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by

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Abstract. There is a debate regarding the impact of swing or independent voters in American politics. While some argue that swing voters either do not swing or have a marginal impact on campaigns, the decline in voter partisan identification and the rise of independents means that they have a potential impact on elections, making them a desirable commodity to candidates. Additionally, presidential elections represent a unique case for swing voters. A robust literature notes that during the presidential primary and caucus process, voters in states such as Iowa or New Hampshire effectively have a greater voice in the election than those in other states. This is due to the number of voters in these states, and the strategic importance of having their primaries and caucuses positioned at the beginning of the presidential selection process. Additionally, the Electoral College is criticized as giving disproportionate influence to some voters or states, or as otherwise distorting the results in presidential elections because of its winner-take-all method of allocating votes in 48 or the 50 states. But these assertions notwithstanding, can the impact or distortion that swing-voters have in some states compared to others, in terms of their relative influence on presidential elections, be quantified? Relatedly, does the Electoral College distort the impact of swing voters? This study presents a new method to assess the impact of swing voters within the winner-take-all method that states use to allocate electoral votes. By looking at several recent U.S. presidential elections, we quantify how the winner-take-all method of allocating electoral votes produces disparities in the voting power of citizens across states.

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1. Introduction

In the U.S., voting is a fundamental right characterized, at least in theory, by the requirement of all votes carrying "equal weight." This concept is perhaps best expressed by the U.S. Supreme Court, in reapportionment decisions that followed the well-known "one person, one vote" philosophy. This precedent demands nearly mathematical equality in the apportionment of congressional districts and in the requirement that the counting of votes assigns equal weight to each voter across a state. Moreover, as it became clear in the *Bush v. Gore* Supreme Court decision of 2000, voters in one part of the state would not face a standard for the counting of their votes that differed from that in other parts of the state. In other words, geography would not impact voting power and hence not interfere with voting rights.

Despite the equal weight imperative, as a practical matter, some votes do count more than others. There is a debate regarding the impact of swing or independent voters in American politics (Campbell, 2008; Shaw, 2008). While some argue that swing voters either do not swing or have a marginal impact on campaigns, the decline in voter partisan identification and the rise of independents means that they have a potential impact on elections, making them a desirable commodity to candidates (Pomper, 1975; Miller and Shanks, 1996; Campbell, 2008; Lewis-Beck, 2008). Additionally, presidential elections represent a unique case for swing voters. A robust literature notes that during the presidential primary and caucus process, voters in states such as Iowa or New Hampshire effectively have a greater voice in the election than those in other states (Schier, 1980; Bartles, 1989; Brady, 1989; Mixon and Hobson, 2001; Mayer and Busch, 2004; Hull, 2008). This is due to the number of voters in these states, and the strategic importance of having their primaries and caucuses positioned at the beginning of the presidential selection

process. Additionally, the Electoral College is criticized as giving disproportionate influence to some voters or states, or as otherwise distorting the results in presidential elections because of its winner-take-all method of allocating votes in 48 or the 50 states (Pomper, 2001: 150). But these assertions notwithstanding, can the impact or distortion that swing-voters have in some states compared to others, in terms of their relative influence on presidential elections, be quantified? Relatedly, does the Electoral College distort the impact of swing voters? This study presents a new method to assess the impact of swing voters within the winner-take-all method that states use to allocate electoral votes. By looking at several recent U.S. presidential elections, we quantify how the winner-take-all method of allocating electoral votes produces disparities in the voting power of citizens across states.

2. Presidential Elections and the Electoral College

The U.S. Electoral College is perhaps one of the oddest institutions in American politics. For those who teach it to undergraduates, it is often the subject of significant confusion, leaving students to wonder why it even exists. The framers of the Constitution defended it as critical to producing "extraordinary persons" as presidents because they would be selected by "men most capable of analyzing the qualities adapted to the station" of the presidency (Madison, 1937: 444). Others, such as Martin Diamond, have justified it as a constitutional system meant to protect individual and minority rights, or as a mechanism to overcome regionalism (Diamond, 1959: 52). In Diamond's view, it, along with the principles of separation of powers and checks and balances, was necessary to thwart the dangers of factionalism that a popular government posed. Others have noted that, with an Electoral College, recounts would not need to be done nationally, but only in specific jurisdictions where there were disputes (Posner, 2001: 224-227).

