No. 10-238, 10-239

IN THE

Supreme Court of the United States

ARIZONA FREE ENTERPRISE CLUB'S FREEDOM CLUB PAC, ET AL.,

Petitioners,

and

JOHN MCCOMISH, ET AL.,

Petitioners,

v.

KEN BENNETT, IN HIS OFFICIAL CAPACITY AS ARIZONA SECRETARY OF STATE, ET AL.,

Respondents.

ON WRITS OF CERTIORARI TO THE UNITED STATES COURT OF APPEALS FOR THE NINTH CIRCUIT

BRIEF FOR *AMICI CURIAE* COSTAS PANAGOPOULOS, PH.D., RYAN D. ENOS, PH.D., CONOR M. DOWLING, PH.D. AND ANTHONY FOWLER IN SUPPORT OF RESPONDENTS

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INTERESTS OF *AMICI CURIAE*[1]

Amici Curiae ("*Amici*") are scholars (political scientists) who are experts in the American electoral system including campaigns and elections, campaign strategy, voting behavior, public opinion, campaign finance, political psychology, racial politics, and state and local politics. In their research they routinely utilize econometric tools and statistical methods. The team leader, Costas Panagopoulos, Ph.D.,[2] is an Assistant Professor of Political Science, director of the Master's Program in Elections and Campaign Management and founder and director of the Center for Electoral Politics at Fordham University. Dr. Panagopoulos is also an expert on public financing in American elections and editor of the forthcoming book volume, *Public Financing in American Elections* (Temple University Press). Ryan D. Enos, Ph.D. is an Assistant Professor of Government, Faculty Associate at the Institute of Quantitative Social Science, and a member of the Executive Committee for the Center for American Political Studies at Harvard University. Conor M. Dowling, Ph.D. is a postdoctoral associate in the Institution for Social & Policy Studies and the Center

1. No counsel for a party authored this brief in whole or in part, and no such counsel or party made a monetary contribution intended to fund the preparation or submission of this brief. No person other than the *Amici*, or their counsel, made a monetary contribution intended to fund its preparation or submission. The parties have filed blanket waivers with the Court consenting to the submission of all amicus briefs.

2. A more detailed description of the credentials of each *Amicus* can be found in the Appendix, which includes *Amici's* report "The Effects of Arizona's Campaign Finance Laws on Campaign Spending and Free Speech" ("*Amici's* Report"), at 1a-3a.

for the Study of American Politics at Yale University. Anthony Fowler is a Ph.D. student in the Department of Government at Harvard University.

Amici write to provide the Court with their original data analyses and the findings of their empirical testing of Petitioners' claim that the matching funds provision in Arizona's Citizens' Clean Elections Act (the "Act") inhibits the free spending of nonparticipating candidates and independent groups. *Amici* believe it is essential that the Court have empirical data regarding the systematic impact of the Act's matching funds provision on candidate spending behavior in Arizona. After conducting multiple, rigorous statistical tests, *Amici* found no empirical evidence to support the Petitioners' claim that the matching funds provision inhibits political spending (i.e., "chills" political speech). Rather, nonparticipating candidates and independent groups appear to spend just as much when the matching funds provision is applicable as they do in the absence of the law.

SUMMARY OF THE ARGUMENT

Despite Petitioners' claims that the matching funds provision in the Act burdens political speech and, therefore, is subject to strict scrutiny, the empirical evidence demonstrates that the matching funds provision does not deter, limit, or otherwise restrain speech. Without such deterrence or restraint on speech, Petitioners cannot show that the matching funds provision imposes a direct and substantial burden on speech, as is necessary for this Court to apply strict scrutiny to the statute.

In an attempt to convince this Court otherwise, Petitioners have emphasized anecdote over empirical

reality. Petitioners' arguments are unavailing, however, as all available empirical evidence – the scientific studies currently in the record and the original data analyses performed by *Amici* – find no evidence that spending has been chilled.

Amici tested whether nonparticipating candidates' spending tends to cluster below the matching funds provision's triggering threshold; if the provision actually inhibits spending by nonparticipating candidates, one would expect nonparticipating candidates to spend just below the threshold that would trigger additional funds to their participating opponents. *Amici*, however, found no evidence of such behavior. In addition, *Amici* tested whether spending by nonparticipating candidates and independent groups increased when the Act's matching funds provision was suspended by this Court's injunction in 2010. If the matching funds provision inhibited spending, one would expect a marked increase in spending by nonparticipating candidates once the distribution of matching funds was suspended. Again, *Amici* found no evidence of such behavior.

What do *Amici's* analyses and findings affirmatively demonstrate? (A) There is no statistically significant evidence of clustering below the triggering amount in Arizona elections between 2006 and 2010; and (B) Spending in Arizona's 2010 election, after the Court enjoined the operation of the matching funds provision, did not increase relative to other states. *Amici's* research, analyses and findings conclusively establish that the matching funds provision does not deter or otherwise "chill" the propensity to speak by nonparticipating candidates and their supporters.

Without any such deterrence, Petitioners have simply failed to demonstrate that the matching funds provision imposes a burden on speech. However, even if this Court decides, like the Ninth Circuit, that the Act's matching funds provision might indirectly and incidentally burden speech, the matching funds provision is only subject to intermediate scrutiny. Under intermediate scrutiny, the Ninth Circuit correctly held that the matching funds provision did not violate the First Amendment because there was a substantial relation between the Act's matching funds provision and Arizona's important and compelling government interest in preventing and combating corruption. Accordingly, the Ninth Circuit's judgment should be affirmed.

ARGUMENT

1. *AMICI'S* RESEARCH, ANALYSES AND FINDINGS DEMONSTRATE THAT THE MATCHING FUNDS PROVISION IN THE ACT DOES NOT IMPOSE A DIRECT AND SUBSTANTIAL BURDEN ON SPEECH

Unlike the expenditure bans struck down in *Buckley* and *Citizens United*, and unlike the discriminatory contribution limitations struck down in *Davis*, Arizona's matching funds provision does not limit or restrict the campaign spending of nonparticipating candidates in any way. Instead, the matching funds provision is simply a triggering mechanism for the fair and efficient distribution of public funding. Confronted with this clear distinction between regulations that directly and substantially burden speech and the challenged matching funds provision, Petitioners have relied on personal,

anecdotal evidence – not empirical data and scientific analysis – to claim that fundraising and spending have been unconstitutionally burdened. The *Amici's* research, however, shows that Petitioners' claims of "burden" are overstated and unsupported and, thus, that their argument for the application of strict scrutiny is fatally flawed.

