President Andrés López Obrador believed costs were excessive and he questioned the legitimacy of the initial contract award. In a time of much debate in Mexico on how the country's government awards public works projects, this issue brief examines the laws that govern the process.

According to the Law of Public Works and Related Services (LPWRS),<sup>1</sup> a public construction contract should be given to the winner of a procurement auction. However, when the value of the project is relatively low, the law provides exceptions that enable the government to bypass the auction and assign a project directly to the contractor of the government's preference. This exception raises two questions: When the government chooses a public works contractor directly, is it selecting the most cost-efficient firm? Do firms that directly receive contracts also compete in procurement auctions?

### BYPASSING PUBLIC PROCUREMENT AUCTION PROCEDURES

The allocation of a construction contract may bypass the public auction procedure if it is relatively small<sup>2</sup> and it meets criteria specified in the LPWRS. Provided these conditions are met, the government can either invite three or more participants to an auction, or it can directly award a contract to a firm.

In certain circumstances, it is understandable for the government to bypass a procurement auction if the project meets the legal criteria. For example, a project may be urgent and only one company may be readily available to carry it out. In another hypothetical scenario, the construction work may need to be done in a remote area, and there may only be a few companies willing or able to go to the construction site. In such situations, it is reasonable for the government to assign the project to the company that can complete the job, regardless of its efficiency. It is for these types of cases that the LPWRS (Chapter 3, article 41) provides exceptions to the requirements for a procurement auction. Specifically, regarding public construction projects, the most common exceptions allowed in the law are the following:

- Circumstances that could cause significant losses or additional costs for the government, although these must be explained.



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- Force majeure circumstances that do not permit the timely completion of public tender procedures; in this case, the contract should be limited to what is strictly necessary to deal with the problem.
- Situations in which a contract has been rescinded due to the original contractor's failure to fulfill the terms. In this case, the state can give the project to the company with the second-best offer.
- Situations in which no company responds to the call for proposals.
- When the service required merely involves maintenance, restoration, repairs, or demolition.
- When the project requires rural labor or if it is in an urban area classified as low-income.

Although these exceptions sound reasonable, some are too broad or too vague and may allow for an undue degree of discretion in assigning public works contracts. The first two exceptions, for example, are of special concern, not only because they lack specificity, but also because they can be used to conceal inefficiencies in a proposal—or even to justify corrupt practices that give preferential treatment to specific firms. Whether through inefficiency or corruption, the allocation of direct contracts can lead to two problems. First, the company chosen may not be the most cost-efficient one; second, even if it is the most efficient, the chosen company could inflate prices at will in the absence of competition. In the end, exceptions may create important unforeseen problems that deserve greater scrutiny.

### **BENEFITS OF PROCUREMENT AUCTIONS**

The use of a procurement auction is beneficial in two ways: it increases transparency and fosters competition. Both of these factors, in turn, may aid (although indirectly) in reducing corruption as the terms of the contract are met.<sup>3</sup> At the same time, as pointed out by the Federal Commission of Economic Competition

(COFECE), if a firm's ability to win contracts is determined not by its efficiency but by its dubious procurement practices, inefficient firms that would not have otherwise survived will be permanently entrenched in a corrupt system. Moreover, competing companies that may be efficient might leave the government market because they cannot win enough contracts.<sup>4</sup>

