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PACs and the Congressional Supermarket: The Currency Is Complex*

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Although PACs attempt to influence the legislative process with contributions, this research finds little evidence that the contributions of 120 PACs affiliated with 10 organizations affected the voting patterns of the House members who served continuously from 1975 to 1982. In the few cases in which a relationship between contributions and a member's votes is established, the analysis indicates that contributions are a surrogate measure of a more important and larger package of support for the member from the interest groups. Two-stage least squares regression models are used to test the relationship between PAC contributions and a member's votes, controlling for the incumbent's ideology and party, and the political leaning of the district. Interviews with PAC officials supplement the statistical analysis.

Money has played an integral role in American politics ever since the 1700s, when candidates rewarded supporters with whiskey (Thayer, 1973). While there is limited information on how candidates collected money before 1972 (Heard, 1960), more recent data indicate significant increases in the amount of money collected from both political action committees (PACs) and individuals. Although individual contributions remain the largest source of funds for congressional candidates, the proportion of money that House members receive from PACs has grown from 21 percent in the 1978 election cycle to 34 percent in the 1986 cycle. During this decade PAC contributions to House candidates increased from \$24.4 million to \$87.2 million, and the number of PACs increased from 1,146 to 4,157.¹

PAC money could affect the legislative process by influencing members' votes on legislation and by influencing the outcome of elections. This article argues that although PAC contributions may facilitate a lobby's access to a representative's time, contributions from large PACs do not generally influence members' voting patterns on issues of interest to these groups. The conditions under which money successfully alters electoral outcomes have been discussed elsewhere (Crain and Tollison, 1976; Deegan, 1979; Glantz, Abramowitz, and Burkart, 1976; Jacobson, 1980; Johnston, 1978; Palda, 1975; Shepard, 1977; Silberman, 1976; Welch, 1974, 1976, 1980, 1981; Silberman and Yochum, 1978).

Considerable controversy has resulted from the conclusions of those studying the impact of contributions on members' votes. Political observers and activ-

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ists cite cases where PACs give money to those in power who share their issue positions (Green, 1975; Common Cause, 1981; Wertheimer, 1980; Drew, 1983). The analysis in this literature is anecdotal and unsystematic or is based on correlations. Whereas the coincidence of power, votes, and money is established in numbers of situations, the causality and the generality of the relationships are unclear.

With the publication of campaign contribution data, several researchers have begun quantitative, systematic examinations of the relationships between contributions and members' voting. Their studies are based on a variety of bills and issue domains and an assortment of statistical techniques and conceptual models. To be complete, such studies require four features: the statistical methods must clarify the simultaneous relationships between money and votes; the control variables must be solid in their conceptualization and measurement; a dynamic perspective extending beyond a single Congress must trace changes; and statistical analysis must be supplemented with interviews to corroborate the assumptions made as well as the results.

The relationship between a member's position on issues and PAC contributions is simultaneous in that voting behavior may be influencing a PAC's contribution at the same time that PAC contributions may be influencing voting behavior. Studies that ignore this simultaneity may report regression coefficients that overestimate the impact of contributions on voting. The problem is especially serious when single equation techniques are used to conclude that money does influence votes (Freundreis and Waterman, 1985; Silberman and Durden, 1976; Brown, 1983; Gleiber, King, and Mahood, 1987; Ginsberg and Green, 1986). Specification error is not as serious for studies that conclude that contributions have little or no impact on members' voting because the conclusion is likely to be the same regardless of whether the relationship is conceptualized as simultaneous or not (Wayman and Kutler, 1985; Wright, 1985; Nelson, 1982; Welch, 1982; Evans, 1983).² However, even the simultaneous analysis techniques yield controversial results. Chappell (1982) finds little support for the hypothesis that contributions influence votes, whereas Kau and Rubin (1982) and Wilhite and Theilmann (1987) argue that they do.

The validity of the models of the relationship between contributions and members' voting also depends upon how well the propensity to vote in a particular direction in the absence of influence from a PAC contribution is measured. The other influences on the vote are not taken into account, the findings may overestimate the influence of money on votes. The control variables are usually conceptualized as a mix of member's ideology, district interests, and party affiliation.

²Because simultaneous techniques such as two-stage least squares regression yield consistent coefficients in exchange for an increase in standard errors and decrease in precision, the use of simultaneous techniques is not likely to yield significant coefficients when the single equation coefficients are not significant.

tion. Ideology is measured by a rating (ADA, ACA, or COPE), which is a summary of a member's votes on a variety of issues.³ Influence from the district is usually measured by the district's demographic and political characteristics.

