Sophisticated Voting in Bicameralism *

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Abstract

Bicameralism introduces additional complexities into the analysis of sophisticated voting by members of parliament (MPs). The paper proposes a general game-theoretical model to assess the conditions under which MPs may engage in strategic behavior. The implications suggest that these conditions strongly depend on the institutional details of the bicameral system.

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1 Introduction

At least since the publication of Farquharson’s (1969) seminal treatment sophisticated voting in parliaments has preoccupied legislative scholars\(^1\). Their interest, however, has come and gone in waves. While in the aftermath of Farquharson’s (1969) publication of “Theory of voting” a series of scholars proposed both theoretical extensions (e.g., McKelvey and Niemi, 1978; Enelow and Koehler, 1980; Enelow, 1981; Denzau, Riker and Shepsle, 1985; Austen-Smith, 1987; Groseclose and Krehbiel, 1993; Calvert and Fenno, 1994) and empirical evaluations (e.g., Riker, 1958; Bjurluf and Niemi, 1978; Riker, 1983; Krehbiel and Rivers, 1990; Calvert and Fenno, 1994). sceptics (e.g., Krehbiel and Rivers, 1990) largely put a lid\(^2\) on such studies (though see Ladha, 1994; Wilkerson, 1999; Jenkins and Munger, 2003; Finocchiaro and Jenkins, 2008). With almost no exception both the theoretical work and many of the empirical evaluations, even when focussing on the US Congress, did not consider the bicameral structure (nor possible presidential vetoes for that matter (though see Volden, 1998; Martin, 2001; Schwartz, 2005)). Only the work by Gross (1982), drawing on Farquharson (1969) and corrected by Miller (1984), and Martin’s (2001) study of the separation of powers systems directly address the question of sophisticated voting in a bicameral system\(^3\).

If we presume that parliamentary decision-making is so structured that sophisticated voting is very unlikely to be observed (e.g. Krehbiel and Rivers, 1990; Groseclose and Milyo, 2009; Groseclose and Milyo, 2010) or yielding identical behavior through “sophisticated sincerity” (e.g., Austen-Smith, 1987) (though see Groseclose and Krehbiel, 1993; Calvert and Fenno, 1994), we might leave it at this, Based in part on recent work by Schwartz (2005, 2008) (see also Groseclose and Krehbiel, 1993; Rasch, 2000; Miller, 2009) I will argue, however, that depending on the exact type of bicameral system, the agenda used in cameral voting (Schwartz, 2008) and the role political parties play (e.g. Bütikofer and Hug, 2008) we might well expect sophisticated behavior by members of parliament (MPs).

\(^1\)This paper draws heavily on a previous exploration in (Hug, 2010 (forthcoming)).
\(^2\)This is easily observable by tracking, for instance, over time the citations to Farquharson’s (1969) book.
\(^3\)While Schwartz (2005) also analyzes a separation of powers system, he does not address directly bicameral systems, even though, as shown below, his work has direct relevance for them (see also the related analysis by Volden, 1998).
To do so I first discuss in the next section the case being made in the literature against sophisticated behavior in parliaments in general and Congress in particular. Section three presents the few theoretical studies of strategic voting in bicameral settings. Drawing on one of these studies, namely Martin’s (2001), and linking it to work by Schwartz (2005) I propose in section four for different institutional settings models that capture and allow for strategic voting in a bicameral setting. Section five concludes.

2 The case against sophisticated voting

Farquharson’s (1969) work and the related studies by Gibbard (1973) and Satterthwaite (1975) led to a series of studies assessing theoretically, though much less generally, the conditions that allow for sophisticated behavior by MPs (e.g., McKelvey and Niemi, 1978; Enelow and Koehler, 1980; Enelow, 1981; Denzau, Riker and Shepsle, 1985; Austen-Smith, 1987; Groseclose and Krehbiel, 1993; Calvert and Fenno, 1994). While the earlier work came to the conclusion that sophisticated behavior is likely to occur and differ from sincere behavior Austen-Smith (1987) demonstrated at least for one type of agenda rule that sophisticated behavior while possible is observationally equivalent to sincere behavior (thus “sophisticated sincerity”) due to the endogenous agenda setting. His conjecture that such “sophisticated sincerity” would be the equilibrium behavior in all models with binary agendas turned out, as Groseclose and Krehbiel (1993) proved, to be wrong. In parallel to this theoretical work a series of scholars attempted to illustrate the theoretical findings with empirical examples, mostly, though not exclusively, from Congress (e.g., Bjurulf and Niemi, 1978; Enelow, 1981; Riker, 1983).

