

Skiping Down Strategy and Stability in School Choice Problems with Affirmative Action: Theory and Experiment[#]

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Abstract

The paper presents an experimental study of affirmative action policies in school choice problems with focus on the minority reserve mechanism proposed by Hafalir et al. (2012) (referred to here as DA-Reserve) and the majority quota mechanism proposed by Kojima (2012) and Matsubae (2011) (referred to here as DA-Quota). We examined the performance of these mechanisms in two preference environments and found that (1) while truth-telling is a dominant strategy in both mechanisms, the rate of its occurrence is less than 60%; (2) the average payoff was significantly higher with DA-Reserve than with DA-Quota, as theoretically predicted; (3) But, surprisingly, the proportion of students exhibiting justified envy was higher with DA-Reserve than with DA-Quota; (4) a systematic pattern of deviation from the dominant strategy called skipping down startegy was observed, and it was theoretically proven that this constituted a Nash equilibrium with DA-Quota in some environments but not with DA-Reserve at all. More generally, we show that the set of stable matchings is larger with DA-Quota than with DA-Reserve. This explains the matching instability observed with DA-Reserve.

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