Policy Watch: Congressional Campaign Finance Reform

Steven D. Levitt

The Journal of Economic Perspectives, Volume 9, Issue 1 (Winter, 1995), 183-193.

Your use of the JSTOR database indicates your acceptance of JSTOR's Terms and Conditions of Use. A copy of JSTOR's Terms and Conditions of Use is available at http://www.jstor.org/about/terms.html, by contacting JSTOR at jstor-info@umich.edu, or by calling JSTOR at (888)388-3574, (734)998-9101 or (FAX) (734)998-9113. No part of a JSTOR transmission may be copied, downloaded, stored, further transmitted, transferred, distributed, altered, or otherwise used, in any form or by any means, except: (1) one stored electronic and one paper copy of any article solely for your personal, non-commercial use, or (2) with prior written permission of JSTOR and the publisher of the article or other text.

Each copy of any part of a JSTOR transmission must contain the same copyright notice that appears on the screen or printed page of such transmission.

The Journal of Economic Perspectives is published by American Economic Association. Please contact the publisher for further permissions regarding the use of this work. Publisher contact information may be obtained at http://www.jstor.org/journals/aea.html.

The Journal of Economic Perspectives
©1995 American Economic Association

JSTOR and the JSTOR logo are trademarks of JSTOR, and are Registered in the U.S. Patent and Trademark Office. For more information on JSTOR contact jstor-info@umich.edu.

©2001 JSTOR

http://www.jstor.org/
Mon Jul 16 18:12:51 2001

Journal of Economic Perspectives—Volume 9, Number 1—Winter 1995—Pages 183–193

Policy Watch
Congressional Campaign Finance Reform

Steven D. Levitt

Public policies are often made without much recourse to economic reasoning. Economists are often unaware of what is happening in the world of public affairs. As a result, both the quality of public decision making and the role that economists play in it are less than optimal. This feature contains short articles on topics that are currently on the agendas of policymakers, thus illustrating the role of economic analysis in illuminating current debates. Suggestions for future columns and comments on past ones should be sent to Daniel Weinberg, c/o Journal of Economic Perspectives, HHES Division, Bureau of the Census, Department of Commerce, Washington, D.C. 20233.

Introduction

In the abstract, campaign finance reform is popular with both voters and politicians. In practice, however, the political divisiveness of the issue has thwarted all recent reform attempts. As a consequence, the present system of campaign finance is essentially unchanged since 1974 (except for minor modifications in 1979). The reemergence of a single party controlling both Congress and the presidency after the 1992 elections, along with campaign pledges by President Clinton to make campaign finance reform a priority, led many

■ *Steven D. Levitt is a junior fellow in the Harvard Society of Fellows and a faculty research fellow with the National Bureau of Economic Research, Cambridge, Massachusetts.*

observers to predict that major reform would finally be enacted. While both the House and the Senate passed versions of campaign finance reform in 1993, substantial differences between the bills caused the legislation to be stalled in conference committee throughout 1994. The Republican victories in the 1994 midterm elections have further reduced the likelihood of action in this area. Even if the current round of reforms is enacted into law, however, the impact on the political system is likely to be minor.

The major features of the current laws governing congressional elections are as follows. Individuals can contribute no more than $2,000 per candidate per election cycle—$1,000 for the primary and $1000 for the general election —up to a maximum of $25,000 per calendar year in overall contributions.[1] Political action committees (PACs) are restricted to $10,000 per candidate per election cycle. In contrast to individuals, however, there is no overall limit on the amount PACs can distribute. Candidates are required to disclose all contributions and expenditures over $200. There are no legal limits on how much a candidate may spend on his or her own campaign. There is no limit on the total amount of money that a candidate can raise or spend, and no public financing of campaigns.

