

Public Money, Candidate Time, and Electoral Outcomes in State Legislative Elections

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Abstract

Public election financing is becoming increasingly common in the American states, yet political scientists have not fully considered its impact on campaign dynamics. This project focuses on the effects of public funding on candidate time. I employ survey data from candidates in three states, and demonstrate that publicly funded candidates devote more time to voter mobilization efforts. In Maryland, where only private funding is available, candidates' share of the general election vote is unaffected by campaign activities. In the publicly funded states of Arizona and Maine, the effect of that time on general election vote differs between the moderately professionalized elections in Arizona and the non-professionalized races in Maine. In the former, only traditionally financed candidates sway voters with field activities, while in the latter, publicly funded candidates are able to drive voters with public interaction. These findings help to clarify the dynamic mechanisms at play in publicly funded elections, shedding light on the manner in which funding regulations affect campaigns and electoral competition.

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“The candidates that I knew this last election that ran traditional were having fundraisers two or three times a week, while (publicly funded candidates) were going out knocking on doors. That, I think, is a big difference in how you spend your time. In an evening after work, I can knock on fifty to seventy doors of people who will actually go to the polls for me, as opposed to that candidate who has to go out and raise and spend two, three hours with lobbyists who often don’t even live in their district. Yeah, they’re going to get the money, but I’m the one going out and meeting the voters.”

-Arizona Legislator

While money alone does not guarantee victory, its absence all but ensures defeat for federal and state candidates alike (e.g. Caldeira and Patterson 1982; Giles and Pritchard 1985; Tucker and Weber 1987; Green and Krasno 1990; Gierzynski and Breaux 1991; 1993; Cassie and Breaux 1998). Thus, as races become more expensive, challengers find themselves shut out of meaningful opportunities to compete. Advocates of public election financing believe they hold the solution to this problem, and their influence is growing. As of 2008, nearly half of the states will offer some form of public funding in at least one election.¹ Most provide matching funds to candidates or parties, funded by tax check-offs. Others utilize various mechanisms of partial public financing, in which candidates receive subsidies that comprise a percentage of campaign costs. However, full public financing has been employed in state elections since 2000, when Arizona and Maine became the first states to offer subsidies equivalent to their spending limits (Appendix A). Since then, full funding has become more common; in 2008, it will likely be offered in at least some elections in six state and two major metropolitan elections.

With mandated financial equality and the chore of fundraising removed, supporters of public funding reason that the election can be won by the candidate who works the hardest to reach the largest number of voters. Francia and Herrnson (2003) confirmed that candidates who accept full public subsidies spend a significantly smaller percentage of their campaign time raising money than those in partially subsidized or traditional funding systems. If they spend less time on the money chase, candidates in fully subsidized systems should be expected to devote substantially greater effort to interaction with voters and groups. An important question therefore remains: What effect does the recapture of fundraising time have on the campaigns of publicly funded candidates?

¹Full funding is available for all state elections in the two states, and under the Buckley precedent, participation is optional. Here, the focus is on legislative elections. New Mexico opted for similar reforms for its Public Regulation Commission candidates in 2003, and North Carolina implemented full funding for judicial candidates in 2004. Connecticut will begin offering full public subsidies in 2008 state elections, while New Jersey may expand its legislative program beyond a pilot stage. Albuquerque and Portland have recently passed full funding laws for municipal and at least a dozen other cities are considering them.

Public Funding: Toward Competitive Elections

The potential for enhanced competition has been the most studied aspect of public election finance. However, definitive conclusions remain elusive. It has been demonstrated that the spending caps associated with public financing can curb expenditures, in theory opening avenues for a greater number of viable challengers (Mayer and Wood 1995; Gross and Goidel 2003, 55), but partial subsidies have proven ineffective in reducing spending in New York City (Kraus 2006) and Minnesota state elections (Schultz 2002). Likewise, numerous studies have found little competitive change in partially subsidized elections (e.g., Jones and Borris 1985; Mayer and Wood 1995; Malbin and Gais 1998, 136), but there is some evidence of enhanced competition in Minnesota (Donnay and Ramsden 1995). Simulation studies have linked public money to enhanced electoral competition, with greater impact realized by higher subsidies (Goidel and Gross 1996). In Arizona and Maine, the only two states implementing full public election funding, higher levels of competition are beginning to become apparent (General Accounting Office 2002; Mayer, Werner, and Williams 2006).