In light of the importance of controlling for these factors and the difficulty of measuring them, a dynamic model that explains changes in voting behavior and changes in contributions may be used to gain insights that the static models with troublesome control variables can miss. For example, while it may be impossible to measure a member's predisposition to vote with labor on a set of bills, it may be possible to relate changes in the member's support for labor legislation to changes in labor's contributions and changes in district contributions. This approach eliminates the need to measure many control variables because they are likely to remain stable. District characteristics certainly fall into this category, with the exception of districts that are significantly redrawn after a census. General attitudes about the role of government and other components of ideology can also be assumed to be reasonably stable. In spite of the advantages of a dynamic perspective, most studies of campaign financing are case studies of specific legislation in a single Congress.⁴

While different approaches to methodological problems may account for some differences in the conclusions of researchers, it is also likely that the influence of PAC contributions varies, depending on the type of legislation and circumstances surrounding it. For example, contributions may be influential on legislation with low public visibility, particularly if neither party nor constituency influences are present (Freundreis and Waterman, 1985; Schroedel, 1986). Because so much of the research on PAC contributions consists of case studies, it is difficult to establish whether specific cases of PAC influence are indicative of a general pattern of PAC influence on much of the legislative agenda, or whether these cases are exceptions to the norm.

³Because these ratings are based upon conflictual votes of concern to PACs, it is entirely possible that the votes were influenced by PAC money, and therefore the rating may not be a measure of how the member would behave without PAC contributions.

⁴Measuring district influence with district characteristics is problematic because the member relates to his or her district through a supporting coalition, representing only part of the district, particularly in the case of a heterogeneous and polarized district (Fiorina, 1974; Kingdon, 1968; Fenno, 1978). General demographic and occupation statistics do not indicate which district interests are most important to the House member. Some of the more successful attempts to use district characteristics as a measure of district influence include studies of narrow issue domains, where the district characteristic is tied closely to the legislative votes (Welch, 1982; Wayman and Kutler, 1985; Evans, 1983).

⁵Wayman and Kutler (1985) and Freundreis and Waterman (1985) construct indices from several votes on oil and gas deregulation and trucking deregulation, respectively, but neither study is fully dynamic. Ginsberg and Green (1986) measure member behavior with ratings that summarize voting in an issue domain. They attempt a partial dynamic analysis, but the conceptualization of their dependent variable (change in votes) is weak because it is a proportion that has the same value for members undergoing very different amounts of change.

This research conceptualizes the relationship between member's voting behavior on issues and PAC contributions as reciprocal and simultaneous. The two-stage least squares regression analysis permits generalizations about whether PAC contributions influence legislator's voting and/or legislator's voting influences PAC contributions. The longitudinal nature of the design (1975-82) is well suited to asking questions about changes in legislator's voting behavior and campaign contributions, thus avoiding some of the difficulties in measuring control variables. Interviews with PAC directors about various contribution and voting behavior patterns corroborate the statistical analysis and provide insights into the complexities of the relationships. Finally, because this research investigates the influence of contributions from several PACs on members' votes, it provides insights into the impact of PAC contributions on voting behavior in a variety of issue domains.

Research Design

The representatives investigated in the study include all 154 members who served continuously between 1973 and 1982 and 18 members who served between 1973 and 1980 but were not present for the 1981-82 Congress. Some members were from safe seats; some from marginal seats; and others lost their bid for reelection in 1980 or 1982.⁶ Campaign financing data were collected on 120 PACs affiliated with 10 major organizations that are concerned with legislation in a variety of issue domains: education (National Education Association [NEA]); business (Business Industry Political Action Committee [BIPAC]); construction (Association of General Contractors [AGC]); insurance (National Association of Life Underwriters Political Action Committee [LUPAC]); abortion (National Abortion Rights Action League [NARAL]); private sector labor (AFL-CIO Committee on Political Education [COPE]); Communication Workers of America [CWA]; United Auto Workers [UAW]; public sector labor (American Federation of Government Employees [AFGE]); American Federation of State, County, and Municipal Employees [AFSCME]). Open-ended interviews with officials in each of these organizations were conducted and subsequently supplemented with telephone conversations.

Three of the legal Federal Election Commission (FEC) categories of PACs are represented. LUPAC and AGC are affiliated with trade associations. BIPAC and NARAL have no connected organization. The remaining PACs are affiliated

⁶The study is limited to these veteran legislators because only they have a relationship with PACs that could be examined over time. These members are not too electorally secure to test the influence of PAC contributions. Thirty-five percent of these House members faced at least one close election between 1972 and 1980, in which they won or lost by less than the 10 percent. Sixteen were defeated in 1980, and six were defeated in 1982. Many of the 14 incumbents who retired did so to avoid a tough electoral battle. Moreover, the uncertainties of politics are such that even apparently safe incumbents are nervous about elections (Fenno, 1978; Mann, 1978; Jacobson, 1980, 1987).

with labor organizations. Corporate PACs are excluded because none of them both contributed to incumbent House members between 1975 and 1982 and made available a list of votes in which they were particularly interested during that time period. However, BIPAC is considered an umbrella PAC, from which many corporate PACs get strategic information. Also, LUPAC and AGC are business-related PACs. While there are no corporate PACs in the study, technically speaking, business interests and behavior are represented.

