

An Experimental Study of Sponsored-Search Auctions*

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Abstract. We study the Generalized Second Price auctions—a standard method for allocating online search advertising—experimentally, considering both the static environment assumed by the prevailing theory and a dynamic game capturing the salient aspects of real-world search advertising auctions. We find that subjects tend to overbid in both treatments relative to the Vickrey-Clarke-Groves outcome suggested as most plausible by the theory, but that their behavior in the dynamic game resembles the behavior in the static game. Our analysis thus lends support to the use of a static game as modeling proxy, but calls into question the prevailing equilibrium predictions.

JEL Classification: C92, D44, M3.

Keywords: online advertising, sponsored search auction, generalized second price auction, experiment.

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