

THE LATTICE STRUCTURE OF THE SET OF STABLE OUTCOMES OF THE MULTIPLE PARTNERS ASSIGNMENT GAME

By

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Abstract

The Multiple Partners assignment game is a natural extension of the Shapley and Shubik Assignment Game (Shapley and Shubik, 1972) to the case where the participants can form more than one partnership;

In Sotomayor (1992) the existence of stable outcomes was proved. For the sake of completeness the proof is reproduced in appendix I. In this paper we show that, as in the Assignment Game, stable payoffs form a complete lattice and hence there exists a unique optimal stable payoff for each side of the market. We also observe a polarization of interests between the two sides of the matching, within the whole set of stable payoffs. Our proofs differ technically from Shapley and Shubik's proofs since they depend on a central result (Theorem 1) which has no parallel in the Assignment model.

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