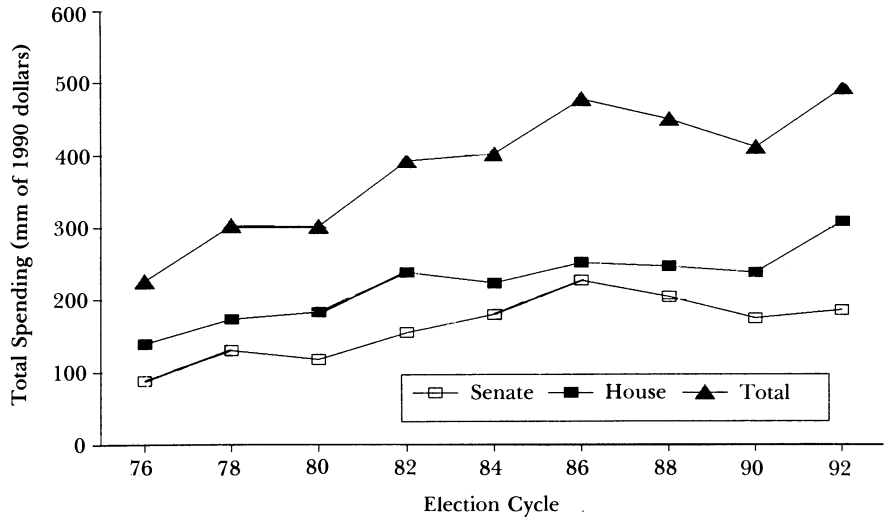
Criticisms of the Current System

The status quo in campaign funding faces three main criticisms. The first criticism is that too many resources are devoted to campaigns. According to this argument, the need to raise vast sums of money to wage a competitive campaign makes congressmen beholden to deep-pocketed special interests, and turns elected officials into full-time fundraisers, distracting them from their tasks as legislators. Figure 1 shows that real campaign expenditures have approximately doubled in both houses of Congress in the last 20 years. In absolute terms, however, spending on congressional campaigns remains low. In the 1991–92 election cycle, total spending was approximately $500 million dollars, or less than $3 per person of voting age. Over the same time period, Americans spent four times as much money on chewing gum and ten times more on greeting cards than they did on congressional elections.[2] Nearly 50 individual companies spend more on advertising in the United States than all congressional candidates combined (*Advertising Age*, September 29, 1993). Congressional spending on advertising represents well under 1 percent of total

[1]The analysis here is limited to congressional campaign finance reform, since the laws governing presidential campaigns differ substantially from the congressional laws. Among the most important differences is the availability of matching funds from the Federal Election Campaign Fund, which is funded via the check-off option on federal income tax forms. Presidential campaign finance is not without its own difficulties; for example, the presidential election fund is nearing bankruptcy, with only one in five taxpayers checking the box.

[2]This comparison is somewhat overstated since much of the time devoted to campaigns is volunteered.

Figure 1
Congressional Campaign Spending by Major Parties, 1976–92
(*in millions of 1990 dollars*)



Notes: Only spending by major party candidates who compete in general elections are included in totals. All values computed from Federal Election Committee data presented in Ornstein et al. (1994).

media expenditure. Alexander (1992) reports that U.S. spending per voter on elections falls near the middle of an international comparison, on par with Japan and India.

A second criticism is that the current system of campaign finance unfairly benefits incumbents and discourages high-quality challengers. Over the last two decades, House incumbents seeking re-election have success rates over 90 percent; senators win re-election approximately 80 percent of the time. When insulated from the risks of electoral defeat, politicians are free to pursue their own objectives rather than those of the electorate (Kalt and Zupan, 1984). Table 1 shows how the margin of spending between incumbents and challengers widened between 1976 and 1992. For example, in races where the incumbent garnered less than 60 percent of the two-party vote, campaign spending was near parity in the House in 1976, but was slanted more than two to one in favor of the incumbent by 1992.[3]

The third criticism is that monied interests exert "undue" influence on political outcomes in the present system of campaign finance. PAC receipts

[3]One facet of the fundraising advantage enjoyed by incumbents is their ability to carry over unspent funds from previous elections. In the House, these incumbent "war chests" at the beginning of the most recent election cycle (1993–1994) totaled $47 million, more than was spent by all House challengers in the previous election cycle.