A. Petitioners Levy Weak Support for Their Claims That the Matching Funds Provision Burdens Speech

Petitioners rely almost exclusively on anecdotal evidence to support their assertion that the impact of the matching funds provision is to create a direct and substantial burden on speech. Yet such anecdotal evidence, because it is grounded in human attribution, by its very nature cannot control for multi-variable causation. Accordingly, such evidence, cannot foreclose the possibility that, notwithstanding the good faith beliefs or perceptions of those who gave such testimony in the proceedings below, variables *other* than the matching funds provision actually drove spending decisions. Therefore, Petitioners' evidence fails to establish definitively any causal effect between the matching funds provision and the amount of speech actually disseminated by a single candidate or Arizona candidates as a group.

For example, Petitioners rely on testimony that Petitioner McLain and former gubernatorial candidate John Munger both decided to forego or minimize self-financing after considering the effect of matching funds on the competitiveness of their campaigns. However, these representations by the parties-in-interest in this case say nothing about the total amount of money ultimately spent

by their respective campaigns. Nor do they definitively establish that *matching funds* (rather than, for example, a particularly strong oppositional candidate) was the causal force behind such a decision. A rational candidate will always consider her own resources and prospective resources, the resources and prospective resources of her opponents, and the marginal value of any additional dollar spent at any given time or place, in determining an optimal campaign spending strategy.[3] That this is so, and that in certain circumstances the analysis of an opponent's potential resources may involve reference to the matching funds provision, says nothing about what that opponent's resources would have been in the absence of a public finance system or that, in the absence of the matching funds provision, the testifying candidates would necessarily have spent more money or disseminated more speech. Indeed, Petitioners themselves present several examples of candidates and independent expenditure groups making expenditures notwithstanding the presence of matching funds. *See e.g.*, Brief for Petitioners McComish *et al.* ("McComish Brief") at 41 (noting gubernatorial candidate Matt Salmon held fundraiser notwithstanding

3. *See e.g.*, Adam Nagourney & Jeff Zeleny, *Obama Forgoes Public Funds in First for Major Candidate*, N.Y. Times, June 20, 2008 (discussing factors underlying presidential candidates Barack Obama's and John McCain's respective decisions to reject and accept public financing, including assessments of how much the other had raised and could raise); Stanton A. Glantz *et al.*, *Election Outcomes: Whose Money Matters?*, 38 J. Pol. 1033 (1976) (presenting research that marginal value of election money spent is greater for challengers than incumbents); Molly J. Walker Wilson, *Behavioral Decision Theory and Implications for the Supreme Court's Campaign Finance Jurisprudence*, 31 Cardozo L. Rev. 679, 686 (2010) (underscoring the "importance of tactical maneuvering in political campaigns"), 695–698 (discussing strategies for maximizing the campaign value of political speech).

disbursement of matching funds to his opponent); Brief for Petitioners Arizona Free Enterprise Club's Freedom Club Pac, *et al.* at 18-19 ("Committee Brief") (citing independent expenditures made by Republican Party on behalf of Matt Salmon, despite the availability of matching funds); McComish Brief at 32 (noting the Arizona Realtors Association made independent expenditures of $6,500 for the election of Petitioner McComish, triggering $18,330 to his opponents). Thus, the many concrete examples in the historical record that are cited by Petitioners show that candidates and their supporters have not been chilled by matching funds, but instead have chosen to speak, fundraise and spend without regard for the matching funds provision.

As such, although the record discusses the various *perceptions* and *attributions* of various interested parties regarding the impact of matching funds on campaign spending, such testimony is of limited value because it cannot, by its very nature, scientifically control for the possibility that factors other than matching funds affected spending choices or the alternate possibility that campaign spending has not, in adjusted terms, changed at all as a result of the matching funds provision.[4] Moreover, this anecdotal evidence is contradicted by the behavior of the Petitioners themselves, many of whom triggered the matching funds by exceeding the threshold despite their knowledge of the Act. *See, e.g.*, Respondent Clean

4. Wilson, *supra*, at 699 (discussing research demonstrating "that individuals who are predisposed to a certain position or explanation are significantly less likely to generate or be receptive to disconfirming or challenging information"); Charles G. Lord *et al.*, *Biased Assimilation and Attitude Polarization: The Effects of Prior Theories on Subsequently Considered Evidence*, 37 J. Personality & Soc. Psychol. 2098 (1979).

Elections Institute, Inc. Brief ("Clean Elections Brief") at 6-7 (noting Petitioners McComish, Bouie, and McLain each exceeded the spending limit despite the distribution of matching funds; Petitioner Martin triggered matching funds in contradiction of his sworn testimony that he could not recall having done so; matching funds never caused Petitioners Murphy or McLain to reject a contribution or stop fundraising) (citing JA 433-34; JA 704; JA 384-85; 545-46; ECF 369-2, 370-2; JA 574-75, 755; JA 410; 594-95; JA 412; JA 416.)[5]

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5. In addition to relying exclusively on anecdotal evidence, Petitioners mischaracterize aspects of the operation of the Act. For example, they mistakenly claim the existence of a so-called multiplier effect where multiple privately financed candidates run against a single publicly financed candidate. Petitioners suggest that in this scenario, if $10,000 in expenditures above the spending limit are made by or on behalf of each privately financed candidate, the single publicly funded candidate will receive $28,200 in matching funds ($30,000 minus six percent). Committee Brief at 5; *see also* McComish Brief at 31-32. However, Petitioners have failed to acknowledge the fact that the disbursement of matching funds adjusts the spending limit for a publicly funded candidate. *See* A.R.S. § 16-952. Thus, where one publicly financed candidate competes against three privately financed candidates and all candidates have spent up to (but not exceeded) a hypothetical $10,000 spending limit, if an independent expenditure of $10,000 is made on behalf of one privately funded candidate, the publicly funded candidate will receive $10,000 in matching funds (minus six percent) and the spending limit will be adjusted upward to $20,000. If a second or third independent expenditure of $10,000 is made on behalf of a second or third privately funded candidate, no additional matching funds will be disbursed because the adjusted spending limit of $20,000 has not been exceeded. All candidates have spent up to, but not exceeded, the adjusted spending limit. Thus, Petitioners' so-called "multiplier effect" simply does not exist.

