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## Stochastic Asymmetric Blotto Games: An Experimental Study

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**ABSTRACT.** We consider a model where two players compete for  $n$  items having different common values in a Blotto game. Players must decide how to allocate their common budgets across all  $n$  items. The winner of each item is determined stochastically using a lottery mechanism which yields a unique equilibrium in pure strategies. We analyze behavior under two competing payoff objectives found in the Blotto games literature that have not been previously compared: (i) players aim to maximize their total expected payoff and (ii) players maximize the probability of winning a majority value of all  $n$  items. We report results from an experiment where subjects face both payoff objectives and we find support for the differing theoretical predictions.

**Keywords:** Colonel Blotto game, Contests, Resource Allocation, Lotteries, Electoral College, Game Theory, Political Theory, Experimental Economics.

**JEL Classification Nos.** C72, C73, C92, D72, D74.

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