Table 1
Campaign Expenditures of Incumbents vs. Challengers

	House		*Senate*	
Variable	*1976*	*1992*	*1976*	*1992*
Mean Expenditures				
Incumbents	183	552	1,434	3,575
Challengers	116	156	1,039	1,696
Incumbent: Challenger Spending Ratio (By Incumbent Share of Two-Party Vote)				
> 60%	2.5:1	5.6:1	2.0:1	3.8:1
50–60%	1.2:1	2.8:1	1.4:1	2.2:1
< 50%	1.1:1	2.0:1	1.3:1	1.2:1
PAC Receipts				
Incumbents	61	253	282	1089
Challengers	19	37	132	310

Notes: All dollar values in thousands of 1990 dollars. Averages include only major party candidates who compete in general elections. All values computed from data presented in Ornstein et al. (1994), except for the 1976 PAC data, which is from Jacobson (1980).

accounted for almost half of all spending by House incumbents and a third of Senate expenditures in 1992. Moreover, Table 1 demonstrates that PAC money disproportionately benefits incumbents; in 1992, the average House incumbent enjoyed a seven to one advantage in PAC receipts, while the typical incumbent senator had a three to one edge. Approximately half of the spending gap between House incumbents and challengers is attributable to differential patterns of PAC contributions.

The Current Proposal for Campaign Finance Reform

Campaign reform proposals usually center around three issues: spending limits for candidates, public funding of campaigns, and limiting the funds received by individual politicians from PACs. The current reform bills passed recently by the House (H.R. 3) and Senate (S. 3) are no exception. The key features of the proposed reforms, along with the rationale for these reforms, are described below.

Spending limits on candidates are intended to reduce the effort devoted to fundraising, lower the hurdle for challengers to wage a competitive campaign, and limit the influence of monied interests. In 1976, however, mandatory

spending limits were ruled an unconstitutional abridgement of free speech by the Supreme Court in *Buckley v. Valeo* (424 U.S. 1). As a consequence, any spending limit must be "voluntary," which in practice means that candidates who abide by the limits are rewarded with public funds. (Some political observers also see public funding as an attractive reform in its own right, since it may provide seed capital to underfunded challengers and possibly lessen the influence of PACs.) The current Senate bill imposes voluntary spending limits on Senate candidates that range from $2 million to $8.25 million, according to state population. In over 60 percent of the states, at least one Senate candidate exceeded the proposed spending limits in either 1990 or 1992. Those candidates that comply with the spending limits would receive broadcast and postal discounts. Candidates that exceed the limits would be subject to a new 34 percent federal tax on campaign receipts.[4] The House proposal sets spending limits for House candidates at $600,000, with an extra $200,000 allowed in the case of close primary elections. Candidates abiding by the $600,000 limit would be eligible for up to $200,000 in federal communications vouchers. Vouchers would be provided on a matching basis: the first $200 contributed by an individual would be matched with federal vouchers. Less than one-third of House incumbents (and far fewer House challengers) exceeded the proposed spending limits in 1992. The Congressional Budget Office has estimated the total taxpayer cost of financing the plan to be approximately $200 million per election cycle.

The other major element of the proposed campaign finance reform is limitations on PAC contributions. While the primary goal of limiting PAC contributions is to reduce PAC influence, it may also aid challengers, since the overwhelming majority of PAC donations go to incumbents. The Senate bill would prohibit PACs from contributing to any federal campaign. In the likely occurrence that such a ban is found unconstitutional, the limit on PAC contributions per candidate per election cycle would be lowered from $10,000 to $2,000. Campaigns would be prohibited from receiving more than 20 percent of funds from PACs. In the House version, contribution rules for individual PACs would not be altered, but no candidate could accept more than $200,000 in aggregate PAC donations. Over 60 percent of House incumbents seeking re-election in 1992 exceeded the proposed aggregate PAC limit.

