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Strategic Voting in Multi-Office Elections

What are the incentives for voters to vote strategically when legislative policy outcomes are constrained by a system of checks and balances? The policy-balancing theory supposes that moderate voters split their tickets because such splitting is the only way these voters can achieve moderate policy outcomes. I show that a different type of strategic voting, policy stacking, is characteristic of legislatures that endow the majority party with only limited institutional powers. Focusing on voting for the president and House of Representatives in the United States reveals that a substantial proportion of voters engage in policy-stacking behavior, but very few engage in policy-balancing behavior.

In a democracy with checks and balances, policy outcomes are determined by multiple, separately elected, branches of government. Under such a system, voters have an incentive to vote strategically even when there are only two candidates competing for each office. The policy-balancing theory (Alesina and Rosenthal 1995, 1996; Erikson 1988; Fiorina 1988, 1992) supposes that moderate voters split their tickets because this is the only way the voters can achieve moderate policy outcomes. Policy balancing has been advanced as an explanation for divided government, split-ticket voting, and the midterm effect.[1]

I have developed a model of a unicameral legislature with an executive veto, which endows the majority party with negative agenda control. Using this model, I will argue that policy-balancing incentives are only characteristic of legislatures with a strong institutional role for the majority party. In this article, I describe a new variety of strategic voting, policy stacking, in which voters with split preferences cast straight-ticket votes in order to minimize gridlock.[2] I argue that incentives for policy stacking are characteristic of legislatures that endow the majority party with only limited institutional powers.

In a framework where both the president and the majority party have the ability to veto legislation but the median legislator has the power to propose, moderate voters have a strong incentive to cast straight-ticket votes, even when their preferences are split. A voter must choose between divided government (where gridlock occurs for status quos on either side of the political spectrum) and united government (where gridlock is confined to one side of the political spectrum). In the absence of gridlock, moderate policy outcomes prevail, because the median legislator is the proposer. Hence, a moderate voter will choose to minimize gridlock through united government, since gridlock cannot be eliminated completely.

I offer a critique of previous work testing the policy-balancing theory. The policy-balancing theory predicts that moderate voters will be the voters most likely to cast split-ticket votes. That this fact is indeed borne out by the data is often taken as confirmation of the policy-balancing theory. This inference is unwarranted, however, because most (if not all) of the alternative explanations for divided government and split-ticket voting are also consistent with this fact (Burden and Kimball 1998, 2002; Degan and Merlo 2006; Frymer 1994; Jacobson 1990; Patty 2004, 2006). Hence, this prediction cannot be used to distinguish among these theories.

I present the details of my empirical investigation of strategic voting in multi-office elections. Specifically, I focus on voting for the president and the House in U.S. presidential elections. Strategic voting involves voting for candidates other than those one most prefers. To investigate strategic voting, we must therefore reference data on voting behavior as well as voter preferences. Data on voting behavior is readily available from political surveys. Obtaining a measure of voter preferences is less straightforward. I constructed a measure of voter preferences using the thermometer scores from the American National Election Studies. This approach follows work by Abramson et al. (forthcoming) and is defended later in this article.

My results focus on two groups of respondents: respondents with straight preferences and respondents with split preferences. If a respondent with straight preferences casts a split ticket, then the respondent is engaging in policy balancing. If a respondent with split preferences casts a straight ticket, then the respondent is engaging in policy stacking. I have found that very few respondents engage in policy balancing, while approximately one-third of voters with split preferences engage in policy stacking.

These results provide support for nonstrategic explanations of split-ticket voting. Although strategic voting behavior is present in multi-office elections, it actually reduces the degree of split-ticket voting, suggesting that the cause of split-ticket voting is split preferences. Alternative theories point to a number of factors contributing to split preferences. My results further suggest that strategic voting actually acts to reduce the likelihood of divided government.

1. Incentives for Strategic Voting

In this section, I present a theoretical model of lawmaking for a unicameral legislature that provides an executive with the power to veto legislation. I use this framework to characterize the incentives for strategic voting in multi-office elections.

The Model

I employed the one-dimensional spatial model. The legislature consists of N legislators, where N is an odd number. Member n has the utility function[3]

$$u_n(x;q_n) = -(x-q_n)^2.$$

Here, $x \in \mathbb{R}$ denotes the policy outcome and $q_n \in \mathbb{R}$ denotes the ideal point of legislator n. Without loss of generality, one may assume that the legislator ideal points are ordered such that

$$q_1 \leq q_2 \leq \ldots \leq q_N.$$

For notational convenience, let $m = \frac{N+1}{2}$. Thus, q_m denotes the ideal point of the median legislator.

The policymaking process is described by a four-stage game. In the first stage, a status quo, s, is drawn from the density $f_s(s)$. The status quo is observed by all players in the game. An agenda setter chooses whether or not to allow the floor to consider the issue. The agenda setter's preferences have the form $u^a(x;a) = -(x - a)^2$, where $a \in \mathbb{R}$ represents the ideal point of the agenda setter. The agenda setter can be viewed as the chamber leader (selected by the majority party) or the chair of the relevant committee (Cox and McCubbins 1993; Denzau and Mackay 1983). If the agenda setter blocks consideration of s, then the policy outcome becomes $x = s$ and the game ends. Otherwise, the game proceeds to the second stage.

In the second stage, the floor chooses a bill, $b \in \mathbb{R}$, to pit against the status quo. All legislators have the opportunity to propose amendments to the bill. For a bill to be amended from b to b', b' must receive at least $\frac{N+1}{2}$ votes. The amending activity stops when no legislator has further incentive to amend the bill.[4]

In the third stage, the legislature chooses between the bill and the status quo by majority vote.

In the fourth stage, the executive has an opportunity to veto the final bill. The executive's preferences have the form $u^p(x;p) = -(x-p)^2$, where $p \in \mathbb{R}$ represents the ideal point of the executive. If the bill is vetoed, then the policy outcome becomes $x = s$. Otherwise, the policy outcome becomes $x = b$, where b refers to the final form of the bill.

