# Why Is There So Little Money in U.S. Politics?<sup>1</sup>

Stephen Ansolabehere
Department of Political Science
Massachusetts Institute of Technology

John de Figueiredo Sloan School of Management Massachusetts Institute of Technology

James M. Snyder, Jr.

Departments of Political Science and Economics

Massachusetts Institute of Technology

June, 2002

<sup>&</sup>lt;sup>1</sup>Professor Ansolabehere thanks the Carnegie Corporation for their generous financial support under the Carnegie Scholars Program.

#### Abstract

Thirty years ago, Gordon Tullock posed a provocative puzzle: considering the value of public policies at stake and the reputed influence of campaign contributions in policy-making, why is there so little money in U.S. politics? In this paper, we argue that campaign contributions are not a form of policy-buying, but are rather a form of political participation and consumption. We summarize the data on campaign spending, and show through our descriptive statistics and our econometric analysis that individuals, not special interests, are the main source of campaign contributions. Moreover, we demonstrate that campaign giving is a normal good, dependent upon income, and campaign contributions as a percent of GDP have not risen appreciably in over 100 years - if anything, they have probably fallen. We then show that only one in four studies from the previous literature support the popular notion that contributions buy legislators' votes. Finally, we illustrate that when one controls for unobserved constituent and legislator effects, there is little relationship between money and legislator votes. Thus, the question is not why there is so little money politics, but rather why organized interests give at all. We conclude by offering potential answers to this question.

### 1. Introduction

Thirty years ago, Gordon Tullock posed a provocative puzzle. Considering the value of public policies at stake and the reputed influence of campaign contributors in policy making, why is there so little money in U.S. politics? Estimates put total campaign spending at about \$200 million in 1972, when Tullock first offered his critique. Assuming a reasonable rate of return, such an investment could have yielded at most \$250-300 million, a sum dwarfed by the hundreds of billions of dollars worth of public expenditures and anti-competitive regulations supposedly at stake (Tullock, 1972).

Tullock's observation challenges the basic premises of both economic analyses of campaign finance and public discourse about reform. Campaign fundraising is widely viewed as a market for public policy. Candidates and parties need money to run effective election campaigns. And, donations come from firms, associations, and individuals that seek private benefits in the form of subsidies, favorable regulations and other policies set by the government. With thousands of firms and other interests bidding for private benefits and thousands of candidates vying for funds, something like a market for legislation emerges. As with any competitive market, the rate of return on the investment in politics should resemble that of other investments. Otherwise, firms and individuals will take assets out of other investments and put them in the political market.

The puzzle has not disappeared in the past three decades. Candidates, parties, and organizations raised and spent \$3 billion in the 2000 national elections – like 1972, another record. This represents a growth in campaign spending twice the rate of inflation from 1972 to 2000. However, total federal government spending in 2000 equaled \$2 trillion, and consumption and gross investment of the federal government was \$590 billion.

The puzzle comes into sharper focus still when we examine specific interests and policies.

Consider three important U.S. industries – defense contracting, agriculture, and energy.<sup>1</sup>

<sup>&</sup>lt;sup>1</sup>Estimates of total industry contributions come from the Center for Responsive Politics: www.opensecrets.org. They include donations from political action committees and from individuals employed in an industry. They include hard money contributions and soft money contributions (i.e., contributions to parties directly from corporate treasuries or by individuals). We view these as overestimates.

Defense Contracting. All defense firms and individuals associated with those firms gave approximately \$10.6 million to candidates and parties in 1998 and \$13.2 million in 2000. The U.S. government spent approximately \$134 billion on defense procurement contracts in fiscal year 2000.

Agriculture. Crop producers and processors contributed \$3.3 million to candidates and parties in 2000; U.S. commodity loans and price supports equaled \$22.1 billion that year. Dairy producers, who since 1996 have had to have subsidies renewed annually, gave \$1.3 million in 2000 and received price supports worth almost \$1 billion in the 2002 Farm Bill.

Energy. Firms, individuals, and industry associations of the oil and gas industry gave \$21.6 million to candidates and party organizations in 1998 and \$33.6 million in 2000. The Department of Energy values subsidies to the industry in 1999 at \$1.7 billion.

Digging down to the micro level, the puzzle persists. Consider the case of sugar subsidies. Stratmann (1991) estimates that a "\$3,000 sugar PAC contribution maps into a yes vote with almost certainty" (Stratmann 1991, p. 615). Without sugar industry contributions, he further estimates, the final vote on the sugar amendment to the 1985 agriculture bill would have been 203-210, effectively ending the sugar subsidy. With contributions, the subsidy survived: the final vote was 267-146. A 1993 GAO study values that the annual transfer from consumers to sugar producers and processors at \$1.1 billion a year from 1989 to 1991.<sup>2</sup> In other words, a \$192,000 worth of contributions in 1985 bought more \$5 billion worth of value for the industry over a five year period.

The discrepancy between the value of policy and the amounts contributed strains basic economic intuitions. There are twin problems.

First, given the value of policy at stake, firms and other interest groups should give more. The figures above imply astronomically high average rates of return on investments.

Figures on defense contracts are from the U.S. Census Bureau, Consolidated Federal Funds Report, 2000, www.census.gov/govs/cffr/00cffus.htm. Figures on commodity support programs are from the U.S. Department of Agriculture, www.usda.gov/agencies/agencies.html. Figures on subsidies to energy sources are from the Energy Information Agency, Federal Financial Interventions and Subsidies in Energy Markets 1999: Primary Energy, September 1999, U.S. Department of Energy, Washington DC.

<sup>&</sup>lt;sup>2</sup>U.S. General Accounting Office (1993), "Sugar Program: Changing Domestic and International Conditions Require Program Changes" (April): GAO/RCED-93-84.

In a normal market, with such high rates of return, any donor should want to increase their contributions. There are, of course, legal limits on what one can do. However, these constraints are rarely binding. And even the large loopholes that allow donors to skirt the limits – such as "soft" money, independent expenditures, and leadership PACs – account for only a small fraction of the money.

Second, exceptionally high average rates of return, if real, imply that more firms and industries should enter the political marketplace. If a relatively small investment of approximately \$200,000 brings a return of \$1 billion, or even one-thousandth that amount, then any investor should want to shift assets out of other investments and enter the political market. A surpringly large number of firms – even firms in the Fortune 500 – do not participate at all, even though there are virtually no barriers to entry.

The existing theoretical work in economics and political science cannot account for these facts. One body of research posits that campaign finance reflects a competitive market for private benefits from public laws or for services and effort from politicians.<sup>3</sup> Such a market might exist, but the small amounts given imply that it must be small. As we discuss below, it likely cannot explain most of the money given, let alone most of the value of policy reputedly for sale.

A second strain in the theoretical literature posits that there is a market failure in politics that gives legislators more of the bargaining power.<sup>4</sup> In particular, legislators hold key "gate keeping" positions, and can threaten regulation or harassing oversight unless interest groups contribute. Such extortionary practices seem unlikely given the trivial amounts of money raised.

A third strain of theorizing argues that donors are monopoly providers of campaign funds and that legislators compete for contributions (Dal-Bo, 2001; Helpman and Persson, 2001). The prediction of such models is that donors get a lot for a little, which is one possible answer to Tullock's puzzle. However, the lack of entry presents a severe problem for these

 $<sup>^3</sup>$ See, e.g., Denzau and Munger (1986), Baron (1989), Snyder (1990), Baron and Mo (1991), and Grier and Munger (1991).

<sup>&</sup>lt;sup>4</sup>Grossman and Helpman (1994) examine a range of cases, including this case.

models. If there are average rates of return in the many thousands, then we would expect firms, individuals, and associations to flock to campaign finance. But, most firms and people do not give, even though entry is essentially costless.

Why are interest groups' campaign contributions so small? Why aren't more firms and industries involved?

