LOVE AND CHANCE: EQUILIBRIUM AND IDENTIFICATION IN A LARGE NTU MATCHING MARKETS WITH STOCHASTIC CHOICE

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Abstract. We consider the problem of one-to-one matching with nontransferable utility (NTU) and stochastic unobserved heterogeneity in agents' preferences. Assuming that there is unobserved heterogeneity only on tastes, and without making distributional assumptions on utility shocks, we 1. characterize the set of aggregate stable matchings as a nonlinear complementarity problem, 2. prove the existence of an aggregate stable matching using a discrete choice version of the Deferred Acceptance algorithm, 3. show the marriage matching function implied by NTU matchings is a Leontief matching function. We characterize the identified set when only single matching market is available, and provide a sufficient condition for point identification. Using CPS data, we find that men place more weight on spouses' educational attainment over the past few decades, while women's preference is relatively stable.

Preliminary and incomplete.

Keywords: sorting, matching, marriage market, deferred acceptance, marriage matching function.

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