B. *Amici's* Research Extends and Confirms the Research Already in the Record Showing That the Matching Funds Provision Does Not Cause Clustering and Has No Impact on Overall Spending

1. Professor Green's research indicates that clustering did not occur at the Act's matching funds provision's threshold amount

Professor Donald Green is the A. Whitney Griswold Professor of Political Science at Yale University. JA 874-75 at ¶ 2. Professor Green wanted to assess empirically whether clustering occurred at the Act's matching funds provision's threshold amount. His methodology was: (1) reviewing all campaign expenditures in 1998 before implementation of the Act; (2) reviewing all campaign expenditures in 2006 after the Act was applied; and (3) reviewing patterns of spending by nonparticipating candidates in 2006 who were opposed in the general election by at least one participating candidate. JA 943 at ¶ 10.

As Green hypothesized, if nonparticipating candidate behavior was in fact burdened by the matching funds provision's threshold limit, one would expect to see nonparticipating candidate spending cluster just below the threshold amount. In this way nonparticipating candidates could make the maximum amount of expenditures but avoid triggering the matching funds provision. Yet Professor Green's testimony is that his research unequivocally demonstrates that no such clustering occurred. *Id.* at ¶ 11.

For example, in 2006 the Act's matching funds threshold was $17,918. *Id.* In that year 46 nonparticipating candidates faced a publicly financed opponent in the general election. *Id.* at ¶ 12. Of the 46 candidates, 39 spent less than $15,000 and therefore never reached the matching funds threshold. JA 943-44 at ¶ 12. One candidate spent between $15,000 and $26,000; the remaining six candidates spent between $26,000 and $149,000. JA 944 at ¶ 12. Based on this "smooth" distribution, Professor Green concluded there was no tendency for nonparticipating candidates' expenditures to cluster just below the $17,918 threshold limit. JA 943 at ¶ 11. Professor Green's findings suggest that nonparticipating candidates' behavior is not governed by the Act's matching funds provision and their speech is not burdened by the Act.

2. The *Amici's* new research on clustering confirms that there is no statistically significant evidence of clustering in Arizona elections between 2006 and 2010

Amici, like Professor Green, undertook an analysis to determine whether nonparticipating candidates in Arizona spent just below the matching funds provision's triggering threshold. Unlike Professor Green, *Amici* also included the 2010 election year in the analysis, as well as the 2006 and 2008 election years. In addition, *Amici* conducted rigorous statistical tests to determine if there was empirical evidence of systematic clustering at conventional levels of statistical significance in the election cycles they analyzed. The results of their analyses indicate that nonparticipating candidates' spending did not "cluster" below the triggering threshold.[6]

6. *Amici* note that they cannot test whether spending was "chilled" for individual candidates, but they can look at

To test for clustering, *Amici* collected general election data for every nonparticipating state legislative candidate in 2006, 2008 and 2010 in Arizona who ran against at least one participating candidate. The distribution of spending for these nonparticipating candidates in each of the elections reveal no evidence of clustering below the triggering threshold, and therefore contradicts the contention that nonparticipating candidates intentionally spend below the threshold.[7] For 2006 and 2008, there were 88 nonparticipating candidates for Arizona state legislature running against a participating opponent. Of those, 55 nonparticipating candidates spent less than $10,000, which is well below the triggering thresholds in each cycle respectively. Of the remaining 33 candidates, 11 spent more than $30,000, well above the triggering thresholds. These candidates do not appear to be deterred by the matching provision. That leaves only one-fourth of nonparticipating candidates in these election cycles whose spending could have been plausibly deterred by the matching funds provision. Among these candidates, *Amici* found no evidence that these candidates spent strategically below the threshold.[8]

Furthermore, this Court's issuance of an injunction suspending Arizona's matching funds provision in June 2010 failed to alter nonparticipating candidate spending behavior; as *Amici's* analysis shows, the distribution of

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the spending of many candidates to assess the extent to which candidates may have strategically held back their spending to avoid triggering matching funds.

7. For complete details on this analysis please see Appendix, *Amici's* Report at 5a-12a.

8. Appendix, *Amici's* Report at 6a-7a.

spending is similar for all three years, and there is no evidence of clustering in any year.[9]

As an additional test, the *Amici* conducted the same analytical method for the state of Maine, which has a similar, although not identical,[10] matching funds provision as Arizona, to test whether a similar pattern exists there. *Amici* compiled general election spending data from nonparticipating state legislative candidates from 2000-2010, and found no statistical evidence of clustering around the triggering threshold.[11] In short, analysis of clustering around the triggering threshold in Arizona and Maine indicates that nonparticipating candidates do not strategically stop their spending to avoid triggering the matching funds.[12]

Accordingly, as Professor Green previously demonstrated, and *Amici* now confirm with original analyses of the 2006, 2008 and 2010 election cycles, the matching funds provision does not cause a clustering of spending below the triggering threshold. This in turn demonstrates that the matching funds provision does not deter or otherwise "chill" spending.

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9. *Id*. at 7a.

10. Maine's matching funds provision can be found at 21-A Maine Revised Statutes ("M.R.S.") § 1125(9).

11. Appendix, *Amici's* Report at 8a-12a.

12. *Id*.

C. The *Amici's* Research and Analyses Demonstrates No Change in Political Spending in 2010 Despite this Court's Injunction on the Act's Matching Funds Provision

The Respondents' experts have previously demonstrated that the Act's matching funds provision did not create a reduction in privately financed candidates' or independent groups' expenditures, but instead that expenditures of both have increased over time since the Act took effect in Arizona. *See, e.g.*, Clean Elections Brief at 6-7, 18-19. *Amici* recognized that this Court's injunction, which suspended the distribution of matching funds during the 2010 Arizona elections, provided a unique opportunity to test for the effects of the matching funds provision on overall campaign spending to see whether spending increased in 2010 more than would have been expected had the matching funds provision not been enjoined. *Amici*, therefore have collected and analyzed political expenditure data in Arizona in order to analyze the injunction's effect on spending. If, as Petitioners argue, the Act's matching funds provision deters political spending and therefore burdens speech, one would expect to see a marked increase in political spending in the 2010 election *after* suspension of the matching funds provision. Instead, the empirical data fail to demonstrate any statistically significant evidence of an increase in 2010 election spending in Arizona.[13]

Again using the Arizona spending data, *Amici* analyzed the mean and median levels of spending for

13. For complete details of the analyses performed by *Amici* please see Appendix, *Amici's* Report, at 13a-20a.

nonparticipating state legislative candidates who ran against at least one publicly funded opponent in 2006, 2008 and 2010. The data revealed that the distribution and magnitude of spending was no different under a system of matching funds (2006 and 2008) than it was when the matching funds provision was removed in 2010. In fact, spending levels were lower in 2010 than in 2008. This is evidence that matching funds did not "chill" the spending of nonparticipating candidates; if they had, one would expect to see more spending in 2010 after the injunction was issued.[14]

To test this hypothesis further, *Amici* compared Arizona and Maine since both states have similar matching funds programs and have similar levels of *per capita* campaign spending. Comparing Arizona and Maine, both states exhibit a similar trend in spending between 2002 to 2008. If, as Petitioners contend, the matching funds provision actually chilled political spending, the injunction in Arizona should have caused Arizona's spending to significantly increase relative to Maine (where matching funds were not enjoined). However, the evidence shows that overall *per capita* spending in Maine actually increased more than Arizona between 2008 and 2010. This is further proof that the injunction did not increase spending in Arizona.[15]

For yet another test of this hypothesis, *Amici* collected data on overall campaign spending from 2000 through 2010 for as many states as possible.[16] For each state *Amici*

14. Appendix, *Amici's* Report at 13a.

15. *Id.* at 14a-15a.

