The Winner-Take-All Dilemma

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Abstract

This paper considers collective decision-making when individuals are partitioned into groups (e.g., states) endowed with voting weights. We study a game in which each group chooses an internal rule that specifies the allocation of its weight to alternatives (e.g., presidential candidates) as a function of its members' preferences. We first show that the winner-take-all rule is a dominant strategy. We then show that under some distributional assumptions, if the number of groups is sufficiently large, the uniform use of the proportional rule by all groups Pareto dominates the uniform use of any other rule. The results together imply that the game asymptotically constitutes a Prisoner's Dilemma. Numerical computations confirm the Pareto dominance in a model based on the US Electoral College with fifty-one groups.

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