PRIMARY ELECTION SYSTEMS AND CANDIDATE DEVIATION

Christopher Westley
Jacksonville State University

Peter T. Calcagno
College of Charleston

and

Richard Ault
Auburn University

INTRODUCTION

In March of 1996, voters in California overwhelmingly passed the Open Primary Act of 1996 by direct voter initiative, replacing a closed primary system with a blanket primary system, thus adopting a primary system that was very similar to the one that has been in existence in the state of Washington since 1935 (*State of Washington, Office of the Secretary of State*).[1] Much of the support for the Act came from voters who argued that a closed primary system produces a slate of extremist candidates in the general election, thereby effectively disenfranchising centrist voters. In June 2000, however, the U.S. Supreme Court overturned this referendum following legal challenges from the California Republican and Democratic parties (along with the state Libertarian and Peace and Freedom parties). These parties argued that allowing nonparty members to choose their party's nominees violated their rights to political association. Since this ruling, the states of Alaska and Washington have begun to reform their primary election process to conform to the Supreme Court ruling. This episode raises interesting theoretical questions about the relationship between rent-maximizing politicians, voters, and the electoral institutions under which they act.

A significant set of the public-choice literature considers the relationship between primary types and the resulting ideology of the winning candidate in primary and general elections. Research by Buel and Jackson [1991], for instance, suggests that primary voters with ideologically extreme views are more likely to participate in political activities than other voters. Gerber and Morton [1998] argue that the relevant median voter in closed primaries is more extreme than the median voter in general elections and that this difference is less pronounced in states with open or blanket primaries. In this paper, we build upon Gerber and Morton [1998] by adding

Christopher Westley: Department of Economics, Finance, and Accounting, Jacksonville State University, Jacksonville, AL 36265. E-mail: cawestley@msn.com

Eastern Economic Journal, Vol. 30, No. 3, Summer 2004

a new measure of deviation from the median voter that explains why politicians may prefer one primary type to another. We suggest that institutional arrangements such as primary types, in addition to logrolling and signaling, may account for candidate deviation from the median voter. In the process, we re-evaluate this principal-agent relationship with a focus on the role of agent deviation under different primary types.

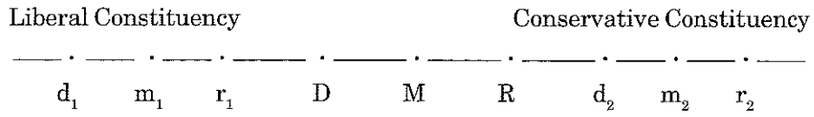
PRIMARY SYSTEMS AND THE MEDIAN VOTER MODEL

The primary voting system in the United States can be divided into three types: blanket, closed, and open. The blanket primary allows all registered voters to vote for any declared candidate, without regard to party affiliation.[2] The closed system requires voters to choose among candidates running for nomination under the party affiliation in which the voters are registered. Under the closed system, for instance, a registered Republican is allowed to vote only for candidates running for the Republican nomination to state and federal offices. Voters must indicate their party affiliation before voting in the primary. Under the blanket system, this voter can vote for any candidate regardless of party. Finally, open primaries are a hybrid of the two approaches. In this scheme, voters must declare which parties' candidates for whom they want to vote. The registered Republican can vote for the Democratic candidates in the primary; opting for the Democratic slate, however, means that she forgoes the opportunity to vote for the Republican candidates.[3]

The structure of the primary system presents an empirical opportunity to study the median voter model. One obvious motive for implementing blanket primary systems lies in granting voters a wider array of choices in primary elections and to facilitate voter participation.[4] Public Choice theory with regard to the median voter, however, also suggests that the higher the voter participation, the less ideologically extreme the median voter. This suggests that the median voter in blanket primary elections would be more moderate than the median voter that exists in closed primary elections because a broader spectrum of voters participate in such a system. This means that the median position, which would be targeted by politicians (according to the assumptions of the median voter model), would be closer to the actual median voter for the overall constituency. Assuming that representatives elected from blanket primary systems reflect the position of the *primary* median voter, does their ideology reflect the median voter of their constituencies? In other words, are the successful blanket primary candidates more moderate than those candidates emerging from primaries that restrict the array of choices available to primary voters?[5]