16. *Id.* at Appendix Table 1.

obtained the following: (1) the total amount of spending by statewide and state legislative candidates and (2) total amount of spending by PACs and interest groups.[17] Next, *Amici* employed a statistical technique called synthetic control that allowed *Amici* to find the weighted average of other states that most closely mirror Arizona in terms of campaign spending, population, population growth and other demographic or political variables. Through multiple tests and specifications, *Amici* found no evidence that overall campaign spending increased in Arizona in 2010 relative to the synthetic control of other comparable states, despite the injunction. If anything, the increase in overall spending in Arizona between 2008 and 2010 was *smaller* than the increase in these other states.[18]

As a final test of the effects of the 2010 injunction, *Amici* employed the "difference-in-differences"[19] method to test whether election spending in Arizona in 2010 increased more than would have been expected in the absence of the injunction. *Amici* then generated regression analyses (i.e., predictive statistical spending models) to test if the injunction caused the difference between Arizona in 2010 and previous years to be greater than the difference between 2010 and previous years for other states. The regression models test for the effect

17. For each state, campaign expenditure data was collected from the state's official election web pages.

18. Appendix, *Amici's* Report at 16a-17a (providing an example of such a synthetic control analysis using California, Maine, Michigan and Tennessee).

19. A difference-in-differences method looks at the differences in changes in spending from one election year to the next between sets of states.

of the 2010 injunction in Arizona, while controlling for different average levels of spending in each state and for different spending levels in each year (captured through the use of state and year fixed effects variables in the models).[20] The regression models estimated the effect of the injunction on three types of spending: (1) total candidate spending, (2) total spending of privately funded, nonparticipating candidates, and (3) total spending by PACs and independent groups.[21] If the matching funds provision caused a "chill" on campaign spending before 2010, a large, positive effect of the injunction on spending would be expected. However, for all three types of spending, there was not a statistically significant or substantively significant effect of the injunction. In fact, the models indicate that candidate spending actually decreased after the injunction in 2010.[22] This is the opposite of what should happen if spending was chilled, as Petitioners contend. Indeed, focusing on the analysis of private and independent spending, the nonparticipating candidates spent three dollars per person less than expected and independent groups spent twenty-five cents per person more than expected.[23] Neither result, however, is statistically significant or substantively meaningful. In sum, there was no evidence found to support the notion that the injunction resulted in increased spending or that the matching funds provision inhibited spending in Arizona. Accordingly, Petitioners' claim that the matching funds provision deters or otherwise "chills" spending is entirely unsupported by the empirical evidence.

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20. Appendix, *Amici's* Report at 18a-19a.

21. *Id*. at 19a.

22. *Id*. at 19a-20a.

23. *Id*. at 20a.

II. ALTHOUGH THE EMPIRICAL DATA REVEAL THAT THERE IS NO EVIDENCE THAT THE ACT'S MATCHING FUNDS PROVISION BURDENS SPEECH, IF THIS COURT FINDS THAT THERE MAY BE AN INCIDENTIAL OR INDIRECT BURDEN, THE MATCHING FUNDS PROVISION IS SUBJECT ONLY TO INTERMEDIATE SCRUTINY REVIEW

As the research and analyses performed by *Amici* demonstrate, there is no empirical evidence that the matching funds provision even incidentally burdens speech, as Arizona's campaign spending continued to rise while the matching funds provision was in place, and there was no statistically significant increase in spending when the matching funds provision was suspended by the injunction in 2010. *See supra* pp. 13-17. This evidence, coupled with Petitioners' failure to provide any concrete evidence to the contrary, demonstrates that the Act imposes no burden on speech. However, even if this Court decides, like the Ninth Circuit, that the matching funds provision might indirectly and incidentally burden speech, the matching funds provision is subject to only intermediate scrutiny. *McComish v. Bennett*, 611 F.3d 510, 520 (9th Cir. 2010); *see also Buckley v. Valeo*, 424 U.S 1, 52 (1976); *Citizens United v. Fed. Election Comm'n*, 130 S.Ct. 876, 908 (2010); *Davis v. Fed. Election Comm'n*, 554 U.S. 724, 740 (2008).

Ultimately, Petitioners' complaint about the Act's matching funds provision is not that their speech has been silenced, but rather that their opponents' speech has been enabled. If the Court accepts this proposition it will allow Petitioners to use the First Amendment to

condone a candidate's choice not to speak unless his can be the only voice heard. The Ninth Circuit properly rejected this argument, as did the First Circuit before it. *See McComish*, 611 F.3d at 524; *Daggett v. Comm'n on Governmental Ethics and Election Practices*, 205 F.3d 445, 464 (1st Cir. 2000) (holding the First Amendment includes "no right to speak free from response"). This Court should do so as well.

CONCLUSION

Based on the foregoing, the Act's matching funds provision does not place a direct and substantial burden on political speech, subjecting the statute to intermediate, not strict scrutiny. Accordingly, because the matching funds provision directly furthers Arizona's compelling interest in combating corruption and enhancing political speech, the Ninth Circuit's judgment should be affirmed.

Respectfully submitted,

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APPENDIX

APPENDIX — THE EFFECTS OF ARIZONA'S CAMPAIGN FINANCE LAWS ON CAMPAIGN SPENDING AND FREE SPEECH

The Effects of Arizona's Campaign Finance Laws on Campaign Spending and Free Speech

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Credentials

COSTAS PANAGOPOULOS, Ph.D., is assistant professor of political science (2005-present), director of the Master's Program in Elections and Campaign Management (2005-present), and founder and director of the Center for Electoral Politics (2008-present) at Fordham University. He was previously a research fellow at the Institution for Social and Policy Studies at Yale University (2005-2006). He served as an American Political Science Association Congressional Fellow in the office of Senator Hillary Rodham Clinton (D-NY) in 2004-2005.