We favor an alternative explanation: Campaign contributing is a form of consumption, or, in the language of politics, participation. As we show below, almost all money in the existing campaign finance system comes ultimately from individuals and in relatively small sums. Individuals give because they are ideologically motivated, because they are excited by the politics of particular elections, because they are asked by their friends or colleagues, and because they have the resources necessary to engage in this particular form of participation, namely money. By far the single strongest predictor of contributing is income. The people who give to politics are also disproportionately likely to participate in other ways, including attending meetings, writing letters, talking to others, and voting (Rosenstone and Hansen, 1992; Verba, Schlozman, and Brady, 1995). We call these donors "consumer contributors." They account for most of the campaign money in politics.

Individuals not only give the average dollar to campaigns, they also give the marginal dollar. Candidates in competitive races raise and spend more than those in lopsided races, and most of the additional money comes from individual contributors and parties. Senate candidates in large states raise and spend many times more money as those in small states, and almost all of the additional money comes from individuals. Consistent with the notion that campaign spending reflects participation, trends in aggregate spending over the last 100 years are explained entirely by growth in personal income.

It is true that corporations, labor unions and other interest groups give nontrivial amounts of money to politics. They raise money from individuals and contribute those funds through the groups' political action committees to candidates and parties. They also give "soft" money to parties, skirting federal contribution limits. When economic interest groups give,

they usually appear to act as rational investors.<sup>5</sup> However, this "investor" money accounts for only a small fraction of overall campaign funds.

Corporations and other investor contributors may still have substantial influence on policy. Evidence for this idea, however, is thin. We have surveyed an extensive literature and conducted our own analyses of legislative decision making. Legislators' votes depend almost entirely on their own beliefs and the preferences of their voters and their party. Contributions explain a miniscule fraction of the variation in voting behavior in the U.S. Congress.

Investor contributors have little leverage because politicians can raise sufficient funds from consumer contributors. Members of Congress care foremost about winning reelection. They must attend to the constituency that elects them, voters in a district or state, and the constituency that nominates them, the party. Legislators can run effective campaigns by appealing to individuals for funds. Interest groups can get only a little from their contributions, so they give only a little.

In sections 2-4 below we document that the levels and trends in campaign funds do not follow basic predictions of rent-seeking models. Instead, campaign finance looks more like consumption or participation. Section 2 of the paper presents a portrait of where campaign funds come from in U.S. politics today. Section 3 examines what drives the level and fluctuations in campaign spending. Section 4 considers what explains legislation. The final section offers tentative answers to the puzzle we pose: Why give at all?

# 2. Sources and Sums

Stepping back from the theories, it is useful to observe who gives what and how.

For most of the last century, campaign contributions have been regulated in the United States. In 1911, Congress banned corporate contributions to parties and candidates and provided for disclosure of expenditures and contributions. Over the subsequent 60 years, that ban was extended to other organizations, including unions and trade associations. But

<sup>&</sup>lt;sup>5</sup>See, e.g., Snyder (1990, 1992, 1993), Grier and Munger (1991), Romer and Snyder (1994), Kroszner and Stratmann (1998, 2000), and Ansolabehere and Snyder (1999, 2000).

these rules lacked enforcement and were far from comprehensive. Individuals, for instance, could give unlimited amounts.

The Federal Election Campaign Act of 1974 (FECA) created a comprehensive system of disclosure and contribution limits. The logic behind FECA is simple.

There are two types of campaign organizations: candidate campaign committees and party committees. Candidates and parties conduct the actual election campaigns in the United States. They are the ultimate recipients of campaign money. Individuals and groups may run their own advocacy or independent campaigns on behalf of or against individual candidates, but in practice such campaign expenditures pale in comparison with the activities of candidates and parties.

There are two sources of funds: individuals and interest groups. Candidates and parties may raise funds from individuals, firms, unions, trade associations and other interest groups. Individuals, groups, and parties may also run their own advocacy or independent campaigns on behalf of or against individual candidates. Individuals, groups, party committees and candidates must report all contributions, receipts, and expenditures to the Federal Elections Commission (FEC).

FECA constrains how money can be raised and how much can be given. Sorauf (1988, Chapter 2) provides an excellent overview. Briefly, the rules are as follows.

First, to ensure transparency in accounting, organizations wishing to contribute to federal candidates and parties must create "separate and segregated funds," commonly known as political action committees (PACs). Organizations may not give money directly to their PACs, except to cover start-up, administrative, and fund-raising expenses. All money that is contributed to candidates or parties (or spent on independent political advertising) must be raised by voluntary donations from individuals. Corporate PACs raise almost all of their money from their managers, and unions, trade associations, and professional associations raise almost all of their money from their members. Thus, individuals are the ultimate

<sup>&</sup>lt;sup>6</sup>Parties and candidates may give to each other, but such transfers account for a trivial percent of total funds.

<sup>&</sup>lt;sup>7</sup>Sorauf (1992) provides an excellent summary of the FECA system.

source of all PAC contributions.

Second, individuals, PACs, and party committees can give only limited amounts directly to federal candidates and committees. The lowest limits are on individuals, not groups. PACs may give \$10,000 in a two-year election cycle to a candidate (\$5,000 each calendar year). Party committees may give no more than \$17,500 to a candidate in a two-year election cycle. Individuals may give no more than \$2,000 to a candidate in an election cycle (\$1,000 each calendar year), no more than \$5,000 to a PAC in a calendar year, and no more than \$20,000 to a party committee in a calendar year. An individual may give no more than \$25,000 total in a calendar year.

Third, presidential candidates may receive public funds if they agree to abide by spending limits. General election candidates may receive complete federal funding; primary election candidates may receive public funds to match privately raised contributions. FECA set the general election spending limit at \$20 million in 1976, and this limit increases with the consumer price index.

A fourth set of constraints created in 1974 limited candidate and group campaign expenditures. In 1976, the Supreme Court struck down spending limits as a violation of free speech in *Buckley v. Valeo*. Presidential spending limits survived judicial scrutiny because they are voluntary: any candidate who wishes to receive federal funding must abide by the limits. Congress reestablished FECA in 1976, and amended it again in 1979 and 2002. The 1979 amendments prohibited personal use of campaign funds by candidates or their families. The 2002 amendments raised the hard money limits on party contributions.

Two important loopholes in the constraints have received extensive criticism. One was created by the Courts, the other was created by the Federal Election Commission. The first loophole consists of "independent expenditures." The *Buckley* decision allows individuals, groups, and corporations to spend unlimited amounts on behalf of or against a candidate, so long as such expenditures are not coordinated with candidate or party campaigns. The second loophole consists of money raised through national party organizations for non-federal

<sup>&</sup>lt;sup>8</sup>See Sorauf (1988, Appendices A and B) for more details.

accounts, so- called "soft" money. Individuals and groups may give unlimited amounts to non-federal party funds for the purpose of party building activities. The Federal Election Commission (FEC) created soft party money through a set of administrative rulings in 1978 and 1979. Such funds, it was hoped, would strengthen party organizations in the individual states. In fact, soft money has just become an accounting convention used by the national party organizations to raise even more money. Although unlimited in amount, independent expenditures and soft party donations must still be publicly disclosed. The 2002 amendments to the FECA restricted soft money.<sup>9</sup>

Even with these substantial loopholes, almost all campaign money comes in the form of "hard" contributions that must abide by the limits, and all of these funds come ultimately from individuals. A simple accounting for the 2000 elections reveals this immediately.

Candidate and party committees raised nearly \$3 billion during the 1999-2000 election cycle. Congressional candidates raised and spent just over \$1 billion in the 2000 election; presidential candidates raised and spent just over \$500 million; and political party hard and soft money accounts totaled \$1.2 billion. PACs raised \$600 million, approximately \$320 million of which was for fundraising and other expenses and \$20 million of which was devoted to independent expenditures; the remainder was contributed to congressional candidates.<sup>10</sup>

The majority of this money came from individuals in small amounts. We estimate that of the \$3 billion, individuals contributed nearly \$2.4 billion, the public treasury paid \$235 million, and about \$380 million came directly from the treasuries of corporations, unions, and other associations. And campaign money comes mainly in dribs and drabs. According to survey research, in the 2000 election approximately 10 percent of the Americans over 18 (21 million people) gave to political candidates, party committees, or political organizations.

