Campaign Spending and Spurious Correlations:
Why Self-Financed Gubernatorial Candidates Lose

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Abstract

Critics are quick to accuse wealthy gubernatorial candidates of attempting to “buy” elections. But although self-financed gubernatorial candidates sometimes win, their electoral success does not necessarily imply that voters can be bought. To the contrary, I present evidence that self-financed campaign spending has a far weaker marginal effect on electoral results than externally-financed campaign spending. For every Corzine, there’s a DeVos—who spent record amounts in his 2006 attempt to unseat Michigan’s incumbent governor, only to lose by an embarrassingly wide margin. Money can’t buy the governor’s mansion.

This empirical finding presents a theoretical puzzle—why would externally financed spending trump self-finance? The solution lies in strategic incentives facing would-be campaign donors. A candidate’s ability to raise funds serves as a crucial indicator of her electoral viability. When it comes to influencing voters, a candidate’s ability to raise money matters far more than her ability to spend it. As such, the apparent correlation between campaign spending and votes is largely spurious.
“There are two things that are important in politics. The first is money and I can’t remember what the second one is.”

-- Mark Hanna (1837-1904), U.S. Senator and McKinley’s campaign manager

“Money is the mother’s milk of politics.”

-- Jesse Unruh (1922-1987), 54th Speaker of the California Assembly

After earning hundreds of millions of dollars at the helm of Goldman Sachs, Jon Corzine turned his eyes to politics. He spent $62 million of his own money in his successful 2000 bid for New Jersey’s vacant Senate seat—an amount that more than doubled the previous self-finance record.¹ Long before the campaign ended, his extravagant spending began to attract national media attention. In June of 2000, for example, Newsweek covered Corzine’s campaign under a headline that read, “The New Jersey Purchase: Jon Corzine’s $36 Million Campaign for the Senate.” Five years later, Corzine sought a promotion to the governor’s mansion. Again, he financed his campaign out of his own pocket, this time spending $42 million. In total, Corzine spent over $100 million on these two successful campaigns.

Of course, Jon Corzine is not the only gubernatorial candidate to have lavishly self-financed his own campaign. Between 1998 and 2006, four candidates spent $30 million or more

¹ Prior to Corzine’s run, the record for self-finance in a Senate race was set by California’s Michael Huffington in 1994, who spent $28 million.
of their own money on a gubernatorial campaign\textsuperscript{2}; another seven spent at least $5 million; and another fourteen spent at least $1 million. Of the 268 major-party gubernatorial candidates for whom campaign finance data are available during this period, 24% gave $50,000 or more to their own campaigns.

Critics are quick to accuse wealthy gubernatorial candidates of attempting to “buy” elections. But although wealthy gubernatorial candidates sometimes win, their electoral success does not necessarily mean that voters can be bought. To the contrary, the electoral record of self-financed gubernatorial candidates is surprisingly poor. Of those who spent $50,000 or more of their own money, only 24% won; of those who spent $1 million or more, only 20% won.\textsuperscript{3} Oddly enough, then, it appears that self-finance actually hurts gubernatorial candidates on election day—at the very least, it does not appear to help. By contrast, campaign funds raised from outside sources do help candidates; between 1998 and 2006, whichever major-party candidate raised the most money from outside sources won over 83% of the time. I present statistical analysis later in this paper that confirms this general pattern: Self-financed spending does not lead to victory, but externally-financed spending does.

This discrepancy points to a deeper theoretical misunderstanding, both popularly and within academia, about the role of money in political campaigns. Typically, when analysts or pundits observe that vote margins increase with spending, they tend to conclude that money somehow “buys” votes—perhaps because money can pay for pollsters, campaign managers, advisors, mailers, and advertising time, all of which enable the candidate to refine and publish their campaign messages. But although this interpretation is popular, it is inconsistent with the

\textsuperscript{2} Besides Corzine, the list includes Corzine’s 2005 opponent, Doug Forrester; Michigan’s Dick DeVos; and Texas’s Tony Sanchez. Only Corzine won.