Of course, this scenario ignores a few components of the U.S. political system. First, it assumes that the legislature consists of a single branch when, in fact, the U.S. system is bicameral. Second, it does not consider the possibility that the legislature may override the executive. Most important, it endows the majority party with a specific type of agenda power. While this structure gives a plausible characterization of lawmaking in the U.S. Congress (Cox and McCubbins 2005; Lawrence, Maltzman, and Smith 2007), other plausible alternatives exist. I chose this particular form because it lies between the extreme partisan models used in the policy-balancing literature (Alesina and Rosenthal 1995, 1996; Fiorina 1988, 1992) and pivot models that do not provide a formal role for the majority party (Krehbiel 1996, 1997). By showing that other forms of strategic voting behavior are likely to occur in this framework, I can demonstrate the dependency of policy-balancing incentives on *strongly* institutionalized parties.

Model Solution

With backwards induction, one can solve the game and analyze the stages in reverse order. For a bill to pass, it must be approved by the president. For the president to prefer a bill to the status quo, the bill must satisfy

$$b \in P(s) = \{b : (b-p)^2 \leq (s-p)^2\} = \begin{cases} [s, 2p-s], & s \leq p \\ [2p-s, s], & s > p \end{cases}.$$

Here, one assumes that the president chooses not to veto when indifferent between the bill and the status quo, an assumption that avoids open-set problems.[5]

In the third stage, in order for a bill to pass, it must be contained in the Winset. The Winset, $W(s)$, is described by

$$W(s) = \begin{cases} [s, 2q_m - s], & s \leq q_m \\ [2q_m - s, s], & s \geq q_m \end{cases}.$$

For a given status quo point, the Winset is the set of bills, $b \in \mathbb{R}$, that will receive at least $\frac{N+1}{2}$ votes when paired against the status quo.

Again, to avoid open-set problems, one assumes that legislators who are indifferent between the bill and the status quo will vote for the bill.

For a bill to become law, it must be contained in $W(s) \cap P(s)$, or the set of bills preferred by both the president and the median legislator to the status quo. One can then determine that

$$W(s) \cap P(s) = \begin{cases} [s, 2\min\{q_m, p\} - s], & s \le \min\{q_m, p\} \\ \varnothing, & \min\{q_m, p\} \le s \le \max\{q_m, p\} \\ [2\max\{q_m, p\} - s, s], & s \ge \max\{q_m, p\} \end{cases}.$$

In the second stage, the selected bill, b, must be *Amendment-proof,* in the sense that no legislator would like to propose an alternative bill, b', that would defeat b.[6] Therefore, if the issue is allowed to go to the floor, then the floor outcome will be given by[7]

$$f(s) = \begin{cases} q_m, & s \le 2\min\{q_m, p\} - q_m \\ 2\min\{q_m, p\} - s, & 2\min\{q_m, p\} - q_m \le s \le \min\{q_m, p\} \\ s, & \min\{q_m, p\} \le s \le \max\{q_m, p\} \\ 2\max\{q_m, p\} - s, & \max\{q_m, p\} \le s \le 2\max\{q_m, p\} - q_m \\ q_m, & s \ge 2\max\{q_m, p\} - q_m \end{cases}.$$

This outcome is, for each status quo, the point in $W(s) \cap P(s)$ that is closest to the median legislator's ideal point.

Finally, one can consider the first stage. Let a represent the ideal point of the agenda setter. The agenda setter will choose to allow the bill to be considered only if she or he strictly prefers the floor outcome to the status quo,[8] that is, if

$$x(s) = \begin{cases} f(s), & (f(s) - a)^2 < (s - a)^2 \\ s, & \text{otherwise} \end{cases}.$$

Combining this with the expression for $f(s)$ yields the following:

$$x(s) = \begin{cases} q_m, & s \le 2\min\{q_m, p, a\} - q_m \\ 2\min\{q_m, p\} - s, & 2\min\{q_m, p, a\} - q_m \le s \le \min\{q_m, p, 2a - q_m\} \\ s, & \min\{q_m, p, 2a - q_m\} \le s \le \max\{q_m, p, 2a - q_m\} \\ 2\max\{q_m, p\} - s, & \max\{q_m, p, 2a - q_m\} \le s \le 2\max\{q_m, p, a\} - q_m \\ q_m, & s \ge 2\max\{q_m, p, a\} - q_m \end{cases}.$$

Illustrating the Equilibrium

To simplify things, let q_D denote the ideal point of the Democratic Party and let q_R denote the ideal point of the Republican Party. Assume further that $q_D < q_m < q_R$. The ideal point of the president is equal to q_D if there is a Democratic president and to q_R if there is a Republican president. The ideal point of the agenda setter is equal to q_D if the Democratic Party controls the legislature and to q_R if the Republican Party controls the legislature.

One can denote the policy outcome, as a function of the status quo, for each of four possible scenarios, using $x_{DD}(s)$, $x_{DR}(s)$, $x_{RD}(s)$, and $x_{RR}(s)$. Here, the first letter indicates the party that controls the presidency and the second letter indicates the party that controls the legislature. Plugging in the specified values for p and a in each of the four scenarios yields