The greater promise of full subsidies should come as no surprise. To gain standing against an incumbent, challengers in traditional funding systems must engage political elites by raising a substantial sum of money, but in terms of activating voters, candidate attributes and campaign activities are negated by incumbents' financial power (Howell, 1982). Meanwhile, political campaigns have become increasingly important forces in voter mobilization (Rosenstone and Hansen 1993). Face to face efforts are extremely effective voter mobilization tools, particularly when delivered on-time to targeted populations (Kramer 1970; Gerber and Green 2000; Niven 2001a; Niven 2001b; Niven 2002; Green, Gerber, and Nickerson 2003; Hillygus 2005; Parry et al. 2008).

However, these techniques require a large investment of candidate time. Time spent fundraising reduces the number of hours that can be devoted to interaction with the electorate at large, and so challengers, who typically begin the campaign well behind in both funding and name recognition, face a paradox: To be viewed as viable by political elites, interest groups, and media, they must raise substantial sums of money. The time required to raise the requisite funds significantly limits candidates' ability to mobilize voters. Thus, when deciding how to use scarce time, challengers in particular must choose from options that are less than ideal.

If partial subsidies have not improved competition, it is likely due to their inability to solve this problem. Even when the subsidy covers half of the funding level allowed under the spending cap, the challenger's strategic considerations relative to those in privately funded elections are largely unchanged, and a large spending gap between challengers and incumbents is likely to persist. As Table 1 illustrates, in all three partially financed states, legislative challengers must raise well more than half of the average expenditure level, and substantially more effort is required to reach financial parity with incumbents.² The practi-

²These five states were the only ones with widely available public financing for legisla-

Table 1: Average Spending in 2004 Lower House Elections of 5 Publicly Financed States

	Cost of Race	Incumbent Spending	Challenger Spending	Gap	Gap, Percentage of Total Average Cost
Arizona	\$27,835	\$29,641	\$26,752	\$2,889	10.4%
Maine	\$4,587	\$4,946	\$4,389	\$557	12.1%
Hawaii	\$30,911	\$45,929	\$19,617	\$26,312	85.1%
Minnesota	\$23,668	\$35,226	\$15,770	\$19,456	82.2%
Wisconsin	\$24,189	\$32,619	\$16,892	\$15,727	65.0%

cal result is that the day-to-day campaign in a partially funded system is little different from one in which all money comes from private sources. The challenger is always outspent, and the great fundraising effort required to maintain competitive financial status constrains the challenger’s choices of voter mobilization tactics. Combined, these circumstances diminish the impact of personal campaigning: the incumbent can exploit a financial advantage to counteract retail politics with mass advertising and mailings while the challenger campaigns around a fundraising schedule.

The comparatively narrow gaps between challenger and incumbent spending in Arizona and Maine evident in Table 1 suggest the possibility of a different sort of campaign being waged in those states, where the equalization of challenger and incumbent funding levels may diminish the importance of political money, freeing candidates to choose how to most effectively plan their activities. Full public funding changes the power dynamic between challengers and incumbents. Traditionally financed challengers, who typically begin the campaign well behind in both funding and name recognition, find their options severely limited when it comes to getting out the vote. With the necessity of fundraising eliminated, full financing creates a different kind of politics. Fully funded challengers in Arizona and Maine not only compete financially with incumbents, but campaign finance regulations in the two states also preclude them from accepting any donations once they have qualified for the program.³ Candidates in those states have more time to campaign door to door, telephone constituents, and post signs, all under the cover of “air support” provided by advertising and mailings purchased with public funds.

Enhanced competitiveness, if it exists, is a symptom of an electoral environment that is fundamentally transformed. The availability of funds is likely to draw more challengers to politics. These challengers will be strategically minded individuals who view public money as a mechanism to clear otherwise existent financial hurdles that would occlude their entry. If system-wide competition is enhanced, the presence of a greater number of challengers alone is likely the cause, but this says little about the dynamics of the elections themselves. In

tive races in 2004. Data were obtained from the Wisconsin Campaign Finance Project at <http://campfin.polisci.wisc.edu/>

³As of the 2006 election, Arizona and Maine were the only two states with available full funding for all legislative candidates.

publicly financed elections, candidates should, as Francia and Herrnson (2003) find, spend less time raising money. Consequently, they are likely to devote more effort to interacting with the public, media, and interest groups. With sufficient money to wage a strong campaign, challengers should find themselves empowered to optimize their political strategy, facilitating higher levels of voter mobilization and more votes in the election.

