

Bidding Behavior in Multi-Unit Auctions

— An Experimental Investigation and some Theoretical Insights*

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Abstract

We present laboratory experiments of five different multi-unit auction mechanisms. Two units of a homogeneous object were auctioned off among two bidders with flat demand for two units. We test whether expected demand reduction occurs in open and sealed-bid uniform-price auctions. Revenue equivalence is tested for these auctions as well as for the Ausubel, the Vickrey and the discriminatory sealed-bid auction. Furthermore, we compare the five mechanisms with respect to the efficient allocation of the units. We also provide some theoretical insights concerning the equilibria of uniform-price auctions with incomplete information.

Prezentujeme laboratorní experimenty pěti různých mechanismů více -jednotkových aukcí. Dvě jednotky homogenního objektu jsou nabízeny dvěma nakupujícími s plochou poptávkou po dvou jednotkách. Testujeme, zda se objeví očekávané snížení poptávky v otevřené aukci s jednotnou cenou prováděné obálkovou metodou. Teorém ekvivalentních výnosů testujeme též pro Ausubelovu, Vickreyho a cenově odstupňovanou obálkovou metodu. Taktéž porovnáváme pět mechanismů vzhledem k efektivitě přidělení jednotek. Uvádíme také teoretický pohled zaměřený na rovnováhu aukcí s jednotnou cenou a neúplnou informací.

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