Designing the Market Structure in Matching Problems* (Preliminary draft)

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Abstract

We propose a simple model to study how a market structure (which firm appears in which market) is endogenously determined in matching problems. In the model, each firm chooses to participate in one market among possible markets, while each worker can participate in all markets and thus she may receive more than one offers. The final match for a worker is the most preferred firm among those offered to her. We focus on a subgame perfect equilibrium in which all agents are truthful (we name such an equilibrium a subgame perfect truthful equilibrium). We show that, under a reasonable preference domain, there exists a mechanism such that a subgame perfect truthful equilibrium exists and its outcome (final matching) is stable. In that equilibrium, a market structure is endogenously determined, and thus neither centralized (the coarsest) nor decentralized (the finest) market structure emerges necessarily.

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