\textsuperscript{3} Between 1998 and 2006, there were 41 races in the former category, 15 in the latter. To avoid distorting the victory percentages, I omit races in which both candidates spent $50,000 (or $1 million) or more.
patterns I identify in this paper. If money buys votes, then it should not matter one whit whether that money comes from campaign donors or from the candidate’s own wallet.

To properly understand why spending correlates with victory, we need to shift our attention from spending to fundraising. My central argument is that a candidate’s ability to raise money is what matters—not her ability to spend it. Because potential campaign donors are strategic, they contribute only to those candidates who have a realistic chance of victory. As such, campaign finance totals say more about a candidate’s viability than about her ability to persuade voters. I proceed by laying out my theoretical argument more completely and deriving specific hypotheses. I then present a complete statistical analysis of the role of money in gubernatorial elections.

Theory

Twenty-five years ago, Jacobson and Kernell (1983) revolutionized the study of Congressional elections (and of electoral politics generally) by demonstrating the importance of challenger quality. They found that “quality” (i.e. politically experienced) Congressional challengers were strategic; they preferred to run only when the probability of victory was adequately high. Thus, quality challengers are more likely to run in open seats than against incumbents; likewise, the president’s popularity will influence his party’s ability to recruit quality challengers to run on the party label.4

Jacobson and Kernell’s theory resolved what had been a troubling puzzle in the Congressional elections literature. Earlier work had shown that the president’s party fared better

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4 For evidence that this strategic logic also applies to gubernatorial contests, see Brown and Jacobson (2008) and Squire (1992).
or worse in House elections depending on the president’s popularity and on national economic conditions (e.g. Tufte 1978). But although this relationship obtained in the aggregate, survey researchers could find not find a strong enough connection between economic evaluations and Congressional candidate preference at the individual level to explain these aggregate findings (Fiorina 1978; Hibbing and Alford 1981). By highlighting the strategic role of challengers, Jacobson and Kernell showed how macroeconomic conditions can influence aggregate election results even if individual voters pay no attention at all to those conditions: “The strategic decisions [by challengers] so structure the vote choice that electoral results are consonant with national level forces even if individual voting decisions are not” (1983, pg 3). Political scientists had erred in expecting to find a direct causal link between national economic conditions and Congressional voting. As Jacobson and Kernell demonstrated, the true relationship was indirectly mediated by challenger quality; earlier researchers had committed the classic error of confusing correlation with causation.

Although some readers may question the relevance of the preceding paragraphs to a paper about self-financed candidates in gubernatorial elections, there are important parallels between my argument and Jacobson and Kernell’s. Both in academia and out, few have failed to notice the strong link between campaign spending and electoral success—a seemingly universal connection that arises at every level of politics, including in gubernatorial elections (Brown and Jacobson 2008). Almost invariably, observers infer that a direct causal link between spending and vote shares must mediate this strong relationship. Indeed, there is plenty of circumstantial evidence to support this conclusion. We know, for example, that candidates use their campaign funds to hire pollsters, campaign managers, media consultants, webmasters, and other advisors to help them run their campaigns. We also know that candidates mail postcards, broadcast
advertisements, and deploy get-out-the-vote squads on election day. Although there is considerable academic disagreement as to whether and how campaigns matter,\textsuperscript{5} few would contend that spending makes no difference at all.

At the same time, however, the widespread assumption that campaign funds matter primarily through their direct effects can distract us from searching for the more subtle types of indirect effects that Jacobson and Kernell discussed. As ever, correlation does not imply causation. Regardless of whether campaign spending has any direct effect on voter preferences or mobilization, a candidate’s ability to raise money in the first place speaks volumes about that candidate’s viability. Even if a candidate chose not to spend any of the campaign money she raised, the fact that she was able to raise it at all indicates that contributors have faith in her candidacy. Money is, after all, a scarce resource. Because it is scarce, people do not aimlessly give their money to candidates without considering what their contributions might produce. Perhaps some campaign donors seek to help elect like-minded politicians; perhaps others seek post-election access for their lobbyists; perhaps others have more corrupt motives. But no matter why a potential donor wants a particular candidate to win, he is extremely unlikely to get any return on his investment unless his chosen candidate actually does win.

