Bidding and Renegotiation in Auctions for New Electricity Generation Capacity in India

Faculty Member: Nicholas Ryan

Proposal Description:

The “rules of the game” in an economy—laws, contracts and how they are enforced—are critically important for how developing countries invest and grow. We study an instance of how contracts affect economic efficiency, in the context of the Indian power sector. A wave of private investments in the Indian power sector in the 2000s were made through competitive bidding in auctions, the kind of “rules” that economists think generally produce efficient allocation and production. Yet, the performance of the resulting power projects has been uneven, with many power producers delaying their projects or raising their price after the auction was settled. We collect data on bidding in power auctions and whether bidders manipulated the long-term auctions to get contracts on terms they could not fulfill, and analyze data to measure what this strategy might have cost the Indian states that were buying the power.

Requisite Skills and Qualifications:

The RA would review documents pertaining to completed auctions and power plants to expand an existing but incomplete data set of auction outcomes, including (a) whether tariffs from auctions were revised after the fact (b) whether the winning bidder established a plant and got it running on time. The RA would also conduct data analysis of auction outcomes and their relation to the bids offered. Familiarity with Stata and/or Matlab a strong plus. Knowledge of differential equations a plus for data analysis part but not a requirement.

Award: Neel Karpe '18
Project Type: Tobin RA
Tobin Application Link: Tobin Application
Project Type Year: Fall 2017 Tobin Research Projects