

Update monotone preference rules

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Abstract

Collective decisions are modeled by preference correspondences (rules). In particular, we focus on a new condition: “update monotonicity” for preference rules. Although many so-called impossibility theorems for the choice rules are based on—or related to—monotonicity conditions, this appealing condition is satisfied by several non-trivial preference rules. In fact, in the case of pairwise, Pareto optimal, neutral, and consistent rules, the Kemeny–Young rule is singled out by this condition. In the case of convex valued, Pareto optimal, neutral and replication invariant rules, strong update monotonicity implies that the rule equals the union of preferences which extend all preference pairs unanimously agreed upon by k agents, where k is related to the number of alternatives and agents. In both cases, it therewith provides a characterization of these rules.