SHORT LISTS IN CENTRALIZED CLEARINGHOUSES

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Stable matching mechanisms are used to clear many two-sided markets. In most settings, frictions cause participants to submit short preference lists (even if there are many potentially acceptable matches). This paper studies the consequences of this fact, and focuses on two broad questions. First, when lists are short, what is the quantity and quality of matches formed through the clearinghouse? Second, what are the effects of introducing an aftermarket which allows agents left unmatched by the clearinghouse to find one another?

The answers to these questions depend crucially on the extent and form of correlations in agent preferences. I consider three canonical preference structures: fully independent (or idiosyncratic) preferences, vertical preferences (agents agree on the attractiveness of those on the opposite side), and aligned preferences (potential partners agree on the attractiveness of their match).

I find that when agent preferences are idiosyncratic, more matches form than when agents are vertically differentiated. Perhaps more surprisingly, I show that the case of aligned preferences causes the fewest matches to form. When considering quality of matches, the story reverses itself: aligned preferences produce the most high quality matches, followed by correlated preferences, with independent preferences producing the fewest. These facts have implications for the design of priority structures and tie-breaking procedures in school choice settings, as they point to a fundamental tradeoff between matching many students, and maximizing the number of students who get one of their top choices.

Regarding the role of the aftermarket, I find that when preferences are aligned, the aftermarket unambiguously improves the welfare of both sides. In other cases, however, the introduction of an aftermarket has multiple competing effects, and may either raise or lower aggregate welfare. This suggests that when designing an aftermarket, the extent and form of correlations in agent preferences are an important factor to consider.