For evidence that strategic donors will not contribute to a hopeless candidate, visualize a potential campaign contributor’s basic decision process using the simple rational calculus shown below. Let $U_A$ represent the utility to a potential donor of giving money to candidate $A$. Presumably, this donor expects that he will receive some sort of benefit from having candidate $A$ win. Again, this benefit might be ideological or policy-based, or it might be more particularistic.

\textsuperscript{5} The various articles in Brady and Johnston’s (2006) edited volume provide one entry into this debate. Carsey (2001) focuses specifically on gubernatorial elections.
Regardless, we can represent these benefits as \( B \). Of course, simply giving money does not necessarily guarantee that the donor will receive these benefits. As such, the donor must discount \( B \) by the probability \( p \) that his contribution will actually influence whether he receives \( B \); this discounting has important implications, which I return to shortly. We complete the calculus by appending \( C \), representing the actual monetary cost to the donor of contributing to candidate \( A \). The resulting equation resembles other strategic models used elsewhere (Black 1972; Jacobson and Kernell 1983; Riker and Ordeshook 1968). Our hypothetical donor contributes to candidate \( A \) if the utility of doing so is positive:

\[
U_A = p \times B - C
\]

This model produces distinct predictions depending on the donor’s goals. Consider two hypothetical donors, Alpha and Beta. Assume that Alpha is motivated primarily by access; that is, she hopes that her contribution will, at the very least, ensure that her lobbyist’s calls get returned if candidate \( A \) wins. Alpha is less concerned with electing a like-minded candidate than with being on the winner’s good side. With \( B \) defined in this manner, \( p \) will rise with the candidate’s probability of victory; as long as candidate \( A \) wins, Alpha can feel confident that her donation will guarantee a minimal amount of access.

By contrast, suppose that Beta is motivated primarily by ideological or policy goals, such as gay marriage. Beta’s goal is not mere access, but actual policy change; as such, he hopes that his contribution will enable candidate \( A \) to defeat candidate \( B \), thus ensuring that Beta’s preferred candidate wins. With \( B \) defined in this manner, \( p \) will be highest in the most competitive races. Beta has little interest in contributing to a candidate with no chance of victory, nor does he desire to contribute to a candidate who is virtually assured of victory; his goals are best met by
contributing to marginal candidacies, wherever they occur.

Figure 1 illustrates the basic difference between Alpha and Beta. The probability that Alpha’s donation will yield the benefits she seeks depends only on whether candidate A wins; by contrast, the probability that Beta’s donation will yield the benefits he seeks depends only on whether his contribution changes the outcome of the election. But although Alpha and Beta differ as to whether they prefer to donate to safe or marginal candidates, they agree on one thing: Neither hypothetical donor would waste any money on a candidate with little chance of winning. Previous research has shown that both types of campaign donor exist (Thompson et al. 1994.). Depending on which type predominates, we might observe either marginal races or favored incumbents raising the most money. But regardless of which type predominates, we will not observe hopeless candidates raising much money—a point critical to my argument.

This strategic logic suggests an alternative, indirect causal pathway that may explain why campaign spending has such a strong relationship with electoral outcomes. When evaluating a candidate’s viability, potential donors undoubtedly assess the candidate from a variety of angles. In addition to political experience, donors may consider a candidate’s charisma, policy positions, personal narrative, resolve, likeability, and public relations skills. Not coincidentally, voters consider similar factors (Popkin 1993).

We are left, then, with two possible causal stories, either of which might explain the strong relationship between campaign spending and election results. Figure 2 summarizes these two pathways graphically. Panel A depicts the direct causal story that seems to motivate most discussion (and legislation) about campaign spending. Reformers had this direct causal pathway
in mind when they warned that American elections are “no longer a democracy but a plutocracy.” Editorial writers had this direct causal pathway in mind when they rebuked the Supreme Court for striking down the Bipartisan Campaign Reform Act’s “millionaire amendment” in June 2008—a provision intended to weaken self-financed candidates. The New York Times complained that the “Court gave a big boost to rich candidates,” for whom “being rich [is] such a great political advantage”; the Washington Post argued that “the public good is served when voters have confidence that seats cannot be bought.” The Boston Globe had this direct causal pathway in mind when its editors spoke out against Tony Sanchez’s self-financed campaign for Texas governor: “Candidates who are less than super-rich face an enormous disadvantage against someone who can write checks and buy advertising without limit.”