Downs [1957] first formally discussed the median voter model in a theoretical context in his seminal book, *An Economic Theory of Democracy*. The model has applications for both the supply side (to explain which policies politicians support, for example) and a demand side (to explain which politicians win elections). It assumes that the distribution of ideologies is single peaked (or unimodal). If politicians act to maximize votes, the politician who represents the constituency will supply policies that satisfy the median voter. It is also assumed that the politician will have enough policy choices to include the choice of the median voter. Otherwise, agenda selection is assumed [cf. Holcombe, 1983, 29-41].

FIGURE 1
The Comparative Midpoints Model



The model can be applied similarly to the demand side when voters demand representatives who then supply government policies. Using the same assumptions, the candidate whose positions most closely resemble the position of the median voter will receive the most votes. With the assumption of an ideological, unimodal, and normal distribution of votes, both candidates present moderate platforms that correlate with the median voter in an effort to win voters who are bunched in the middle. The candidates ignore the extreme voters on each side of the spectrum. Like Hotelling's [1929] description of the placement of grocery stores in location theory, the candidates strive to place themselves in the middle position so that most voters will be indifferent to them. Under this schema, candidates can afford to ignore the wishes of the "extreme" voters who are located in the tail ends of the ideological distribution. If single peaked preferences hold, extreme voters can be ignored because they do not represent very many votes. As Downs notes, "there are so few votes to be lost at the margins compared to the number gained in the middle" [1957, 118].

The supply and demand relationship between voter-demanders and legislator-suppliers has been well-established in the public choice literature [Stigler, 1972; 1974; Guttman, 1978; and Lott, 1987]. We believe, however, that the shortcoming of such analyses is that deviation is not obvious in a graphical sense. The comparative midpoints model, developed by Grofman et al. [2000] and Brunell et al. [2001] to examine split ticket voting at an aggregate level in general elections, can be adapted to examine different primary elections. We think that the comparative midpoints model can be utilized to understand deviation by legislators.

According to this model, constituencies differ in their distributions of voter ideology. Figure 1 identifies the ideological spectrum for a congressional district and party. We argue, similarly to Grofman et al. [2000], that politicians of opposite parties will want to locate close to the median, but will offer different positions. This implies that the liberal candidate will always be to the left of the conservative candidate. For simplicity, we adapt the model to represent districts with two general ideological types: liberal (1) and conservative (2). Therefore, the median voter in any given district may be to the left or right of the national median voter. It follows then that members of the same political party running for election in different districts may face different constituents and not have identical platforms.

Assuming a primary system dominated by two political parties representing opposite ends of the ideological spectrum, we can represent the party participants and district, constituents on the same distribution.[6] Despite the ideological characteristics of the district a distribution of voters exists who are relatively more liberal or

conservative than the median voter of the district. Therefore, in a closed primary the distribution of all voters in the congressional district is more likely to be bimodal. This implies that in a closed primary system, the relevant constituency for political candidates depends on the ideology of their political party. The candidate vying for the nomination of the "conservative" party, for instance, *will support the position of the median voter of his party, m_2*. A candidate will want to position himself at m_2 to win the primary appealing to the median voter within the conservative portion of the distribution. Likewise, the candidate vying for the nomination of the "liberal" party will face a different median voter, and position himself at m_1 to win this primary. Therefore, successful politicians emerging from such systems are likely to be more ideologically liberal or conservative than the median voter of the district, M. Candidates in a closed primary system are more likely to deviate from M. Candidates who run for office under a blanket primary system would have to appeal to M, the median voter of the district. The open primary system will also provide the incentive to behave moderately. Candidates may locate at positions such as R or D closer to M to attract the potential crossover vote.