Data and Methodology

I construct three models associating candidate public interaction with electoral success, utilizing survey data obtained from 2006 lower-house legislative candidates in Arizona, Maine, and Maryland. Surveys were delivered in both electronic and paper form to all registered primary candidates.⁴ Candidates were asked to quantify the devotion of their time to fundraising, public speeches, field activity, electronic campaigning, media relations, research, strategy, and the courting of interest groups. Electronic messages were sent to available addresses, but paper surveys were mailed to the entire candidate population in all states, achieving redundant coverage for most candidates but at least some solicitation of all. The letters directed the respondents to the electronic survey, and also included prepaid return envelopes for completion of the paper version. There were 510 known candidates in Maryland, 386 in Maine, and 186 in Arizona. After a response window that lasted from early September through December 31, 2006, 346 responses were received, for an overall response rate of 32.0%.⁵ This rate is lower than that of many general surveys but is consistent with previous polling of elite candidate populations (e.g., Francia and Herrnson 2003; Howell 1982). Candidate demographic proportions were comparable between samples, and the samples are reasonably representative of the candidate populations of each state (Appendix B).⁶

Responses from the individual time categories are reduced to two indices which take on a normal distribution while allowing for the use of fewer predictors in the model. The public index is an additive grouping of time, measured in raw weekly hours or fractions thereof devoted to the public solicitation of votes, either directly or indirectly. The public index includes candidate time allocations to field activity, electronic campaigning, media relations, public speaking, and interactions with groups. The housekeeping index encompasses tasks that are integral to the maintenance of a campaign, but that are performed behind the scenes and do not involve voter mobilization. Fundraising, policy research and strategy meetings are included in the housekeeping index.

⁴There is no substantive difference between respondent groups that completed the survey online and those that mailed a paper copy. The survey excludes candidates for executive, county, and statewide offices due to a comparatively small number of those candidates.

⁵124 total responses were received from Maryland (response rate = 24%) 69 from Arizona (37.1%), and 153 from Maine (39.6%).

⁶While there are no apparent unnatural abnormalities in the sample data, Maryland and Arizona challengers are slightly over-represented in the sample.

Table 2: Contributions as Percentage of Registered Voters, 2006 Election

	Registered Voters	Contributions	Percentage
Arizona	2,568,401	39,651	1.5%
Maine	993,748	14,012	1.4%
Maryland	3,056,657	35,344	1.2%

The inclusion of fundraising in the housekeeping category is warranted here. The activities, goals, and strategy that accompany the search for cash are of a wholly different character than the environment in which a candidate seeks votes. While the candidate must interact with the public for fundraising purposes, the fundraising audience is comprised of a narrow sector of the electorate, and is usually targeted because of well-known preferences favorable to the candidate. Funding lists typically target political elites who have demonstrated a capacity to give money, and there is little reason to believe that the act of contributing changes their political preferences (Wilcox 2001). In other cases, funds may be solicited from individuals who live outside of the candidate’s district or state, negating any potential electoral benefit from fundraising activities. As Table 2 indicates, contributors represent less than two percent of the voting population in the three states, and any mobilization achieved through fundraising efforts is likely negligible.⁷

The addition of Maryland facilitates the modeling of campaign behavior in a privately financed state that is otherwise quite similar to Arizona. The states are comparable in population, and entering the 2006 election, both houses of each state’s legislature were controlled by similar majorities of one party.⁸ Maryland and Arizona also employ parallel electoral timelines, with multimember districts in the lower house and primaries on the same day in early September. Most important, the two states are positioned in close approximation within Squire’s (2000) measure of legislative professionalization.⁹ Their key difference is in campaign finance regulation: Maryland’s election finance laws are more conventional than those of the other two states. While candidates on gubernatorial tickets are entitled to public funds, those for the Maryland General Assembly operate in a traditional, privately financed environment.¹⁰ With no

⁷Different state reporting regulations lead to the availability of different information. The figures for Maryland reflect the number of individual contributions to candidates for state electoral office, while the figures for Arizona and Maine represent contributions from all entities except parties and the public fund. Thus, in all three cases, the actual number of voters who directly contribute to campaigns is inflated; individuals who donate to more than one campaign are counted each time, and in Arizona and Maine, PAC contributions are included in the tabulation. Data source: National Institute for Money in State Politics. <http://www.followthemoney.org>

⁸Maryland’s House of Delegates had 98 of the 141 members (69.5%) caucusing with the majority Democrats. In Arizona’s House, 39 of the 60 members were Republicans (65%). The upper chambers were also comparable in majority advantage. Maryland Democrats held 32 of the 47 seats (68%) while Arizona Republicans occupied 18 of 30 seats (60%).

⁹Arizona ranks 18th, and Maryland is 16th.

¹⁰Individuals in Maryland may donate \$4,000 to any candidate in a four-year period, and a

Table 3: Time Allocations of 2006 Candidates

State	Average Weekly Campaign Hours	Fundraising, Percentage of Time	Public Index, Percentage of Time	Housekeeping Index, Percentage of Time
Arizona	42.0*	7.5* ^A	68.8*	31.2*
Maryland	48.7*	12.6* ^A	69.9*	30.1*
Maine	34.75*	3.4*	81.5*	18.5*

*One-way ANOVA indicates at least one state is significantly different at $\alpha=.05$

^AArizona and Maryland are significantly different at $\alpha=.05$

public funds available, Maryland’s legislative candidates must self-fund or seek contributions from individuals and PACs. Maryland therefore adds value to this analysis by providing a basis for comparison between the states employing optional full funding and one that operates under more familiar traditional funding guidelines.