Some of the largest PACs are included in the study. PACs affiliated with four of these 10 organizations were among the top 10 contributors to federal candidates during this period (UAW, NEA, COPE, CWA). NARAL and BIPAC have been among the top 10 contributors in the nonconnected category. LUPAC is one of the top contributors in the trade/membership/health category.

Because the influence of PAC contributions on member's votes is likely to vary with the type of legislation, interest groups with different agendas, broad and focused, high and low visibility, were chosen. The breadth of an agenda is determined by the extent to which votes on legislation in one PAC's rating are included in another PAC's rating.⁷ COPE has the broadest agenda. Between 40 and 50 percent of the votes of concern to AGC, LUPAC, AFGE, NEA, AFSCME, CWA, and UAW are also included in the COPE rating. The UAW's agenda, although not as broad as COPE's, still overlaps significantly with the NEA, AFSCME, and CWA. (Between 30 and 40 percent of the votes of concern for each of these PACs is also of concern to the UAW.) PACs with agendas of intermediate breadth include AFGE, NEA, AFSCME, CWA, and BIPAC. There is little overlap of the agendas of each of these with each other, even though several of them are categorized as labor PACs. (E.g., only 14 percent of AFSCME's votes are also in AFGE's ratings, even though both are organizations of government employees.) The PACs with the most focused agendas are the AGC, NARAL, and LUPAC, where there is virtually no overlap with any other PAC (except for COPE). While the PAC agendas vary from broad to narrow, it is important to note that all of these PACs have fairly focused, specific issue concerns. Sixty-four percent of the votes are included in only one PAC's rating, and another 23 percent are included in the ratings of only two or three PACs. For the majority of votes of concern to even large interest groups, there is no overlap with another of the PACs in this study.

The publicity surrounding the PAC agendas varies. The abortion votes of concern to NARAL are highly visible and important to the constituencies of most members. Therefore, NARAL's contribution may have little impact on members' voting on abortion issues. Several other PAC ratings (COPE, UAW, CWA, AFGE, AFSCME, BIPAC, NEA) generally include very specific funding and

⁷The ratings included 384 unique roll call votes. Two roll call votes on the same bill (i.e., different amendments) were considered unique only if they occurred on different days.

regulatory measures, which are of great concern to a narrow, politically active constituency, but of little interest to most voters in most districts. Because the activists interested in legislation related to general union, business, and education concerns are relatively widespread throughout many districts, they can generate moderate constituency interest in some of the votes in the PAC's agenda. However, many, if not most of the votes are unlikely to attract much voter interest, or even party pressure.⁸ The agendas of LUPAC and AGC, the least visible to voters, are of interest to a narrow set of elites. The LUPAC ratings include mostly financing legislation. AGC ratings are based virtually entirely on port barrel legislation (i.e., Tenn-Tom Waterway, Gasohol Exemption/Windfall Profits Tax, public works appropriations, environmental impact statements).

Because the 10 interest groups are large groups and because they have chosen to focus attention on particular legislation by including it in their ratings, all of the legislation examined here is important. The study's conclusions may not be generalizable to the impact of contributions on less important, less conflictual, or less visible votes. However, the public debate about PAC contributions often focuses on the big contributors and their influence on important pieces of legislation. This study attempts to contribute to this debate by investigating whether contributions from PACs with broad or focused, highly publicized or less visible agendas bring about a pattern of voting on issues that concern them.

Static Model

The impact of PAC contributions on congressional voting will be investigated from two perspectives. The static model investigates whether members vote in a pro-PAC manner because they receive higher PAC contributions than do their colleagues. This model uncovers whether certain patterns of behavior are being maintained by PAC contributions. The dynamic model, discussed later, investigates whether changes in PAC contributions cause changes in a member's voting behavior. Together, the models form a more complete picture of the relationship between contributions and members' votes.