It follows that a legislator from a liberal (conservative) district is considered to deviate if she maintains a voting record that is not consistent with the district median voter. Deviation can occur in either direction of the ideological spectrum. A legislator is also considered to deviate if she maintains a voting record that is more liberal, m_1 (conservative, m_2) than the median voter of her constituency, M. Assuming that party activists are more motivated by ideology than the voting public at large, as suggested by Johnson [1991, 252], this analysis provides one reason why the political parties oppose blanket primary laws and why such laws were contested in California.[7] The self-interested candidate has the incentive to minimize election costs and therefore benefits from the ability to change the relevant median voter in the primary by influencing the terms of the primary. By dealing with a smaller electorate comprised primarily of party activists, candidates can save campaign funds for use during the general election.

THE MODEL

We propose a model to test whether observed ideologies of members of the U.S. House of Representatives can be explained by the primary system under which candidates are elected. Our dependent variable measures the degree to which members deviate from the median voter of his or her constituency, and we use it to test for an empirical relationship between the degree of deviation and the type of primary.

Ideology in the public-choice literature has been measured by the utilization of presidential election dummies (to gauge constituency ideology), as well as ideological ratings of legislators compiled by special interest groups (to gauge representative ideology). Deviations between legislator and constituent ideology suggest the existence of shirking, and much of the public-choice literature is devoted to determining whether such shirking exists.[8]

In this paper, we measure the degree of deviation from the median position of the relevant constituency utilizing data pertaining to the incumbent members of the House of Representatives of the 104th Congress. Our study focuses on the 1996 election because the California blanket primary law was passed that year. We think that studying the data pertaining to years that California's blanket primary was in force would not aid our analysis. According to Cho and Gaines, voters are "slow to react to new strategic opportunities. Changes in political behavior may yet manifest themselves, but people require time and practice to understand a new electoral system" [2002, 171]. Therefore, we argue that a cross-sectional study is more appropriate for this analysis since primary election laws prior to this point have been relatively stable. The model is specified as

$$Deviation = f(\mathbf{x},\mathbf{y}),$$

where *Deviation* is a measure of divergence from the median voter. The vector $\mathbf{x}$ represents the effect of the type of primary on deviation, and the vector $\mathbf{y}$ represents endowments of electoral security enjoyed by the legislator. *We contend, therefore, that the existence of deviation—and not simply the resulting ideology of the winning candidates—is explained by the type of primary from which the legislator emerges and by security in office.*

The model we propose uses a logit regression technique to estimate the following equation[9]:

$$(1) \qquad EX50 = b_0 + b_1 BLANKET + b_2 OPEN + b_3 WIN96_{log} + b_4 RPAC_{log} + b_5 RTURN_{log} + b_6 YEARS_{log} + e.$$

Variable descriptions and descriptive statistics are provided in detail in Table 1. The dependent variable, *EX50*, is a dummy variable indicating the likelihood of legislators' deviance from the median voter of his constituency. It is coded based on error terms resulting from regressing standard measures of legislator ideology on a series of constituency characteristics. Kau and Rubin [1979] developed this technique to indicate ideology as a voting factor. They found that measures used by the Americans for Democratic Action (ADA) and the American Conservative Union (ACU) interest groups are highly correlated. Thus, they conclude that it does not matter if one uses ADA or ACU scores. Our measure of ideology is derived by using a combination of the ratings assigned by ADA and ACU for 1996. In an attempt to minimize bias associated with these scores, we use the ACU measure if the candidate is a Republican and the ADA measure if the candidate is a Democrat. This potential for bias is discussed by Brunell et al. [1999].[10] The ADA and ACU scores are regressed on demographic characteristics of congressional districts of the 104th Congress. These demographic characteristics are: the percentage of constituents that is African-American, married, married with children, college-educated. We also include the median income of the district, the per capita income of the district, and the sum of federal, state, and local employees.[11]