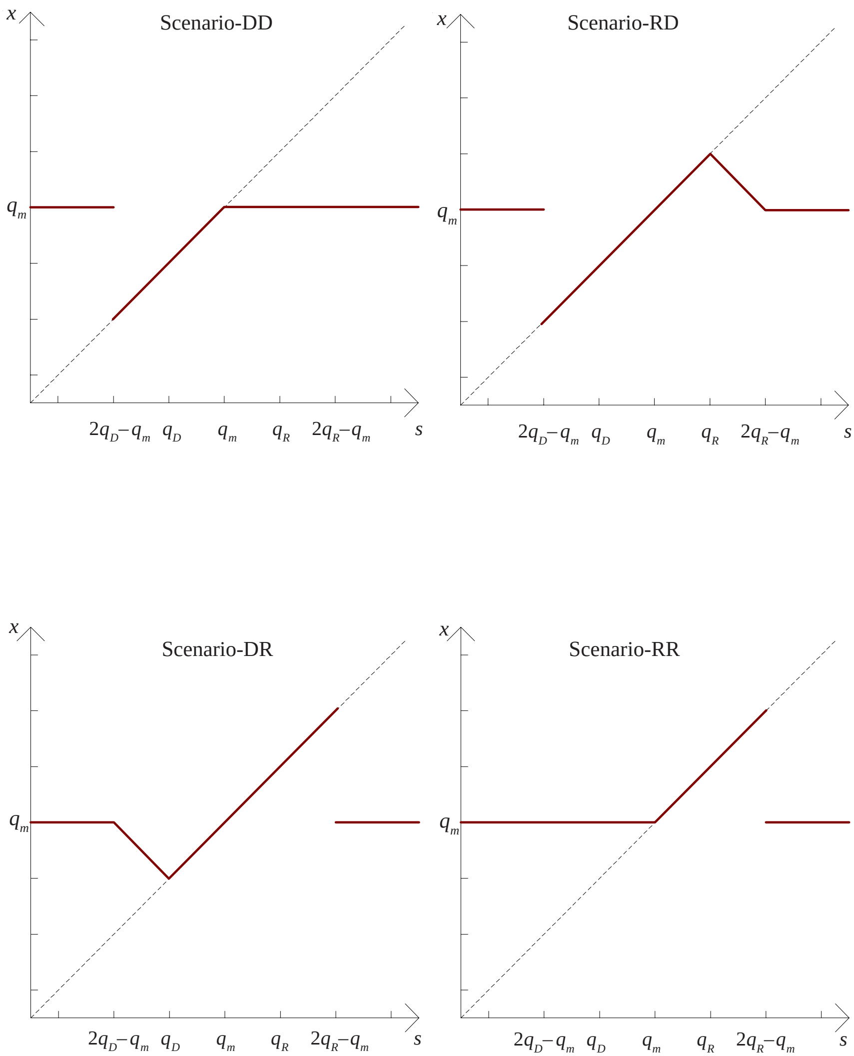
$$x_{DD}(s) = \begin{cases} q_m, & s \le 2q_D - q_m \\ s, & 2q_D - q_m \le s \le q_m \\ q_m, & s \ge q_m \end{cases}, \quad x_{DR}(s) = \begin{cases} q_m, & s \le 2q_D - q_m \\ 2q_D - s, & 2q_D - q_m \le s \le q_D \\ s, & q_D \le s \le 2q_R - q_m \\ q_m, & s \ge 2q_R - q_m \end{cases},$$

$$x_{RD}(s) = \begin{cases} q_m, & s \le 2q_D - q_m \\ s, & 2q_D - q_m \le s \le q_R \\ 2q_R - s, & q_R \le s \le 2q_R - q_m \\ q_m, & s \ge 2q_R - q_m \end{cases}, \quad x_{RR}(s) = \begin{cases} q_m, & s \le q_m \\ s, & q_m \le s \le 2q_R - q_m \\ q_m, & s \ge 2q_R - q_m \end{cases}.$$

These four scenarios are plotted in Figure 1. For $x_{DD}(s)$, the policy outcome is equal to the position of the median legislator everywhere except in the "gridlock interval." The gridlock interval is the set of status quo points such that $x(s) = s$. In this case, the gridlock interval is $[2q_D - q_m, q_m]$. If the agenda setter (with ideal point q_D) allowed the legislation to go to the floor, then the bill passed would be as close as possible to q_m while surviving a presidential veto. In this region, the agenda setter is indifferent between the floor outcome and the status quo, and thus chooses to block consideration.

For $x_{DR}(s)$, there are two actors who are able to veto legislation, although these vetoes take different forms by assumption. The Democratic president has an ex post veto, and the Republican agenda setter has an a priori veto. The median legislator is effectively the proposer, so the floor outcome will be q_m unless the status quo is closer to q_m than q_D. In this case ($2q_D - q_m < s < q_m$), the floor position will be moderated in order to avoid a veto by the Democratic president. The Republican agenda setter will block consideration of legislation when the status quo is in the interval $[q_m, 2q_R - q_m]$, explaining the patterns in Figure 1. The *RR* and *RD* cases are analogous to the *DD* and *DR* cases, respectively.

FIGURE 1
Policy Outcomes



Strategic-voting Incentives

In this subsection, I characterize the opportunities for strategic voting. Following Fiorina (1988, 1992), I do not explicitly consider pivotal probabilities. Instead, I assume that a voter casts a vote as if he or she were pivotal, both in determining which party controls the presidency and determining which party controls the legislature. This approach is not necessarily equivalent to analyzing the voter's decision using pivotal probabilities [using Fey's (1997) approach or Myerson's (2002) method, for example]. Yet I believe that this is a more plausible account of voting behavior; the alternative requires voters to compare the extremely small probabilities of being pivotal in the presidential and legislative races.

Voters care about the deviation between the policy outcome and their ideal point, $v \in \mathbb{R}$. I assume that voters have quadratic utility functions, $u(x;v) = -(x-v)^2$. Voters expect that, in a given session, the legislature will face a stream of status quos, represented by the density function f_s. Voters integrate over this stream of status quos to obtain an expected utility of $U_{kl}(v) = \int_{s=-\infty}^{\infty} -(x_{kl}(s)-v)^2 f_s(s)ds.$ The indices $kl \in \{DD, DR, RD, RR\}$ denote the dependency of the expected utility on the scenario.

The positions of the presidential candidates are already specified to be q_D and q_R. Hence, a voter's sincere preferences over presidential candidates indicate that the voter will prefer the Democratic candidate if $v < \frac{1}{2}(q_D + q_R)$ or the Republican candidate if $v > \frac{1}{2}(q_D + q_R)$. Let q_D^L and q_R^L denote the positions of the Democratic and Republican legislative candidates in a district. A voter's sincere preferences over legislative candidates indicate that the voter will prefer the Democratic candidate if $v < \frac{1}{2}(q_D^L + q_R^L)$ or the Republican candidate if $v > \frac{1}{2}(q_D^L + q_R^L)$.

