The Strong Consistency of Neutral and Monotonic Binary Social Decision Rules

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Abstract

The purpose of this paper is to investigate the strong consistency of neutral and monotonic binary social decision rules. Individuals are assumed to satisfy von Neumann -Morgenstern axioms of individual rationality. The main result of the paper shows that there does not exist any neutral and monotonic non-null non-dictatorial binary social decision rule which is strongly consistent. The relationship between restricted preferences and the existence of strong equilibria is also investigated. It is shown that for every nondictatorial social decision function satisfying the conditions of independence of irrelevant alternatives, neutrality, monotonicity and weak Pareto-criterion there exists a profile of individual orderings satisfying value-restriction corresponding to which there is no strong equilibrium.

Key Words: Binary Social Decision Rules, Strong Consistency, Neutrality, Monotonicity, Value-Restricted Preferences