Panagopoulos studies American politics with an emphasis on campaigns and elections, voting behavior and mobilization, campaign strategy, public opinion, campaign finance and Congress. He received his Ph.D. in Politics from New York University in 2005, his Master's in Politics from New York University in 2001 and his undergraduate degree in Government, *magna cum laude*, from Harvard University in 1994. His research has been published in the *American Journal of Political Science, Journal of Politics, Public Opinion Quarterly, Political Research Quarterly, Political Behavior, American Politics Research, Presidential Studies Quarterly, Electoral Studies, PS: Political Science and Politics, Women & Politics*, and the *Journal of Political Marketing.* Dr. Panagopoulos is editor of *Public Financing in American Elections* (Temple University Press, *forthcoming*) and *Rewiring Politics: Presidential Nominating Conventions in the Media Age* (LSU Press) and *Politicking Online: The Transformation of Election Campaign Communications* (Rutgers University Press) and coauthor (with Joshua Schank) of *All Roads Lead to Congress: The $300 Billion Fight Over Highway Funding* (CQ Press).

RYAN D. ENOS, Ph.D., is an Assistant Professor of Government, Faculty Associate at the Institute of Quantitative Social Science, and a member of the Executive Committee for the Center for American Political Studies at Harvard University (2010-present). His expertise is in American politics, political psychology, and racial politics. He has taught undergraduate and graduate courses in American politics, elections, political psychology, experimental methods, and other topics. His

research has been published in the *Quarterly Journal of Political Science*. He earned his BA in Political Science and History with high honors in Political Science and Distinction in General Scholarship from the University of California, Berkeley, and his M.A. and Ph.D. in Political Science from the University of California, Los Angeles (2010).

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Appendix

Summary of Findings

Our main goal is to empirically test the Petitioners' primary claim in *McComish v. Bennett* that Arizona's matching funds provision inhibits the free spending of independent groups and nonparticipating candidates. We proceed by testing whether nonparticipating candidate spending tends to cluster below the triggering threshold. If the trigger provision inhibits spending by nonparticipating candidates, we might expect nonparticipating candidates to spend just below the threshold that would trigger additional funds to their participating opponents. We find no evidence of such behavior. Second, we exploit the Court's 2010 injunction of Arizona's matching funds provision to test whether spending by nonparticipating candidates and independent groups increased when the provision was suspended. Comparing spending trends in Arizona to those in comparable states, we find no evidence that spending changed in 2010 as a result of the injunction. After multiple, rigorous statistical tests, we find no empirical evidence to support the Petitioners' claim that Arizona's matching funds provision inhibits political spending (i.e., "chill" political speech). Independent groups and nonparticipating candidates appear to spend just as much under the matching funds provision as they would in absence of the law.

Appendix

I. Does Spending Cluster Below the Triggering Threshold?

If nonparticipating candidates in Arizona consciously hold back their campaign spending to avoid the triggering of funds to their participating opponents, we might expect that spending would be clustered just below the triggering threshold. Under the hypothesis of such a "chilling" effect, a candidate who would have spent above the threshold might hold back and spend just below the threshold. For an individual candidate, we cannot test whether spending was chilled, but we can look at the spending of many candidates to assess the extent to which candidates may have strategically held back their spending to avoid triggering matching funds.

To test for clustering, we collected campaign spending data for every privately-funded (nonparticipating) state legislative candidate who faced a publicly-funded opponent in general elections in 2006, 2008 and 2010. For each nonparticipating candidate, we standardized spending in each cycle by dividing expenditures by the applicable triggering threshold ($17,918 for 2006, $19,382 for 2008, and $21,479 for 2010). Thus, a candidate that spent exactly as much as the triggering threshold (for example, $17,918 in 2006) would receive a value of 1, and so forth.

Figure 1 shows the distribution of general election spending for the privately-funded (nonparticipating) candidates who faced publicly-funded opponents in each election.[1] The horizontal axis displays the converted

1. For visual purposes, we do not show the candidates (less than 10% of the sample) who spent more than 2 times the threshold.

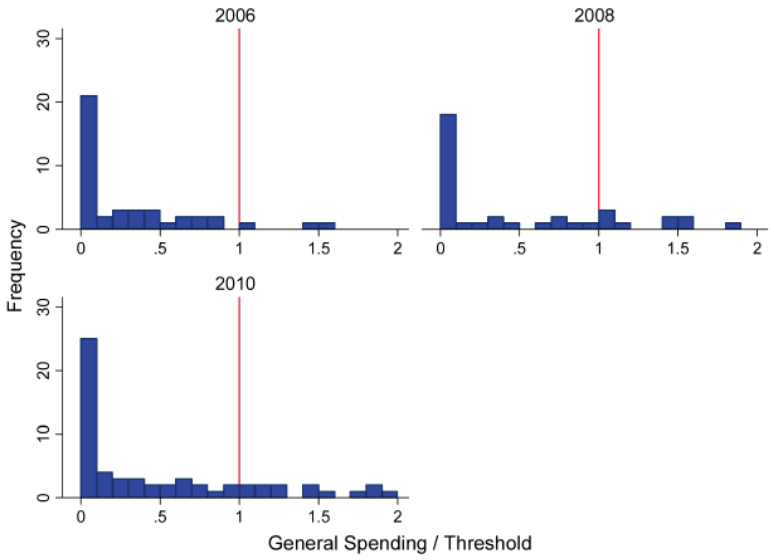
spending figures (nonparticipating candidate spending in the general election/triggering threshold), while the vertical axis displays the number of nonparticipating candidates that fall into each bin. Most nonparticipating candidates spend well below the threshold (denoted by the red vertical line). Many of these candidates were probably either likely to win by a large margin, uncompetitive, or unable to qualify for public funding. Nevertheless, we see no evidence that nonparticipating candidates intentionally spend below the threshold. If nonparticipating candidates were intentionally spending below the threshold, we might expect a cluster of spending just to the left of 1 (the red vertical line). However, there are just as many nonparticipating candidates spending barely above the threshold as there are nonparticipating candidates spending just below. In fact, in 2006 and 2008, more candidates spent just above the threshold than just below, which would be the opposite behavior we would have expected if a chill was caused by the matching funds provision.

