Efficient Allocation of Indivisible Goods in Pseudo Markets with Constraints

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Abstract: We provide conditions under which market mechanisms can be used to allocate indivisible goods efficiently and fairly. We consider pseudo markets; that is, economies in which initially the seller/designer owns all of the indivisible goods and the agents are allocated fiat money. We allow stochastic consumption and show the existence and eciency of Walrasian equilibria in this setting. We demonstrate that constraints on minimum and maximum levels of individual consumption and aggregate constraints of the kind that are relevant in combinatorial allocation problems can be accommodated by either incorporating these constraints into individual preferences or by incorporating a suitable production technology