The Effects of the Proposed Reforms

The impact of campaign finance reform hinges on the answers to two key questions. First, what is the relative effectiveness of expenditures by challengers and incumbents in altering election outcomes? Secondly, how big an impact do PAC contributions have on the behavior of elected officials?

[4]The tax on campaign receipts is highly controversial, however, and is likely to be dropped from the final bill.

The Effect of Campaign Spending on Election Outcomes

The long-held conventional wisdom among political scientists has been that challenger spending is very productive, but incumbent expenditures have little impact (Abramowitz, 1988; Glantz, Abramowitz, and Burkart, 1976; Jacobson, 1980, 1985, 1990; Welch, 1981).[5] The estimates in Jacobson (1980, 1985) are typical of the literature on House elections: an additional $100,000 in 1990 dollars increases the challenger's share of the two-party vote by almost 3 percentage points, while an extra $100,000 expenditure by the incumbent is worth only 0.2 percentage points. For the Senate, Abramowitz (1988) finds that challenger spending is three times more productive at the margin than incumbent spending and is the single most important determinant of election outcomes.

However, these estimates suffer from two potentially severe biases. One problem is that the same qualities that make candidates attractive to voters are also likely to increase their attractiveness to contributors. Moreover, it is rational for those who give to campaigns in expectation of future favors to contribute more to a candidate as the likelihood of victory increases (Synder, 1990). These facts are likely to impart an *upward* bias in estimating the effects of challenger spending: high-quality challengers will receive a high fraction of the vote and will have high campaign expenditures, even if campaign spending has no effect on vote outcomes. In contrast, estimates of the effects of incumbent spending are likely to suffer from *downward* bias since incumbents tend to increase expenditures in response to a strong challenge. In other words, incumbents will be seen to spend more when their share of the vote is closer to 50:50.

Several recent papers have attempted to address these biases. The result has been a strong challenge to the conventional wisdom on this topic.

Gerber (1992) attempts to estimate the impact of campaign spending in the Senate. To deal with the endogeneity problem, Gerber employs three instrumental variables that are likely to be correlated with campaign spending, but unlikely to be correlated with vote shares except through their impact on campaign spending. The first instrument is a candidate's personal wealth. All else equal, wealthier candidates are likely to spend more of their own money in seeking election. A second set of instruments is the lagged spending by challengers and incumbents in the previous Senate election in the state, which did not involve the incumbent currently seeking re-election due to the staggered

[5]Green and Krasno (1988, 1990) are exceptions to this view. They find large effects of spending by both challengers and incumbents. Their methodology, however, has been sharply criticized. Using two-stage least squares, they instrument for incumbent spending using once-lagged incumbent spending, but do not instrument for challenger spending. Jacobson (1990) cites evidence that their instrument is likely contaminated. When the strength of the challenger in the previous election is also controlled for, the estimated effect of incumbent expenditures becomes small and statistically insignificant.

nature of Senate elections. Finally, state voting age population is used as an instrument since a substantial fraction of campaign contributions are raised outside the state. With these instruments, Gerber (1992) finds that the differences in the effectiveness of campaign spending between challengers and incumbents are no longer statistically significant.[6]

Focusing on the House, Levitt (1994) analyzes elections in which the same two candidates face one another on multiple occasions.[7] Under the assumption that an individual candidate's intrinsic vote-getting ability remains constant over time, focusing on the difference between the results from these pairs of elections will eliminate the bias from unobserved candiate quality. If a candidate's vote-getting ability fluctuates, it is easy to demonstrate that this method will reduce (but not eliminate) the bias found in previous studies.

The results obtained from this approach contradict the conventional wisdom in two respects. First, no statistically significant differences between the productivity of expenditures by challengers and incumbents are uncovered. Second, campaign spending is found to have a small impact on election outcomes. Controlling for candidate quality by looking at the matched pairs of elections reduces the return on an additional $100,000 in campaign spending by a challenger by an order of magnitude, to less than one-third of a percentage point. When the standard ordinary least squares methodology is applied to the subsample of elections used in Levitt (1994), the results are virtually identical to those reported in the previous literature. Thus, the different findings appear to reflect only the different analytical approach.