The entries in Table 3 confirm the similarities between the two states.¹¹ Overall, candidates in Maryland and Arizona spend remarkably similar proportions of their time engaged in public interaction and housekeeping activities. However, as Francia and Herrnson’s (2003) finding would suggest, Marylanders overall spend a significantly greater proportion of their time on fundraising than candidates in either Arizona or Maine. Despite this difference, candidates in Arizona and Maryland do not devote significantly different percentages of their time to either public interaction or housekeeping activities. Moreover, the candidates for Maine’s non-professionalized legislature differ significantly from Maryland and Arizona in the expected direction. In short, Arizona and Maine, as the only two states offering full public funding in the 2006 election, provide a unique opportunity to measure the impact of public money on candidate time and electoral outcomes in very different environments.

Data are regressed from incumbent-contested elections for the lower house of each state. The dependent variable in the model is the respondents’ general election vote share. Model data include only candidates who ran in the general election and who responded to the time usage component of the survey. Primary losers and candidates who did not respond to questions regarding their time allocation were excluded, as were unopposed and weakly challenged incumbents.¹² The three states are modeled separately, and while the small sample in the case of Arizona (N=27) presents some difficulty, I believe it preferable to the alternative of a pooled model that would group traditional candidates in

maximum of \$10,000 to all political candidates. Political Action Committees may contribute up to \$6,000 to any candidate within the same four-year period, but have no aggregate limitations.

¹¹For the three-state comparison, means are tested with ANOVA and Kruskal-Wallis methods. Differences between Arizona and Maryland are examined with Tukey-Kramer tests.

¹²Weakly challenged candidates are those who received more than 85% of the vote. In two cases in Maine, the winner was challenged only by a candidate of the Green Independent Party, with the latter candidate receiving more than 20% of the vote. In those cases, the GIP candidate was treated as a major party challenger.

Maine with those in Maryland, given substantial differences in professionalism and political culture between the two states.

The inclusion of Arizona and Maryland requires some modification to the data from those states. All candidates for the Arizona House of Representatives run in multimember districts. Voters choose two candidates on each ballot, and the top two vote recipients are elected to represent the district in tandem. Candidates for the Maryland House of Delegates run in one, two, or three member districts with similar voting instructions. Because candidates in multimember districts are typically elected with between 25 and 35 percent of the overall votes cast, meaningful comparison of their vote percentage with the receipts of candidates in a conventional two person race is difficult.

I address this issue with the correction first described by Niemi et. al. (1991) and since employed effectively by others (e.g., Cox and Morgenstern 1993; Mayer et. al. 2005). Using this method, the raw vote of the top recipient from one party in a multimember district is added to the lowest recipient of the other party, and percentages for each are calculated from the total. The same process is followed for the second-highest and second-lowest vote recipients, yielding “pseudo pairs” that approximate the dynamics of a traditional head-to-head race, allowing Arizona House candidates and those in multimember Maryland House of Delegates contests to be meaningfully compared to Maine and Maryland candidates running in single member districts.

The number of hours each candidate devotes to public interaction and housekeeping activities are included as independent variables. I expect that the financial parity present in most Arizona and Maine elections will diminish the relative importance of money, allowing candidates to drive voters to the polls with their field activity. In other words, greater public interaction efforts should result in higher levels of support on Election Day. I therefore anticipate public interaction activities to be positively associated with general election vote percentage. Because time spent on housekeeping detracts from candidates’ ability to spread their message, I anticipate those activities to display a negative correlation.

I do not expect candidate activity to be the sole determinant of electoral success. Accordingly, I add to the model a dummy variable reflecting candidate status as a challenger or incumbent, coded 0 for challengers and 1 for incumbents. I anticipate that the incumbency dummy will absorb not only the effects of incumbent advantage, including the inherent ability of incumbents to raise more money than challengers, but also the partisan preferences of voters in the district. Further, I expect the incumbency dummy to reflect differences in candidate experience. State house races are often entry-level contests; a dummy variable for challenger quality in this data set is highly collinear with a dichotomous measure of incumbency, rendering any potential control for challenger quality redundant.¹³ In Maryland, the incumbency dummy is therefore

¹³In Arizona, only 2.9% of all non-incumbent legislative candidates can be considered ‘quality,’ according to the Arizona Association of Counties 2006 Election Guide. Fewer than 5% of challengers from Maryland met the previous office threshold, according to candidate biographies on the University of Maryland’s National Center for the Study of Elections website during the 2006 general election. Information on candidates in Maine are more difficult to ob-