We attempt to proxy the characteristics of the median voter using these constituency variables. *EX50* is based on the resulting error terms of this regression. Large errors, in absolute terms, suggest higher degrees of deviation, while low errors suggest little deviation.[12] We pose the issue of deviation as one of likelihood,

TABLE 1
Variable Definitions and Descriptive Statistics

Variable	Definition	Mean	Std. Deviation	Minimum	Maximum
EX50	Dummy variable for a representatives deviation (1 = top 50 percent; 0 otherwise)	.50149	.50075	.00	1.00
BLANKET	Dummy variable (1 = Blanket primary; 0 otherwise)	.03284	.17847	.00	1.00
OPEN	Dummy variable (1 = Open primary; 0 otherwise)	.50448	.50073	.00	1.00
$WIN96_{log}$	Log of winning percentage in the 1996 election	3.81122	.06844	3.6628	4.00
$RPAC_{log}$	Log of ratio of PAC money to total spending	.17177	.07603	−.00562	.587217
$RTURN_{log}$	Log of voter turnout (votes cast/voting age population)	−.32374	.12632	−1.04627	.015878
$YEARS_{log}$	Log of years of service	.81707	.37146	.00	1.61278

given that larger errors indicate an increased likelihood of deviation.[13] Therefore, a 1 is assigned to members in the upper 50 percent of the absolute value of the error terms, and a 0 is assigned to members in the lower 50 percent. We hypothesize that a legislator assigned a 1 is more likely to vote in a way that deviates from the district median voter.

This variable is then regressed on variables comprising the **x** and **y** vectors. The vector **x** is composed of two dummy variables, *BLANKET* and *OPEN*.[14] *BLANKET* represents incumbent members of the House of Representatives running for reelection under a blanket primary in 1996, and *OPEN* represents members that were elected under an open primary in 1996. Representatives were assigned a 1 if they emerged from such a state, and a 0 if otherwise. (States employing each primary are listed in Table 2.) A negative relationship for both variables is anticipated since each system allows for wider voter participation and therefore less deviation from the median voter.

Variables comprising the vector **y** measure the degree of electoral security. These include the incumbent's winning percentage in the 1996 elections, $WIN96_{log}$; the ratio of political action committee contributions to total spending, $RPAC_{log}$; voter turnout in the legislator's district in 1996 measured as the ratio of votes cast to the voting age population in each congressional district, $RTURN_{log}$; and the number of years in office, $YEARS_{log}$. The expected coefficient sign for each of these variables except for $RTURN_{log}$ is ambiguous. Both a high winning percentage and years in office suggest degrees of electoral security (making deviation possible) but also could reflect a voting pattern that is consistent with the median voter. Research by Grier and Munger [1993] and Weingast and Marshall [1988] suggests that political action committees (PACs) reward deviation, but other research, notably Stratmann [1992], argues that representatives who deviate from the position of the median voter have higher supply prices that cause them to lose the financial support of cost-minimizing PACs. Moreover, Becker [1983, 396] argues that PACs will "fire or repudiate" legislators if they fail to serve the PACs' interests. The expected relationship between $RTURN_{log}$ and *EX50* is negative; the larger the turnout, the higher the cost incurred by representatives for ignoring the position of the relevant median voter.