For 2006 and 2008, there were 88 nonparticipating candidates for state legislature running against a participating opponent in Arizona. Of these, 55 nonparticipating candidates spent less than $10,000, well below the triggering thresholds in each cycle respectively. These candidates were not deterred by matching funds because they did not raise or spend enough funds for the threshold to be a relevant consideration. For example, in 2008, these candidates could have spent an extra $9,382 without triggering matching funds. Of the remaining 33 candidates, 11 spent more than $30,000, well above the triggering thresholds. These candidates also do not appear to be deterred by matching funds. That leaves only one-fourth of nonparticipating candidates in these

election cycles whose spending could have been plausibly deterred by the matching funds provision. Among these candidates, we see no evidence that they strategically stop their spending below the threshold.

Furthermore, because the Supreme Court issued an injunction in 2010, which suspended the distribution of matching funds during the 2010 campaign, we might expect candidates to behave differently in 2010 than 2006 or 2008. Yet, the distribution of spending is similar for all three years, and there is no evidence of clustering below the triggering thresholds in any year.

Figure 1. Distribution of Spending by Privately-Funded (Nonparticipating) State Legislative Candidates Facing Publicly-Funded Opponents in Arizona (General Elections, 2006-2010)

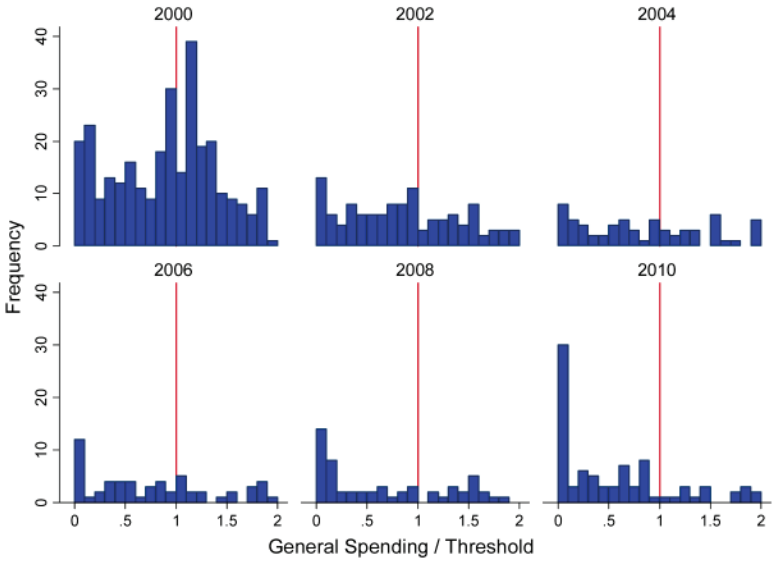


Appendix

As an additional test, we conduct a parallel analysis using general election campaign spending data for privately-funded (nonparticipating) state legislative candidates who faced publicly-funded opponents in Maine between 2000 and 2010. Maine has a similar, although not identical, public financing program with a matching funds provision for state legislative candidates. Figure 2 presents the spending distributions among these candidates for each election cycle. The evidence reveals the overall number of nonparticipating candidates has decreased over time, but, as in Arizona, clear visual evidence of clustering below the corresponding triggering thresholds for each cycle does not emerge. Below we proceed to perform more rigorous analytic tests to detect clustering.

Appendix

Figure 2. Distribution of Spending by Nonparticipating State Legislative Candidates Facing Publicly-Funded Opponents in Maine (General Elections, 2000-2010)



Beyond the visual analyses we present above, we can conduct statistical tests for evidence of clustered spending around the triggering thresholds. The most rigorous approach, proposed by McCrary (2008), tests for a discontinuity of the density function at the threshold by conducting local linear regression on both sides of the threshold.[2] Table 1 presents statistical estimates for the

2. This method requires arbitrary decisions to be made about the bin size and the window of analysis. However, the results are insensitive to changes in these specifications. Reference: McCrary, Justin. 2008. "Manipulation of the Running Variable in the Regression Discontinuity Design: A Density Test." *Journal of Econometrics* 142(2): 698-714.

extent of clustering around the threshold for the analysis of candidate spending in Arizona. The coefficients we report can be interpreted as the difference between the number of nonparticipating candidates spending just below the threshold and the number of nonparticipating candidates spending just above the threshold. Positive values would indicate clustering below the threshold and negative values would indicate clustering above the threshold. The p-value is a standard measure of statistical significance. It indicates the probability that our observed result would have occurred by chance if there truly was no clustering. A lower p-value indicates a lower probability that our observed result could have occurred by chance. Generally, a coefficient is not considered statistically significant unless the p-value is at least less than .05, suggesting confidence at the 95 percent level. The most reliable statistical estimates are achieved by pooling the data across years. This approach provides for more data and allows for the most rigorous test of the clustering hypothesis. In Arizona, we pool the data from 2006 and 2008 and compare the results in those years to 2010, when the Court issued the injunction. If clustering existed prior to the Court issuing the injunction we would expect to see evidence for it in the pooled data from 2006 and 2008, but not in 2010.

Table 1 reveals no statistically significant evidence of clustering in Arizona for general elections in 2006 and 2008, before the injunction was issued. The clustering coefficient is substantively small and statistically indistinguishable from zero. The coefficient for 2006 and 2008 is also similar to the coefficient for 2010, indicating

that candidate spending was similar with and without the presence of a triggering threshold. In addition, the signs of the coefficients are negative, which would suggest, if anything, clustering *above* the triggering threshold, a finding that directly contradicts the claim that triggering thresholds artificially suppress spending to just below the thresholds.

Table 1. Statistical Tests for Clustering Around the Triggering Threshold (Arizona, 2006-2010)

	Coefficient	Standard Error	*p*-value
2006-2008	-0.30	0.94	0.75
2010	-0.42	0.43	0.33

In addition, the substantive interpretation of these coefficients gives a sense of how little clustering there actually is. A coefficient of 1 would indicate that there is only a single additional candidate clustered just below the threshold than just above it. Similarly, a coefficient of -1 would indicate a single additional candidate clustered just above the threshold. The coefficients above are between -1 and 1, which means that the statistical evidence indicates virtually no clustering.

We replicate these statistical tests for Maine as well using spending data from privately-funded (nonparticipating) state legislative candidates who faced publicly-funded opponents in general elections between 2000 and 2010. Similar to the Arizona analysis above, here we pool the Maine spending data for all years

in order to provide for the most rigorous test of the clustering hypothesis. We do not find statistically reliable evidence of systematic clustering around the triggering threshold. The coefficient for clustering in Maine is 2.90, with a standard error of 7.10, yielding a p-value of .69. This result falls far outside the accepted standards of statistical significance, indicating there was not systematic clustering behavior.

