**Logrolling Affects the Relative Performance of Alternative q-Majority Rules**

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**Abstract:**

It has been argued that simple majority rule is the best decision rule for a committee taking a large number of binary (yes or no) decisions.

In addition to a general symmetry condition, the underlying argument assumes that members vote sincerely on each proposal.

We argue that the conclusion changes if members engage in logrolling agreements, i.e. agreements to `trade votes' and vote insincerely on some proposals.

We propose two simple algorithms to predict the agreements and voting outcomes that are likely to occur for a given set of proposals and corresponding payoffs, and under any $q$-majority rule.

In a simulation exercise, these algorithms are applied to a large number of randomly generated situations, assuming simple majority, qualified majority, and unanimity rule.

Our simulations produce two main insights.

First, logrolling improves the performance of qualified majority and unanimity rule, and worsens the performance of majority rule, in an aggregate payoff sense.

Second, if the number of proposals being considered is large enough, unanimity rule outperforms majority rule.

We conduct a laboratory experiment to verify whether subjects engage in the kinds of agreements that our algorithms assume, and whether the relative performance of unanimity rule indeed improves as predicted.

We find that subjects often, but not always, engage in the predicted trades.

Predicted agreements occur more often under unanimity rule and when they increase the aggregate payoff, while they are less likely if they are more complex (involve bigger coalitions and/or bigger bundles of project).

Overall, our results are qualitatively consistent with the assumptions going into our simulation exercise.

We conclude that in the presence of logrolling, greater majority requirements may be desirable.