Table 4: Time Expenditures of Arizona and Maine Lower House Candidates, in Weekly Hours

		Clean Elections Status	Public Interaction	Housekeeping Activities
Overall	Arizona	Opted Out	20.3*	12.3
		Accepted	34.0*	13.6
	Maine	Opted Out	20.9*	7.1
		Accepted	31.4*	7.6
Incumbents	Arizona	Opted Out	22.5*	14.5
		Accepted	38.0*	11.2
	Maine	Opted Out	17.5*	6.9
		Accepted	29.0*	5.8
Challengers	Arizona	Opted Out	16.3*	10.2
		Accepted	33.1*	16.0
	Maine	Opted Out	13.4*	5.4
		Accepted	31.5*	7.8

*One-tailed tests, statistically significant at $\alpha=.05$

the only predictor included in the model, aside from the public interaction and housekeeping variables.

In all three states, I test the hypothesis of whether the number of hours candidates devote to public interaction and housekeeping are significant predictors of candidate vote share. However, in Arizona and Maine, there are reasons to include additional regression terms. As Table 4 indicates, average hours devoted to behind-the-scenes tasks are remarkably similar between publicly financed candidates and those who run their campaigns with privately donated money, and when the groups are segmented into incumbents and challengers, there are no significant differences in housekeeping activities. Regardless of their Clean Elections status, candidates in Arizona and Maine recognize a need to perform basic maintenance. However, it is worth noting that the housekeeping hours of publicly funded candidates are almost certainly overstated, and the gap between them and traditional candidates is under-reported, due to the wording of the survey question.¹⁴

The limitations of the questions have no bearing on the public interaction index, and publicly funded candidates in both Arizona and Maine spend significantly more time interacting with the public (Table 4). In Arizona, candidates

tain, but the pattern present in the other two states, combined with Maine's relatively low level of professionalization, are suggestive that challengers in Maine are similarly inexperienced.

¹⁴Candidates were asked to quantify their devotion of time to fundraising on average throughout the campaign. Many publicly funded candidates factored in the time-consuming process of raising five dollar qualifying contributions, noting their responses as such. In these cases, fundraising time is inflated during the primary and general elections, when participating candidates were proscribed from raising money. The shortcoming will be corrected in future research.

in general spend nearly 14 hours more per week engaged with voters or groups. In Maine, the disparity is almost 11 hours. The direction and size of the relationship is similar when the data are separated into challenger and incumbent groups. This consistent trend is indicative of a different sort of campaign when public money is involved: Publicly funded candidates in both states spend more time actively seeking votes.

However, while the entries in Table 4 demonstrate that candidates who accept public funds interact with the public to a greater extent, they also show that publicly funded candidates devote more time to their campaign in total, and that difference cannot be fully explained by the shift from fundraising to public interaction. There are a number of potential reasons for this difference: Traditional candidates may, for some reason, be inclined to campaign part-time. Publicly funded candidates may also possess traits that make them harder-working or more ambitious, or those who accept public funds may be less prone to burnout, allowing them to sustain higher levels of activity throughout their campaign.

Regardless of the reason, there is a difference in activity between the two groups. If publicly funded candidates tend to campaign more in general, it is reasonable to expect the effect of public interaction to differ between candidates in the two categories. I therefore add a dummy variable coded 0 for candidates who opt out of public funding and 1 for those who accept subsidies, and include an interaction term to arrive at the following model in publicly funded states:

$$Y = a + b_1X_1 + b_2X_2 + b_3X_3 + b_4X_4 + b_5X_1X_4$$

Where:

Y= vote percentage

X1= Public Interaction (Mean Centered)

X2= Housekeeping

X3= A dummy variable for incumbency

X4= A dummy variable for publicly funded candidates

Due to the expected difference in the impact of public interaction between traditional and publicly funded groups, the interaction between the public funding dummy variable and the number of public interaction hours is the predictor of interest. I anticipate a positive, significant interaction coefficient in both Arizona and Maine, indicating a stronger effect of public interaction for publicly funded candidates. The candidate's number of weekly public interaction hours is centered based on a mean of 34.83 in Arizona and 30.23 in Maine. Centering allows for more meaningful interpretation of the coefficient for public interaction. The interaction component terms, in this case the public funding dummy variable and the public interaction variable, reflect the expected effect of those variables when the other equals zero. The coefficient for the public funding dummy in a model with a non-centered variable would be interpreted as the effect of moving from the privately financed to fully funded category when the number of public interaction hours equals 0. Subtracting the mean from each data point in the public interaction variable allows for that effect to be measured when those hours are at their mean level instead of zero in the respective