Additionally, the clustering estimate in Maine is substantively small: the coefficient indicates that across all 6 election cycles for which spending data is available, there were about 3 more candidates just below the threshold than candidates just above. With 802 nonparticipating candidates in total during this period, the estimated effect is extremely small. Regardless, we emphasize the coefficient is not nearly statistically significant at conventional levels. The small and statistically insignificant effect indicates that there has been no substantial clustering of candidates below the triggering threshold in Maine either.

In short, both the visual and statistical analyses for clustering around the triggering thresholds in Arizona and Maine do not reveal evidence that candidate spending is strategic around the triggering thresholds. These empirical results lead us to conclude matching funds do not chill spending.

II. Spending Increase in Arizona after the 2010 Injunction?

In June 2010, the Supreme Court issued an injunction that suspended the distribution of matching funds during the 2010 election cycle in Arizona. This rare intervention provides a unique opportunity to test for the effects of the matching funds provision on overall campaign spending. If matching funds had previously had a chilling effect on the spending of nonparticipating candidates, we should see their spending increase dramatically in Arizona relative to other states in 2010.

We return to spending data for nonparticipating state legislative candidates to test this hypothesis. In 2010, candidates in Arizona decided whether or not to participate in public funding before the injunction occurred, so the types of candidates participating should be similar for 2006, 2008, and 2010. This means we can make a valid comparison of the spending of candidates in these years.

Table 2 shows the mean and median levels of spending for nonparticipating state legislative candidates who ran against at least one participating opponent in Arizona in the election cycles we analyze. We can see that 2010 was not an extraordinary year in terms of campaign spending for this subset of candidates. This initial comparison suggests that the injunction did not have a significant effect on the spending behavior of state legislative candidates. The distribution and magnitude of spending was no different under a system of matching funds (in 2006

and 2008) than it was when the provisions were removed (in 2010). In fact, spending was even lower in 2010 than it was in 2008. This is evidence that matching funds did not chill the spending of nonparticipating candidates; if matching funds had chilled spending, we should observe more spending in 2010 when the injunction had been issued.

Table 2. Magnitude of General Election Spending by Nonparticipating State Legislative Candidates across Elections (Arizona, 2006-2010)

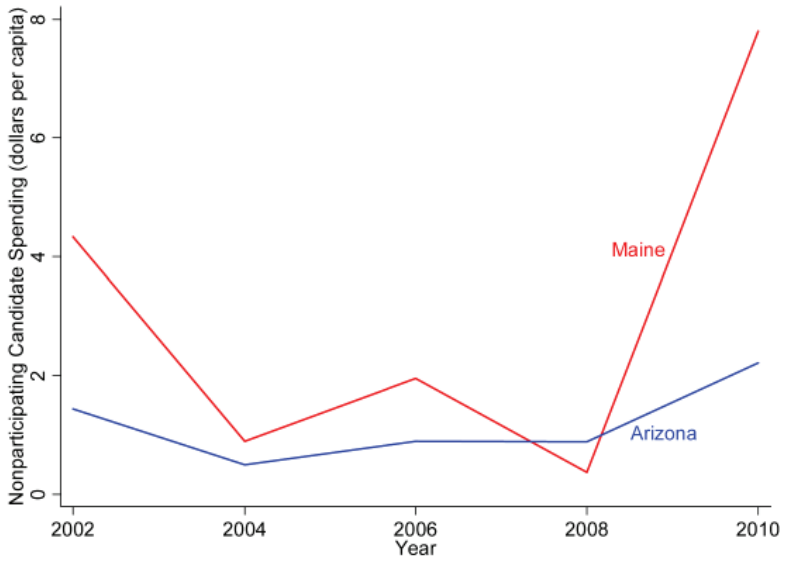
Year	Spending	
	Mean	Median
2006	11550	3637
2008	16172	6565
2010	15223	6898

In order to better understand the effect of the injunction, we can also compare spending in Arizona to other states over time. Every election year is different, and the magnitude of spending will vary with the political climate of the time. For example, spending in states holding elections for high-profile, statewide offices, like governor, will likely be higher than in elections without statewide contests. However, states that share the same electoral calendar (gubernatorial and statewide races occurring at the same time) should exhibit similar trends in campaign spending. Therefore, we can compare changes in spending in Arizona in 2010 to the spending changes in other states to obtain a better estimate of the effect of the injunction.

As we note above, Maine's campaign finance program is similar to Arizona's, and both states have similar levels of per capita campaign spending, making Maine a natural state to compare with Arizona for an initial cross-state analysis. Figure 3 shows the trends in campaign spending for all state legislative and statewide candidates from 2002 to 2010 who opted out of public funding. Both states exhibit a similar trend in spending from 2002 to 2008. If matching funds chill political spending, we should expect that the removal of this provision in Arizona in 2010 would cause spending in Arizona to increase more precipitously relative to spending in Maine. However, the evidence shows that per capita spending in Maine actually increased more so than in Arizona between 2008 and 2010. Over this period, nonparticipating candidates in Maine increased their spending by 7.4 dollars per person, while Arizona's nonparticipating candidates only increased spending by 1.3 dollars per person. Again, we find no evidence that the injunction increased spending in Arizona.

Appendix

Figure 3. Spending Trends for Nonparticipating Candidates in Arizona and Maine (2002-2010)



To test this hypothesis further, we collected data on general election campaign spending between 2000 and 2010 for as many states as possible. For each state-election, we obtained two figures: (1) the total amount of spending by statewide and state legislative candidates and (2) the total amount of spending by PACs and interest groups.[3] Appendix Table 1 shows the state-elections for

3. Each state has different reporting requirements and differing degrees of data accessibility. However, for the purposes of our analysis, it is most important that the data is consistent within each state. This is because the difference-in-differences design used below compares differences within states, which effectively controls for any other differences between states.

which this data has been collected. All of these states hold their gubernatorial and statewide races at the same time, so for the purposes of our analysis, we should expect that these states exhibit similar trends in campaign spending over time.