One's belief concerning the relative effectiveness of challenger and incumbent campaign spending is critical to one's view of the effect of campaign finance reform. Among those subscribing to the conventional wisdom—that challenger spending is more productive than incumbent expenditures—spending limits are typically viewed as anticompetitive.[8] While more incumbents than challengers will be constrained by spending limits, challengers in close races tend to be well funded. Therefore, in races where spending may actually determine the outcome, challengers are hurt more by limits since their spending is thought to be far more productive. Public financing of campaigns is pro-competitive in the conventional view because it puts more money in the hands of challengers.

If, however, spending by challengers and incumbents is equally productive, as Gerber (1992) and Levitt (1994) argue, the standard conclusions must be

[6]Gerber (1992) uses two-stage least squares. Numerous other researchers have previously tried this approach to address the potential bias (Green and Krasno, 1988; Jacobson, 1985; Welch, 1981), but it is extremely difficult to justify the validity of the instruments used in those studies. Jacobson (1985, 1990) discusses the flaws in these approaches.

[7]There were 633 elections satisfying that condition over the period 1972–1990. Those elections represent approximately 15 percent of all House elections over the time period studied.

[8]Johannes and Nugent (1990), for instance, describe spending limits as "incumbent protection acts."

altered. Spending caps will be pro-competitive since more incumbents are constrained by such limits. Public financing has little, if any, effect on election outcomes if expenditures by both candidates are equally productive, since the amount of public funding going to challengers and incumbents is approximately equal. Public financing does, however, increase the total amount of money devoted to campaigns (as well as the federal deficit), and is therefore inconsistent with the goals of reform.

The estimates in Gerber (1992) suggest that the proposed reforms will lower the re-election rate among Senate incumbents by between 2 and 7 percent—that is, one or two additional losses by incumbents per election cycle. To the extent that campaign finance reform alters incumbents' decisions to seek re-election, or affects the quality of challengers, these estimates would understate the effects of reform. The Senate proposal would significantly lower overall campaign expenditures since the decline in spending as a result of spending caps outweighs the increase due to public financing.

The predicted impact of the current round of reforms in the House is likely to be less pronounced.[9] The estimates in Levitt (1994) suggest that the proposed House reforms ($600,000 limits per candidate in the House, with public financing accounting for about $200,000 of that total) would alter less than 1 percent of the election outcomes in a typical cycle. Conventional estimates, such as Jacobson (1985), predict that a far greater fraction of election outcomes would be affected, but the overall re-election rate of incumbents would not be greatly changed since the pro-incumbent impact of the spending limits would be largely offset by the anti-incumbent effects of public funding. In other words, many incumbents who would have won without campaign finance reform would lose, and vice versa, but on net, the effect on incumbency re-election rates is a wash. The proposed reforms are likely to slightly *increase* overall campaign spending in House races. While spending will be reduced in approximately one-third of the races due to spending caps, increased expenditures in the other elections due to the availability of public finds will probably more than offset that reduction.

How Big an Impact Do PACs have on Political Outcomes?

There are three possible channels through which PACs might affect public policy. First, PAC contributions might influence which candidates win elections. Second, PAC donations might affect the roll-call voting behavior of recipients.

[9]The proposed reforms have a smaller predicted effect on election outcomes in the House for two reasons. First, the proposed spending limits bind much more tightly in the Senate. Secondly, House elections are on average much less competitive than Senate elections, so a marginal change in spending is less likely to affect the election outcome. Approximately half of all Senate incumbents obtain less than 60 percent of the two-party vote, compared to less than one-quarter of House incumbents.