### **WHAT CAN BE DONE?**

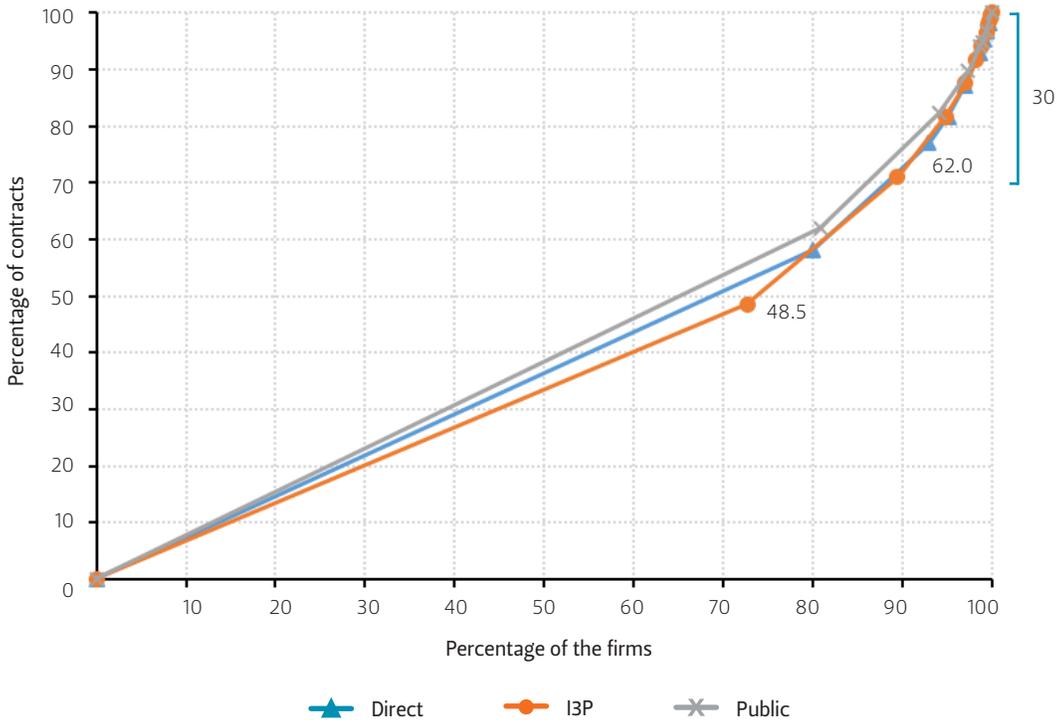
Recently, the COFECE has made public several suggestions to improve the transparency of the public contract allocation process. The suggestions are geared toward facilitating the use of public auctions; to making the exceptions in the LPWRS more specific; to instituting checks and balances to circumvent the use of contract modifications; and to increasing the penalties for the firms that collude with each other to bid for higher construction prices.<sup>5</sup>

Additionally, steps can be taken to improve monitoring of the allocation process. More specifically, it is possible to explore publicly available data in CompraNet, which details information about all government contracts in recent years. Examining patterns for the allocation of contracts can help a monitoring agency identify where to look first when combating corrupt or inefficient practices. The information available in CompraNet allows us to ask the following questions:

- How concentrated is a particular public works market? Do a relatively small number of firms win a significant number of contracts?
- Are there any firms that only receive contracts by direct allocation instead of through competitive auctions?
- When the government must choose a firm directly, does it select the most cost-efficient firm?

The next section aims to answer these questions in the case of a particular public works market: the pavement of streets with hydraulic concrete.

**FIGURE 1 — PERCENTAGE OF FIRMS BY THE PERCENTAGE OF CONTRACTS**



**NOTE** In the legend, “direct” refers to contracts awarded directly to the company; “I3P” refers to auctions involving three or more participants invited to bid; “public” refers to standard public auctions.

**CASE STUDY: PAVING THE STREETS**

The example of a small street paving job is a good case study for two reasons. First, the relatively low budget of these contracts allows the government to consider the use of exceptions to bypass a public auction. Second, these contracts appear with high frequency in Compranet and thus data are readily available to examine. Furthermore, this analysis can be extended to other markets, or it can be done for sub-regions, which allows testing for other variables. The results presented here are for country averages.

