An Empirical Analysis of Public-Private Partnerships in Delivering Transportation Projects

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Abstract:

The gap between increasing demands of infrastructure and shrinking funds poses great challenges at all levels of government. Increasingly, governments are turning to the private sector to help build both large and small projects. It is suggested that public-private partnership (P3) projects are more efficient, finish under budget and ahead of schedule, and meet the long term goals of maintaining and operating roads, tolls and bridges. However, many arguments in favor of P3 projects are anecdotal or based on a limited number of case studies. Solid empirical studies and quantitative analysis are lacking in literature, mostly because of the lack of data. The analysis is further complicated by the diversity of projects in their scale, duration, functional type, geographic distribution, financial sources, contract type, etc… Because of these challenges, there is no consensus on the scale of benefits, if any, related to P3s in literature. This study addresses this problem by investigating a large number of projects delivered through both P3s and conventional mechanisms over time. It relies on data from a variety of sources, including the InfraAmerica Database, TIFIA database, and data from state transportation agencies. This study examines the breadth of data available, whereas previous analyses were based on case studies of a single or small number of projects. Additionally, rigorous econometric analysis is used. Findings from this study could help decision-makers choose the appropriate project delivery method.