

The Core and Competitive Equilibria of Assignment Markets with a Side of Middlemen

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Abstract

Initially, we show that the set of all imputations given by competitive equilibria of an assignment market with a side of middlemen who trade a single unit of indivisible goods coincides with the core of the game derived from the market. Next, we show that the set of all imputations given by competitive equilibria of an assignment market with a side of middlemen who trade multiple units of indivisible goods coincides with the core of the game of another three-sided assignment market generated from this market, by using the first result. The last result leads to an equivalent condition for the existence of a competitive equilibrium of an assignment market in which each middleman trades more than one unit of goods.

Keywords: Assignment games; Middlemen; Competitive equilibrium; Core; Partitioning linear program

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