TABLE 2
State Primary Types

Blanket	Open	Closed
Washington	Alabama	Arizona
Alaska	Arkansas	California
Louisiana	Georgia	Colorado
	Hawaii	Connecticut
	Idaho	Delaware
	Illinois	Florida
	Indiana	Iowa
	Michigan	Kansas
	Minnesota	Kentucky
	Mississippi	Maine
	Missouri	Maryland
	Montana	Massachusetts
	North Dakota	Nebraska
	Ohio	Nevada
	South Carolina	New Hamphire
	Tennessee	New Jersey
	Texas	New Mexico
	Vermont	New York
	Virginia	North Carolina
	Wisconsin	Oklahoma
		Oregon
		Pennsylvania
		Rhode Island
		South Dakota
		Utah
		West Virginia
		Wyoming

RESULTS

The empirical results are reported in Table 3. The negative coefficients for the *BLANKET* and *OPEN* primaries are consistent with the median voter model's implication that broad elections produce more centrist candidates. Furthermore, it follows that the coefficient term for *BLANKET* is larger and more significant than the coefficient term for *OPEN*. Since states that hold blanket primaries allow voters to split their tickets between Democrats and Republicans, the representative is chosen by a broader ideological spectrum of voters. This is also true, to a lesser degree, for states that have open primaries, in which voters must choose the party's slate from which they wish to vote. Although the coefficient for *OPEN* is not significant, its sign and smaller size relative to the parameter estimate for *BLANKET* is consistent with our hypothesis.

TABLE 3
Logit Regression Results for Equation 1

Variable Name	Coefficient	Marginal Effects
Constant	17.6665	2.0320
	(2.489)[b]	
BLANKET	−1.7286	−.1988
	(2.131)[b]	
OPEN	−0.1807	−.0208
	(0.782)	
$WIN96_{log}$	−4.6583	−.5358
	(2.438)[b]	
$RPAC_{log}$	−3.4974	−.4023
	(2.142)[b]	
$RTURN_{log}$	−1.0014	−.1152
	(1.035)	
$YEARS_{log}$	0.6303	.0725
	(1.935)[a]	
Sample size	358	
Log-likelihood	−221.83	
LR	−20.7456	

Absolute values of t-statistics are in parentheses.
a. Denotes significance at the 5 percent level.
b. Denotes significance at the 10 percent level.

Of the variables comprising the vector **y**, all coefficients are significant except for $RTURN_{log}$. The negative sign for $WIN96_{log}$ implies that voters penalize ideological stances that deviate from the position of the median voter in their district. This is exactly what the median voter model implies. This result implies that candidates with larger winning percentages have more freedom to deviate from the relevant median position. The negative coefficient estimate for $RPAC_{log}$ supports the conclusions of Stratmann [1992]. It suggests that those legislators with ideological stances closest to the median voter in their districts are more likely to receive PAC contributions. Cost-minimizing PACs will focus donations on those legislators with the lowest supply price, and legislators who already hold the position of their median voter will be in a better position to trade votes for donations on those issues in which the relevant median voter holds no position. The positive coefficient for $YEARS_{log}$ has a level of significance of just over 5 percent. This result may reflect electoral endowments that accrue with seniority. While it contradicts the conclusion of the median voter model, the small coefficient suggests that the ability of senior legislators to deviate from the positions of their median voters is limited. Finally, the negative coefficient for $RTURN_{log}$ corresponds with the conclusions of the median voter model. The larger the turnout, the closer the ideological distribution of voters is to the district median voter, therefore increasing the costs to the candidate for deviation.

CONCLUSIONS

The purpose of this paper is to analyze the effect of primary voting systems on the ability of agent-representatives to deviate within the median voter model. While our conclusions are consistent with the results found in Gerber and Morton [1998], our paper extends their analysis by including the role played by electoral security and the extant incentives that accompany it. We believe that the results presented herein make two important contributions to the literature: First, while we have been consistent with the literature in maintaining that deviation is driven by ideology, our results reflect that institutional arrangements also allow for deviation (and not simply factors such as logrolling or signaling). Second, our measurement combining ADA and ACU scores reduces the potential of liberal bias (by the ADA) or conservative bias (by the ACU) by combining these scores into the determination of our dependent variable. Our results suggest that more open primaries produce candidates with positions that are closer to those of the median voter. If blanket primaries encourage broader electoral participation by voters, the resulting median voter in such primaries will more closely resemble the median voter in the entire constituency.