The Electoral College has also had its detractors. It has been criticized as anti-democratic, as denying individual liberty and the fundamental right to vote, and as no longer serving the purpose for which it was established (Glennon, 1992). Following the 2000 presidential election–where George Bush lost the national popular vote to Al Gore but won the Electoral College vote–those criticisms intensified (Bugliosi, 2001; Dershowitz, 2001). Others maintain that the Electoral College serves to depress and/or distort voter turnout (Keyssar, 2006; Cebula, 2002) or that it creates a system of wasted votes (Cebula and Meads, 2008; Edwards, 2004). Still others see the Electoral College as discouraging the formation and support of third parties (Durban, 1992).

A further criticism of the Electoral College derives less from its constitutional design than from the practice of all states, except for Maine and Nebraska, to award all of their electoral votes to the presidential candidate receiving the plurality of the popular vote in their state (Greene, 2001: 25; Posner, 2001: 239; Pomper, 2001: 150). During the 2004 presidential election, voters in Colorado defeated a state ballot measure to amend their state's constitution to award their state's electoral votes proportional to their popular vote breakdown. Others have noted how the Electoral College disproportionately weights the votes of smaller states relative to larger states (Banzhaf, 1968). The disproportionate weighting occurs because each state's Electoral College votes are equal to the sum of its votes in the U.S. House of Representatives and the U.S. Senate. U.S. House votes are apportioned on the basis of population, with each state guaranteed at least one representative, regardless of population. U.S. Senate votes are not. Each state receives two U.S. Senate votes, regardless of its population. California, the most populous state, with about 37.3 million residents according to the 2010 census, receives the same number of US Senate votes – two – as Wyoming, the least populous state, with 563,626

residents. As a result of the "plus-two" U.S. Senate bonus, smaller states pack a slightly larger Electoral College punch relative to their populations than do larger states.

More significant, though, is the effect of the winner-take-all allocation of each state's Electoral College votes. At present, the electoral votes in all but two states are allocated to each state's popular-vote winner. Such a winner-take-all allocation is not mandated by the U.S. Constitution. The U.S. Constitution provides that each state's electors shall be appointed in a manner to be determined by its legislature. The only stipulation is that a sitting member of Congress cannot also serve as an elector.

Given that the U.S. Constitution leaves the determination of how electors are appointed to the state legislatures, it is not surprising that they have all (with the exception of Maine and Nebraska) opted for a winner-take-all allocation in order to maximize their influence. At the state level, such a course of action is a rational one. Allocating its electors on a winner-take-all basis boosts the likelihood that candidates will visit a state and pay attention to its concerns. If, for example, Oregon, with its relatively small population is shaping up as a swing state, a last-minute trip to the state might appear attractive. If it went well, it could have the effect of swinging the full complement of the state's Electoral College votes on election day. Candidates would be less likely to court the state's voters if the state's Electoral College votes were allocated on some other basis. The result is that every state, clamoring for national candidates' attention, ends up with a winner-take-all allocation.

While Mayhew (2010: 196-198) contends there is no partisan bias to the Electoral College, there is some evidence that it does distort election results (Cebula and Meads, 2008). The winner-take-all effect ensures that small swings in state-vote margins can disproportionately influence the Electoral College count. In a close election, such swings can even determine the winner. The extreme case is the 2000 presidential election, where 537 popular votes in Florida

represented the difference in awarding the state's then-25 Electoral College votes, and, ultimately, the election for Bush over Gore. Four years later, in the presidential election of 2004, the margin of victory for Bush over Democrat John F. Kerry was the 119,000 votes in Ohio that swung the state's 20 Electoral College votes. In the presidential election of 1976, the margin of victory for Democrat Jimmy Carter over Republican Gerald Ford amounted to 175,000 votes in three states. Nearly half of Carter's 297-240 Electoral College vote margin over Ford was attributable to his winning Ohio. Carter won Ohio's then-25 Electoral College votes by a margin of 11,116 popular votes.

The turmoil of the presidential election of 2000 left many uneasy with the Electoral College. In that election, as noted above, the margin of victory for Republican George W. Bush over Democrat Albert Gore was a mere 537 popular votes in Florida. Those votes – out of nearly six million votes cast in the state – swung the state's then-25 Electoral College votes to Bush, who defeated Gore by 271 to 267 in the Electoral College. For five weeks after the polls closed, the election's outcome was in doubt, as the Bush and Gore camps battled in the courts for the disputed Florida electors. It took the intervention of the U.S. Supreme Court to settle the outcome of the election in Florida, and, thus, the nation. While the exceedingly narrow margin in Florida in 2000 was atypical, the phenomenon of some states' relatively small margins of victory disproportionately influencing an election's outcome has not been as uncommon. The winner-take-all allocation of each state's Electoral College votes ensures that it will happen in every election. Under winner-take-all, some states' votes will count for more than others – in some cases, hundreds or even thousands of times more – in determining the outcome. It happens whether the election is a cliffhanger or a landslide. The only difference, then, from one election to the next is its magnitude.