By contrast, Panel B depicts the indirect connection between money and election results. More accurately, Panel B shows that the supposed connection between spending and votes may be partly or entirely fallacious. Panel B acknowledges that potential campaign donors are strategic, rendering candidate viability and fundraising ability at least as important as actual spending. The direct pathway pertains to how the money is used, regardless of the money’s source; the indirect pathway pertains to the money’s source, regardless of how it is used. To the extent that the indirect pathway dominates, the direct pathway is spurious.

The direct and indirect causal pathways imply distinctive outcomes. Both predict a correlation between campaign spending and victory (assuming that money raised is actually

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spent). But critically, the direct pathway implies that money from any source could win an election; the indirect pathway does not. More to the point, the direct pathway implies that self-finance should influence election results just as strongly as externally-financed spending does; the indirect pathway does not.

To understand why this is true, note that self-financed contributions by a candidate to his own campaign are not subject to the same strategic considerations that traditional campaign donors face. Granted, money is a scarce resource even for a wealthy candidate, implying that candidates should hesitate to contribute to their own campaigns unless they expect that doing so will actually improve their chances of victory (Steen 2006). But unlike traditional donors, self-financers might be willing to pour money into their campaigns even if victory seems unlikely. Candidates who choose to make a serious run for governor put their time and professional pride at risk. Those who must leave a safe office elsewhere in order to pursue the governor’s office put their political careers at risk as well; as Leal writes, “It appears that after running an unsuccessful statewide campaign, candidates either leave politics or run for lower office” (2006, 25). Having placed so much on the line, a struggling gubernatorial candidate who finds that few donors are willing to contribute to his campaign may well find it worthwhile to contribute his own funds in a final effort to avoid defeat, even if his odds of victory are too poor to attract external financing. After all, previous research has shown that people are more tolerant of additional risk when seeking to avoid loss than when pursuing gains (Quattrone and Tversky 1988). It may also be that wealthy candidates are willing to inject self-financed funds into their campaign coffers in hopes of attracting external funds.

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10 However, the fact that traditional donors and wealthy candidates face the same donation calculus does not imply that each term has the same weight. In particular, the utility cost \( C \) of contributing $1 million is probably higher for a traditional donor than for a candidate who views $1 million as rounding error on his tax return.
Because self-financing has weaker strategic constraints than external financing, any effect that self-finance has on vote shares will flow predominantly through the direct causal pathway. By contrast, externally-financed spending can theoretically influence vote shares through either pathway. As such, we can compare the relative effects of self-financed and externally-financed spending on election results to make inferences about the relative strength of the direct and indirect causal pathways.

**Hypotheses and Data**

If it is true that traditional campaign contributions are subject to stricter strategic constraints than self-financed contributions, then we should observe two distinct hypotheses. First, we should see greater reliance on self-financing among candidates with a lower probability of victory. Traditional donors will avoid wasting money on candidates with less likelihood of victory; having already committed to run, candidates may then compensate by relying more on self-finance. Although I cannot measure each candidate’s probability of victory directly, I can measure other related constructs. For example, because incumbent governors enjoy significant reelection advantages (Ansolabehere and Snyder 2002; Tompkins 1984; Turett 1971), incumbents have better odds of victory than do their challengers. Other things being equal, then, we can expect that incumbents will feel less need to self-finance than challengers; open-seat candidates should lie somewhere in the middle. By similar logic, we can also expect that experienced, professional challengers will attract more campaign contributions than politically inexperienced candidates; that is, high-quality challengers will feel less need to self-finance than low-quality challengers. If Hypothesis 1 generally is that self-financing is more common among long-shot candidates, then, we can derive a handful of sub-hypotheses:
**Hypothesis 1a**: Self-finance is more common among challengers than among incumbent governors.