Table 5: OLS Coefficients: Campaign Activity and Vote Percentage, Incumbent-Challenged Races

	Arizona N=27 R ² =.84	Maine N=72 R ² =.48	Maryland N=47 R ² =.43
Constant	48.9* (.11)	40.04* (3.4)	45.4* (5.79)
Public Index	.44* (.11)	-.06 (.10)	.07 (.10)
Housekeeping Index	-.22* (.09)	-.30* (.12)	-.29 (.21)
Incumbency Dummy	14.78* (1.78)	16.02* (2.05)	17.44* (3.42)
Publicly Funded Candidate	-1.2 (2.21)	7.15* (3.01)	NA
Public Index X Publicly Funded Candidate	-.36* (.11)	.29* (.12)	NA

*Statistically significant $p \leq .05$, Robust standard errors in parentheses. Dependent variable is candidate general election vote percentage.

states. Since the candidate who spends 0 hours devoted to public interaction is a rare animal, for the purposes of this question, mean centering produces a better interpretation.

Findings

The relationship between public interaction and general election vote percentage is engaged with an OLS regression model for each state. The model includes a multiplicative interaction term reflecting the product of a dummy variable for publicly funded candidates and a mean-centered term for the number of weekly hours candidates devoted to public interaction. Regression coefficients are contained in Table 5, and demonstrate that the relationship between public interaction and vote percentage, as mediated by status as a clean elections candidate, appears markedly different in Maine and Arizona. Despite no evidence of heteroscedasticity, I report robust standard errors to adjust for any non-random variance that may be present.¹⁵

With R² ranging from .43 to .84, the models in all three states demonstrate

¹⁵Cook-Weisberg tests and Cook's distances indicate no issues with heteroscedasticity or influential observations, respectively. Visual inspection of the residuals also indicates no problems. Mean variance inflation factors range from 1.04 to 2.8. No single term has a variance inflation factor greater than 5.18. As a further robustness check, model results are confirmed with confidence intervals based on a 5,000 sample non-parametric bootstrap. Finally, sign and significance of coefficients remains unchanged when the vote receipt is modeled as a count with a control for total votes cast utilizing a negative binomial model.

good predictive power. As expected, the dummy variables for incumbency are highly significant, with p-values approaching zero in all three cases: Not surprisingly, incumbents performed better in the general election. Moreover, in both Arizona and Maine, the models verify the existence of a time opportunity cost when candidates perform housekeeping tasks. In other words, every hour that candidates in those two states devote to fundraising, strategy meetings, and research detracts from their general election vote percentage. In Maryland, neither the housekeeping nor public interaction indices achieve significance, indicating that campaign activities matter little there: In the traditionally funded elections of Maryland, the power of candidates' activities pales in comparison to the effect of incumbency and the accompanying gaps in spending ability.

In the publicly funded states, the differences in campaign activity between publicly funded and traditional candidates necessitate the inclusion of an additional variable and interaction. The interaction term is significant in both Arizona and Maine, verifying that the effect of public interaction on general election vote percentage is mediated by candidates' participation in the program. However, the models yield evidence of opposite effects for the two candidate groups in Arizona and Maine. The coefficients for the terms involved in the interaction are interpreted differently than they would be in a strictly additive linear model. Because public interaction is centered in this model, the coefficient of the predictor for the public funding dummy can be interpreted as the effect of public interaction at mean levels on general election vote percentage for all candidates in the sample. Thus, on average a candidate in Maine who devotes approximately 30 hours per week to public interaction can expect a gain of 7.15 points. In Arizona, this term fails to achieve significance. In other words, on average, candidates in Arizona face conditions similar to those in Maryland: The hours that they devote to public interaction have no ultimate effect on their vote receipt.

The coefficient of the predictor for the public index reflects the effect of a one hour increase in public interaction by traditionally funded candidates.¹⁶ In Arizona, traditional candidates can expect to gain nearly one half of one percent in general election vote total with a one hour increase in the average devotion of their campaign time to public interaction. The positive, significant coefficient of the public interaction index in Arizona indicates that while candidates overall reap little benefit from public interaction, traditionally financed candidates receive a bump of nearly 0.5% for every weekly public interaction hour. In Maine, the opposite is true: The insignificance of the public index coefficient shows that traditional candidates receive no benefit from public interaction.

The coefficient for the interaction term can be interpreted as the difference in slopes between traditional candidates and those receiving public money. The model therefore predicts a coefficient for public interaction of publicly funded candidates in Arizona and Maine as .08 and approximately .23, respectively. However, only the difference in Maine is significant.¹⁷ In other words, publicly

¹⁶Traditionally funded candidates are coded 0.