Since then there has been a movement started – the National Popular Vote Interstate Compact – to effectively alter the Electoral College. This proposal, in lieu of a constitutional amendment, would require a state to allocate its electoral votes according to whoever is the winner in the national popular vote for president. The animus behind this proposal is not only to make the popular vote more directly determinative in presidential elections, but also to address the other perceived distortions or problems (such as reduced or distorted voter participation rates) associated with the institution, at least given the current winner-take-all system for allocating electoral votes.

3. Winner-Take-All Distortions: A Statistical Analysis

As noted, the winner-take-all method to allocate electoral votes distorts presidential elections. It is possible to quantify the magnitude of this distortion. The critical element is the swing votes—the votes that represented the margin of victory for the winning candidate. They are the votes that swung the state to the winning candidate. The other votes for each major-party candidate offset each other. The swing votes are the ones that are of interest.

The key is to determine what the Electoral College's impact is on each state's swing votes in an election. That is done here, for each state, by dividing the number of Electoral College votes at stake (N) by the margin of victory for the winning candidate (M). Thus, the swing voters impact can be expressed as $S = N/M$. Invariably, the margin of victory dwarfs the number of Electoral College votes, and the *S-fraction* is minute. For ease of interpretation, each state's S-fraction can be normalized with respect to the middle-ranking (median) state for that election. The states can then be ranked, in order of their swing voters' Electoral College impact, for each election.

In the presidential election of 2008, the Democratic ticket of Senator Barack Obama and Senator Joseph Biden defeated the Republican ticket of Senator John McCain and Governor Sarah Palin by a 365-173 Electoral College margin. Obama-Biden won 28 states (and the District of Columbia), to 22 states for McCain-Palin. The popular vote tally was 69.5 million votes for Obama-Biden to 59.9 million votes for McCain-Palin. Every state but two allocated its Electoral College votes on a winner-take-all basis. The remaining two states, Maine and Nebraska, allocated their Electoral College votes according to the number of congressional districts.

The state with the smallest popular-vote margin relative to the number of Electoral College votes at stake was Missouri. Its eleven Electoral College went for McCain-Palin by a margin of 3,903 popular votes. Those swing votes, representing the margin of victory for one ticket over the other, are the key. Dividing the number of Electoral College votes at stake by the popular vote margin (11/3,903) yields the Electoral College impact of each *swing* vote in that state. In Missouri, it came to 0.0028. Missouri's Electoral College votes per swing-vote ratio, or *S*, was larger than that of any other state.

The full-slate of state-by-state results for the 2008 presidential election is presented in Table 1. The states are ranked by the Electoral College impact of a swing vote in each state, *S*, with the results normalized relative to the median state. Kansas was the median state for the 2008 election. Its six Electoral College votes went for McCain-Palin by a margin of 184,890 popular votes. Dividing the Electoral College votes at stake in Kansas by the state's popular vote margin yields the result of 0.000032 Electoral College votes per swing vote in Kansas. That result was normalized to 1.0 for purposes of comparison with the other states. The same calculations were performed for the other states (except for Maine and Nebraska) plus the District of Columbia, with the results expressed relative to the normalized value for Kansas.

The differences between states shown in Table 1 are sizeable. Missouri tops the list for the 2008 election. A swing vote in Missouri carried 86.85 times the Electoral College impact of one in Kansas, the median state. At the other end of the list is the District of Columbia. The District's three Electoral College votes went for Obama-Biden by a popular vote margin of 228,433. Dividing the Electoral College votes at stake in the District by its popular vote margin produces an S of only 0.000013. That figure for the District equates to only 0.40 of the value of S for Kansas.

The two battleground states of Florida and Ohio were near the top of the 2008 list. Obama-Biden won Florida's 27 Electoral College votes by a margin of 236,450 popular votes. Ohio's 20 Electoral College votes also went to Obama-Biden, by a margin of 262,224 popular votes. A swing vote in Florida had 3.52 times the Electoral College impact of one in Kansas; one in Ohio had 2.35 times the impact of one in Kansas. Florida was decisive in the victory of the Republican Bush-Cheney ticket over the Democratic Gore-Lieberman ticket in 2000. Four years later, Ohio provided the margin of victory in the re-election of the Bush-Cheney ticket against the Democratic ticket of Kerry-Edwards. Interestingly, those two states received disproportionate attention in terms of candidate time and advertising resources during the 2008 campaign.

