

Strategy-Proofness and Stability for Matching with Contracts*

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Abstract

We consider the setting of many-to-one matching with contracts, where firms may demand multiple contracts but each worker desires at most one contract. We introduce three novel conditions—observable substitutability, observable size monotonicity, and non-manipulatability—and show that when these conditions are satisfied, a stable and strategy-proof (for workers) mechanism exists. Moreover, we show that when any of our three conditions fails, one may construct preferences for the doctors and unit-demand choice functions for the other firms such that no stable and strategy-proof mechanism exists. Finally, we show that, whenever our three conditions are satisfied, the outcome of any stable and strategy-proof mechanism coincides with the cumulative offer process.

JEL Classification: C62; C78; D44; D47

Keywords: Matching with contracts, Stability, Strategy-proofness, Substitutability, Size monotonicity

*The authors thank Fuhito Kojima, Alexey Kushnir, and Paul Milgrom for helpful comments. Kominers gratefully acknowledges the hospitality of Microsoft Research New England, as well as the support of National Science Foundation grant CCF-1216095 and the Harvard Milton Fund. Westkamp thanks the European Union for support via a Marie-Curie Intra-European fellowship for career development under REA grant agreement 628276.

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