Order-restricted preferences and strategy-proof social choice rules*

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Abstract

Preference profiles are order-restricted (Rothstein 1990, 1991) if for any pair of alternatives, x and y, the set of agents I can be partitioned in three (integer) intervals, $I_1 = [0, i_1]$, $I_2 = [i_1+1, i_2]$ and $I_3 = [i_2+1, |I|]$, such that I_1 is the set of agents that prefer x to y, I_2 the set of agents indifferent between both alternatives, while I_3 represents the set of those agents preferring y to x. This condition has been proven to be useful in different models of collective decision-making, where there is a *natural* ordering of individuals rather than of the alternatives. The purpose of this article is to analyze whether or not there exists nontrivial social choice rules, defined on this preference domain, which satisfy the well-known non manipulability condition called *strategy-proofness*. Through a simple argument, the paper shows that in the case of the *median choice rule* no profitable deviation can occur because of the internal coordination among the individuals that the structure of preferences generates. It turns out that this result, which extends the investigations of Moulin, Barberá and others to a different class of domain restriction, has important consequences for the robustness of representative agents in many strategic problems of political economy.

Keywords: Strategic-proofness; Social Choice; Order-restricted Preferences

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