

The Large Core of College Admission Markets: Theory and Evidence

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Lit. on two-sided matching markets

1. Rural hospital theorem
2. Consensus property
3. Core convergence
4. Vanishing incentives to manipulate

Model

1. $m-1$, two-sided matching market
2. Colleges have quotas & (fewer) state scholarships
3. Choose the best students subject to quotas (“generalized responsive”)

Results (merit-based)

1. Variants of DA are stable
2. Yield merit-based funding
3. Merit-based + stable = same students assigned
4. \exists non-merit based stable

Results (stable allocations)

1. May differ in # students assigned
2. Approximating max. assignment under stability is NP-hard
3. Preference-flip stable algorithm (PF)

Results (large markets)

1. Set of stable allocations is large if students are heterogenous in the way they trade-off financial terms and college characteristics (can use **preference flip**)
2. All variants of DA are similar

Results (empirical)

1. Hungarian college data (100k student/yr)
2. PF increases # of assigned students by ~2%, changes assignment of ~8%
3. SP-DA vs SR-DA change assignment of 8 students