California and New York, the first and third most populous states, were near the bottom of the 2008 list. California's 55 Electoral College votes went to Obama-Biden by a margin of about 3.3 million popular votes. New York awarded its 31 Electoral College votes to Obama-Biden by a popular-vote margin of about 2.2 million popular votes. A swing vote in California had 0.52 times the Electoral College impact of one in Kansas, while one in New York had 0.43 times the impact. The election's outcome in both states was treated as almost a foregone conclusion, and they received hardly any attention from the candidates other than for fund-raising purposes.

The outcome was relatively closer in Texas, the second-most-populous state. Texas awarded its 34 Electoral College votes to McCain-Palin by a popular-vote margin of 950,695. A swing-vote in Texas carried 1.10 times the impact of one in Kansas.

The results for Florida and Ohio relative to those in California and New York underscore how the winner-take-all allocation of states' Electoral College votes serves to underweight votes from the large-margin states. Swing votes from the large-margin states carry a smaller impact on the election's outcome than those from the small-margin states. Clearly, from a political strategy standpoint, presidential candidates are well-advised to direct their resources toward any of the small-margin states, where a last-minute campaign swing could make the difference in moving enough votes to swing the full complement of the state's Electoral College votes. That was what happened in 2008, as the Obama-Biden and McCain-Palin tickets both aggressively targeted Florida and Ohio, and largely avoided California and New York.

Comparing the first-place and last-place states from the 2008 election, a swing vote in Missouri had 215 times the impact of one in the District of Columbia. However, the 2008 election was not the only one to demonstrate such a distortion. In 2004 Bush-Cheney defeated Kerry-Lieberman by a 286-252 electoral vote margin, and by 3.5 million popular votes. Table 1 presents the state-by-state Electoral College swing-vote impact rankings. The results are normalized with respect to that election's middle-ranking state, Alaska (AK). Topping the list of states for the 2004 election was Wisconsin (WI). Its 10 Electoral College votes were won by Kerry-Lieberman by a margin of 11,813 popular votes. Its popular-vote margin was smaller than that of any other state, relative to the number of Electoral College votes at stake.[1] Alaska (AK) was the median state. Bush won its three Electoral College votes by a margin of 65,812

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[1] Only New Mexico (NM) and New Hampshire (NH) had smaller popular-vote margins, and they both carried fewer Electoral College votes.

popular votes. At the bottom of the list is Utah (UT), which gave Bush-Cheney its five Electoral

College votes by a margin of 385,337 popular votes. The popular-vote margin in Utah was over

30 times larger than that in Wisconsin, yet it swung only half as many Electoral College votes.

As shown in Table 1 shows, each swing vote in Wisconsin carried 18.57 times the Electoral

College impact of a swing vote in Alaska. However, each swing vote in Utah carried only 0.28

times the Electoral College impact of a swing vote in Alaska. Wisconsin's swing votes, then,

packed 65 times the punch of Utah's swing votes.

Next, we examine the 2000 presidential election. Bush-Cheney won the electoral vote by 271

to 267 for Gore-Lieberman, while at the same time losing the popular vote by 500,000 votes.

Results for the presidential election of 2000 are presented in Table 1. As the data show, a swing

vote in Florida carried over one thousand times the Electoral College impact of a swing vote in

California. A California swing vote, in turn, carried nearly three times the Electoral College

impact of a Utah swing vote. Again, the explanation has to do with the winner-take-all

allocation of each state's electors. The Florida-Utah comparison shows how large the disparity

can be. In the case of a large state with a razor-tight margin versus a small state with a runaway

victor, it can be huge. In Utah, one-fifth as many Electoral College votes were at stake as in

Florida, yet Utah's popular vote margin was almost 600 times that of Florida's. Each of

Florida's swing votes, then, carried nearly 3,000 times the Electoral College impact of a Utah

swing vote.

The patterns demonstrated in the 2008, 2004, and 2000 elections are not unique. Table 2 uses

the same methodology to compute Electoral College voting ratios back to 1960. The 1960

election was the first with the Electoral College at its current figure of 538 electors, which

resulted after Alaska and Hawaii joined the union. Table 2 shows that the 2008 election was not

unusual in terms of the distortions induced by the winner-take-all allocation of states' Electoral

College votes. At the top of the list is the 2000 election, due to the razor-thin margin in Florida for the Republican Bush-Cheney ticket over the Democratic Gore-Lieberman ticket. In 2000, the Bush-Cheney ticket won Florida by a mere 537 popular votes. That popular vote margin swung the state's full complement of 25 Electoral College votes, and the election, to the Republican ticket. Florida was the state with the largest Electoral College impact of a swing vote in 2000, whereas Utah was the state with the smallest. Utah's five Electoral College votes went to Bush-Cheney by a margin of 312,043 popular votes. Comparing the two states, a swing vote in Florida carried 2,905 times the Electoral College impact of a swing vote in Utah.

