

# Matching Markets with Signals

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Abstract

A costless signaling mechanism has been proposed as a device to improve welfare in decentralized two-sided matching markets. An example of such an environment is a matching market of new economic Ph.D. candidates (students) applying to economic departments (programs) for faculty positions. We study a decentralized market game of incomplete information and show that costless signaling is actually harmful for some matching markets. Specifically, if agents have almost aligned preferences, signaling lessens the total number of matches and the welfare of programs, as well as it affects ambiguously the welfare of students. These results run contrary to previous studies and the belief, that costless signaling facilitates match formation.