An Empirical Analysis of Bidder Asymmetry in Japanese Electric Power Procurement Auctions Using Bayesian Analysis^{*}

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Abstract

Given the low market competition in Japanese retail electricity market, this paper explores bidder asymmetry between the incumbents and entrants in the electricity procurement auctions in the public sector in Japan from 2005 to 2010. Bayes estimator is employed to handle three unobserved variables. The result shows that the entrants do possess competitive advantage over the incumbents despite their low market share (2.1%). However, their competitive advantage diminishes in certain types of auctions owing to some fees disproportionately imposed on the entrants. Interestingly, Japanese environmental policy initially increased the entrants' cost, but it no linger affects their costs.

JEL-Classification: C11, L51, Q48, Q58 Keywords: Bidder asymmetry, Green Contract Law, Bayes estimator

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