Behind 2000 are the elections of 1960, 1980, and 2008 with the next-largest Electoral College distortions. For each election, the Electoral College impact of a swing vote in the highest-ranked state was more than 200 times that of a swing vote in the lowest-ranked state. The elections of 1960 and 2000 were cliffhangers, unlike the elections of 1980 and 2008. Whether the election was close or not did not matter – every election saw significant distortions due to the winner-take-all allocation of states' Electoral College votes. This result will hold whenever the election outcomes are not evenly distributed across all the states.

4. Swing States and Fiscal Federalism: Some Empirical Tests

Empirical studies making use of the distortions in the Electoral College system are not new. Wright's (1974) econometric explorations of federal government spending in the states during the "New Deal" indicate that Electoral College votes per capita across states is the most significant explanatory variable.[2] At the same time, Brams and Davis (1974) argue the presidential campaign resources allocations exhibit a large-state bias, based on Electoral College counts. In an interesting analysis of President Abraham Lincoln's quest for a second presidential term, Anderson and Tollison (1991b) present statistical results suggesting that ". . .

[2] See also Anderson and Tollison (1991a) and Couch and Shughart (1998).

Northern causalities [during the Civil War] were partly determined by electoral votes in 1864 . . . . Given that the Northern troops were organized by states and that President Lincoln sought to be reelected, . . . [t]roops from close states were much less likely to suffer causalities . . . [based on the logic that] . . . dead men cannot vote (Tollison, 2004: 558)." Grier, McDonald and Tollison (1995) show, using a pooled sample (1970-1988) of 325 individual bills, that the presidential veto is sensitive to winner-take-all electoral voting in the 50 states. Statistical evidence indicates that presidential veto decisions are influenced by the floor votes of senators from closely-contested, larger states, where the political payoff is highest.[3]

The Electoral College distortion explored above, which creates asymmetries in the impact of a swing vote across the 50 states, carries with it public choice implications regarding fiscal federalism. Mixon and Hobson (2001) show that intergovernmental grants – from the federal level to the states – are sensitive to the presidential primaries/caucuses calendar during each presidential election cycle. As Mixon and Hobson (2001) indicate, by rearranging (or frontloading) the dates of their primaries and caucuses, states can play a more important role in shaping the field of presidential candidates within the two major U.S. political parties. Specifically, results in Mixon and Hobson (2001) suggest that a 10.36 days movement (closer to 1 January) of a state's primary or caucus results in an increase of $181 million to $600 million per presidential election year in federal grants to state governments.

In an earlier, yet related study, Mixon and Ladner (1998) apply the public choice model of Tullock (1967), Krueger (1974) and Posner (1975) to events surrounding the 1995 Republican takeover of the U.S. House of Representatives. As part of the Republican campaign platform of 1994, many candidates adopted the "Contract with America," which promised to reinforce

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[3] See Tollison (2004) for a concise review of these and other studies related to the Electoral College and presidential politics.

adherence to the 10th Amendment to the U.S. Constitution by sending various fiscal responsibilities, often accompanied by federal receipts, back to the 50 states.[4] As Mixon and Ladner (1998: 31) posit, as the federal government bundles tax receipts in the form of block grants for states, the value of holding state office would increase, thereby enticing a larger pool of candidates for those offices. Event study results from the panel data set employed by Mixon and Ladner (1998) suggest that the block grant movement that occurred after the Republican victory in 1994 led to a significant increase in the number of candidates for state house seats.

Based on the studies reviewed above, the empirical model expressed in equation (1) is proposed as a test of the impact of the importance of swing states' votes in the presidential election:

$$RGRANTPOP_{t+2} = \alpha + \beta_1 SWING\text{-}S_t + \beta_2 POPU_{t+2} + \beta_3 HOMESTATE_{t+2} + \beta_4 FEDLAND\%_{t+2} + \beta_5 ALASKA_{t+2} + \beta_6 YEAR + \varepsilon. \tag{1}$$

