Abstract:

I show that a unique equilibrium exists in an asymmetric two-player all-pay auction with a discrete signal structure that satisfies a monotonicity condition in each player's signal. Independent signals and asymmetric interdependent valuations are a special case. The proof is constructive, and the construction is simple to implement as a computer program. For special cases, which include some private value settings, common value settings, and symmetric players, I derive additional properties and comparative statics. I also characterize the set of equilibria when a reserve price is introduced.