**Does Strategic Ability Affect Efficiency? Evidence from Electricity Markets**

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**Abstract:**

Oligopoly models of price competition predict that strategic firms exercise market power and generate inefficiencies.

However, heterogeneity in firms’ strategic ability also generates inefficiencies.

We study the Texas electricity market where firms exhibit significant heterogeneity in how they deviate from Nash equilibrium bidding.

These deviations, in turn, increase the cost of production.

To explain this heterogeneity, we embed a Cognitive Hierarchy model into a structural model of bidding and estimate firms’ strategic sophistication.

We find that firm size and manager education affect sophistication.

Using the model, we show that mergers that increase sophistication can increase efficiency despite increasing market concentration.