In the model above, the subscript, t, represents a presidential election year; in this study, t is equal to either 2000 or 2004, meaning that the dependent variable, RGRANTPOP, and several of the regressors are measured in years 2002 and 2006. In equation (1) above, RGRANTPOP is equal to real per-capita federal government grants to state and local governments, both for 2002 and 2006, of the states carried by the victorious presidential candidates in 2000 and 2004, respectively. These grants are a function of six independent variables, including our variable of interest, SWING-S, the ratio of Electoral College votes (N) to margin of victory (N) in the presidential elections of 2000 and 2004. If swing states are rewarded by victorious presidential candidates, one such potential reward is through intergovernmental grants in the years after the

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[4] Bills passed by the U.S. House resulting from the "Contract with America" commitment made by Republican candidates include the *Local Government Law Enforcement Block Grant of 1995*, the *Unfunded Mandate Reform Act of 1995*, and the *Personal Responsibility Act of 1995*. The second of these three ultimately became law. Though the other two bills failed to pass in the U.S. Senate, elements of them later found their way into various federal spending bills later in 1995 and 1996.

presidential election. This study examines year *t+2* in order to allow for lags in the legislative process. The rent-seeking theory described here predicts a positive sign for β_1.

The variable POPU, the population in each state (in 2002 and 2006) captures essentially what is referred to in the economic growth literature as the "catch-up effect." Here, large states are expected to lag behind smaller states in terms of *per-capita* intergovernmental support. A number of studies have shown that presidential candidates perform well in the general election in their home states (Lewis-Beck and Rice, 1983; Kjar and Laband, 2002; Mixon and Tyrone, 2004). One would expect, then, that victorious presidents want to reward their home state, possibly through larger intergovernmental grants. As such, HOMESTATE, which is a dummy variable equal to one for the home states of the victorious presidential and vice presidential candidates in the 2000 and 2004 presidential elections, is included in equation (1) above. Given this discussion, we expect to find $\beta_2 < 0$ and $\beta_3 > 0$.

States with large land masses that are owned and administered by the federal government are expected, *ceteris paribus*, to receive fewer federal government grant dollars. At the same time, with its transportation obstacles, oil and gas reserves, and other considerations, Alaska might receive larger amounts of federal grants than other states, *ceteris paribus*. Thus, FEDLAND%, or the percentage of each state's land area owned by the federal government, and ALASKA, a dummy variable equal to one for observations on Alaska, and zero otherwise, are included in (1) above. It is expected that $\beta_4 > 0$ and $\beta_5 > 0$. Finally, the dummy variable YEAR above is equal to one for 2006 observations on RGRANTPOP, and zero otherwise (i.e., for 2002 observations on RGRANTPOP). It is included to capture any regime or structural effects present in the RGRANTPOP data present in the two-year data panel.[5]

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[5] Data for this study are taken from various editions of the *Statistical Abstract of the United States*.

Summary statistics and results from OLS estimation of equation (1) above are presented in Table 3. The pooled model is jointly significant (*F*-statistic = 29.71), and produces an R^2 of 0.774. Additionally, all of the parameter estimates are correctly signed, with five (out of six) statistically significant as well.

References

Anderson, G.M. and R.D. Tollison (1991a) "Congressional influence and New Deal spending, 1933-1939," *Journal of Law & Economics* xx: 161-175.

Anderson, G.M. and R.D. Tollison (1991b) "Political influence on Civil War mortality rates: The electoral college as a battlefield," *Defense Economics* 2: 219-234.

Banzhaf, J.F. (1968) "One man, 3.312 votes: A mathematical analysis of the Electoral College," *Villanova Law Review* 13: 303-xx.

Bartels, L.M. (1989) "After Iowa: Momentum in presidential primaries," in *The Iowa Caucuses and the Presidential Nominating Process* (P. Squire, ed.), Boulder, CO: Westview Press, 121-48.

Brady, H.E. (1989) "Is Iowa news?" in *The Iowa Caucuses and the Presidential Nominating Process* (P. Squire, ed.), Boulder, CO: Westview Press, 89-119.

Brams, S.J. and M.D. Davis (1974) "The 3/2's rule in presidential campaigning," *American Political Science Review* xx: 113-134.

Bugliosi, V. (2001) *The Betrayal of America: How the Supreme Court Undermined the Constitution and Chose Our President*, xxx: Nation Books.

Campbell, J.E. (2008) "Do swing voters swing elections?" in *The Swing Voter in American Politics* (W.G. Mayer, ed.), Washington, D.C.: Brookings Institution Press, 118-132.

Cebula, R.J. (2002) "The Electoral College and voter participation: Evidence on two hypotheses from the 1996 Presidential election," *Atlantic Economic Journal*, 30 (2), 67-75.