Thus, if $v < \min\{\frac{1}{2}(q_D + q_R), \frac{1}{2}(q_D^L + q_R^L)\}$, then the voter has straight Democratic preferences. If $\min\{\frac{1}{2}(q_D + q_R), \frac{1}{2}(q_D^L + q_R^L)\} < v < \max\{\frac{1}{2}(q_D + q_R), \frac{1}{2}(q_D^L + q_R^L)\}$, then the voter has split preferences. And if $v > \max\{\frac{1}{2}(q_D + q_R), \frac{1}{2}(q_D^L + q_R^L)\}$, then the voter has straight Republican preferences. If some districts have $\frac{1}{2}(q_D^L + q_R^L) < \frac{1}{2}(q_D + q_R)$ while others have $\frac{1}{2}(q_D^L + q_R^L) > \frac{1}{2}(q_D + q_R)$, then there are voters of four preferences types: *DD*, *DR*, *RD*, and *RR*. Here, the first letter denotes the voter's sincere preference in the presidential race and the second letter denotes the voter's sincere preference in the House race. Voters have four options for casting their ballot: *DD*, *DR*, *RD*, and *RR*. Once again, the first letter denotes the presidential vote and the second letter denotes the legislative vote.

If a voter's ballot cast is the same as that voter's preference configuration (for example, if the voter prefers *DD* and votes *DD*), then the voter has voted sincerely. If the voter has straight preferences (*DD* or *RR*) and casts a split ticket (*DR* or *RD*), then the voter has engaged in policy balancing. If the voter has split preferences (*DR* or *RD*) but casts a straight ticket (*DD* or *RR*), then the voter has engaged in policy stacking.[9]

I denote a voter's expected utility using $U_{kl}(v)$ for $kl \in \{DD, DR, RD, RR\}$. These expressions are integrals that depend on the distribution of status quo points. I assume that the distribution of status quo points is uniform over the region $[2q_D - q_m, 2q_R - q_m]$. In addition, I normalize $q_D = -1$ and $q_m = 0$. I sometimes leave q_D in the notation to emphasize the symmetry.

Computing expressions for the utility functions in each of the four scenarios results in the following equations:

$$U_{DD}(v) = \frac{\frac{8}{3}q_D^{\,3} - 4vq_D^{\,2}}{2(q_R - q_D)} - v^2,$$

$$U_{DR}(v) = \frac{\frac{2}{3}q_D^{\,3} - \frac{8}{3}q_R^{\,3} - 2vq_D^{\,2} + 4vq_R^{\,2}}{2(q_R - q_D)} - v^2,$$

$$U_{RD}(v) = \frac{\frac{8}{3}q_D^{\,3} - \frac{2}{3}q_R^{\,3} - 4vq_D^{\,2} + 2vq_R^{\,2}}{2(q_R - q_D)} - v^2, \text{and}$$

$$U_{RR}(v) = \frac{-\frac{8}{3}q_R^{\,3} + 4vq_R^{\,2}}{2(q_R - q_D)} - v^2.$$

My goal is to show that policy-stacking behavior is possible in this environment. Suppose that the relative distances between the parties and the median legislator are not too different. Specifically, assume that q_R satisfies $q_R^{\,3} + \frac{1}{2}q_R^{\,2} - \frac{1}{2} > 0$ and $q_R^{\,3} - q_R - 2 < 0$.[10] These polynomials restrict q_R to lie in the interval (0.6573,1.5214).[11] Using these assumptions, one can prove the following proposition:

Proposition 1: Suppose that $q_D = -1$, $q_m = 0$, and q_R satisfies $q_R^3 + \frac{1}{2}q_R^2 - \frac{1}{2} > 0$ and $q_R^3 - q_R - 2 < 0$. Suppose that $f_s(s)$ is uniformly distributed over the interval $[2q_D - q_m, 2q_R - q_m]$. Then all voters with split preferences engage in policy-stacking behavior.

The intuition behind this proposition is quite simple. The voters with split preferences are those voters with ideal points relatively close to q_m (that is, moderate voters). These voters have the choice of casting a straight ticket and confining gridlock to one side of the political spectrum or casting a split ticket and causing gridlock on both sides of the political spectrum. Since, in the absence of gridlock, policy outcomes are close to q_m, moderate voters prefer to avoid gridlock and hence have an incentive to cast a straight ticket, even when they have split preferences.

The result makes use of three assumptions that one may consider relaxing. First, one may allow for $q_R \notin (0.6573, 1.5214)$. Second, one may drop the assumption that the voters' utility functions are quadratic. Third, one may drop the assumption that status quo points are uniformly distributed. Considering any of these extensions is difficult, because analytical results become less tractable or impossible to derive. As a robustness check, I examined each of these extensions by numerically computing the voting strategies under alternative assumptions.[12] When I selected $q_R \notin (0.6573, 1.5214)$, I found that split-ticket voting occurred for intermediate values of v but that the degree of split-ticket voting was much less than would be predicted by sincere voting. When I selected an absolute-value utility function or considered different distributions for f_s, I found that the results were qualitatively similar: all or most voters would cast straight tickets, even if they had split preferences. My main prediction of significant policy-stacking behavior thus seems to be robust to these three assumptions.

Discussion

Alesina and Rosenthal's (1995, 1996) and Fiorina's (1988, 1992) policy-balancing theories assume that parties are perfectly cohesive. In this case, voters can only achieve moderate policy outcomes through divided government. If the power of the majority party weakens, then a different form of strategic voting appears. If the majority party has gatekeeping power, then we observe policy-stacking behavior; voters with split preferences prefer to vote a straight ticket in order to avoid gridlock. Recent work on Congress has defended the importance of parties, but much of this work has stressed negative agenda-setting powers (Cox and McCubbins 1993, 2005; Lawrence, Maltzman, and Smith 2007). My results weaken the theoretical case for policy balancing by showing that policy-balancing behavior depends on strongly institutionalized parties. My theory provides an alternative prediction for the form of strategic voting in multi-office elections, which is tested in the next section.

