Ordinal Efficiency, Fairness, and Incentives in Large Markets[*]

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Abstract

Efficiency and symmetric treatment of agents are the primary goals of resource allocation in environments without transfers. Focusing on ordinal mechanisms in which no small group of agents can substantially change the allocation of others, we first show that uniform randomizations over deterministic efficient mechanisms are asymptotically ordinally efficient, that is, efficient ex ante. This implies that ordinal efficiency and ex-post Pareto efficiency become equivalent in large markets, and that many standard mechanisms are asymptotically ordinally efficient. Second, we show that all asymptotically ordinally efficient, symmetric, and asymptotically strategy-proof mechanisms lead to the same allocations in large markets.

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