Finally, PACs may influence the type of legislation that emerges from committees. While the public appears convinced that PACs are extremely influential, the empirical documentation for this "undue" influence is surprisingly mixed.

For PACs to significantly influence election outcomes, campaign spending must be an effective means to altering the popular vote. The overwhelming majority of PAC dollars flow to incumbents, however, and almost no academic work finds evidence that incumbent spending has a large impact on vote shares. Aggregate statistics provide further evidence discounting the effect of PAC spending on election outcomes. Over the period in which PAC contributions have both tripled and become increasingly slanted towards incumbents, incumbent re-election rates are essentially unchanged. House incumbents, for instance, were reelected at a 93.1 percent rate in the 1970s and have had a 93.9 percent success rate over the 1980s and 1990s. If PACs do have a substantial impact on election outcomes, it is likely to be in the 10 percent of elections with open seats, which tend to be closely contested and attract large amounts of PAC money.

Determining whether PACs affect the roll-call voting behavior of elected officials is extremely difficult for two reasons. First, PACs tend to channel money to those congressmen whose outlooks are most similar to their own.[10] Thus, a correlation between PAC contributions and roll-call voting behavior does not necessarily imply a causal effect of PAC donations. Secondly, a number of thorny timing issues arise since it is not clear whether PAC contributions should be thought of as rewards for previous votes, "bribes" intended to alter future votes, or some combination of the two. While there is considerable variability in the conclusions of papers analyzing the relationship between PAC contributions and roll-call voting behavior, the two studies that most convincingly deal with the problems noted above find small or nonexistent effects of PAC money.

Chappell (1982) identifies the effect of PAC contributions on roll-call voting using incumbency status and lagged percentage of the popular vote as instruments to predict PAC contributions. Both of those variables are correlated with the likelihood of election, which will affect PAC contributions, but may plausibly be excluded from the roll-call voting equation. In only one of the eight roll calls considered are PAC contributions from relevant special interests statistically significant at the .10 level.[11] Grenzke (1989) examines whether *changes* in PAC contributions are associated with *changes* in roll-call voting behavior. This

[10]To the extent that PACs are "buying votes" in Congress rather than attempting to improve the election likelihood of supporters, rational PACs will want to channel resources towards those congressmen who are on the margin (Snyder, 1990). With the exception of Stratmann (1992), there is little empirical evidence for such PAC behavior.

[11]Controlling for simultaneity has a large effect on the estimates. When Chappell (1982) does not instrument for PAC contributions, its coefficient carries the expected sign in all eight roll calls examined and is statistically significant at the .05 level in five of the eight cases. Instrumenting shrinks the point estimate associated with PAC contributions in seven of the eight cases, and the coefficient changes sign in two instances.

approach is less likely to reflect spurious correlation between PAC contributions and roll-call voting due to failure to control adequately for factors such as constituent interests and the underlying ideology of the congressman. On the other hand, it may exacerbate the problems associated with timing issues. Looking at contributions by 120 PACs, Grenzke (1989) finds little evidence that contributions influence roll-call voting patterns.

Finally, PAC contributions may affect the development of legislation at the committee stage. Hall and Wayman (1990) find evidence that controlling for other factors, PAC donations make it more likely that a legislator will engage in a wide range of activities including attending committee meetings, participating in committee votes, and offering amendments during committee markups.

Given the inconclusiveness of the above findings, it is difficult to judge the extent of PAC influence, much less the changes that would result from lowering PAC contribution limits or capping the overall level of PAC receipts by candidates. Given that PACs have a number of reasonably close substitutes to direct campaign contributions—lobbying, voter mobilization efforts, "soft money" donations, and so on—it seems unlikely that limits on PAC giving will have a large impact on the political system.