<sup>&</sup>lt;sup>9</sup>A further loophole allows legislators to set up leadership PACs which allow donors to give up to \$10,000 to a candidate, but such funds cannot be used on that candidate's campaigns.

<sup>&</sup>lt;sup>10</sup>The party accounts are the most difficult to analyze. Transfers between party accounts amount to approximately 10 percent of all party money. The correct figure is probably, then, about \$1 billion.

<sup>&</sup>lt;sup>11</sup>The FEC does not provide a direct accounting of this figure because only the total amount of contributions under \$200 must be reported, not the specific donations. We estimated the total amount of soft money from firms and organizations (approximately \$380 million) using the individual donor files and on-line reports from the Federal Election Commission: www.fec.gov.

The average contribution from an individual to a candidate, party committee or PAC, then, is approximately \$115.<sup>12</sup>

Of the estimated \$2.4 billion in individuals' contributions, about \$1.1 billion takes the form of direct contributions to congressional and presidential candidates; \$700 million goes to the parties; and \$600 million goes to PACs.

Much of the focus of the academic literature focuses on interest groups and their PACs, so they deserve a closer look. Approximately 4,500 PACs are registered with the Federal Election Commission. In the 2000 election, 3,000 PACs gave to federal candidates or parties or engaged in some form of independent expenditure campaign; the remaining one-third were inactive. It is noteworthy that the number of active PACs has declined by 12% since 1988. Among the active PACs, 1,400 are associated with corporations, 670 are tied to a membership or industry group (such as the American Medical Association), and 240 are associated with labor unions. Another 670 are ideological groups.

Strikingly few firms give money to federal candidates. Only 60 percent of the Fortune 500 companies have PACs. The Fortune 500 companies have revenues in excess of \$3 billion a year (each), and all are affected by government policies. As noted above, roughly one-third of all industries have *no* firms with PACs.

Perhaps the most surprising feature of the PAC world is the fact that the constraints on contributions are not binding. Only 4 percent of all PAC contributions to House and Senate candidates are at or near the \$10,000 limit. The average PAC contribution is \$1,700. Corporations give an average contribution of approximately \$1,400 to legislators; trade associations and membership groups give average contributions of approximately \$1,700, and labor unions give average contributions of \$2,200. Viewed from the perspective of rent-seeking legislature, these sums are quite small. If such models capture the essence of campaign fundraising, then legislators should extract much larger contributions from interested donors. If donors reached the maximum allowed amount, PACs would have given six times as much as they

<sup>&</sup>lt;sup>12</sup>Divide by 2.4 billion by 21 million. Survey estimates come from the National Election Study: ICPSR study number 3131, available at http://www.umich.edu/nes/studyres/nes2000/nes2000.htm. See Rosenstone and Hansen (1992).

do, or nearly \$2 billion.

Comparing the different sorts of contributions, it is evident that individuals are by far the most important source of campaign funds. Even in congressional elections, where PACs are most active, candidates raised over 3 times more from individuals directly than they did from PACs.

## 3. What Drives Campaign Spending?

Individual contributions are the core of the campaign finance system. We therefore expect that the factors that determine why individuals give are the factors that drive total campaign spending.

The tiny size of the average contribution made by private citizens suggests that little private benefit could be bought with such donations. Instead, political giving must be a form of consumption not unlike giving to charities, such as the United Way or public radio. Economic theory predicts relatively little about such consumption goods, except that like any normal good they will grow with income. Survey researchers in political science and sociology have documented exactly this pattern. Income is the main predictor of giving to political campaigns and organizations, and it is the main predictor of contributing to non-religious charities. And, individuals give very little to politics, much less than to charities. Political contributions in 2000 were just 4 hundredths of one percent of national income.

The contribution behavior of top corporate executives proves the rule. We examined the political contributions of 94 top executives from 12 large corporations – some of the wealthiest people in America. On average, these executives gave \$3,000 to their own corporations' political action committees in the 1997-1998 election cycle. They gave an additional \$4,500 to candidates, parties, and other committees, for an average total political contribution of \$7,500 per executive, far below the \$25,000 allowed under FECA. Dividing by their annual

<sup>&</sup>lt;sup>13</sup>The corporations are AT&T, Boeing, Citigroup, Exxon Mobil, General Electric, General Motors, Home Depot, IBM, Microsoft, Pfizer, Verizon, and Wal-Mart. Data on executives and their compensation come from the ExecuComp Database. Data on contributions came from the Center for Responsive Politics: www.opensecrets.org.

compensation, these executives gave \$51 for every \$100,000 of income each year. In other words, top corporate executives gave about 5 hundredths of one percent of their annual compensation to political campaigns, only slightly above the national average.<sup>14</sup>

As with the public at large, giving to charity is much more important to firms and executives than giving to politics. Milyo, Primo, and Groseclose (2000) studied 15 large corporations in 1998. The firms in their sample gave \$1,611 million to charities and just \$16 million to political campaigns.<sup>15</sup>

The notion that campaign contributions mainly reflect consumption and participation of many individuals suggests that personal income should determine the amount raised and spent in campaigns.

Alternatively, a basic prediction of rent-seeking models is that total government spending should explain total campaign spending. The growth of government over the last 60 years, the argument goes, has meant that government regulations, taxes and subsidies, and other policies, can have substantial effects on private interests. The very threat of regulation or other unfavorable treatment may induce private interests to give to politics. As a result, the more government spends, the more private interests must contribute (Lott 2000). This should hold even if donors are able to buy a lot for a little.

We constructed three data sets: a time-series of campaign spending under the Federal Election Campaign Act from 1978 to 2000, a time-series of candidate and party expenditures in presidential elections from 1884 to 2000, and a panel of campaign spending by gubernatorial candidates from 1976 to the present. The FECA data offers the best accounting of campaign spending in any context. The presidential election series offers a very long time series, but the quality of the data is less good. The state data offers the advantage of a panel, with enough observations to allow us to test competing hypotheses.

<sup>&</sup>lt;sup>14</sup>This figure even overstates the share of income devoted to politics, because we do not include income from capital gains, dividends, and interest.

<sup>&</sup>lt;sup>15</sup>The response to the 9/11 terrorist attack also suggests that campaign contributions might be properly viewed simply as one item in a portfolio of voluntary donations. Stevens (2001) reports that political contributions dropped significantly in the month following 9/11, as individuals diverted their funds to various charities. Interestingly, PACs were probably affected most severely.

All three data sets point to one conclusion. Campaign spending tracks with income and electoral competition (that is, demand for money), and not with government spending.

### Trend 1: Spending Under FECA.

Over the past two decades, the Federal Elections Campaign Act has been widely criticized because the system of contribution limits and disclosure requirements has not contained the growth of campaign spending. On the political left, the criticism is that growing expenditures reflect widespread vote buying. On the political right, the criticism is that growing expenditures reflect government extraction of "political" rent from private interests.

The first piece of evidence in these critiques is the growth of real campaign spending over the last 20 years. Figure 1A graphs the trend in total campaign spending deflated by the CPI under the FECA regime (to the right of the vertical line). The numbers reported encompass all forms of hard and soft money as well as public funds. It shows that real campaign spending has indeed grown, roughly doubling between 1976 and 2000.<sup>16</sup>

# [Figures 1A and 1B]

From our perspective, however, price inflation is not the right baseline against which to measure campaign spending growth. A more appropriate baseline is national income, shown in Figure 1B.

Interestingly, there is no trend in campaign spending relative to national income over the period 1976-2000 (to the right of the vertical line). Ansolabehere, Gerber, and Snyder (2001) examine trends in individual, PAC, and party contributions. After deflating each type of money by GDP, no trends are evident within each category of campaign money.

