

Empirical Analysis of Effects of Offering Price Adjustment Clauses (PACs) on Competition

Mohammad Ilbeigi and Daniel Castro- Lacouture, Ph.D.
Georgia Institute of Technology
Atlanta, Georgia

Offering Price Adjustment Clauses (PACs) in highway construction projects is one of the most common risk management strategies to control the consequences of uncertainty in the price of asphalt cement. Owner organizations may benefit from a PAC through the contractors' willingness to exclude extra risk premiums from their submitted bid prices and consequently submit lower bid prices, or by increasing the number of bidders, encourage competition among bidders, and receive less dispersed bids. Although several previous studies have analyzed the effects of offering PAC on the submitted bid prices, the actual effects of PACs on the level of competition is not clear. The objective of this study is to empirically analyze the effects of offering PACs on the number of bidders and dispersions of the submitted bid prices. System monitoring control charts are utilized to track the variations in the average number of bidders per project, and to analyze the dispersion of the submitted bid prices for four major asphalt line items to check whether their variations have changed after offering PACs. Results show that there is no evidence indicating that offering PACs yield to an increased number of bidders or a decreased dispersion of the submitted bid prices. These results can also help capital planners of transportation agencies and owners of major capital projects systematically evaluate their financial risk management strategies such as PACs.

Keywords: Price Adjustment Clauses, Competition, Number of Bidders, Dispersion, Control Chart