In an article Krehbiel and Rivers (1990) raised, however, the issue that for sophisticated behavior in parliament to be possible required the following elements:

- the agenda is reasonably fixed,

- and knowledge about preferences is reasonably good.

Given that both conditions hardly hold for the US Congress Krehbiel and Rivers (1990) conclude that sophisticated behavior at the voting stage should
not occur (see also the discussion in Groseclose and Krehbiel, 1993, 272). More recently Groseclose and Milyo (2009, 2010) present a model relying on congressional rules (both formal and informal) that implies completely sincere behavior by members of Congress. The reason for this implication is that with the possibility to switch votes in a roll call vote, sophisticated behavior makes only sense for members of Congress who are pivotal. This can, however, not be equilibrium behavior since, as Groseclose and Milyo (2009) show, in equilibrium all members of Congress behave as if they were not pivotal, and thus vote sincerely. In their view this explains why the attempts to systematically find the votes in Congress with sophisticated behavior (e.g., Ladha, 1994; Wilkerson, 1999; Jenkins and Munger, 2003; Finocchiaro and Jenkins, 2008) come up with few if any concrete examples.

The rules (both formal of informal) employed in the US Congress are, however, not the typical ones in representative democracies. First of all, roll call votes (even in the US, see Clinton and Lapinski, 2008) are not as pervasive in parliaments around the world (e.g., Carey, 2008; Crisp and Driscoll, 2009; Hug, 2010). And even when roll call votes are the norm (e.g., Poland since the 1990s and Switzerland since the late 2000s) vote-switching is not always permitted. Second, the way agendas are set (both in terms of the exact formal rules and the way in which proposals are made) differ widely (e.g., Rasch, 2000; Carrubba, Gabel and Hug, 2008). Third, given the importance of party groups in many parliaments, information of the preferences of MPs is often collected and distributed by party group leaders (see e.g. Kam, 2008 (forthcoming); Bütikofer and Hug, 2008).

Given that these elements play central roles in the case against sophisticated voting in parliament, it seems unlikely that the strong conclusions drawn from the US case necessarily apply to other parliaments. Consequently, much more attention should be paid to the institutional details in parliamentary settings that allow for or hinder sophisticated behavior by MPs.

4Note that the recent debate between Schwartz (2008) and Miller (2009) is closely related to this issue, namely how the agenda is constructed and how MPs perceive the choices that they face in an agenda-tree (as constructed by the theorist).

5This was experienced in the Swiss parliament by the neighbor of the future government minister Christoph Blocher who had activated in the former’s absence her electronic voting button (NZZ 15.6.1994).
3 Bicameralism and strategic voting

As discussed above sophisticated voting was discussed and analyzed either in unicameral settings (e.g., Bjurulf and Niemi, 1978) or the bicameral setting was simply ignored. Gross (1982), drawing largely on Farquharson’s (1969) pioneering work attempted to present bicameral voting by having recourse on voting trees. These, however, as Miller (1984) demonstrated, fail to respect the properties charted out by Farquharson (1969).

More recently Martin (2001) and Schwartz (2005) present models of separation of powers system with either implicitly or explicitly addressing the issue of sophisticated voting in a bicameral setting.

between a member of Congress (C) and an other chamber who have to adopt an exogenously determined bill A, while knowing that both a president and the supreme court may invalidate the adopted bill. If the bill is rejected by C the outcome is the status quo Q, while the acceptance of A leads to the adoption of compromise (implicitly) proposed by a conciliation committee. Using this simple setup in a one-dimensional policy space, Martin (2001) derives a series of implications, among them on the prevalence of sophisticated behavior (also in opposition to “sophisticated sincerity”). In an empirical analysis he finds considerable support for his implications on the basis of data on the US Congress.

Martin’s (2001) model, while highly instructive, suffers from a quite constraining setup. First, the agenda voted upon by C is fixed and the bill A is also exogenously determined. Relatedly, the role of the conciliation committee is mechanistic and not integrated in the strategic analysis. Second, the model assumes that C has complete and perfect information. Consequently, following Krehbiel and Rivers (1990) we could expect sophisticated behavior. These authors, however, argue that Martin’s (2001) assumptions do not reflect the way in which the US Congress operates.

\[^6\text{This applies to most empirical work on the US Congress, but also to B"utikofer and Hug (2008).}
\]^7\text{Related to this study is Hoyland and Hagemann’s (2009 (forthcoming)) work on the bicameral relations in the European Union. Analyzing the relations between the Council of ministers (the equivalent of an upper house) and the European parliament (the lower house) they demonstrate that votes in the former affect the voting behavior of the members of the European parliament (EP). Their study focuses on one particular decision-making rule in the European Union, namely the so-called co-decision procedure, but it nevertheless suggests that analyzing separately Council or EP voting may be misleading.}
Martin’s (2001) model, despite its limitations, provides a useful starting point for a model exploring different institutional setups (see Hug, 2010 (forthcoming)).