### Trend 2: 1884 to the Present.

Historians and political scientists have pieced together presidential campaign spending figures from the 1880s to the present. Reports of the party committees and presidential

<sup>&</sup>lt;sup>16</sup>This growth probably has little to do with cost push inflation. Most campaign inputs, such as labor and advertising prices, also grow with the CPI.

candidates are fairly complete from 1912 on, but most congressional candidates did not file reports until FECA. Histories of significant political campaigns, such as 1896, have reconstructed the budgets of the presidential campaigns and party committees.<sup>17</sup> Figures 1A and 1B display the trend in presidential and party general election expenditures deflated by the CPI and GDP (the left side of the vertical line in each figure).

The long-run perspective parallels the lessons from the FECA era. Campaign spending relative to inflation has grown sharply – although somewhat more irregularly – over the last 120 years. However, campaign spending as a fraction of national income has shown no growth at all.

The two most dramatic features of Figure 1B are the collapse in spending during the first decade of the 20th Century and the rough stability since. Measured relative to national income, presidential campaigns in the 1880s and 1890s spent three times more than the typical presidential campaigns in the 20th century. The 1890s and 1900s ushered in wide ranging political reforms, including the secret ballot (which made vote-buying during elections nearly impossible), civil service and government spending reforms (which limited the powers of political machines), and campaign finance reform. From 1912 to 2000, presidential campaigns have accounted for approximately the same, small fraction of GDP. This pattern suggests that the private benefits bought through the campaign finance system are not an increasing problem for our economy.

Unfortunately, it is impossible to distinguish the effects of income growth and government spending growth on presidential campaign spending in these series. The correlation between real per-capita GDP and real per-capita federal spending is .98, and even the long historical series contains just 23 observations.

# Trend 3: State Elections, 1976 to 2000.

State elections allow us to untangle the effects of income, government spending, and electoral competition. We have compiled a fairly complete panel of spending in gubernatorial

<sup>&</sup>lt;sup>17</sup>Alexander (1984, p. 7) presents a table with these figures.

elections from 1976 to 2000. The data set includes campaign expenditures or contributions by all candidates, population, personal income, state government expenditures, and primary and general election results.<sup>18</sup>

It is difficult to compare campaign spending levels across states, because states operate under different regulatory regimes. Some states have no limits on contribution or expenditure levels (AL, PA, UT), while others have relatively strict limits that have been in place for many years. Some states allow direct corporate and labor contributions (IL, NM), while others do not. And some states have generous public funding mechanisms (MI, NJ). Instead of comparing across states, we can exploit the panel structure of the data and compare changes in spending and other variables over time within states.

Table 1 presents a statistical analysis of the panel of governor campaign spending from 1976 to 2000. The table shows the effects of personal income per-capita, government spending per-capita, and various measures of general and primary election competition on total spending in gubernatorial elections. The spending and population figures are in logarithms, so the coefficients are elasticities. The regression includes fixed effects for each state to correct for differences in state campaign laws and other unmeasured state effects.

# [Table 1]

Personal income and electoral competition strongly predict spending. The coefficient on log of per-capita income is approximately equal to 1, consistent with the findings above that the share of income spent on campaigns is constant. Government spending, on the other hand, has no independent effect on total campaign spending.<sup>20</sup>

<sup>&</sup>lt;sup>18</sup>The data on campaign contributions, campaign expenditures, and election results are from the *Gubernatorial Campaign Expenditures Database* compiled by Thad Beyle and Jennifer M. Jensen, and *America Votes* (various years). To our knowledge, this is the most comprehensive data set that exists on aggregate gubernatorial campaign spending. Personal income is from the Bureau of Economic Analysis, <a href="http://www.bea.doc.gov/bea/regional/data.htm">http://www.bea.doc.gov/bea/regional/data.htm</a>, and state government expenditure data is from the U.S. Census Bureau, *Compendium of State Government Finances*.

<sup>&</sup>lt;sup>19</sup>The three electroral competition measures defined as follows: Closeness in General Electron =  $1-v_G$ , where  $v_G$  is the winning candidate's vote share in the general electron. Average Closeness in 1st Primary is the average of  $1-v_D$  and  $1-v_R$ , where  $v_D$  is the winning candidate's vote share in the first Democratic primary electron and  $v_R$  is the winning candidate's vote share in the first Republican primary electron. Average Closeness in 2nd Primary is defined analogously. The winning candidate's vote share is 1 in uncontested races.

 $<sup>^{20}</sup>$ The average within state correlation between income and government spending is .86.

Using the coefficients in Table 1, one can calculate that per-capita income growth and population growth explain nearly all of the growth in per-capita campaign spending in the states. Both per-capita income and population grew from the 1970s to the 1990s. The effect of income growth on predicted levels of campaign spending is roughly 4 times larger than the effect of population growth.

Electoral competition has a strong positive effect on total spending. However, these variables trend downward over the period studied. Gubernatorial elections were, on average, more competitive in the 1970s than in the 1990s, and fewer seats came open during the 1990s. Thus, the trend in electoral competition cannot explain the growth in spending. Rather, these variables would predict a trend in the opposition direction.

### Cross-Sectional Analysis.

Looking across elections teaches a similar lesson. The average House election cost \$834,000 in the 1990s (Democratic and Republican candidate spending combined), but spending varied considerably across districts.

District income and electoral competition predict variation in total spending in congressional elections. per-capita income in congressional districts ranges from a low of \$7,000 to a high of \$41,000, with an average of \$15,000. During the 1990s, total campaign spending averaged \$696,000 in low income districts (per-capita income below \$12,000), \$806,000, in middle income districts (per-capita income between \$12,000 and \$20,000), and \$1,052,000 in high income districts (per-capita income above \$20,000). Holding constant the competitiveness of the race, an additional \$1,000 dollars of per-capita income in a district translates into an additional \$20,000 of total campaign spending.<sup>21</sup>

Competitiveness of the race has even stronger effects on total spending. The typical House election in the 1990s was decided by 17 percentage points, but many races were determined by small margins. During the 1990s, total spending averaged \$1.5 million in House elections

 $<sup>^{21}</sup>$ To correct for the skew in both district income and total spending, we convert spending and income can into logarithmic scale. The elasticity of total spending in terms of per-capita income is .43

decided by fewer than 5 percentage points; \$1.2 million in House elections decided by 5 to 15 percentage points; \$846,000 in elections decided by 15 to 30 percentage points; and \$489,000 in elections decided by more than 30 percentage points. Holding constant district income, a 1 percentage point reduction in the electoral margin between the candidates corresponds to an increase in combined total spending of \$20,000.

Importantly, individual donors grow in importance as demand for campaign cash increases. In safe House seats, those decide by a margin of 30 percentage points or more, 48% of campaign funds came from individuals and 46% from PACs. In close House races, those decided by fewer than 5 percentage points, 60% of campaign funds came from individuals and 31% came from PACs. Most of the difference in the share from individuals is accounted for by contributions in amounts less than \$500. On the margin, then, candidates raise disproportionately more from individuals than from interest groups.

A more dramatic pattern holds in U.S. Senate elections. The average U.S. Senate candidate receives approximately \$1 to \$2 million from interest groups, and this amount varies little with state size. Total PAC contributions to California Senate elections (Democrat and Republican candidates combined) average of \$2 million from PACs during the 1990s. Total PAC contributions to Wyoming and North Dakota Senate elections received an average of \$950,000 from PACs during the 1990s. Overall, however, California Senate elections are much more expensive than elections in Wyoming and North Dakota. The typical U.S. Senate election in California during the 1990s cost \$24 million, while the typical U.S. Senate election in small states cost \$2 million total in the 1990s. The difference is accounted for almost entirely by individual contributors. California is both wealthier and more populous than Wyoming and North Dakota.<sup>22</sup>

### 4. What Explains Legislative Decisions?

The critical evidence for the argument that campaign finance reflects a market for policy

 $<sup>^{22}</sup>$ See Snyder (1993) and Ansolabehere and Snyder (1999) for more comprehensive and detailed analyses of this phenomenon.

is whether contributions have substantial effects on legislative decisions and policy outcomes. Almost all research on donors' influence in legislative politics the effects of contributions on roll call votes cast by members of Congress.<sup>23</sup>

Dozens of studies have considered the effects of contributions on legislative votes, across hundreds of pieces of legislation. We surveyed nearly fourty articles in economics and political science that examine the relationship between PAC contributions and congressional voting behavior. Table 2 summarizes the key findings reported in these papers and some details about the analyses. Typically, these papers regresses roll call votes – either a single vote, a vote count, or a vote index – on a number of independent variables, including the PAC contributions received by the legislator. Some papers study broad issues and include broad measures such as total corporate PAC contributions and/or total labor PAC contributions. Others study narrower issues and include more narrowly defined contribution measures – e.g., regressing votes on dairy price supports on contributions from dairy industry PACs.