**Hypothesis 1b**: Self-finance is more common among against incumbent governors than in open-seat races.

**Hypothesis 1c**: Self-finance is more common among low-quality challengers than among high-quality challengers.

Second, the preceding arguments suggest that self-financed campaign spending should have a weaker effect on election results than externally-financed spending does. If spending had only a direct effect on vote shares, then any spending—regardless of source—would influence the election result equally. But if part of the relationship between spending and vote shares is caused indirectly (and spuriously) by the challenger’s viability, then that indirect causal pathway should enhance the apparent effect of externally-financed spending. Together, these statements imply that externally-financed spending should have a stronger statistical relationship with vote shares than self-financed spending.

**Hypothesis 2**: Externally-financed spending has a significantly stronger relationship with election results than self-financed spending does.

I test these hypotheses using campaign finance data for gubernatorial general elections from 1998 through 2006, as collected by the National Institute on Money in State Politics.\(^\text{11}\) Unfortunately, state-to-state differences in population complicate my analysis of the effects of spending. Those who study Senate elections have observed that spending generally rises with population but at a decreasing marginal rate; as a result, neither per-voter nor total spending

\(^{11}\) Note that the National Institute on Money in State Politics provides only contributions data, not spending figures.
figures are a perfect measure (Abramowitz and Segal 1992; Gerber 1998; Jacobson 1980, 1985). To compensate for the decreasing marginal relationship between spending and population, I divide total spending where appropriate by each state’s logged population—a compromise between per-voter and total spending measures.

**Hypothesis 1: Self-Finance as a Sign of Weakness**

Between 1998 and 2006, there were 134 gubernatorial elections. Of these, 43 featured a Republican incumbent, 33 featured a Democratic incumbent, and the remaining 58 were open contests, usually as a result of term limits. When competing against incumbents, 30% of the challengers contributed $50,000 or more to their own campaigns; by contrast, only 10% of the incumbents made a similar sacrifice. Challengers at the seventy-fifth percentile contributed $185,000 to their campaigns; comparable incumbents contributed nothing at all.\(^{12}\) As shown in Table 1, these figures are similar for both Republicans and Democrats.\(^{13}\)

| Table 1 about here |

Somewhat surprisingly, open seat candidates self-finance at roughly the same rates as challengers to sitting incumbents. Although the numbers are slightly lower in open seat races, the differences are substantively small. Thus, we can apparently dismiss Hypothesis 1b. Nevertheless, the stark difference between incumbents and other types of candidate provides compelling evidence for Hypothesis 1a.

Table 2 presents evidence supporting Hypothesis 1c. Consistent with expectations, self-

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\(^{12}\) It would be inappropriate to report raw means because of severe skew. Medians are uninformative since most candidates contribute nothing at all to their campaigns (hence, the median is usually $0 for every group). I report seventy-fifth percentiles to compensate for these problems.

\(^{13}\) Note that only major-party candidates are included in this analysis.
finance occurs far more frequently among low-quality candidates than among high-quality candidates. I define challenger quality using Squire’s (1992) index; in contrast to other measurement schemes developed by those who study Congressional elections, Squire’s scale is particular to the gubernatorial context. Only challengers are included in Table 2; incumbents and open-seat candidates are excluded. For purposes of this table, I label those scoring 50 or below in Squire’s index as “low quality” and those scoring 100 or above as “high quality.” As shown, 39% of low-quality challengers resorted to self-finance, while only 13% of high-quality challengers did so. Low-quality challengers at the seventy-fifth percentile contributed $478,000 to their own campaigns; comparable high-quality challengers contributed only $13,000. These are large differences by any standard.

Tables 1 and 2 provide evidence for the basic claim motivating hypotheses 1a, 1b, and 1c: Self-finance occurs most frequently in situations where traditional donors may hesitate to put their money at risk. Candidates with better chances to succeed rely on external contributions; less fortunate candidates are more likely to rely on self-finance. Apparently, self-finance can be a sign of weakness. Recent events indicate that this pattern is not limited to the gubernatorial context. In late 2007, the New York Times reported that Republican officials were “aggressively recruiting wealthy candidates who [could] spend large sums of their own money to finance their [2008] Congressional races.” Democratic strategists took this as evidence of Republicans’ financial weakness—a view apparently confirmed by Republican officials. As one Democratic official put it, “National Republicans are in disarray, forcing them to recruit inexperienced and

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14 Squire’s index ranges from 0 (no political experience) through 600 (former governor or Senator), although most candidates cluster either in the low double-digits or in the upper half of the scale.
unprepared self-funders.”

