

Title:

Overdemand and Underdemand in Economies with Indivisible Goods and Unit Demand

Abstract:

We study an economy where a collection of indivisible goods are sold to a set of buyers who want to buy at most one good. We characterize the set of Walrasian equilibrium price vectors in such an economy using sets of overdemanded and underdemanded goods. Further, we give characterizations for the minimum and the maximum Walrasian equilibrium price vectors of this economy. Using our characterizations, we give a sufficient set of rules that generates a broad class of ascending and descending auctions in which truthful bidding is an ex post Nash equilibrium.