# [Table 2 here]

Setting aside questions about the right specification, what do these studies suggest? We count the number of coefficients on PAC contributions that are signed correctly and statistically significant at the 5% level (two-tailed).<sup>24</sup>

PAC contributions show relatively few effects. In three out of four instances, campaign contributions had no statistically significant effects on legislation or had the wrong sign (suggesting that more contributions lead to less support). Also, given the difficulty of publishing "non-results" in academic journals, we suspect that the true incidence of papers written showing campaign contributions influence votes is even smaller.

<sup>&</sup>lt;sup>23</sup>Exceptions are Hall and Wayman (1990), who study effort on behalf of groups, and Langbein (1986), who study minutes spent with lobbyists. Hansen and Park (1995) study policy outputs – antidumping and countervailing duty decisions by the International Trade Administration – and find that total PAC contributions by an industry typically have no effect on the industry's chances of obtaining a favorable decision.

<sup>&</sup>lt;sup>24</sup>Many papers run a similar model many times, adding different variables to the model to check robustness. We count these as one regression equation. If the coefficients of interest in these nested models are signed correctly and statistically significant at the 5% level of significance for a two-tailed test in at least half the models, we count this as finding campaign contributions as statistically significant. We also consider the specification as "one regression" if there are only small changes to the specification, such as a different measure of a control variable, such as ideology.

We are interested not only in statistical significance, but also in magnitudes. Unfortunately, it is difficult to interpret the relative magnitude and meaning of the coefficients for most of the analyses in Table 2, because few of these papers report enough information about the data (e.g., means and standard deviations of the underlying variables). In addition, two well-known specification issues plague most of these studies. First, there is likely simultaneity between contributions and votes – in many studies the level of PAC contributions is the dependent variable and a roll-call-based measure of "ideology" is one of the independent variables. This issue is ignored in most studies (see Table 2). Second, although most papers attempt to control for district interests and members' own preferences, the variables used are typically crude because of limits on the available data. This is a serious problem because of the tendency for groups to contribute to "friendly" legislators. Such a strategy is well-grounded theoretically – groups may contribute in part to help re-elect their friends, and legislators from "friendly" districts may be able provide services to the groups at lower marginal cost – and is well documented empirically.<sup>25</sup>

To address these problems, we perform our own statistical analysis. Our dependent variable is the roll call voting score produced by the Chamber of Commerce of the U.S. (CCUS). We collected this for the U.S. House from 1978 to 1994. Like many interest groups, the CCUS identifies 12-20 bills in each Congress that are important to its interests, and calculates the percentage of times that each member of Congress votes with the group. Scores therefore run from 0 to 100.<sup>26</sup>

We estimate six models, which cover much of the range found in the existing literature. First, we consider three different ways of controlling for district and legislator preferences: including party affiliation of the member and a measure of district preferences based on voting patterns; including party affiliation of the member and a district-specific fixed effect;

 $<sup>^{25}</sup>$ See, e.g., Herndon (1982), Poole and Romer (1985), Grier and Munger (1986, 1991, 1993), Poole, Romer and Rosenthal (1987), and Evans (1988).

<sup>&</sup>lt;sup>26</sup>We conducted similar analyses for five other organizations as well. The organizations are the AFL-CIO, the American Security Council, the Consumer Federation of America, the League of Conservation Voters, and the National Education Association. Since the basic patterns are similar in all cases, we only report the results for the CCUS.

and including a legislator-specific fixed effect. The last two specifications exploit the panel structure of the data – we observe most legislators several times in the sample. We believe that using legislator-specific fixed effects provides the most compelling estimates, because this controls for legislators' own (average) preferences in addition to district preferences. There is strong evidence that legislators are not tightly constrained by their constituencies when casting roll call votes.<sup>27</sup>

In addition, we estimate each specification using both ordinary least squares (OLS) and instrumental variables (IV). We follow Chappell (1981, 1982), Welch (1982), and others in choosing instruments. Two types of variables are used: the degree of electoral competition, and measures of members' relative "power" inside the House. The idea is that a close race increases an incumbent's demand for PAC contributions, producing an exogenous shift in contributions via in increase in the propensity to "sell" services, including roll call votes. Groups give more to powerful members because their support is especially valuable.<sup>28</sup>

The results are shown in Table 3. The first three columns of present the OLS estimates and the second three columns present the IV estimates.

Columns 1 and 4 are similar to the most common specifications found in the literature, which use direct measures to control for district and legislator preferences. Contributions have significant effects on votes. Even so, taking the most charitable estimates (from column 1), the effects of contributions are quite small compared to other factors. An additional \$60,000 in corporate PAC contributions (approximately one standard deviation) changes the voting score by at most 2 points; an additional \$50,000 in labor PAC contributions changes the voting score by 6 point. By comparison, changing the party of a district's representative changes the voting score by more than 30 points. Using instrumental variables reduces the

<sup>&</sup>lt;sup>27</sup>See, e.g., Poole and Rosenthal (1984, 1997), Levitt (1996), and Ansolabehere, Snyder and Stewart (2001). Two recent papers noted in Table 2 employ member-specific fixed effects (Bronars and Lott, 1997; and Stratmann, 2002). They reach opposite conclusions about the importance of contributions.

<sup>&</sup>lt;sup>28</sup>The instrumental variables are: total campaign spending by the opponent, —vote-share minus .5—, a dummy variable indicating that the member ran unopposed, a dummy variable indicating that the member is a party leader, a dummy variable indicating that the member is a committee chair, and a dummy variable indicating that the member was on the Ways and Means or Energy and Commerce committee (probably the two most powerful committees with respect to business issues).

estimated effects of contributions substantially, and reverse the sign on corporate donations (column 4).

Controlling for voters' preferences using district fixed effects almost completely eliminates the effects of contributions on legislative voting, in both the OLS and IV estimates. And the effect of a change in party actually increases, to 40 points on the scale.

Using legislator fixed effects eliminates the effects of contributions entirely, in both the OLS and IV. The estimated coefficients are tiny and statistically insignificant. Evidently, changes in donations to an individual legislator do not translate into changes in that legislator's roll call voting behavior.

Overall, our findings parallel that of the broader literature. Indicators of party, ideology, and district preferences account for most of the systematic variation in legislators' roll call voting behavior. Interest group contributions account for at most a small amount of the variation. In fact, after controlling adequately for legislator ideology, these contributions have no detectable effects on legislative behavior.

### 5. Why Do Interest Groups Give at All?

Aggregate campaign spending in the United States, we conjecture, mainly reflects the consumption value that individuals receive from giving to campaigns. Perhaps the sharpest evidence in support of this conjecture is the finding that income, not government spending, explains campaign spending in the states. In addition, individual contributors provide the average and the marginal dollar to political campaigns. Because politicians can readily raise campaign funds from individuals, rent-seeking donors lack the leverage to extract excessively large private benefits from legislation.

This argument suggest a reorientation of future research on campaign finance.

First, it is still possible that campaign contributions have significant effects on economic and social policies. To raise sufficient funds, candidates might skew policies in ways preferred by donors. Campaign contributions might therefore act like weighted votes. And contributors, who are disproportionately wealthy, might have different policy preferences than the

median voter. Whether this has significant effects on policy is unknown. Fleshing this out requires careful study of how policy responds to the preferences of contributors and the overall level of contributions.

Second, more empirical and theoretical work remains to make the argument convincing. As with other forms of voluntary public-spirited activities such as giving to charities or voting, the theoretical underpinnings of small campaign donations are not well developed. It is unclear what specific empirical predictions distinguish consumption from rent-seeking, or what evidence will prove compelling.

