Let the experts decide? Asymmetric information, abstention, and coordination in standing committees

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A B S T R A C T

We examine abstention when voters in standing committees are asymmetrically informed and there are multiple pure-strategy equilibria – swing voter's curse (SVC) equilibria where voters with low-quality information abstain and equilibria when all participants vote their information. When the asymmetry in information quality is large, we find that voting groups largely coordinate on the SVC equilibrium which is also Pareto optimal. However, we find that when the asymmetry in information quality is not large and the Pareto optimal equilibrium is for all to participate, significant numbers of voters with low-quality information abstain. Furthermore, we find that information asymmetry induces voters with low-quality information to coordinate on a non-equilibrium outcome. This suggests that coordination on "letting the experts" decide is a likely voting norm that sometimes validates SVC equilibrium predictions but other times does not.

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1. Introduction

Individuals make binary decisions by majority voting in many contexts from elections to legislatures to city councils to faculty department meetings to juries. A central question in the literature on formal models of voting has been to what extent majority voting leads to information aggregation when participants have private information but all would like to choose the same outcome as if they had complete information as posited by Condorcet (1785).[1] Yet, in most of this work the possible abstention of voters is ignored. This makes sense for one of the principal applications of these models, that is, juries, since abstention is not allowed. But it does not make sense for many of the other voting situations. Abstention or simply not showing up for votes is allowed in most elections, legislatures, city councils, and faculty department meetings.

Furthermore, one might argue that a norm in many of these voting situations is to delegate decisions to "the experts" or those individuals known to have expertise about a matter. For example, suppose an issue before a city council is whether to construct a new sewage plant. We can imagine that some of the city council members will have greater knowledge about the merits of the decision than others and that this will be known because they come from different business backgrounds or parts of the city or are on particular subcommittees. Alternatively, when a faculty department votes on whether to hire a new member, we can imagine that some members have greater knowledge of the individual's merits than others, and this heterogeneity in information will be known. We particularly expect this to be true in standing committees such as

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[1] See for example Austen-Smith and Banks (1996), Feddersen and Pesendorfer (1998), and Meirowitz (2002).

legislatures, city councils, and faculty departments since the same individuals repeatedly interact in voting situations over a series of sequential choices and are likely to know the overall qualities of each others' information.

In a seminal set of papers, Feddersen and Pesendorfer (1996, 1999), hereafter FP, incorporate abstention into voting situations with asymmetric information and demonstrate that such delegation to experts can be rational even when the cost of voting is zero. The reasoning is that a voter's choice only matters if he or she is pivotal. But if an uninformed voter is pivotal, then that implies that he or she may cancel out the vote of a more informed voter who has similar preferences. Thus, voting would be "cursed" for this individual, and the individual should rationally abstain. Feddersen and Pesendorfer's model has been labeled the "swing voter's curse," hereafter SVC. The prediction that uninformed voters will abstain and delegate their votes to informed voters has been supported in laboratory elections by Battaglini, Morton, and Palfrey (2008, 2010), hereafter BMP.

BMP investigate two situations in which information quality is binary. In one situation voters are either fully informed or uninformed and in the other voters are either fully informed or somewhat informed. In BMP somewhat or less informed voters are ones who have some prior information that one outcome is better than the other, but not full information about the best outcome. BMP also consider treatments where some voters are partisans and always vote for a particular choice regardless of their information. In general, in BMP, both uninformed and less informed voters abstain and delegate their votes to informed voters when it is theoretically optimal for them to do so. However, there is more error on the part of less informed voters. That is, some less informed voters do participate and vote for the choice that their information leads them to believe is optimal.

Yet, there are features of the formal setup of the BMP experiments that are at variance with some observational worlds of voting with abstention. First, in the BMP experiments voters do not know for sure whether other voters are more informed or not, just the probability that they are more informed, which is the same for all voters. The uncertainty is over the actual number of informed voters in the electorate. This might make sense when thinking of a large election. But as noted above in many standing committee voting situations we would expect voters to know that some voters have access to better quality of information. This difference may matter to voters in such groups where knowing for certain that some voters are informed can lead them to be more likely to abstain and delegate votes than when the number of informed voters is unknown.

Second, BMP evaluate only a special case of the SVC model where there is always a probability that some voters are fully informed. A more interesting case would be where no voter is perfectly informed, but some voters have access to better quality information. In this situation it is possible that equilibria exist as in SVC, where only the voters with high-quality information participate, but also equilibria exist where all voters participate across information quality levels. Thus, the less informed voters face strategic uncertainty over whether they should either vote their information or abstain, depending on their expectations of what other similar voters choose. Furthermore, which of the two equilibria is Pareto optimal (i.e. results in all voters receiving higher utility levels) depends on the difference in informational quality. If the difference in information quality is not too large, then voters' utilities are higher in the equilibrium where all participate rather than in the SVC equilibrium, but if the difference in information quality is large, then voters' utilities are higher in the SVC equilibrium.

In this paper we consider these important cases that are more likely to capture voting in standing committees. We find significant support for the SVC equilibrium predictions when no voter is fully informed and there is a large degree of information asymmetry such that the SVC equilibrium is Pareto optimal. However, we find that in some cases where the Pareto optimal equilibrium is for all voters to participate even though information asymmetry exists, significant numbers of voters coordinate instead on the SVC equilibrium. The information asymmetry leads voters to overvalue the advantage of voters with higher quality information, experts, and to coordinate on the inferior SVC equilibrium. This evidence suggests that the tendency of less informed voters to delegate their votes can be strong and that abstaining when less informed may occur even when a Pareto optimal equilibrium exists with all voters participating. We find that the tendency to delegate to more informed voters is so strong that groups sometimes coordinate on a non-equilibrium strategy combination that resembles SVC equilibria but is not a Bayesian Nash equilibrium. The behavior of voters suggests that they are following a norm of "letting the experts decide" even when that norm is not an equilibrium prediction. Our results then demonstrate that this norm can lead voters to make choices that are suboptimal. In the next section we present our model of abstention with asymmetric noisy information which is the basis for our experimental analysis and the theoretical predictions for our treatments. In Section 3 we discuss our experimental procedures and present our experimental results. Section 4 summarizes and addresses implications of our analysis for future research on information aggregation in voting. We also specifically consider how communication in such situations might change our results.

2. A model of abstention with known asymmetric information qualities

2.1. Basic setup

We consider a voting game with a finite number of participants, $n \geqslant 3$. Participants choose whether to vote for one of two options, a or b, or abstain. The option that receives a majority of the votes is declared the winner and ties are broken randomly. There are two states of the world A and B. The probability that state A occurs is given by $1 > \pi \geqslant 0.5$. Voters have homogeneous preferences. That is, all voters have the same utility function. We normalize voters' utility to equal 1 if either option a is selected in state of the world A or b is chosen in state of the world B, and 0 otherwise.