

Alexander Nesterov

Presentation Title

Did the reforms of the matching systems make them more fair?

(with Somouaoga Bonkougou)

Abstract

Recently, many matching systems around the world have been reformed. These reforms responded to objections that the matching mechanisms in use were unfair and vulnerable to gaming. Surprisingly, they remained unfair even after the reforms: each new mechanism may induce an outcome with a *\textit{blocking student}*, who desires and deserves a school which has not been assigned to her. However, in this paper, we show that the reforms introduced more fair matching mechanisms, as measured by two criteria. First, most of the reforms introduced more *\textit{stable}* mechanisms: whenever the old mechanism does not have a blocking student, the new mechanism does not have a blocking student either. Second, some reforms introduced more stable mechanisms according to a stronger criterion: the old mechanism always has at least as many blocking students as the new mechanism. These findings give a novel rationale to the reforms and complement the recent literature that shows how the same reforms have introduced less vulnerable, to gaming, matching mechanisms. We further show that stability and manipulability of the mechanisms are often logically related.

Keywords

Market design, school choice, college admission, fairness, stability

Affiliation

Higher School of Economics