The consumption idea itself needs refinement. Consumption might take many forms, including expression, citizen duty, and social life. Do fundraising strategies of PACs look like those of charitable organizations or like those of venture capitalists? Charities hold events, bring in speakers with as much celebrity status as possible, and conduct mass-mail drives. If campaign contributions are a form of expression, then we might expect certain types of people go give to like types of candidates and organizations, e.g., women to women candidates. Are contributors more interested in politics on a personal level than other citizens? Is politics an important part of their social life?

Finally, if the consumption/participation/expression argument is correct, then it turns Tullock's puzzle on its head. The question is not why do corporations, unions, and other interest groups give so little, but why do they give at all? Why do they form PACs?<sup>29</sup> Why do they behave so strategically when they give?

We think there are four possible answers, each deserving of further exploration.

One possible answer is that interest groups give a little and get a little. Although aggregate expenditures primarily reflect consumption, a subset of donors – mainly corporate and industry PACs – behave as if they expected favors in return. These contributors may in fact receive a reasonable rate of return, say 20 percent, but their investments do not account for most money, and they do not explain much government activity.

A second answer is that money buys access, rather than policy directly. Legislators

<sup>&</sup>lt;sup>29</sup>One possibility is that PACs coordinate individual donations and help overcome collective action problems. See Marx and Matthews (2000) for an interesting model that might be applicable.

and their staffers are busy people. Campaign contributions are one way to improve the chances of getting to see the legislator about matters of concern to the group. There is some evidence that campaign contributions are tied to lobbying activities. Groups that give large amounts to political campaigns emphasize lobbying.<sup>30</sup> The behavior of interest groups speaks to the value of lobbying: organizations spend 10 times more on lobbying than they do on campaign contributions.<sup>31</sup> Of course, access itself does not guarantee influence, but only the opportunity to provide information that might influence legislators.

A third explanation is that groups seek to affect elections – to elect legislators that are sympathetic to their views and defeat legislators known to be hostile. Our analysis of roll call voting above reveals that who is in the legislature – a Republican or a Democrat – has an enormous effect on support for a range of policies of importance to groups. Helping to elect friends might have much larger marginal effects on legislation than trying to buy support from those already in Congress. Why doesn't this lead groups to contribute untold billions of dollars to friendly candidates? There are two reasons. First, statistical analyses estimate that the marginal effect of an additional \$100,000 of campaign spending is quite small, probably no more than 1 percentage point in the vote in the typical House race even in the observed ranges (e.g., Jacobson, 1980; Levitt, 1994). Second, collective action problems abound, leading to under-investment in activities that may benefit, say business as a whole.

A final possibility is that even interest groups give for consumption. PAC contributions are solicited at events attended by prominent national politicians – people of celebrity status. Organizations' executives and managers may value being part of the Washington establishment.

<sup>&</sup>lt;sup>30</sup>Sabato (1984) discusses the general connection between contributions and lobbying. Ansolabehere, Snyder and Tripathi (2002) find a strong correlation between between the amount groups contribute and the amount they lobby. Langbein (1986) estimates the price of a legislator's time. The estimate – that one hour of time costs around \$10,000 – does not appear unreasonable.

<sup>&</sup>lt;sup>31</sup>The Lobby Reform Act (1995) provides for disclosure of expenditures on executive and legislative lobbying. In 1997-1998, interest groups spent \$3 billion on lobbying, compared to \$300 million on PAC contributions (Ansolabehere, Snyder and Tripathi (2002).

# References

- Alexander, Herbert E. 1984. Financing Politics. Washington DC: CQ Press.
- Ansolabehere, Stephen and James M. Snyder, Jr. 1999. "Money and Institutional Power." Texas Law Review 77: 1673-1704.
- Ansolabehere, Stephen and James M. Snyder, Jr. 2000. "Money and Office." In *Continuity and Change in Congressional Elections*, edited by David Brady and John Cogan. Stanford, CA: Stanford University Press.
- Ansolabehere, Stephen, Alan Gerber, and James M. Snyder, Jr. 2001. "Corruption and the Growth of Campaign Spending." In *A User's Guide to Campaign Finance Reform*, edited by Gerald C. Lubenow. New York: Rowman and Littlefield.
- Ansolabehere, Stephen, James M. Snyder, Jr., and Charles Stewart, III. 2001. "Candidate Positioning in U.S. House Elections." *American Journal of Political Science* 45: 136-159.
- Ansolabehere, Stephen, James M. Snyder, Jr., and Micky Tripathi. 2002. "Are PAC Contributions and Lobbying Linked? New Evidence from the 1995 Lobby Disclosure Act." *Business and Politics*, forthcoming.
- Bailey, Michael. 2002. "Do Campaign Contributions Lead to Policies That Favor the Wealthy? An Examination of Taxing and Spending in the American States." Unpublished manuscript, Georgetown University.
- Baron, David P. 1989. "Service-Induced Campaign Contributions and the Electoral Equilibrium." Quartely Journal of Economics 104: 45-72.
- Baron, David P. 1991. "Campaign Contributions and Party-Candidate Competition in Services and Policies." In *Political Economy: Institutions, Competition, and Representation*, edited by W.A. Barnett, M.J. Hinich, and N.J. Schofield. Cambridge: Cambridge University Press.
- Bronars, Stephen G., and John R. Lott, Jr. 1997. "Do Campaign Donations Alter How a Politician Votes? Or, Do Donors Support Candidates Who Value the Same Things That They Do?" *Journal of Law and Economics* 40: 317-350.
- Chappell, Henry W., Jr. 1981. "Campaign Contributions and Voting on the Cargo Preference Bill: A Comparison of Simultaneous Models." *Public Choice* 36: 301-312.
- Chappell, Henry W., Jr. 1982. "Campaign Contributions and Congressional Voting: A Simultaneous Probit-Tobit Model." Review of Economics and Statistics 62: 77-83.
- Coughlin, Cletus C. 1985. "Domestic Content Legislation: House Voting and the Economic Theory of Regulation." *Economic Inquiry* 23: 437-448.
- Dal-Bo, Ernesto. 2001. "Bribing Voters." Unpublished manuscript, Oxford University.

- Denzau, Arthur T., and Michael C. Munger. 1986. "Legislators and Interest Groups: How Unorganized Interests Get Represented." American Political Science Review 80: 89-106.
- Durden, Garey C., Jason F. Shogren, and Jonathan I. Silberman. 1991. "The Effects of Interest Group Pressure on Coal Strip-Mining Legislation." *Social Science Quarterly* 72: 239-250.
- Evans, Diana. 1986. "PAC Contributions and Roll-Call Voting: Conditional Power." In *Interest Group Politics*, 2nd ed., edited by Allan J. Cigler and Burdett A. Loomis. Washington, D.C.: Congressional Quarterly.
- Evans, Diana. 1988. "Oil PACs and Aggressive Contribution Strategies." *Journal of Politics* 50: 1047-1056.
- Feldstein, Paul J., and Glenn Melnick. 1984. "Congressional Voting Behavior on Hospital Legislation: An Exploratory Study." *Journal of Health Politics* 8: 686-701.
- Frendreis, John P., and Richard Waterman, 1986. "PAC Contributions and Legislative Behavior: Senate Voting on Trucking Deregulation." Social Science Quarterly 66: 401-412.
- Grenzke, Janet M. 1989. "PACS and the Congressional Supermarket: The Currency is Complex." American Journal of Political Science 33: 1-24.
- Grier, Kevin, and Michael Munger. 1986. "The Impact of Legislator Attributes on Interest-Group Campaign Contributions." *Journal of Labor Research* 7: 349-361.
- Grier, Kevin B., and Michael C. Munger. 1991. "Committee Assignments, Constituent Preferences, and Campaign Contributions." *Economic Inquiry* 29: 24-43.
- Grier, Kevin B., and Michael C. Munger. 1993. "Comparing Interest Group PAC Contributions to House and Senate Insumcumbents, 1980-1986." *Journal of Politics* 55: 615-643.
- Grier, Kevin B., Michael C. Munger, and Brian E. Roberts. 1994. "The Determinants of Industry Political Activity, 1978-1986." American Political Science Review 88: 911-926.
- Grossman, Gene, and Elhanan Helpman. 1994. "Protection for Sale." American Economic Review 84: 833-850.
- Hall, Richard L., and Frank W. Wayman. 1990. "Buying Time: Moneyed Interests and the Mobilizations of Bias in Congressional Committees." *American Political Science Review* 3: 797-820.
- Hansen, Wendy L., and Kee Ok Park. 1995. "Nation-State and Pluralistic Decision Making in Trade Policy: The Case of the International Trade Administration." *International Studies Quarterly* 39: 181-211.
- Helpman, Elhanan, and Torsten Persson. 2001. "Lobbying and Legislative Bargaining." Advances in Economic Analysis and Policy 1, article 3.