The central goal of this paper is not to identify the exact conditions under which candidates choose to self-finance, but rather to explore the effects of self-finance on gubernatorial election results. With that in mind, the specific intent of the preceding analysis is not to present conclusive evidence that campaign donors are strategic, but rather to show that a major assumption of my theoretical argument is plausible—namely, that traditional campaign donors prefer not to contribute to weak candidates, leaving only self-finance to fill the spending void. Having established that this assumption is reasonable at the least, I turn now to my central hypothesis—that is, that self-financed spending cannot “buy” a gubernatorial election.

Hypothesis 2: The Marginal Effect of Self-Finance on Election Results

Table 3 presents the results of two ordinary least squares regressions that predict the Democratic candidate’s share of the gubernatorial vote using data from 1998 through 2006. Panel A confirms that campaign spending has a strong relationship with vote shares. If the Democratic candidate spends more money, her vote share goes up; if the Republican candidate spends more, the Democrat’s vote share goes down. Spending variables are measured in hundreds of thousands of dollars and divided by logged population, for reasons already discussed. Thus, in a median-sized state (where logged population is around 15), a $1,000,000 increase in the Democrat’s spending would be associated with a 3.0 percentage point increase in the Democrat’s share of the vote. The incumbency dummies have unsurprising effects; an incumbent candidate can expect a 6 or 8 percentage point advantage. State-level control variables

16 Those interested in a fuller analysis of the conditions under which candidates self-finance should see Steen’s (2006) work on self-financed candidates in Congressional elections.
appear to have little importance here.\textsuperscript{17}  

Panel B replicates Panel A, but with separate variables for externally-financed and self-financed spending. Consistent with Hypothesis 2, externally-financed spending has a much stronger relationship with vote shares than self-financed spending. Figure 3 depicts these effects graphically, with spending variables rescaled and plotted across their respective observed ranges.\textsuperscript{18} The substantive difference between self-financed spending and externally-financed spending is striking; although self-financed spending does have a visible effect in the graph, its effect is dwarfed by that of externally-financed spending. Moreover, only externally-financed spending has a statistically significant relationship with vote shares. In fact, Bayesian model selection strongly supports dropping the self-finance variables entirely; doing so has almost no ill effect on the model’s fit.\textsuperscript{19} The insignificance of the self-finance variables in Panel B implies that the entire estimated effect of (total) spending in Panel A was produced by externally-financed spending, with self-financed spending contributing little other than statistical noise. These results are robust to reasonable manipulations, such as examining only open races or excluding all races with a meaningful third-party candidate, and they do not appear to be driven by any influential outliers.\textsuperscript{20} Controlling for each candidate’s quality using Squire’s index also does not change the

\textsuperscript{17} State population data are annual Census estimates. The state’s presidential vote is the Democratic candidate’s share of the two-party vote; for gubernatorial elections held in non-presidential years, I use the linearly weighted average of the two most recent (standardized) presidential contests. To control for national partisan tides, the model also includes a dummy for each year.  
\textsuperscript{18} Control variables are held at their means. Opponents are assumed to spend an average amount of externally-financed money but no self-financed money. Each line assumes that the candidate relies exclusively on one type of spending; that is, the line showing the effects of self-finance holds external finance at zero, and vice versa.  
\textsuperscript{19} For details on Bayesian model selection, see Raftery (1995). Omitting the self-finance variables causes adjusted $R^2$ to drop imperceptibly from 0.407 to 0.405. By contrast, omitting the external finance variables pushes adjusted $R^2$ down to 0.33.  
\textsuperscript{20} Whatever outliers may exist appear to actually work against these results. Seven observations were potential outliers according to DF beta statistics on the four spending variables; excluding these observations actually
spending coefficients appreciably.\textsuperscript{21}

[Figure 3 about here]

**Discussion**

Based on the findings reported above, it appears that self-finance has minimal effects on gubernatorial election results. This is consistent with findings in the Congressional literature (Alexander 2005; Steen 2006). As much as editorial writers and reformers might worry about wealthy candidates self-financing their way into office, it appears that self-finance is not so much a threat as a sign of weakness.