In the hydraulic concrete street paving market, 18.5 percent of the 3,469 contracts awarded throughout Mexico between 2010 and 2018 were won through a public auction; 66.8 percent were awarded after three or more firms were invited to participate in an auction; and 14.7 percent were the result of direct allocation. For this specific market, the percentage of contracts awarded by direct

allocation is relatively low. Even so, it might be of interest to determine the concentration of contracts by allocation procedure. In Figure 1, the cumulative percentage of the number of firms being examined is plotted against the cumulative percentage of the number of contracts. For example, if we look at the line for the auctions by invitation to three or more firms (I3P), we see that close to 72 percent of the firms receive 48.5 percent of the contracts. Likewise, if we look at the line for public auctions, we observe that close to 81 percent of the firms receive 62 percent of the contracts. When we look at the last 10 percent of the horizontal axis, we observe that in general, for each allocation process 10 percent of the participating firms win close to 30 percent of all contracts.<sup>6</sup> Nevertheless, the majority of contracts are won by a large number of firms. In other words, a small group of firms receives a relatively larger share of the contracts, but by and large, the market concentration is not high.

A subsequent question is, do the firms that directly receive contracts also receive contracts by winning auctions? As mentioned before, of the 3,469 contracts, 14.73 percent were given directly to a firm. Interestingly, among these firms, 63.61 percent did not win any contracts at auction. If these firms were not able or cost-efficient enough to win an auction, it is questionable why were they given contracts through a process other than an auction.

Yet another question posed here is: Are there indications that firms that received contracts by direct allocation are receiving more lucrative contracts? At least in this market, and for the specific years and states analyzed, the answer is no. When we compare the average value in Mexican pesos of directly allocated contracts and those won at an auction, the difference is not statistically significant.

Finally, when granting a contract to a firm directly, is the government choosing the most cost-efficient firm? The answer to this question is more difficult because we do not know the counterfactual. That is, we do not know what would have happened had the government chosen another firm. Nevertheless, we can use auction theory to indirectly learn about the efficiency of each firm that participated in an auction; then we can compare the efficiency of the firms that received contracts by direct allocation with the firms that did not. The only caveat is that we can only compare the firms that solely participate in auctions with those that both participate in auctions and received contracts by direct allocation. This exercise, hence, omits the firms that have never participated in an auction.

The rationale of how we can learn about the efficiency of the firms is the following: If we assume that a given bid depends on (or is a function of) a firm's costs and other observable characteristics, we can indirectly learn about the cost to complete contract. Using this information, we can then determine how contracts are distributed among firms by cost. Methods suggested by Flambard and Perrigne allow this type of analysis.<sup>7</sup> We are currently conducting this exercise, which will be the topic of a future issue brief.

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## ENDNOTES

1. See Chapter 3, Article 41, Ley de Obras Públicas y Relacionados con las Mismas, accessed February 9, 2019, [http://www.diputados.gob.mx/LeyesBiblio/pdf/56\\_130116.pdf](http://www.diputados.gob.mx/LeyesBiblio/pdf/56_130116.pdf).

2. The Budget of Expenditures of the Federation establishes the maximum value of contracts awarded by direct allocation and/or through invitation to three or more firms to an auction. The amounts depend on the public construction budget of the state or municipality.

3. Organisation for Economic Cooperation and Development, "Collusion and Corruption in Public Procurement," October 15, 2010, <https://www.oecd.org/competition/cartels/46235884.pdf>.

4. COFECE, Agenda de Competencia para un ejercicio íntegro de las Contrataciones Públicas, July 2018, <https://www.cofece.mx/wp-content/uploads/2018/07/CPC-ContratacionesPublicas.pdf>.

5. *Ibid.*, 45–55.

6. Note on Figure 1 that 90 percent of the firms receive close to 70 percent of the contracts, which equivalently means that 10 percent of the firms receive 30 percent of the contracts.

7. Véronique Flambard and Isabelle Perrigne, "Asymmetry in Procurement Auctions: Evidence from Snow Removal Contracts," *Economic Journal* 116, no. 514 (October 2016): 1014–1036, <https://doi.org/10.1111/j.1468-0297.2006.01121.x>.

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