¹⁷Standard errors of the differences in Arizona and Maine are .055 and .071 respectively,

funded candidates do not receive a benefit from public interaction in Arizona. In Maine, the effect of public interaction for publicly funded candidates is both positive and significant, as they parlay their ability to forego fundraising into electoral gains at higher levels than their privately financed counterparts.

In short, while the model results in Maryland confirm expectations of a traditional campaign environment dominated by incumbency and money, those in Arizona and Maine paint quite a different picture. Candidates in both states incur a vote cost due to housekeeping activities. However, in Arizona, only traditional candidates are able to swing votes with public interaction. For whatever reason, publicly funded candidates are unable to increase their vote totals with public interaction tasks. Traditional candidates in Maine face the same problem, as only publicly funded candidates there significantly influence voters with their field activities.

Discussion

Publicly funded candidates in Arizona and Maine generally devote greater time to public interaction during the crucial phases of the election. The key question then becomes: does it matter? Previous examinations have found that the power of incumbents and money in traditionally funded electoral environments is too strong for challengers to overcome: No matter what they do on the campaign trail, most challengers are destined to lose. Unless they self-fund, challengers must invest substantial time and resources to funding. This presents a substantial time opportunity cost as challengers find themselves caught in the vicious cycle: to be viable, they must raise funds, but to raise funds, they must be viable. As challengers solve this paradox, incumbents enjoy advantages of funding and name-recognition against challengers in all but a handful of cases, sealing the challenger's fate regardless of campaign activity. Such an environment is present in Maryland, where vote totals are unaffected by the time candidates spend interacting with the public. Incumbency, with its advantages of money and name recognition, rules the day. Perhaps in response to these conditions, over 60% of respondents from Maryland believe that all state elections there should be publicly funded.

In Arizona and Maine, where full public subsidies are universally available, the picture is more complex. In both states, the effect of public interaction is mediated by candidate participation in public funding; however, while in Maine only publicly funded candidates enjoy a significant relationship between voter interaction and votes, in Arizona the opposite is true. In both states, publicly funded candidates are able to devote significantly more time to voter mobilization efforts, but their efforts lead to higher general election vote totals only in Maine. If public money is designed to create more efficacious candidates by freeing them from fundraising, then in Arizona, it has achieved only a partial victory.

yielding t-statistics of 1.45 and 3.24.

There are at least two important ramifications of these findings. First, for publicly funded candidates in Maine, campaigning matters. Candidates enjoy more discretion over how to use valuable campaign time, and so they devote time to crucial voter mobilization tasks. To proponents of Clean Elections dedicated to restoring a sense of parity on the ledger and at the ballot box, this is good news. Among other things, public support for Clean Elections was predicated upon the assumption that incumbents were inherently advantaged and that the time demands of fundraising were degrading the quality of campaigns. The results here demonstrate that the two issues are not distinct. If they operate within a system characterized by general financial parity, it seems intuitive that traditional incumbent electoral advantage should diminish. Add to this the fact that subsidies require no fundraising effort in important pre-election time periods, and Maine's challengers gain the ability to control their own destiny to a much greater degree.

This trend bears favorably upon the future of enhanced electoral competitiveness. It has been noted that electoral competition has become more meaningful in both Maine and Arizona since the implementation of Clean Elections (Mayer et. al. 2005). Clean Elections has empowered challengers, allowing them access to sufficient resources to mount effective campaigns. Fundraising precludes a candidate from devoting time to anything else; if overall campaign time is held constant, an hour spent raising money is unlikely to be made up elsewhere. Consequently, something is lost as candidates jockey for dollars instead of votes. The opportunity cost is recaptured via substantially higher amounts of time spent directly engaged in the public solicitation of votes, leading to challengers that are better-equipped to shape the election's outcome.

Unfortunately for reformers, Arizona fails to conform to the same happy story. Arizona's publicly funded candidates spend more time in the field than their traditionally financed counterparts, but do not reap the same benefits. This finding may seem counterintuitive, but there are at least two potential reasons for the model producing this result. For one, Arizona's legislature is more professionalized, and its elections are more expensive. Elections in Maine occur in small districts where face-to-face campaigning is more likely to offer maximum return. Arizonans, on the other hand, compete in geographically and demographically larger districts, leading them to rely more on mailing and advertising. While publicly funded candidates do devote more time to field activities such as canvassing, it could be that mass campaigning is simply more effective there. Another reason may stem from available data: The Arizona sample is small ($N=27$), and only five of the respondents included in the regression were traditionally funded candidates. The micronumerosity issue certainly confounds inference, but unfortunately it cannot be overcome with existing data. The best correction for this issue is the gathering of more and better data to clarify the narrative in Arizona. This process is ongoing in the 2008 election.