Our results do not imply that the conclusions of the median voter model do not apply when primaries are closed. Rather, they suggest that closed primaries reduce the array of choices available to voters. Since the party elite is more likely to participate in primary elections, candidates face a relatively more extreme median voter, that is, they face the median voter *of the party*. This creates an incentive for agent-representatives running for electoral office to favor closed primaries because it allows candidates to minimize campaign expenditures and to conserve resources for use during the general election.

The results suggest that the extent to which legislatures are ideologically divided depends on the primary system from which the candidates that comprise them emerge. Although this question is beyond the scope of this paper, it represents an extension to the results presented herein. Just as ideologically extreme candidates are less successful in presidential elections in which all voters are allowed to vote for a particular candidate, so these candidates are less likely to be successful in blanket primary systems. If the U.S. Congress seems more ideologically driven than does the U.S. president, one explanation of this outcome is the different relevant median voter that each successful member of Congress has to please, a conclusion consistent with the comparative midpoint model. Certainly, the median voter resulting from a closed primary in, for example, South Carolina or Massachusetts, differs from the median voter resulting from a national presidential election.

Finally, the results also suggest a reason that political parties, as well as other interested groups, might oppose blanket primary legislation and why, indeed, the political parties in California were successful in bringing their case to the U.S. Supreme Court. When two parties representing opposite sides of the political spectrum face blanket primaries, each faces an identical relevant median voter. As a result, the successful candidate representing each party will have been most successful in communicating the same median voters' views. Since the more active members of any political party are likely to possess ideological positions far to the right or the left of

the median voter, they would be expected to oppose such legislation. On the other hand, if the active members do not dominate the primary, and if the resulting ideological distribution of voters in the constituency is unimodal, the successful candidates from both parties will hold similar ideological positions—a result that concurs with Governor George Wallace's aphorism, that there is not "a dime's worth of difference between liberals and conservatives" [cf. Bennett and DiLorenzo 1982, 1160].

NOTES

An earlier version of this paper was presented at the Annual Meeting of the Public Choice Society, San Antonio, Texas, 2001. The authors would like to thank Roy Pierce, Richard Jankowski, Lawrence W. Kenny, Edward J. Lopez, Barry C. Burden, Thomas L. Brunell, and an anonymous referee for helpful comments. All errors are the responsibility of the authors.

