

Sequential Voting with Externalities: Herding in Social Networks

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We study sequential voting with two alternatives, in a setting with utility externalities: as usual, each voter has a private preference over the candidates and likes her favorite candidate to win, but additionally, a voter values voting for the chosen winner (which is determined by the majority or super-majority of votes). This model aims to capture voting behavior (“likes”) in social networks which are publicly observed and sequential, and in which people care about their “public image” as determined by their votes and the socially accepted outcome (the chosen winner). Unlike in voting with no externalities, voters act strategically although there are only two alternatives, as they rather vote against their preferred candidate if the other is to win. We present two rather surprising results that are derived from the strategic behavior of the voters. First, we show that in sequential voting in which a winner is declared when the gap in votes is at least some large value M , increasing M does *not* result in the aggregation of preferences of more voters in the decision, as voters start a herd on one candidate once a small lead in votes for that candidate develops. Furthermore, the threshold lead for such a herd to start is *independent* of M . Secondly, we show that there are cases in which sequential voting is strictly better than simultaneous voting, in the sense that it chooses the most preferred alternative with higher probability.

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