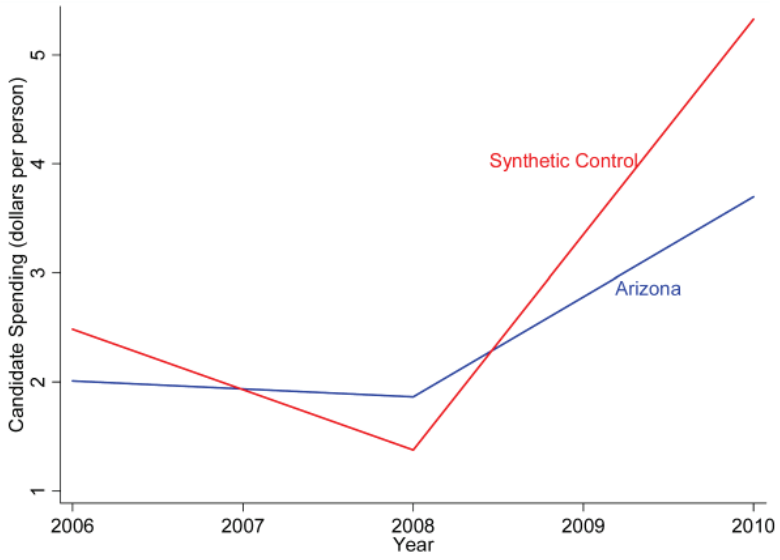
Instead of relying on Maine as our only control state, we can employ a statistical technique called synthetic control to create an additional baseline against which to compare spending changes in Arizona.[4] This approach allows us to find the weighted average of other states that most closely mirror Arizona in terms of campaign spending, population, and population growth, and other demographic or political variables. Through multiple tests and specifications, we find no evidence that campaign spending increased in Arizona in 2010 relative to the synthetic control of other comparable states. If anything, the increase in spending in Arizona between 2008 and 2010 was *smaller* than the increases in other states.

Figure 4 provides one example of such a synthetic control analysis. For all states where we could obtain candidate spending data for 2006, 2008, and 2010 (CA, ME, MI, and TN), we estimated the control group that best matches Arizona in terms of per capita candidate

4. This is a statistical technique published in a leading academic statistical journal in the United States. Reference: Abadie, Alberto, Alexis Diamond, and Jens Hainmueller. 2010. "Synthetic Control Methods for Comparative Case Studies: Estimating the Effect of California's Tobacco Control Program." *Journal of the American Statistical Association* 105(490): 493-505.

spending in 2006 and 2008 and population growth. This particular synthetic control group is a weighted average of Tennessee (weight = .93) and California (weight = .07). Between 2008 and 2010, spending in the synthetic control group increased by 4.0 dollars per capita, while spending in Arizona increased by only 1.8 dollars per person.

Figure 4. Candidate Spending in Arizona and Synthetic Control Group (2006-2010).



As a final test of the effect of the 2010 injunction, we can employ difference-in-differences methods to test whether spending in Arizona in 2010 increased more than would have been expected in the absence of the injunction. A difference-in-differences method simply means we look at the differences in changes in spending between sets of

states. If the injunction had an effect, we would expect the difference between Arizona in 2010 and previous years to be greater than the difference between 2010 and previous years for other states.

In Table 3, we present the results of three regression analyses designed to systematically test for such an effect. The regression models test for the effect of the 2010 injunction in Arizona while controlling for different average levels of spending in each state and for different spending levels in each year (captured through the use of state and year fixed effects variables in the models). The table reports the estimated effect of the injunction on three types of spending separately: (1) total candidate spending, (2) total spending of privately funded, nonparticipating candidates, and (3) total spending by PACs and independent groups. The estimates are reported in units of dollars spent per person living in the state. The table also presents the standard errors associated with each estimate and the corresponding *p*-values, indicating whether the estimates are statistically different from zero.

Table 3. The Estimated Effect of the Injunction on Three Types of Spending

	Coefficient	Standard Error	*p*-value
Candidate Spending	-5.45	3.90	.20
Nonparticipating Candidate Spending	-2.62	2.22	.27
Independent Spending	.25	1.82	.89

Appendix

If the matching funds provision caused a "chill" on campaign spending before 2010, we would expect a large, positive effect of the injunction on spending. For all three types of spending, we fail to estimate a statistically significant or substantively meaningful effect of the injunction. In fact, the models indicate that candidate spending actually decreased after the injunction in 2010. This is the opposite of what should happen if spending was chilled. Focusing on the analysis of private and independent spending, we estimate that nonparticipating candidates spent about 3 dollars per person less than expected and independent groups spent 25 cents per person more than expected on average. Neither result, however, is statistically significant or substantively meaningful. In sum, we fail to find any evidence that the injunction increased spending or that matching fund provision inhibited spending.[5]

Appendix Table 2 provides the more detailed results of the six regressions we estimated with alternative measures of the dependent variables. Again, we find no statistically or substantively significant effect of the injunction on campaign spending. On average, Arizona candidates appear to spend just as much in the presence of the matching funds provision as they would in the absence of such a policy.

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5. For an even simpler test of the hypothesis of a chill, we can estimate these same regression models without controlling for different average levels of spending in each state (state fixed effects) and for different spending levels in each year (year fixed effects). These specifications also fail to detect any statistical or substantive evidence for an increased spending after the Court's injunction.

Conclusion

We conducted a series of statistical analyses to determine whether there is empirical support for the claim that the matching funds provision chill spending, and thereby speech, in Arizona elections. Overall, the evidence we present consistently points in the same direction and leads us to conclude there is no systematic, empirical evidence of such a chilling effect.

Appendix

Appendix Table 1. Available Campaign Finance Data by State and Year

	2000	2002	2004	2006	2008	2010
AK		2		2		2
AZ	2	2	2	2	2	2
CA		1	1	1	1	1
CO		2		2		2
CT		1		1		2
FL		2		2		2
ME		2	2	2	2	2
MI		2	2	2	2	2
OR	1	1	1			
TN			2	2	2	2

A value of 2 means that both candidate and independent spending data is available for this election. A value of 1 means that only candidate spending is available.

Appendix

Appendix Table 2. The Effect of the 2010 Injunction in Arizona on Campaign Spending

	Candidate Spending		Private Spending		Independent Spending	
	per capita	log	per capita	log	per capita	log
Injunction	**-5.45**	**-0.43**	**-2.62**	**-0.06**	**0.25**	**0.63**
	(3.90)	(0.38)	(2.22)	(0.33)	(1.81)	(0.47)
Constant	8.21	14.95	10.12	15.39	7.63	14.70
	(1.64)*	(0.22)*	(1.25)*	(0.22)*	(0.81)*	(0.23)*
Observations	40	40	37	37	30	30
R-squared	0.64	0.90	0.76	0.93	0.86	0.86
SER	4.04	0.50	2.54	0.50	1.95	0.86

NOTES: Ordinary least squares regression. State-clustered standard errors in parentheses. All models include state and year fixed effects.
* Denotes statistical significance at the $p<.05$ level.