2. A Test of Strategic Voting Behavior

Divided government and split-ticket voting have been persistent features of the U.S. political system. Erikson (1988), Fiorina (1988, 1992), and Alesina and Rosenthal (1995, 1996) have advanced the policy-balancing theory as an explanation for these phenomena. The policy-balancing theory predicts that moderate voters are the most likely to split their tickets (Fiorina 1988, 1992), a prediction borne out by the data. The data are interpreted as confirmation of the policy-balancing theory by Fiorina (1992), Alesina and Rosenthal (1995), and Lewis-Beck and Nadeau (2004).[13]

The problem with this approach is that most (if not all) of the competing explanations of divided government and split-ticket voting are also consistent with these data. Hence, this empirical test cannot be used to distinguish between these theories and does not provide convincing evidence in favor of the policy-balancing theory.[14] For example, Jacobson (1990) has argued that voters perceive the parties as having different strengths: the Democratic Party is preferred for constituency service, while the Republican Party is preferred for macroeconomic management and foreign policy. Burden and Kimball (1998, 2002) have argued that split-ticket voting can largely be accounted for by spending disparities between incumbents and challengers. Frymer (1994) has argued that much split-ticket voting has been the result of consistent ideological voting.

Each of the alternative theories suggests that voters cast split-ticket votes because voters have split preferences. In each case, an asymmetry leads some voters to prefer the presidential candidate from one party and the House candidate from the other party. In Jacobson's theory, the asymmetry is the perceived competencies of the parties. In Burden and Kimball's theory, the asymmetry is incumbency. In Frymer's theory, the asymmetry is position-taking by the candidates.

Each of these theories suggests that moderate voters are the most likely to split their tickets, the same phenomenon that policy balancing is purported to explain. One can illustrate this point using a formalized version of Frymer's theory. Suppose, as before, that q_D and q_R are the ideological positions of the Democratic and Republican presidential candidates and q_D^L and q_R^L are the positions of the Democratic and Republican legislative candidates. Let v denote the ideal point of a voter, and assume that voters vote sincerely in each race. Voters with

$$\min\{\tfrac{1}{2}(q_D + q_R), \tfrac{1}{2}(q_D^L + q_R^L)\} < v < \max\{\tfrac{1}{2}(q_D + q_R), \tfrac{1}{2}(q_D^L + q_R^L)\}$$

will split tickets. Hence, split-ticket voting is not only possible, but voters who cast split tickets are likely to be located near the center of the political spectrum.[15] Frymer's theory of consistent ideological voting therefore explains the same facts that are taken as evidence in favor of the policy-balancing theory. It is possible to formalize Jacobson's and Burden and Kimball's theories to generate this prediction, as well.

To resolve this dilemma, I propose a direct test of the policy-balancing theory. Strategic voting involves voting for a candidate other than the candidate one most prefers. Policy balancing is thus a form of strategic voting behavior in which voters with straight preferences choose to split tickets. To *directly* investigate strategic voting behavior in multi-office elections, one must know voters' true preferences and how the voters cast their votes.

Data

I relied on data from the American National Election Studies (ANES). The ANES includes the self-reported votes of the respondents. For my empirical strategy to work, I also needed to be able to measure voter preferences. It is not immediately clear how preferences can be measured (independently from actual voting behavior). For example, we might imagine a survey that asked voters which presidential candidate they planned to vote for and which presidential candidate they preferred. Clearly, respondents would have a difficult time responding to the second set of items in a meaningful way, unless they happen to have studied formal political theory.

Alternatively, I constructed the measure of voter preferences using the thermometer scores available in the ANES.[16] A respondent prefers candidate A to candidate B if the respondent gives a higher thermometer score to candidate A than candidate B.[17]

Readers might raise two concerns about this measure. First, thermometer scores do not measure preferences but how much the voter likes a candidate. Preference is comprehensive, including factors like "valence," policy position, perceptions of competency, retrospective economic voting, and so forth. Thermometer scores may only capture valence or something similar. Adding to this concern is the fact that the thermometer items seem to have been designed to capture the "warmth" one feels toward the candidate. Alvarez and Nagler (2000, 64, fn 16) warn that the fact that "researchers use these survey questions to measure such diverse concepts clearly calls into question what feeling thermometers really measure."

The worry then is that thermometer scores do not measure all the factors that enter into the formation of preferences but only some of these (for instance, valence). We can rule out this notion fairly easily, however. Using thermometer scores alone, one can predict between 96% and 98% of the respondents' votes in the presidential race. No single other variable in the ANES can come even close to predicting presidential vote this well, not party identification, ideological distance, or the Miller-Stokes measure of valence. This predictive power indicates that the thermometer scores must be comprehensive, in the sense that they include almost everything that enters into the voters' preferences.

The second concern is that thermometer scores are too comprehensive—that they include strategic considerations in addition to preferences. This worry can be ruled out because of the way the questions are framed. Respondents are simultaneously asked to rate many candidates and noncandidates on the same 0–100 scale. The order of these questions is rotated so that voters are not likely to be rating the Republican candidate immediately after the Democratic candidate for the same office. It would be quite unnatural (not to mention difficult) for respondents to adjust their ratings to include the strategic considerations that would be relevant in multi-office elections.[18]

Like much of the previous literature on split-ticket voting, this study focuses on presidential elections and considers voting in the presidential and House races. I report results for the years 1980–2000, the years that ANES respondents were asked to give thermometer ratings for the House candidates.

Hypotheses

I begin with the baseline theory of sincere voting.

Hypothesis 1 (Sincere Voting): All voters will cast sincere votes in both races.

This hypothesis is implicitly assumed in the competing theories of divided government and split-ticket voting outlined in the beginning of this section. To provide convincing evidence of strategic voting, one must be able to generate predictions that sincere voting cannot explain. As I have already argued, many of the existing tests of the policy-balancing theory do not meet this standard.