Schwartz (2005), on the other hand, assesses the situation where a chamber faces a veto-wielding actor whose veto can be, however, overridden. His main insight is that even if overriding the veto can be done by simple majority this can change the outcome due to sophisticated behavior in the first chamber. Obviously, even though this veto power is discussed in the context of presidential systems, the same insight applies to bicameral systems where one chamber has only veto power and can be overridden by the other chamber. Hence, Schwartz’s (2005) insights with Martin’s (2001) model will provide the backdrop for what follows.

4 Bicameral powers and strategic voting: a model

The starting point of the theoretical exploration is Martin’s (2001) model with the following setup:

1. An exogenous bill $A$ ($A < Q$ where $Q$ is the status quo) is presented.

2. Member $C$ with ideal-point $x_C$ votes for $A$ or $Q$. If she votes for $Q$ the game ends, and the status quo $Q$ is maintained.

3. If $C$ votes for $A$ the compromise bill of the conciliation committee between $A$ and the other chamber’s ($O$) preferred policy $x_O$, i.e. $A + x_O$ results.

Based on Martin’s (2001) work it is easy to demonstrate (see Hug, 2010 (forthcoming)) that depending on the location of $A$ and $Q$ and $C$’s preferences, $C$ has incentives to vote in a sophisticated way.

Such sophisticated behavior is strongly dependent, however, on the setup of the game. As can be easily demonstrated small changes to the setup lead to equilibria in which sincere behavior is the norm (see Hug, 2010 (forthcoming)). First, if two chambers vote over $A$ and $Q$ and $A$ results only if both chambers adopt this proposal, thus reflecting a situation with no conciliation committee, none of the two chambers has an incentive to behave strategically. Second, and more realistically, assume that $A$ is endogenously proposed and then voted upon

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8See Schwartz (1999) and Alemán and Schwartz (2006) for more discussion on veto paradoxes and their presence in several presidential systems.
by C before the other chamber chooses between A and Q. In that case the strategic behavior moves to the agenda-setting stage such that C chooses A in such a fashion that it passes (sincere) votes in both chambers. 

Based on this and Schwartz (2005) let us assume that (two) proposals (possibly endogenous) are voted upon in the following way.\footnote{Contrary to Martin’s (2001) setup, the preference profile employed in this example can no longer be represented in a one-dimensional policy space. For this reason I no longer refer to a spatial representation here.}

1. Two (possibly endogenous) bills A and B are proposed to replace the status quo Q.

2. C chooses first between A and Q and if A loses then between B and Q.\footnote{This corresponds to a sequential-elimination agenda (e.g., Ordeshook and Schwartz, 1987; Schwartz, 2005, 385) or successive procedure according to Rasch (2000) though criticized by Schwartz (2008).}

3. O (with preferences $Q > A$ and $Q > B$) vetoes whatever bill is adopted by C.

4. C can override O’s veto by a renewed vote.

Schwartz (2005) demonstrates (see also figure 1) that with the majority preferences of $C A > B > Q > A$ the following happens in the absence of a veto override:

1. The sophisticated equivalent of the vote between B and Q is B

2. Thus in the first vote A beats Q (i.e., its sophisticated equivalent B).
Figure 1: Strategic voting with veto-override (dashed lines) (sophisticated equivalents in parenthesis (no veto-override) or brackets (with veto-override)
With the veto override the situation looks differently:

1. After O’s veto of A C would vote for Q making Q the sophisticated equivalent of a vote for A at the first vote.

2. After O’s veto of B C would vote for B over Q making B the sophisticated equivalent of a vote for Q in the first vote.

3. Given the preference profile C will choose B in the first vote over the sophisticated equivalents Q (for option A) and B (for option B) with as final outcome B.