1. Thoughout this article web addresses are given in the reference list at the end of the article under the name of the web site.
2. The "nonpartisan" primary in Louisiana represents a special case of the blanket primary in which the party affiliation of the voter is also not relevant.
3. Gerber and Morton [1998] disaggregate the primary system to include semi-closed and nonpartisan. Semi-closed primaries are closed primaries that allow voters to declare the required party affiliation on the day of the election. Nonpartisan primaries allow voters to choose among candidates without regard to the party membership of the candidate or the voter. In this paper, we follow the approach of Grofman and Brunell [2001] in not making the distinction between closed and semi-closed primaries because both systems still require the voter to declare party affiliation. This distinction is more important when dealing with strategic vs. sincere voting issues. Like Grofman and Brunell [2001], Grofman et al. [2000], and Gerber and Morton [1998], we assume sincere voting dominates.
4. California's voting participation increased after passing the blanket primary law in 1996. Thomas Gede, a California attorney, noted in USA Today [24 April 2000], "[T]he blanket primary has resulted in greater participation among the states' 15 million registered voters, and has allowed 1.5 million independent voters to participate in the primary process."
5. The term "moderate" implies the median of the ideological spectrum of a given congressional district, i.e., the moderate position for a congressional district in North Carolina would be different than for a congressional district in Ohio.
6. The lower case letters represent positions of party participants within the relevant district, and the capital letters represent the positions of voters on the district level.
7. The blanket primary in Washington State has been challenged several times since 1935, both in the courts and in the state legislature. However, none of these court challenges progressed to the U.S. Supreme Court (cf. *State of Washington, Office of the Secretary of State*).
8. Much of the Public Choice literature is devoted to determining whether shirking actually occurs in the context of a voter-representative (principal-agent) model. While the determination of shirking is not the central focus of this paper, a full discussion of this debate can be found in Bender and Lott [1996] and Lopez [1997].
9. Earlier econometric tests suggest that logs of the independent variables provide a better functional form. Thus, the interpretation of the coefficients is the likelihood of the percentage change in the dependent variable rather than absolute value. In addition, we found that the logit estimation is the better functional form and more robust than a simple OLS estimation.
10. Documents obtained from both the ACU and the ADA indicate that the determinations of ratings are remarkably similar. The ratings are based on 20 specific votes cast in 1996 that are considered to best indicate ideological distinction. Both organizations compute a score between 100 and 0 based on how legislators voted—e.g., a high ACU score would suggest an ideologically conservative legislator, and a high ADA score would suggest an ideologically liberal legislator. For more information, see *Americans for Democratic Action* and *American Conservative Union*. The use of ADA and ACU measures are preferred over other measures of ideology found in the literature, such as Poole and Rosenthal's [1985] NOMINATE scores, because of their focus on left-right issues. This is especially applicable when used to construct a measure of deviation from a relevant median. (Cf. Gerber and Morton [1998], page 313, footnote 19.) Our ADA-ACU combination approach allows for a broader array of legislative outputs to be considered in the formulation of the dependent variable and may correct for potential bias resulting from using only the ADA or the ACU measure to construct EX50. In addition, calculations of correlation coefficients of individual ADA and ACU measures compared to the ADA-ACU combination suggest a high degree of correlation. Specifically, the respective correlation coefficients are .66 and .71. This implies that our alternative of combining ADA and ACU scores will yield similar results compared to using ADA or ACU individually.
11. ADA and ACU data and congressional district data was obtained from Barone and Ujufusa [1997] and from U.S. Bureau of the Census [1994]. The sum of public employees, and not the ratio of public employees to population, is justified given that each congressional district is roughly the same population.
12. The results of this regression are available upon request from the authors. We believe the measure *EX50* improves upon much of the literature in that it takes into consideration deviation to the left or right from our proxy of the median voter. Much of the literature attempts to measure median voter ideology by including past presidential votes as an independent variable.
13. We argue that the size of the residuals is a proxy for the size of deviation for the median voter of a congressional district. Much of the literature argues that deviation occurs due to logrolling [Tullock 1981, Stratmann 1992] or signaling behavior on the part of legislative agents [Lott 1987, Dougan and Munger 1989]. In this paper, we are concerned with the measure of deviation more than possible causes. We are indebted to an anonymous referee for pointing this out.
14. Earlier estimations were conducted combining open and blanket primary observations; however, the estimates retain their sign but not significance when combined.

REFERENCES

American Conservative Union. *A Note on Vote Selection.* <http://www.conservative.org/va.htm>

Americans for Democratic Action. *1996 House Vote Descriptions.* <http://adaction.org/1996Housedescriptions.html>

Barone, M. and Ujufusa, G. *The Almanac of American Politics 1998.* Washington: National Journal, 1997.

Becker, G. A Theory of Competition Among Pressure Groups for Political Influence. *Quarterly Journal of Economics*, August 1983, 371-400.

Bender, B. and Lott, J. Legislator Voting and Shirking: A Critical Review of the Literature, *Public Choice*, April 1996, 67-100.

Bennett, J. and DiLorenzo, T. The Political Economy of Political Philosophy: Discretionary Spending by Senators on Staff. *American Economic Review*, December 1982, 1153-61.

Brunell, T., Grofman, B. and Merrill, S. Accounting for Changes in the Number of Districts with Split House-President Outcomes, 1900-1996. Paper presented at the annual meeting of the Public Choice Society, San Antonio, Texas, March 9-11, 2001.

