An essence of the impossibility for constructing strategy-proof social choice correspondences

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January 19, 2011

Abstract

This paper shows an essence of an impossibility for constructing strategy-proof social choice correspondences. I employ Benoit's (Journal of Economic Theory 102, 421–436, 2002) formulation of preferences over sets and prove that under each strategy-proof and unanimous social choice correspondence, there is at least one agent who is decisive. Although this is not a clear-cut impossibility result, this is nearly an impossibility for most purposes of social choice. Moreover, the existence of a decisive agent does not need the universal set of preferences over alternatives. Each circular set of preferences over alternatives is sufficient for the existence of a decisive agent.

Keywords: circular set, social choice correspondence, strategy-proofness

JEL classification: D71.