The broader implications of this finding run far deeper. Consider, once again, the two theoretical possibilities sketched out in Figure 2. If money spent on advisors and advertisements had a direct effect on vote shares, then it would not matter whether that money came from outside donors or from the candidate’s own wallet. As it turns out, the money’s source does matter. Self-financed campaign spending does not have a statistically significant relationship with gubernatorial election results; externally-financed spending does. In fact, Table 3 suggests that the effect of externally-financed spending is two-to-six times larger than the effect of self-financed spending. We can conclude that a candidate’s ability to raise money matters much more than her ability to spend it. Because potential campaign donors are strategic, a candidate’s ability to raise money serves as an important indicator of her viability. Thus, the dominant relationship is between candidate viability and election results—not between campaign spending and election results. This relationship between candidate viability and election results artificially inflates the

\textsuperscript{21} Controlling for quality does reduce the partisan difference in spending effects somewhat. After controlling for quality, the coefficients for externally-financed spending become 0.830 for Democrats and -0.922 for Republicans.
apparent correlation between spending and votes.

Of course, none of this implies that candidates should refrain from raising money. Granted, my finding that spending has weak direct effects might tempt candidates to cut back their fundraising efforts. But although spending has weak direct effects, it is nevertheless possible that raising money does help candidates on election day. Even if voters are not persuaded at all by slick campaign advertisements, they may nevertheless glean information from the fact that a candidate was able to raise enough money to produce slick ads in the first place. If potential donors act strategically when deciding whether to contribute to a gubernatorial candidate, then a candidate’s ability to raise outside funds conveys important information to voters about the candidate’s quality. If large numbers of donors choose to contribute to a candidate, voters can infer that the candidate is probably worth considering seriously. By contrast, if a candidate has trouble raising outside funds and instead relies on self-financing, voters can infer that the candidate might not be worth a second thought. Previous work has shown that an experienced candidate’s decision to challenge a sitting incumbent conveys important information to voters about the incumbent’s vulnerability (Gordon et al. 2007). By the same logic, donors’ collective decisions to finance a particular candidate convey important information about the challenger’s viability.

Besides being of academic interest, these findings have important policy implications. Most obviously, those who advocate campaign finance reform do not need to worry about wealthy candidates undermining our electoral system. As originally written, the 1971 Federal Election Campaign Act imposed strict spending limits in hopes of leveling the playing field between wealthy self-financed candidates and their less fortunate opponents—limits that the Supreme Court eventually struck down. Motivated by the same concern, members of Congress
included the “millionaire amendment” in the 2002 Bipartisan Campaign Reform Act—a provision that relaxed campaign finance rules for candidates facing wealthy self-financed candidates. Although those laws targeted federal races, not gubernatorial elections, my findings contribute to a growing literature suggesting that legislative attempts to handicap self-financed candidates are probably unnecessary (Alexander 2005; Steen 2006). There may be numerous sources of potential unfairness in American elections, but self-finance does not appear to be one of them.
Works cited


Tables and figures

Table 1: Who Self-Finances? Incumbents, Challengers, and Open Seat Candidates

<table>
<thead>
<tr>
<th></th>
<th>Open seat</th>
<th>Incumbents</th>
<th>Challengers</th>
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<tbody>
<tr>
<td></td>
<td>Percent of candidates self-financing at least $50,000</td>
<td></td>
<td></td>
</tr>
<tr>
<td>All candidates</td>
<td>29%</td>
<td>10%</td>
<td>30%</td>
</tr>
<tr>
<td>Republicans</td>
<td>28%</td>
<td>14%</td>
<td>30%</td>
</tr>
<tr>
<td>Democrats</td>
<td>29%</td>
<td>6%</td>
<td>30%</td>
</tr>
</tbody>
</table>

|                | Amount self-financed (75th percentile) |   |   |
| All candidates | $146,000 | $0 | $185,000 |
| Republicans    | $135,000 | $0 | $245,000 |
| Democrats      | $157,000 | $0 | $125,000 |

