"Matching and Prices" (joint with Ravi Jagadeesan)

Abstract

Indivisibilities and budget constraints are pervasive features of many matching markets. But when taken together, these features typically cause failures of gross substitutability—a standard condition on preferences imposed in most matching models. To accommodate budget constraints and other income effects, we analyze matching markets under a weaker condition: net substitutability.

Although competitive equilibria do not generally exist in our setting, we show that stable outcomes always exist and are efficient.

However, standard auctions and matching procedures, such as the Deferred Acceptance algorithm and the Cumulative Offer process, do not generally yield stable outcomes.

We illustrate how the flexibility of prices is critical for our results. We also discuss how budget constraints and other income effects affect classic properties of stable outcomes.