Cebula, R.J. (1997). "An empirical analysis of the impact of government tax and auditing policies on the size of the underground economy: The case of the United States," *American Journal of Economics and Sociology*, 56 (2), 173-186.

Cebula, R.J. and H. Meads (2008) "Voter participation and political party dominance," *Atlantic Economic Journal*, 36 (1), 53-64.

Couch, J.M. and W.F. Shughart, II (1998) *The Political Economy of the New Deal*, Northampton, MA: Edward Elgar.

Dershowitz, A.M. (2001) *Supreme Injustice: How the High Court Hijacked Election*, New York, NY: Oxford University Press.

Diamond, M. (1959) "Democracy and the Federalist: A reconsideration of the framers' intent," *American Political Science Review* 53: 52-68.

Durban, T.M. (1992) "The anachronistic Electoral College: The time for reform," *Fed B. N. J.* 39: 510- xx.

Edwards, G.C., III (2004) *Why the Electoral College is Bad for America*, New Haven, CT: Yale University Press.

Glennon, M.J. (1992) *When No Majority Rules: The Electoral College and Presidential Succession*, Washington, D.C.: CQ-Roll Call Group Books.

Greene, A. (2001) *Understanding the 2000 Election: A Guide to the Legal battles that Decided the Presidency*, New York, NY: New York University Press.

Grier, K.B., M. McDonald and R.D. Tollison (1995) "Electoral politics and the executive veto: A predictive theory," *Economic Inquiry* 33: 427-440.

Hull, C.C. (2008) *Grassroots Rules: How the Iowa Caucus Elects American Presidents*, Stanford, CA: Stanford University Press.

Kellner, D. (2001) *Grand Theft 2000: Media Spectacle and a Stolen Election*, New York, NY: Rowman & Littlefield, Inc.

Keyssar, A. (2001) "The right to vote and election 2000," in *The Unfinished Election of 2000* (J.N. Rakove, ed.), New York, NY: Basic Books, 75-100.

Kjar, S.A. and D.N. Laband (2002) "On 'home grown-ness' in politics: Evidence from the 1998 election for Alabama's Third Congressional District," *Public Choice* 112: 143-150.

Krueger, A.O. (1974) "The political economy of the rent-seeking society," *American Economic Review* 64: 291-303.

Lewis-Beck, M.S. and T.W. Rice (1983) "Localism in presidential elections: The home state advantage," *American Journal of Political Science* 27: 548-556.

Lewis-Beck, M.S., W.G. Jacoby, H. Norpoth, and H.F. Weisberg (2008) *The American Voter Revisited*, Ann Arbor, MI: University of Michigan Press.

Mayer, W.G. (2008) *The Swing Voter in American Politics*, Washington, D.C.: Brookings Institution Press.

 Mayer, W.G. and A.E. Busch (2004) *The Front-Loading Problem in Presidential Nominations*, Washington, D.C.: Brookings Institution Press.

Mayhew, D.R. (2010) "The meaning of the 2008 election," in *The Elections of 2008* (M. Nelson, ed.), Washington, D.C.: CQ Press, 187-204.

Miller, W.E. and J.M. Shanks (1996) *The New American Voter*, Cambridge, MA: Harvard University Press.

Mixon, F.G., Jr. and D.L. Hobson (1998) "Sending federal fiscal power back to the states: Federal block grants and the value of state legislative offices," *Journal of Public Finance and Public Choice* 16: 27-41.

Mixon, F.G., Jr. and D.L. Hobson (2001) "Intergovernmental grants and the positioning of presidential primaries and caucuses: Empirical evidence from the 1992, 1996, and 2000 election cycles," *Contemporary Economic Policy* 19: 27-38.

Mixon, F.G., Jr. and J.M. Tyrone (2004) "The 'home grown' presidency: Empirical evidence on localism in presidential voting, 1972-2000," *Applied Economics* 36: 1,745-1,749.

Pomper, G.M. (1975) *Voters' Choice: Varieties of American Electoral Behavior*, New York: Harper & Row Publishers.

Pomper, G.M. (2001) "The presidential election," in *The Election of 2000* (G.M. Pomper, ed.), New York: Chatham House, 125-54.

Posner, R.A. (1975) "The social costs of monopoly and regulation," *Journal of Political Economy* 83: 43-69.

Posner, R.A. (2001) *Breaking the Deadlock: The 2000 Election, the Constitution, and the Courts*, Princeton, NJ: Princeton University Press.

Schier, S.E. (1980) *The Rules of the Game: Democratic National Convention Delegate Selection in Iowa and Wisconsin*, Washington, D.C.: University Press of America.