The policy-balancing theory, as described by Fiorina (1988, 1992), makes the following prediction:

Hypothesis 2 (Policy Balancing): Some of the voters with straight preferences will cast split tickets.

The policy-balancing theory does not make an explicit prediction about the behavior of voters with split preferences, because it assumes that such voters do not exist.

The results of Section 1 suggest that policy stacking is the form that strategic voting is most likely to take in a setting where the majority party enjoys limited institutional powers. Proposition 1 indicated that if the distribution of status quo points was uniform with sufficiently large support, then all voters (including those with split preferences) would cast straight tickets. In practice, the assumptions of this framework are unlikely to be exactly satisfied, and some amount of split-ticket voting will be possible.[19] I thus derived the following two hypotheses:

Hypothesis 3a (Policy Stacking): Most of the voters with straight preferences will cast straight tickets.

Hypothesis 3b (Policy Stacking): Some of the voters with split preferences will cast straight tickets.

Since I can measure both voter behavior and voter preferences, my approach allows me to distinguish between these three sets of hypotheses.

Results

The main results appear in Table 1. I examined the sample of voters who voted for the Democratic or Republican candidate in the presidential and House races, who provided thermometers scores for the presidential and House candidates from both parties, and who did not express indifference between the candidates. Split-ticket voting averaged 22% in the elections under consideration and was as high as 29% in 1980, when many so-called Reagan Democrats voted for Ronald Reagan and Democratic House candidates.

TABLE 1
Strategic Voting

		Actual Vote (% of total sample)			Sincere or Strategic Vote (% of total sample)				Sincere or Strategic Vote (% of eligible voters)	
Year	N	Straight Democratic Vote	Straight Republican Vote	Split-ticket Vote	Sincere Vote	Policy-stacking Vote	Policy-balancing Vote	Reverse Vote	Policy Stacking	Policy Balancing
1980	266	26.69	44.74	28.57	90.60	6.39	2.63	0.38	22.37	3.68
1984	406	30.05	46.80	23.15	89.16	8.37	2.22	0.25	36.17	2.88
1988	308	32.14	44.16	23.70	87.99	8.77	2.92	0.32	36.99	3.83
1992	437	48.51	31.12	20.37	89.47	7.55	2.75	0.23	37.08	3.45
1996	485	43.09	39.38	17.53	92.78	4.54	2.68	0.00	25.88	3.25
2000	343	44.61	37.03	18.37	92.42	4.08	2.62	0.87	22.22	3.21
Average		37.52	40.54	21.95	90.40	6.62	2.64	0.34	30.12	3.39

Note: The “Policy-stacking Vote” column lists the proportion of voters in the sample who cast a policy-stacking vote. The “Policy Stacking” column lists the percent of voters with split preferences who cast straight-ticket votes. The “Policy-balancing Vote” column lists the proportion of voters in the sample who cast a policy-balancing vote. The “Policy Balancing” column lists the proportion of voters with straight preferences who cast a policy-balancing vote.

Most respondents (an average of 90%) cast sincere votes. The percentage of respondents who cast straight tickets while having split preferences (policy stackers) was small in absolute terms (between 4% and 9% of voters in the sample), but it constituted approximately 30% of the eligible voters—those who had split preferences. The percentage of respondents who cast split tickets despite having straight preferences (policy balancers) was extremely small, averaging only 3% of the eligible voters.

The hypotheses can be tested via comparison of the last two columns of Table 1. The baseline theory of sincere voting (Hypothesis 1) is rejected, because a substantial proportion of voters with split preferences cast strategic votes (between 22% and 37%). The policy-balancing theory (Hypothesis 2) was not supported, because very few voters with straight preferences cast split tickets (approximately 3%). The fraction of split-ticket voters (22%) was also much larger than the fraction of policy-balancing voters, a difference indicating that policy balancing could not provide an explanation for split-ticket voting.

The results favor the policy-stacking theory. Hypotheses 3a and 3b are confirmed by the data. A substantial proportion of voters with split preferences cast straight tickets, but very few voters with straight preferences cast straight tickets. Note that the policy-stacking theory predicted that *all* voters with split preferences would cast straight tickets. The data show that only about one-third of voters with split preferences cast straight tickets. One can interpret this difference in two ways. First, one may posit that the model only captures a portion of the decision-making process. Voters may take into account both policy outcomes and the nonpolicy characteristics of the candidates when making their voting decisions (Adams, Merrill, and Grofman 2005). My framework focuses on policy outcomes alone. My framework therefore suggests a pressure toward casting a straight ticket that is moderated by nonpolicy differences between the candidates. Alternately, one may suppose that the voting population consists of a mix of sincere and strategic voters, with the theory providing an account of the split-preference voters who cast straight tickets. Either of these interpretations are reasonable in light of my findings.

The results demonstrate that strategic voting behavior is present in multi-office elections. Most surprising is the fact that strategic voting is actually a force toward united government rather than divided government. The theory and the results suggest that voters are aware of the institutional constraints on policymaking and are willing to abandon their preferred candidate for the sake of preventing gridlock in government.

TABLE 2
Predicted Split Preferences

Year	Split-ticket Voting (%)	Predicted Split Preferences (pure ideological voting, %)
1980	28.6	39.4
1984	23.2	–
1988	23.7	–
1992	20.4	–
1996	17.5	33.3
2000	18.4	38.2

Split Preferences

The results suggest that split-ticket voting is not caused by strategic voting behavior. The vast majority of voters with straight preferences cast straight-ticket votes. Instead, the results indicate that voters who cast split-ticket votes had split preferences. Here, I investigate one possible source of split preferences, suggested by Frymer (1994).

Presidential and House candidates from the same party need not take the same positions on the issues. A Democratic House candidate in a conservative congressional district will naturally want to be distinguished from the party's presidential candidate and so will take a more conservative position. A similar logic holds for a Republican House candidate in a liberal congressional district.