- Herndon, James. 1982. "Access, Record, and Competition as Influences on Interest Group Contributions to Congressional Campaigns." *Journal of Politics* 44: 996-1019.
- Jacobson, Gary C. 1980. Money in congressional elections. New Haven, CT: Yale University Press.
- Johnson, Linda L. 1985. "The Effectiveness of Savings and Loan Political Action Committees." Public Choice 46: 289-304.
- Jones, Woodrow, Jr., and K. Robert Keiser. 1987. "Issue Visibility and the Effects of PAC Money." Social Science Quarterly 68: 170-176.
- Kau, James B., and Paul H. Rubin. 1981. "The Impact of Labor Unions on the Passage of Economic Legislation." *Journal of Labor Research* 2: 133-145.
- Kau, James B., and Paul H. Rubin. 1984. "Economic and Ideological Factors in Congressional Voting: The 1980 Election." *Public Choice* 44: 385-388.
- Kau, James B., Donald Keenan, and Paul H. Rubin. 1982. "A General Equilibrium Model of Congressional Voting." *Quarterly Journal of Economics* 97: 271-293.
- Kroszner, Randall S., and Thomas Stratmann. 1998. "Interest Group Competition and the Organization of Congress: Theory and Evidence from Financial Services Political Action Committees." *American Economic Review* 88: 1163-87.
- Kroszner, Randall S., and Thomas Stratmann. 2000. "Congressional Committees as Reputation-Building Mechanisms: Repeat PAC Giving and Seniority on the House Banking Committee." *Business and Politics*, 2: 35-52.
- Langbein, Laura I. 1986. "Money and Access: Some Empirical Evidence." *Journal of Poltiics* 48: 1052-62.
- Langbein, Laura I. 1993. "PACs, Lobbies, and Political Conflict: The Case of Gun Control." *Public Choice* 75: 254-271.
- Langbein, Laura I., and Mark Lotwis. 1990. "The Political Efficacy of Lobbying and Money: Gun Control in the U.S. House, 1986." *Legislative Studies Quarterly* 15: 413-440.
- Levitt, Steven D. 1994. "Using Repeat Challengers to Estimate the Effect of Campaign Spending on Election Outcomes in the U.S. House." *Journal of Political Economy* 102:777-798.
- Levitt, Steven D. 1996. "How Do Senators Vote? Disentangling the Role of Voter Preferences, Party Affiliation, and Senator Ideology." *American Economic Review* 86: 425-441.
- Lott, John R., Jr. 2000. "A Simple Explanation for Why Campaign Expenditures are Increasing: The Government is Getting Bigger." *Journal of Law and Economics* 43: 359-xxx.

- Marks, Stephen V. 1993. "Economic Interests and Voting on the Ominbus Trade Bill of 1987." *Public Choice* 75: 21-42.
- Mayer, Kenneth R. 1991. The Political Economy of Defense Contracting. New Haven, CT: Yale University Press.
- McArthur, John, and Stephen V. Marks. 1988. "Constituent Interest vs. Legislator Ideology: The Role of Political Opportunity Cost." *Economic Inquiry* 26: 461-470.
- Milyo, Jeffrey, David Primo, and Timothy Groseclose. 2000. "Corporate PAC Campaign Contributions in Perspective." Business and Politics 2: 75-88.
- Nollen, Stanley D., and Dennis P. Quinn. 1994. "Free Trade, Fair Trade, Strategic Trade, and Protectionism in the U.S. Congress, 1987-88." *International Organization* 48: 491-525.
- Neustadtl, Alan. 1990. "Interest-Group PACsmanship: An Analysis of Campaign Contributions, Issue Visibility, and Legislative Impact." Social Forces 69: 549-564.
- Peltzman, Sam. 1984. "Constituent Interest and Congressional Voting." *Journal of Law and Economics* 27: 181-210.
- Poole, Keith T., and Howard Rosenthal. 1984. "The Polarization of American Politics." *Journal of Politics* 46: 1061-1079.
- Poole, Keith T., and Howard Rosenthal. 1997. Congress: A Political-Economic History of Roll Call Voting. Oxford: Oxford University Press.
- Poole, Keith T., and Thomas Romer. 1985. "Patterns of Political Action Committee Contributions to the 1980 Campaigns for the U.S. House of Representatives." *Public Choice* 47:63-112.
- Poole, Keith T., Thomas Romer, and Howard Rosenthal. 1987. "The Revealed Preferences of Political Action Committees." *American Economic Review* 77:298-302.
- Romer, Thomas, and James M. Snyder. 1994. "An Empirical Investigation of the Dynamics of PAC Contributions." *American Journal of Political Science* 38: 745-769.
- Rosenstone, Steven J., and John Mark Hansen. 1992. Mobilization, Participation, and Democracy in America. New York: MacMillan Publishing Co.
- Rothenberg, Lawrence S. 1992. Linking Citizens to Government: Interest Group Politics at Common Cause. Cambridge: Cambridge University Press.
- Sabato, Larry. 1984. PAC Power. New York: W.W. Norton.
- Saltzman, Gregory M. 1987. "Congressional Voting on Labor Issues: The Role of PACs." Industrial and Labor Relations Review 40: 163-179.
- Schroedel, Jean R. 1986. "Campaign Contributions and Legislative Outcomes." Western Political Quarterly 39: 371-389.

- Silberman, Jonathan I., and Garey Durden. 1976. "Determining Legislative Preferences on the Minimum Wage: An Economic Approach." *Journal of Political Economy* 84: 317-329.
- Snyder, James M., Jr. 1990. "Campaign Contributions as Investments: The House of Representatives, 1980-86." Journal of Political Economy 98: 1195-1227.
- Snyder, James M., Jr. 1992. "Long-Term Investing in Politicians, or Give Early, Give Often." *Journal of Law and Economics* 35: 15-44.
- Snyder, James M., Jr. 1993. "The Market for Campaign Contributions: Evidence for the U.S. Senate, 1980-1986." *Economics and Politics* 5: 219-240.
- Sorauf, Frank. 1988. Money in American Elections. Glenview, IL: Scott, Foresman and Company.
- Sorauf, Frank J. 1992. Inside Campaign Finance: Myths and Realities. New Haven, CT: Yale University Press.
- Stevens, Allison. 2001. "Despite Terrorism, Candidates Make Slow Return to Fundraising." The Hill, October 24 (www.hillnews.com/102401).
- Stratmann, Thomas. 1991. "What Do Campaign Contributions Buy? Deciphering Causal Effects of Money and Votes." Southern Economic Journal 57: 606-620.
- Stratmann, Thomas. 1995. "Campaign Contributions and Congressional Voting: Does the Timing of Contributions Matter?" Review of Economics and Statistics 77: 127-136.
- Stratmann, Thomas. 2002. "Can Special Interests Buy Congressional Votes? Evidence from Financial Services Legislation." *Journal of Law and Economics*, forthcoming.
- Tosini, Suzanne C., and Edward Tower. 1987. "The Textile Bill of 1985: Determinants of Congressional Voting Patterns." *Public Choice* 54: 19-25.
- Tullock, Gordon. 1972. "The Purchase of Politicians." Western Economic Journal 10: 354-355.
- Verba, Sidney, Kay Lehman Schlozman, and Henry E. Brady. 1995. Voice and Equality: Civic Voluntarism and American Politics. Cambridge, MA: Harvard University Press.
- Vesenka, Mary H. 1989. "Economic Interests and Ideological Conviction: A Note on PACs and Agricultural Acts." *Journal of Economic Behavior and Organization* 12: 259-263.
- Wayman, Frank W. 1985a. xx. [we cite this in table 2]
- Wayman, Frank W. 1985b. "Arms Control and Strategic Arms Voting in the U.S. Senate: Patterns of Change, 1967-1983." *Journal of Conflict Resolution* 29: 225-251.
- Welch, William P. 1982. "Campaign Contributions and Legislative Voting: Milk Money and Dairy Price Supports." Western Political Quarterly 35: 478-495.
- Wilhite Allen, and John Theilmann. 1987. "Labor PAC Contributions and Labor Legislation: A Simultaneous Logit Approach." *Public Choice* 53: 267-76.