Shaw, D. (2008) "Swing voting and U.S. presidential elections," in *The Swing Voter in American Politics* (W.G. Mayer, ed.), Washington, D.C.: Brookings Institution Press, 75-101.

Tollison, R.D. (2004) "Voting in U.S. Presidential elections," in *Encyclopedia of Public Choice* (C.K. Rowley and F. Schneider, eds.), Dordrecht, The Netherlands: Kluwer.

Tullock, G. (1967) "The welfare costs of tariffs, monopolies and theft," *Western Economic Journal* 5: 224-232.

Wright, G. (1974) "The political economy of New Deal spending: An econometric analysis," *Review of Economics and Statistics* xx: 30-38.

Table 1
The Impact of a Swing Vote by State: 2000, 2004, and 2008 Presidential Elections

	Top 10, 2008			*Top 10, 2004*			*Top 10, 2000*	
Rank	State	S	Rank	State	S	Rank	State	S
1	MO	86.85	1	WI	18.57	1	FL	1,115.40
2	NC	32.60	2	NM	13.34	2	NM	327.31
3	IN	11.94	3	IA	11.38	3	WI	46.17
4	MO	8.33	4	NH	9.57	4	IA	40.47
5	FL	3.52	5	NV	5.09	5	OR	24.79
6	ND	3.38	6	PA	3.61	6	NH	13.29
7	SD	2.88	7	OH	3.21	7	NV	4.44
8	OH	2.35	8	HI	2.36	8	MN	4.09
9	GA	2.26	9	DE	2.32	9	MO	3.35
10	NH	1.80	10	OR	2.28	10	TN	3.28

	Bottom 10, 2008			*Bottom 10, 2004*			*Bottom 10, 2000*	
Rank	State	S	Rank	State	S	Rank	State	S
40	HI	0.60	40	KY	0.49	40	NJ	0.71
41	CT	0.59	41	IN	0.47		OK	0.71
42	UT	0.57	42	KS	0.44	42	MT	0.70
43	CA	0.52		TX	0.44	43	KS	0.64
44	OK	0.47	44	AL	0.41	44	TX	0.56
	IL	0.47	45	DC	0.40	45	ID	0.48
46	MA	0.46	46	ID	0.39	46	DC	0.47
	MD	0.46	47	MA	0.36	47	NY	0.46
48	NY	0.43	48	OK	0.34	48	MA	0.39
49	DC	0.40	49	UT	0.28	49	UT	0.38

Note: Complete results for *S* for each of the years – 2008, 2004, and 2000 – are available from the upon request.

Table 2
The Impact of a Swing Vote: Ratio of Top (S^T) to Bottom (S^B) Ranked States, 1960-2008

Election	Top-Ranked State	Bottom-Ranked State	S^T/S^B
1960	Hawaii	Massachusetts	832
1964	Arizona	Rhode Island	63
1968	Arkansas	Massachusetts	71
1972	Minnesota	Florida	7
1976	Ohio	Utah	88
1980	Massachusetts	Utah	288
1984	Minnesota	Utah	209
1988	Vermont	Florida	16
1992	Georgia	District of Columbia	54
1996	Nevada	Massachusetts	59
2000	Florida	Utah	2,905
2004	Wisconsin	Utah	65
2008	Missouri	District of Columbia	215

Table 3
Swing Votes and Fiscal Rewards: OLS Regression Results (Dep Var = RGRANTPOP)

Variable	Pooled Results Parameter Estimates	2000 Results Parameter Estimates
Constant	926.60*	943.76*
	(19.83)	(19.60)
SWING-*S*	0.29*	0.27*
[20.7, 145.0]	(1.78)	(1.92)
POPU	−0.04*	−0.04*
[5,030, 4,926]	(−7.74)	(−6.01)
HOMESTATE	724.75*	564.60*
[0.07, 0.25]	(7.67)	(5.27)
FEDLAND%	−3.32*	−3.97*
[19.5, 24.3]	(−3.22)	(−3.59)
ALASKA	1,166.80*	1,298.70*
[0.03, 0.18]	(9.16)	(9.36)
ELECTIONYR	49.11	n/a
[0.51, 0.50]	(1.14)	
	nobs = 59	*nobs* = 29
	F-statistic = 29.71	*F*-statistic = 27.87
	R^2 = 0.774	R^2 = 0.858

Notes: The numbers in brackets beneath the variables are means and standard deviations, respectively. The mean and standard deviation for RGRANTPOP are 769.8 and 325.8, respectively. The numbers in parentheses below the parameter estimates are *t*-statistics, where * denotes significance at the .10 level or better.