To investigate this hypothesis, I used the ANES to identify the proportion of voters who would cast split tickets according to Frymer's theory of consistent ideological voting. I considered all years in which ANES respondents were asked to place presidential and House candidates on a 1–7 ideology scale. Frymer's theory predicts that a voter will cast a split ticket if that voter is ideologically closer to the Democratic presidential candidate and Republican House candidate or ideologically closer to the Republican presidential candidate and the Democratic House candidate.

Table 2 displays the results.[20] Between 33% and 39% of voters would have had split preferences if they evaluated candidates solely on their ideological positions. This is, in fact, a larger segment than the proportion of split-ticket voters in our sample. The results in Table 2 suggest that asymmetries indeed exist and are large enough to account entirely for split-ticket voting. This finding supports Frymer's contention that consistent ideological voting is a major contributing factor to split-ticket voting, although I believe that Burden and Kimball's and Jacobson's theories also identify contributing factors.

3. Conclusions

In multi-office elections, incentives for strategic voting can exist even when there are only two candidates competing for each office. Policy-balancing theory attempts to explain divided government, split-ticket voting, and the midterm effect. I have argued that policy-balancing incentives are only characteristic of legislatures that have a strongly institutionalized majority party. In such systems, moderate voters can only achieve policy moderation through divided government.

Recent work on theories of lawmaking has emphasized negative agenda control by the majority party. Under such a system, a different type of strategic voting behavior is likely to emerge: policy stacking, whereby voters with split preferences cast straight tickets in order to minimize gridlock.

My empirical findings suggest that very few voters engage in policy-balancing behavior, but a substantial fraction of voters with split preferences engage in policy-stacking behavior. The results imply that split-ticket voting is not caused by strategic voting but instead arises because voters have split preferences. A number of existing theories outline factors that may lead voters to have split preferences, and these theories have merit. Contrary to the policy-balancing theory, my results suggest that, were it not for strategic voting behavior, split-ticket voting and divided government would actually be *more* common.

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APPENDIX
Proof of Proposition 1

To prove the proposition, one must show that $U_{DD}(v) > U_{kl}(v)$ for all $kl \in \{DR,RD,RR\}$ when $v < \frac{2}{3}\frac{q_D^3 + q_R^3}{q_D^2 + q_R^2}$ and that $U_{RR}(v) > U_{kl}(v)$ for all $kl \in \{DD,DR,RD\}$ when $v > \frac{2}{3}\frac{q_D^3 + q_R^3}{q_D^2 + q_R^2}$. By applying the expressions derived for $U_{kl}(v)$, one arrives at the following equations:

$$U_{DD}(v) > U_{RR}(v) \Leftrightarrow v < \tfrac{2}{3}\frac{q_D^3 + q_R^3}{q_D^2 + q_R^2}, \quad U_{DR}(v) > U_{RD}(v) \Leftrightarrow v < \tfrac{2}{3}\frac{q_D^3 + q_R^3}{q_D^2 + q_R^2},$$

$$U_{DD}(v) > U_{DR}(v) \Leftrightarrow v < \frac{q_D^3 + \frac{4}{3}q_R^3}{q_D^2 + 2q_R^2}, \quad U_{RD}(v) > U_{RR}(v) \Leftrightarrow v < \frac{\frac{4}{3}q_D^3 + q_R^3}{2q_D^2 + q_R^2},$$

$$U_{DD}(v) > U_{RD}(v) \Leftrightarrow v < \tfrac{1}{3}q_R, \quad U_{DR}(v) > U_{RR}(v) \Leftrightarrow v < \tfrac{1}{3}q_D.$$

First, one must show that DD yields the maximum utility when $v < \frac{2}{3}\frac{q_D^3 + q_R^3}{q_D^2 + q_R^2}$. Hence, $U_{DD}(v) > U_{RR}(v)$. If, in addition $\frac{2}{3}\frac{q_D^3 + q_R^3}{q_D^2 + q_R^2} < \frac{q_D^3 + \frac{4}{3}q_R^3}{q_D^2 + 2q_R^2}$ and $\frac{2}{3}\frac{q_D^3 + q_R^3}{q_D^2 + q_R^2} < \frac{1}{3}q_R$, then $U_{DD}(v) > U_{DR}(v)$ and $U_{DD}(v) > U_{RD}(v)$, as well. One can rearrange $\frac{2}{3}\frac{q_D^3 + q_R^3}{q_D^2 + q_R^2} < \frac{q_D^3 + \frac{4}{3}q_R^3}{q_D^2 + 2q_R^2}$ to obtain $q_R^3 + \frac{1}{2}q_R^2 - \frac{1}{2} > 0$, which holds by assumption. One can then rearrange $\frac{2}{3}\frac{q_D^3 + q_R^3}{q_D^2 + q_R^2} < \frac{1}{3}q_R$ to obtain $q_R^3 - q_R - 2 < 0$, which also holds by assumption. This result implies that $U_{DD}(v) > U_{kl}(v)$ for all $kl \in \{DR,RD,RR\}$ when $v < \frac{2}{3}\frac{q_D^3 + q_R^3}{q_D^2 + q_R^2}$.

Next, one must show that *RR* yields the maximum utility when $v > \frac{2}{3}\frac{q_D^{\ 3} + q_R^{\ 3}}{q_D^{\ 2} + q_R^{\ 2}}$. If, in addition, $\frac{\frac{4}{3}q_D^{\ 3} + q_R^{\ 3}}{2q_D^{\ 2} + q_R^{\ 2}} < \frac{2}{3}\frac{q_D^{\ 3} + q_R^{\ 3}}{q_D^{\ 2} + q_R^{\ 2}}$ and $\frac{1}{3}q_D < \frac{2}{3}\frac{q_D^{\ 3} + q_R^{\ 3}}{q_D^{\ 2} + q_R^{\ 2}}$, then $U_{DR}(v) < U_{RR}(v)$ and $U_{RD}(v) < U_{RR}(v)$, as well. One can rearrange $\frac{\frac{4}{3}q_D^{\ 3} + q_R^{\ 3}}{2q_D^{\ 2} + q_R^{\ 2}} < \frac{2}{3}\frac{q_D^{\ 3} + q_R^{\ 3}}{q_D^{\ 2} + q_R^{\ 2}}$ to obtain $q_R^{\ 3} - q_R - 2 < 0$, which holds by assumption. One can then rearrange $\frac{1}{3}q_D < \frac{2}{3}\frac{q_D^{\ 3} + q_R^{\ 3}}{q_D^{\ 2} + q_R^{\ 2}}$ to obtain $q_R^{\ 3} + \frac{1}{2}q_R^{\ 2} - \frac{1}{2} > 0$, which, once again, holds by assumption.