Brunell, T., Koetzle, W., Dinardo, J., Grofman, B. and Feld, S. The R2 = .93: Where Then Do They Differ? Comparing Liberal and Conservative Interest Group Ratings. *Legislative Studies Quarterly* February 1999, 87-101.

Buel, E., Jr. and Jackson, J. The National Conventions: Diminished but Still Important in a Primary-Dominated Process, in *Nominating the President,* edited by E. Buel and L. Sigelman, Knoxville: University of Tennessee Press, 1991, 213-49.

Cho, W. and Gaines, B. Candidates, Donors, and Voters in California's First Blanket-Primary Elections, in *Voting at the Political Fault Line: California's Experiment with the Blanket Primary*, Bruce E. Cain and Elisabeth Gerber, eds. Berkeley, CA: University of California Press, 2002, 171-91.

Dougan, W. and Munger, M. The Rationality of Ideology. *Journal of Law and Economics,* April 1989, 119-42

Downs, A. *An Economic Theory of Democracy.* New York: Harper & Row Publishers, 1957.

Gerber, E. and Morton, R. Primary Election Systems and Representation. *Journal of Law Economics & Organization*, October 1998, 304-324.

Grier, K. and Munger, M. Comparing Interest Group PAC Contributions to House and Senate Incumbents, 1980-1986. *Journal of Politics*, August 1993, 615-43.

Grofman, B. and Brunell, T. Explaining the Ideological Differences between the Two U.S. Senators Elected from the Same State: An Institutional Effects Model, in *Congressional Primaries and the Politics of Representation*, edited by P.F. Galderisi, E. Marni, and M. Lyons. Maryland: Rowman and Littlefield Press, 2001.

Grofman, B., Koetzle, W., McDonald, M. and Brunell, T. A New Look at Split-Ticket Outcomes for House and President: The Comparative Midpoints Model. *Journal of Politics*, February 2000, 34-50.

Guttman, J. Interest Groups and the Demand for Agricultural Research. *Journal of Political Economy*, June 1978, 467-84.

Holcombe, R. *Public Finance and the Political Process.* Illinois: Southern Illinois University Press, 1983.

Hotelling, H. Stability in Competition. *Economic Journal*, March 1929, 41-57.

Johnson, D. *Public Choice: An Introduction to the New Political Economy.* California: Mayfield Publishing Company, 1991.

Kau, J. and Rubin, P. Self Interest, Ideology, and Logrolling in Congressional Voting. *Journal of Law and Economics*, October 1979, 365-84.

Lopez, E. The Political Economy of Congressional Term Limits. Ph.D. Dissertation, George Mason University, 1997.

Lott, J. Political Cheating. *Public Choice,* January 1987, 1969-86.

Poole, K. and Rosenthal, H. A Spatial Model for Legislative Roll Call Analysis. *American Journal of Political Science*, May 1985, 357-84.

State of Washington, Office of the Secretary of State, *History of the Blanket Primary*. <http://www.secstate.wa.gov/elections/bphistory.htm>

Stigler, G. Economic Competition and Political Competition. *Public Choice,* Fall 1972, 91-106.

_____. Free Riders and Collective Action: An Appendix to Theories of Economic Regulation. *Bell Journal of Economics and Management Science,* Autumn 1974, 359-65.

Stratmann, T. Are Contributors Rational? Untangling Strategies of Political Action Committees. *Journal of Political Economy*, June 1992, 647-64.

Tullock, G. Why So Much Stability? *Public Choice,* 1981, 189-202.

U.S. Bureau of the Census. *Congressional Districts of the United States: Summary Tape File 1D, 104th Congress.* Washington, DC: U.S. Dept. of Commerce, Bureau of the Census, Data User Services Division, 1994.

Weingast, B. and Marshall, W. The Industrial Organization of Congress; or, Why Legislatures, Like Firms, Are Not Organized as Markets. *Journal of Political Economy*, February 1988, 132-63.