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.

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