This example drawn from Schwartz (2005) demonstrates that a veto-wielding actor whose veto can be overridden (even by a simple majority) may induce sophisticated behavior in a first parliamentary chamber, provided a sequential-elimination or successive agenda is employed.\footnote{Schwartz (2005) demonstrates that in an elimination (or amendment) agenda a veto-override by simple majority does not change the behavior in the first chamber.}

The example, however, assumes that the veto-wielding other chamber (Q) vetoes sincerely whatever bill C adopts. As the comparison of the situations with and without veto and veto-override shows, the outcome differs. Consequently, if the preferences of O are Q > B > A vetoing both bills (i.e., A and B) is obviously optimal behavior for O. If O’s preferences are, however, Q > A > B vetoing both bills may no longer be optimal behavior. More precisely by not vetoing A (but still vetoing B) O can assure passage of its second most preferred bill.\footnote{This obviously demands an extension of the voting tree as presented by Schwartz (2005) to take account of the strategic behavior of O (in the present case, or the veto-wielding president in his case.} Figure 2 illustrates this case but also demonstrates that O at its leftmost vote has to vote for a strictly dominated alternative to insure that its second-best alternative wins.
Figure 2: Strategic voting with veto (dashed lines) followed by veto-override (sophisticated equivalents in parenthesis (no veto-override) or brackets (with veto-override).
This example suggests that in bicameral systems of a particular type, namely those where the second chamber can only veto bills adopted by the first chamber (and thus not introduce itself amendments) and where the first chamber uses a sequential-elimination (or successive) agenda, strategic voting can occur.\footnote{13}

In terms of the agenda-setting requirement, some bicameral systems fit the bill.\footnote{14} First of all, the Dutch upper house cannot amend legislation but only oppose proposals adopted by the lower house, misleadingly called Tweede Kamer (see for instance Timmermans, Scholten and Oostlander, 2008, 276). Second, Alemán (2006, 150) demonstrates that presidents in many Latin American countries have considerable control over the agenda, especially in financial legislation. Finally, in the European Union the European parliament (EP) has in certain decisions only the possibility to oppose proposals from the Commission and adopted by the Council. These cases demonstrate that despite the fact that most parliaments recognize the right of individual members of parliament to initiate proposals and this amendments (Interparliamentary Union, 1986), in some instances these right are restricted in such a way that they allow for sophisticated behavior as discussed above.

The right to make proposals and amendments is, however, not the only requirement for such sophisticated behavior to be possible. It also has to be the case that the way in which competing proposals are voted upon is according to a sequential-elimination (or successive) agenda. According to Rasch (2000, 9) most of the European parliaments, with the exceptions of Finland, Sweden, Switzerland and the United Kingdom employ successive agendas as required for the example discussed above.\footnote{15}

Consequently, the simple model presented in this paper reflects an empirical reality in several legislatures. In these legislative bodies we might expect sophisticated behavior in a bicameral system even though at the outset this seems less likely.

\footnote{13}{Obviously, in the example discussed above, the cyclical preferences in the first chamber are a prerequisite, which explains why I no longer refer to a one-dimensional representation in this example.}
\footnote{14}{This part draws on elements discussed in Carrubba, Gabel and Hug (2008)}
\footnote{15}{In addition he also cites the European parliament as an institution adopting this agenda.}
5 Conclusion

In the present paper, drawing on work by Martin (2001) and Schwartz (2005) I assessed whether sophisticated behavior might be possible in a bicameral system. At the outset the likelihood of such behavior seems small. Recent work by Krehbiel and Rivers (1990) and Groseclose and Krehbiel (1993, 272) has alerted us to the requirements for sophisticated voting to occur on the parliamentary floor. While these requirements, namely a fixed agenda, reasonably good information on the preferences of the fellow MPs, and no possibility of vote-switching seem already quite daunting, to assume them in a bicameral setting seems all the more problematic. Implicitly the early work by Gross (1982) and Miller (1984) demonstrated this, since the voting trees need to be known from the beginning to the very end of a bicameral sequence.

Similarly, Martin (2001) can derive an equilibrium with sophisticated behavior only in a highly restrictive model of bicameral (and separation of powers) system. The basic idea, however, that some chambers in bicameral systems have limited agenda power is a useful stepping stone to assess the likelihood of sophisticated behavior in bicameral systems.

More precisely, the insights drawn from Schwartz’s (2005) model on separation of powers allow to derive conditions under which sophisticated voting is possible in a bicameral system. If one of the chambers has only veto rights but which may be overridden, sophisticated voting may occur in the other chamber under one particular agenda type.

While this obviously only proves the possibility of sophisticated voting in one particular setting, it also shows that the simple setup chosen in this paper precludes sophisticated voting in other types of bicameral settings. More precisely, if the agenda is not of the sequential-elimination (or successive) type sophisticated voting will not result from this simple setup. Similarly, if both chambers have proposal and amendment rights the assumption of a reasonably fixed agenda (over the whole decision-making process) is difficult to maintain. Future work will have to explore these issues.

\[16\] It might be, however, that parties present in both chambers act as gatekeepers. This highlights again the important role of political parties.
References


