Stability, Strategy-Proofness, and Respecting-Improvements Properties^{*}

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Abstract

In priority-based two-sided matchings, a respecting-improvements property of a mechanism requires that an agent should get weakly better off when she is assigned a higher priority. Not only is it a normative desideratum, it is also important for ex-ante investments and for disclosure of non-preference information. In the general model of matching with contracts, we demonstrate that respect for improvements is closely related to strategy-proofness (in regard to preference information): With a number of different sets of assumptions and two definitions of improvements, a stable mechanism respects improvements if and "almost" only if it is strategy-proof, although the precise statements vary across different layers of our assumptions. Our results suggest that strategy-proofness is desirable not only as a strategic property, but *also for its normative implication*. We also provide a new sufficient condition for the cumulative offer mechanism to be strategy-proof, which also suffices for respect for improvements.

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