Second, regardless of the relationship between candidate activities and their vote totals, publicly funded candidates in both Arizona and Maine devote more time to activities expressly intended to mobilize voters. This fact suggests that, when it comes to evaluating public election funding, examinations of macro

electoral competitiveness are insufficient. The potential for greater interaction between candidates and the electorate engages the issues of waning participatory inclinations in the electorate and mobilization efforts that are less than all-inclusive. The reality for most American campaigns is that there is not enough time or money to reach every voter in a meaningful way. Public money promises to elevate the resource stature of candidates, equipping them to effectively mobilize supporters inspired to participate in the political process.

Political campaigns are a crucial element of voter education and activation. When campaigns have relatively easy access to the financial resources necessary to communicate with voters, general levels of information about candidates should rise. Moreover, because fewer candidates will be grossly outspent in publicly funded elections, voters should be more likely to trust that their favored candidates have a realistic chance of winning, regardless of that candidate's status as an incumbent or challenger. This belief can be expected to affect political participation: if they feel that their candidate can win, citizens should be more likely to wear buttons, put up signs, or volunteer in some capacity.

Future evaluations of public funding should not only recognize the importance of campaign time, but should also acknowledge that success may be found in less readily measurable concepts such as civic engagement in the electorate. Even if Clean Elections is not changing victory margins, conclusions of inefficacy are premature. For example, one Arizona candidate running against a strong incumbent said that while he knew he was going to lose, he "gave voters the conversation." In other words, while that candidate would not have bothered to challenge an incumbent if he had to raise his own money, public subsidies allowed him to knock on every door in the district and to send out several targeted mailings. While it seems reasonable to conclude that this activity worked to the incumbent's detriment on Election Day, the act of presenting voters with a choice may have value in itself. Regardless, political science must move beyond illusory concepts such as competition to account for changing incentives and campaign dynamics, from the perspective of candidates and voters alike.

Appendix A: Description of Clean Elections in Arizona and Maine

Passed as a public ballot initiative in 1998, the Citizens' Clean Elections Act (AZ Title 16, Chapter 6, Article 7) was implemented in time for Arizona state elections in 2000. In 2006, the legislation provided participating candidates with a subsidy of \$17,918 for the general election and \$11,945 for the primary, so long as candidates were able to demonstrate their viability by successfully soliciting at least 210 contributions of exactly five dollars (16-941, 16-946, 16-949, 16-950). During the qualifying phases candidates may privately raise a relatively small amount of seed money, but if they ultimately accept public financing, candidates agree to forego any additional sources of finance, and to spend only the sum of the subsidy (16-941, 16-949). If participants in the program find themselves outspent by traditionally funded opponents, Arizona matches the difference up to three times the subsidy amount (16-952). This provision is also true for independent expenditures made on behalf of opponents. Candidates are required to file reports at monthly intervals (16-941, 16-948), and those who attempt to circumvent any provisions of the legislation are subject to civil penalties or electoral ineligibility (16-941, 16-957).

Public funding in Maine is similar in every regard. The Maine Clean Elections Act (MCEA, Maine Title 21-A Chapter 14) passed by voter referendum in 1996, and became active during the 2000 election cycle. Like Arizona's law, MCEA provides optional full subsidies for candidates for state office. To qualify in 2006, House candidates solicited fifty contributions of five dollars, after which they received subsidies of \$1,504 for the primary and \$4,362 for the general election. Senate candidates were required to obtain 150 contributions and received \$7,746 and \$20,082, respectively. These amounts are equivalent to the average expenditure of candidates in the respective houses for the two previous primary and general elections (Title 21A, Chapter 14, Article 8). Like Arizona, Maine requires stringent financial reporting to ensure compliance, and provides matching funds on behalf of participating candidates for expenditures above the subsidy amount made by opposition campaigns or independent groups. However, Maine matches only up to two times the original subsidy amount, making the program less generous than Arizona's. Aside from this difference, the funding provisions in both states are essentially the same policy designed to provide candidates optional public funds sufficient to mount a viable campaign.

Appendix B: Representative Character of Candidate Samples, By State

	Arizona		Maine		Maryland	
	Population	Sample	Population	Sample	Population	Sample
Democrats	34.0	39.7	48.8	52.3	59.3	66.1
Republicans	58.7	52.9	48.5	44.9	35.5	29.8
Challengers	26.3	44.1	40.3	39.2	29.1	43.9
Incumbents	32.0	30.9	30.0	32.0	29.7	27.6
Open Seats	41.7	25	29.7	28.8	41.1	28.5
Primary Winners	77.4	80.8	93.2	95.4	61.4	62.9
Accepted Public Money	60.0	67.6	75.1	84.2	NA	NA

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