Table 2: Who Self-Finances? Candidate Quality among Challengers to Incumbents

<table>
<thead>
<tr>
<th></th>
<th>Low quality</th>
<th>High quality</th>
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<tbody>
<tr>
<td></td>
<td>Percent of challengers self-financing at least $50,000</td>
<td></td>
</tr>
<tr>
<td>All candidates</td>
<td>39%</td>
<td>13%</td>
</tr>
<tr>
<td>Republicans</td>
<td>36%</td>
<td>13%</td>
</tr>
<tr>
<td>Democrats</td>
<td>42%</td>
<td>13%</td>
</tr>
</tbody>
</table>

|                | Amount self-financed by challengers (75th percentile) |   |   |
| All candidates | $478,000 | $13,000    |
| Republicans    | $500,000 | $22,000    |
| Democrats      | $457,000 | $8,000     |
Table 3: Effects of Spending on Democrat’s Share of the Gubernatorial Vote, 1998-2006

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<thead>
<tr>
<th></th>
<th>A</th>
<th>B</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total spending by Democrat</td>
<td>0.447*</td>
<td></td>
</tr>
<tr>
<td></td>
<td>(0.175)</td>
<td></td>
</tr>
<tr>
<td>Externally-financed spending</td>
<td>0.749**</td>
<td></td>
</tr>
<tr>
<td></td>
<td>(0.231)</td>
<td></td>
</tr>
<tr>
<td>Self-financed spending</td>
<td>0.119</td>
<td></td>
</tr>
<tr>
<td></td>
<td>(0.232)</td>
<td></td>
</tr>
<tr>
<td>Total spending by Republican</td>
<td>-0.658**</td>
<td></td>
</tr>
<tr>
<td></td>
<td>(0.210)</td>
<td></td>
</tr>
<tr>
<td>Externally-financed spending</td>
<td>-0.932**</td>
<td></td>
</tr>
<tr>
<td></td>
<td>(0.257)</td>
<td></td>
</tr>
<tr>
<td>Self-financed spending</td>
<td>-0.445</td>
<td></td>
</tr>
<tr>
<td></td>
<td>(0.292)</td>
<td></td>
</tr>
<tr>
<td>Democratic incumbent</td>
<td>6.347**</td>
<td>6.005**</td>
</tr>
<tr>
<td></td>
<td>(1.883)</td>
<td>(1.866)</td>
</tr>
<tr>
<td>Republican incumbent</td>
<td>-8.086**</td>
<td>-6.600**</td>
</tr>
<tr>
<td></td>
<td>(1.762)</td>
<td>(1.860)</td>
</tr>
<tr>
<td>State population (logged)</td>
<td>1.587</td>
<td>1.588</td>
</tr>
<tr>
<td></td>
<td>(1.041)</td>
<td>(1.104)</td>
</tr>
<tr>
<td>State’s Democratic vote for president</td>
<td>0.0870</td>
<td>0.0548</td>
</tr>
<tr>
<td></td>
<td>(0.0857)</td>
<td>(0.0858)</td>
</tr>
<tr>
<td>Constant</td>
<td>18.87</td>
<td>20.24</td>
</tr>
<tr>
<td></td>
<td>(15.84)</td>
<td>(16.65)</td>
</tr>
<tr>
<td>Observations</td>
<td>134</td>
<td>134</td>
</tr>
<tr>
<td>R-squared (Adjusted)</td>
<td>0.46 (0.39)</td>
<td>0.48 (0.41)</td>
</tr>
</tbody>
</table>

Standard errors in parentheses. Year dummies not shown. All spending variables are divided by logged population. * p<0.05, ** p<0.01.
Figure 1: Strategic Donations to Candidates

Figure 2: The Relationship between Campaign Spending and Electoral Success

(A) Direct Causal Pathway

X: Campaign spending

Y: Election result

(B) Indirect Causal Pathway

X: Candidate quality

Z: Campaign spending

Y: Election result
Figure 3: Effects of Spending in Gubernatorial Elections