Conclusions

Campaign finance reform generally entails some combination of spending limits for candidates, public funding of campaigns, and limiting the funds received by individual politicians from PACs. However, recent studies have called into question the conventional wisdom that challenger spending is especially powerful; if these results hold up, steps to increase challenger spending will make less difference than expected. While it seems safe to conclude that PACs wield some influence, it is not clear that limiting their cash contributions will have a substantial effect. It seems unlikely that campaign finance reform, at least in its current guise, will have much impact on the functioning of the American political system (with a price tag of $100 million per year it would be surprising if that were not the case). In the light of that conclusion, the substantial amount of energy devoted to the topic by the public, the media, and politicians might be more productively channeled towards other issues.

■ *I would like to thank Alan Gerber, Austan Goolsbee, and James Poterba for helpful comments and discussions, and also Carl Shapiro and Timothy Taylor for invaluable editorial guidance. Financial support of the National Science Foundation is gratefully acknowledged.*

References

Abramowitz, Alan, "Explaining Senate Election Outcomes," *American Political Science Review*, June 1988, *82*, 385–403.

Alexander, Herbert, *Financing Politics: Money, Elections, and Political Reform*. 4th ed., Washington, DC: CQ Press, 1992.

Chappell, Henry, "Campaign Contributions and Congressional Voting: A Simultaneous Probit-Tobit Model," *Review of Economics and Statistics*, February 1982, *64*, 77–83.

Gerber, Alan, "Campaign Spending and Election Outcomes: Re-estimating the effects of Campaign Spending," mimeo, M.I.T. Department of Economics, 1992.

Glantz, Stanton, Alan Abramowitz, and Michael Burkart, "Election Outcomes: Whose Money Matters?," *Journal of Politics*, November 1976, *38*, 1033–38.

Green, Donald, and Jonathan Krasno, "Salvation for the Spendthrift Incumbent: Re-estimating the Effects of Campaign Spending in House Elections," *American Journal of Political Science*, November 1988, *32*, 884–907.

Green, Donald, and Jonathan Krasno, "Rebuttal to Jacobson's 'New Evidence for Old Arguments,'" *American Journal of Political Science*, May 1990, *34*, 363–72.

Grenzke, Janet, "PACs in the Congressional Supermarket: The Currency is Complex," *American Journal of Political Science*, February 1989, *33*, 1–24.

Hall, Richard L., and Frank W. Wayman, "Buying Time: Moneyed Interests and the Mobilization of Bias in Congressional Committees," *American Political Science Review*, September 1990, *84*, 797–820.

Jacobson, Gary, *Money in Congressional Elections*. New Haven: Yale University Press, 1980.

Jacobson, Gary, "Money and Votes Reconsidered: Congressional Elections, 1972–1982," *Public Choice*, 1985, *47*:1, 7–62.

Jacobson, Gary, "The Effects of Campaign Spending in House Elections: New Evidence for Old Arguments," *American Journal of Political Science*, May 1990, *34*, 334–62.

Johannes, John R., and Margaret L. Nugent, "Conclusion: Reforms and Values." In Nugent, Margaret L., and John R. Johannes, eds., *Money, Elections, and Democracy*. Boulder: Westview, 1990, pp. 263–78.

Kalt, Joseph P., and Mark A. Zupan, "Capture and Ideology in the Economic Theory of Politics," *American Economic Review*, June 1984, *74*, 279–300.

Levitt, Steven D., "Using Repeat Challengers to Estimate the Effects of Campaign Spending on Election Outcomes in the U.S. House," *Journal of Political Economy*, August 1994, *102*, 777–98.

Ornstein, Norman J., Thomas E. Mann, and Michael J. Malbin, *Vital Statistics on Congress, 1993–1994*. Washington, DC: Congressional Quarterly, 1994.

Snyder, James, "Campaign Contributions as Investments: The U.S. House of Representatives, 1980–1986," *Journal of Political Economy*, December 1990, *98*, 1195–227.

Stratmann, Thomas, "Are Contributors Rational? Untangling Strategies of Political Action Committees," *Journal of Political Economy*, June 1992, *100*, 647–64.

Welch, William, "Money and Votes: A Simultaneous Equation Model," *Public Choice*, 1981, *36*:2, 209–34.