- Wright, John R. 1985. "PACs , Contributions, and Rolls Calls: An Organizational Perspective." *American Political Science Review* 79: 400-14.
- Wright, John R. 1989. "PAC Contributions, Lobbying, and Representatives." *Journal of Politics* 51: 713-29.
- Wright, John R. 1990. "Contributions, Lobbying, and Committee Voting in the U.S. House of Representatives." *American Political Science Review* 84: 417-38.

 $\begin{array}{c} {\rm Table\ 1} \\ {\rm Campaign\ Spending\ in\ Gubernatorial\ Races} \\ {\rm 1976-2000} \end{array}$ 

Dep. Var. = Log of Total Spending By All Candidates, Per-Capita

Log of Personal Income, Per-Capita	1.07** (.31)	1.17* (.50)
Log of State Government Spending, Per-Capita		09 (.32)
Log of Population	33 (.36)	31 (.36)
Closeness in General Election	2.93** (.39)	2.92** (.39)
Democrat is Incumbent	$\begin{bmatrix}29^{**} \\ (.07) \end{bmatrix}$	29 (.07)
Republican is Incumbent	14 (.08)	14 (.08)
Average Closeness in 1st Primary	.91** (.21)	.92** (.21)
Average Closeness in 2nd Primary	1.11** (.46)	1.09**
$\mathbb{R}^2$ within state	.41	.41
# Obs.	326	326

OLS estimates with state fixed-effects.

Standard errors in parentheses.

<sup>\*\* =</sup> significant at the .01 level; \* = significant at the .05 level.

Table 2. Summary of Roll-Call Voting Studies								
	_	#		# Sig PAC	Ideology or			
Study	Issues	Votes	IV?	Coeffs	Party Sig?			
Silberman, Durden (1976)	minimum wage	2	no	2/2	yes			
Chappell (1981)	cargo preference	1	yes	4/8	yes			
Kau, Rubin (1981)	various economic	8	yes	9/48	yes			
Kau, Kennan, Rubin (1982)	various economic	8	yes	5/26	yes			
Chappell (1982)	variety	7	yes	0/8	yes			
Welch (1982)	dairy subsidy	1	yes	$\frac{1}{2/4}$	yes			
Evans (1986)	tax, Chrysler	8	no	$?/16^{1}$	yes			
Kau, Rubin (1984)	variety	10	yes	10/30	n/r			
Peltzman (1984)	variety	333	no	5/12	yes			
Feldstein, Melnick (1984)	health care	1	no	1/1	yes			
Coughlin (1985)	domestic content	2	no	2/2	yes			
Johnson (1985)	bank, real estate	9	yes	11/45	yes			
Wright (1985)	variety	5	no	$?/5^2$	yes			
Wayman (1985a)	arms control	11	no	0/1	yes			
Wayman (1985b)	arms control	8	no	1/12	n/i			
Frendreis, Waterman (1985)	trucking	4	no	$\frac{1}{2}/2$	yes			
Schroedel (1986)	banking	3	no	3/5	yes			
Wilhite, Theilmann (1987)	labor	2	yes	2/2	yes			
Tosini, Tower (1987)	trade (textiles)	1	no	1/2	yes			
Jones, Keiser (1987)	labor	1	no	5/5	yes			
Saltzman (1987)	labor	1	yes	2/2	yes			
MacArthur, Marks (1988)	domestic content	1	no	1/1	yes			
Grenzke (1989)	variety	30	yes	6/100	yes			
Vesenka (1989)	agriculture	14	no	4/14	yes			
Neustadl (1990)	labor, business	2	no	4/8	yes			
Wright (1990)	tax, agriculture	2	no	0/4	no			
Langbein, Lotwis (1990)	gun control	6	no	2/3	yes			
Durden et al. (1991)	strip mining	3	no	2/2	yes			
Mayer (1991)	aircraft carriers	1	no	0/1	yes			
Stratmann (1991)	agriculture	10	yes	8/10	yes			
Rothenberg (1992)	MX missile	8	no	1/8	yes			
Langbein (1993)	gun control	6	no	0/5	yes			
Marks (1993)	trade	5	no	2/5	yes			
Nollen, Quinn (1994)	trade	6	no	3/18	yes			
Stratmann (1995)	agriculture	10	yes	13/20	yes			
Bronars, Lott (1997)	variety	35	no	5/50	yes			
Stratmann (2002)	banking	2	no	6/6	yes			

n/r = not reported; n/i = not included

# Sig PAC Coeffs column: The first number gives the number of coefficients on PAC contribution variables that are statistically significant at the .05 level (two-tailed test) and have the predicted sign. The second number gives the total number of PAC contribution variables in the analysis.

<sup>&</sup>lt;sup>1</sup> Reports that "PAC contributions were usually among the less important influences on House members' voting on the two bills" (p. 126).

<sup>&</sup>lt;sup>2</sup> Reports that "In none of the five cases examined were campaign contributions an important enough force to change the legislative outcomes from what they would have been without any contributions" (p. 411).

Dep. Var. = CCUS Roll-Call Voting Score (N = 3400)

	Least Squares			Instrumental Variables			
	Spec. 1	Spec. 2	Spec. 3	Spec. 1	Spec. 2	Spec. 3	Mean, SD
Corporate Contributions (in \$10,000)	0.32** (0.04)	0.07 (0.07)	0.02 (0.06)	-0.30** $(0.12)$	-0.05 $(0.17)$	-0.14 (0.26)	6.53, 5.99
Labor Union Contributions (in \$10,000)	$-1.14^{**}$ (0.06)	$-0.44^{**}$ (0.08)	-0.13 (0.08)	-0.18 (0.17)	$-0.02^{**}$ $(0.23)$	0.41 (0.36)	4.48, 5.39
Member is Republican	32.6** (0.67)	40.6** (1.36)	_	40.5** (1.34)	44.2** (2.87)	_	0.39, 0.49
District Partisanship	58.4** (2.48)	_	_	59.5** (2.71)	_	_	0.00, 0.11
District in South	10.2** (0.56)	_	_	14.1** (0.84)	_	_	0.26, 0.44

All specifications include year fixed-effects. Specification 2 includes district fixed-effects. Specification 3 include member fixed-effects.

Standard errors in parentheses.

<sup>\*\* =</sup> significant at the .01 level; \* = significant at the .05 level.

Figure 1A

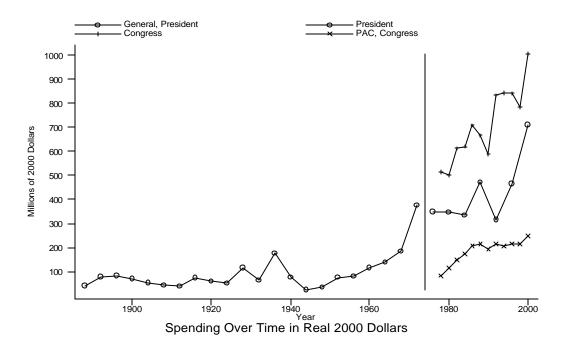


Figure 1B