When $v = \frac{2}{3}\frac{q_D^{\ 3} + q_R^{\ 3}}{q_D^{\ 2} + q_R^{\ 2}}$, voters do not have unique optimal strategies but will vote for either *DD* or *RR*. Since all voters cast straight tickets, it follows that all voters with split preferences will engage in policy-stacking behavior, proving the result.

NOTES

I thank Ken Shotts and three anonymous referees, as well as participants at the Midwest Political Science Association meeting, Chicago, 2006, for many helpful suggestions.

1. The policy-balancing theory has even received occasional endorsements in the popular press (Shafer 2002).

2. As I will later discuss, voters have split preferences if they prefer the Democratic candidate for one office and the Republican candidate for another office. Voters have straight preferences if they prefer one party's candidates for both offices.

3. The assumption of the quadratic utility function is less restrictive than it appears. Any symmetric utility function—that is, $u_n(x;q_n) = f(|x - q_n|)$ where f is strictly decreasing—will produce identical results.

4. Because we are working with the one-dimensional spatial model under majority rule, a unique "stopping point" will exist.

5. See Duggan (2006) for a discussion of open-set problems. As Krehbiel (1997) points out, such an assumption is not technically necessary, since the case of an indifferent president choosing to veto the bill cannot create a subgame perfect Nash equilibrium.

6. See my working paper (Peress 2008) for further discussion of amendment-proof bills. The amendment-proof requirement yields a result equivalent to giving the median legislator exclusive proposal power.

7. These derivations are straightforward, relatively complicated, and not particularly informative, so I omit them here.

8. Here, I chose to break indifferences by assuming that the agenda setter kills the legislation if she or he is indifferent between the floor outcome and the status quo. This is a reasonable assumption, since there is an opportunity cost to considering legislation on the floor. Unlike the previous tie-breaking assumptions used to avoid the open-set problem, this assumption is not without loss of generality, but I believe it is reasonable.

9. The final case is a voter with preferences *DD* or *RR* casting a reverse ballot of *RR* or *DD*, respectively. This case is not interesting, either theoretically or empirically.

10. Where these equations come from will become clear in the proof of Proposition 1.

11. I calculated this range by numerically finding the roots of the two polynomials.

12. I computed the functions $U_{kl}(v) = \int_{s=-\infty}^{\infty} -(x_{kl}(s) - v)^2 f_s(s)ds$ for $kl \in \{DD,DR,RD,RR\}$ using the expressions derived for $x_{kl}(s)$ and integrating over s using simulation methods. I then computed the $kl \in \{DD,DR,RD,RR\}$ that maximized $U_{kl}(v)$ for a grid of values for v.

13. To be fair, some of the alternative theories were not developed until after the results of some of these empirical tests were published. Born (1994) and Sigelman, Wahlbeck, and Buell (1997) have presented evidence against the policy-balancing theory. Mebane (2000) and Mebane and Sekhon (2002) have argued against Fiorina's (1992, 1998) policy-balancing theory and in favor of a more strategic form of policy balancing. Matthews (1979), Lacy and Paolino (1998, 1999), and Kedar (2005) have examined other varieties of institution-based strategic voting.

14. Krehbiel (2000) uses a similar argument against many existing empirical tests of party-discipline theories. A baseline theory of pure spatial voting can explain the same set of facts that theories of party discipline are purported to explain. Thus, empirical tests based on the variation in party cohesion scores should not be taken as evidence in favor of theories of party discipline.

15. Specifically, competition in the presidential race will cause $\frac{1}{2}(q_D + q_R)$ to be close to 0, which is the position of the median voter in the electorate. Competition in the legislative race will cause $\frac{1}{2}(q_D^L + q_R^L)$ to be close to the position of the median voter in the district, which will vary across districts.

16. Using thermometer scores to measure preferences dates back to Black (1978) and Cain (1978). The method has been employed extensively to measure strategic voting in multicandidate elections (Abramson et al. 1992; Abramson et al. forthcoming; Blais and Nadeau 1996), but I believe that this is the first study to employ it as a measure of strategic voting in multi-office elections.

17. The thermometer items are presented as follows in the 1996 ANES survey: "Please look at page 1 of the booklet. I'd like to get your feelings toward some of our political leaders and other people who are in the news these days. I'll read the name of a person and I'd like you to rate that person using something we call a feeling thermometer. Ratings between 50 degrees and 100 degrees mean that you feel favorable

and warm toward the person. Ratings between 0 degrees and 50 degrees mean that you don't feel favorable toward that person and that you don't care too much for that person. You would rate the person at the 50-degree mark if you don't feel particularly warm or cold toward the person. If we come to a person whose name you don't recognize, you don't need to rate that person. Just tell me and we'll move on to the next one. How would you rate ____?"

18. This argument is somewhat specific to the current application and does not apply as well to strategic voting in multicandidate elections. One could reasonably trust this measure in my application while remaining skeptical about its use in multicandidate elections.

19. Specifically, it is reasonable to assume that voters consider both policy outcomes and nonpolicy characteristics (Adams, Merrill, and Grofman 2005). I elaborate on this assumption in my discussion of the results of the empirical test.

20. Predicted split preferences are missing from 1984 through 1992, because respondents were not asked to place the House candidates in those years.

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