Central to the question of whether PAC contributions influence members' voting is the likelihood of a simultaneous relationship between legislative and PAC behavior. The problem is illustrated in the example of Rep. Claude Pepper (D-FL), who has a COPE rating of 87 for 1979-80 and who received \$7,450 from COPE and its affiliates during the 1980 election. There are two explanations for the relationship between the PAC and the representative. First, COPE's contribution may be encouraging the representative to support legislation of interest to the AFL-CIO. Rep. Pepper's votes in the 96th Congress (1979-80)

⁸ While COPE's rating includes highly public bills such as the budget resolutions, the trucking deregulation bill (1980) is more typical. Frendreis and Waterman (1985) use the trucking bill as an example of legislation where the potential for PAC influence was great because neither constituents nor ideological considerations were important.

could have been influenced by the prospect of receiving contributions to help him in the upcoming 1980 election, or he may have received contributions early in the session and felt obligated to vote with COPE. Second, Rep. Pepper could be voting on labor legislation without regard to COPE's past or future contributions. Rep. Pepper has always been liberal and prolabor, dating back to his first year in 1936, when he supported Roosevelt's agenda. On the basis of Rep. Pepper's previous voting record, COPE may be supporting him to dissuade any serious electoral competition. The political impact of contributions in the two explanations is very different, and thus it is important to determine whether contributions actually buy access and/or members' votes, or whether the contributions reward House members for voting behavior that would have occurred in the absence of contributions.

If the relationship between PAC money and member voting is simultaneous, how does two-stage least squares regression permit a specification of the direction of causality? To test whether PAC contributions influence members' voting behavior, a new measure for PAC contributions is created from the model's exogenous variables, so that all of the influence of a member's voting behavior on PAC contributions is eliminated. The exogenous variables include the member's electoral vulnerability, the political leanings of the district, the power the member wields over the PAC's agenda in the previous, current, and subsequent Congresses, and an interactive term that measures the member's ideology and party affiliation. Member's roll call behavior is then predicted by the new PAC contribution variable, the district's political leaning, and the interactive term composed of ideology and party affiliation. The regression coefficients measure the impact of PAC contributions on member's voting behavior after controlling for the impact of the other variables.

PAC activity is measured by the contribution made by a PAC (or a group of affiliated PACs) to the House member.⁹ Member's voting behavior is measured by a rating given by the organization concerned.¹⁰ The ratings are used rather than votes on individual pieces of legislation because this study is interested in establishing whether PAC contributions influence a general pattern of behavior. Other factors that influence a member's votes include the political leaning of the

⁹ When an organization had more than one PAC, the contributions of the several committees were combined and the committees were treated as one. The contributions were aggregated because interviews with PAC officials indicated that affiliated PACs had similar legislative goals and contribution strategies. The number of PACs affiliated with each organization is as follows: COPE, 77 PACs; NEA, 18 PACs; UAW, 3 PACs; AFSCME, 2 PACs; LUPAC, 1 PAC; AGC, 10 PACs; AFGE, 1 PAC; BIPAC, 2 PACs; CWA, 5 PACs; NARAL, 2 PACs.

¹⁰ A PAC contribution could influence member behavior in committee, but not on the House floor where member behavior is more visible. However, interviews with the PACs revealed that just one of the 10 PACs, a few members were more supportive in committee than on the floor. Hence, the rating reflects member behavior not only on the House floor but in the legislative process in general. Absenteeism was minimal because PAC ratings include key votes on conflictual amendments and bills. No rating was entered for members absent for half of the votes.

district (measured by the average percentage voting Democratic in the 1976 and 1980 presidential elections) and the member's party and ideology (measured by the rating of Americans for Constitutional Actions (ACA)). Party affiliation and ideology are related conceptually because the party with which the member chooses to affiliate is partly determined by his or her ideology. They are also multicollinear (Pearson $r > .7$ for each Congress), and therefore both cannot be independent variables in the same regression equation. The impact of both member's ideology and party influence is controlled with an interactive term that ranges from -100 for the most liberal Democrats to zero for the most conservative Democrats, and zero for the most liberal Republicans to 100 for the most conservative Republicans.¹¹

The remaining exogenous variables used to create the instrumental variable for PAC contributions include electoral vulnerability, measured by the margin of the closest election in the previous and current electoral cycles, and a measure of the member's agenda power. The agenda power component reflects the ability to select certain bills and amendments for serious attention, to structure the conflict, and to resolve the conflict with particular compromises. An agenda power index (one for each group) was constructed for each of the four Congresses (1975-82), reflecting whether the representative was a member of the committee and/or subcommittee that received bills included in a PAC's rating and the relative amount of power the member exercised on that subcommittee or committee. The construction of the index is complex and is fully described in Grenzke (1988).

The hypothesis that money systematically influences legislative voting behavior is tested by looking at the relationship between members' voting and PAC contributions in both the previous Congress and the current Congress, while controlling for ideology and party, and the district's political leaning (see Appendix A). The results, in Table 1, provide little support for the claim that money maintains a pattern of pro-PAC behavior in Congress. A mere four of the 29 simultaneous relationships are significant, and only one of the 29 relationships between prior contributions and subsequent member's behavior are positive and significant.¹² The interviews corroborate the statistical evidence. All the officials insisted that "our contributions are too small to change a vote" (UAW). "They behave as they would anyway, and the money comes after" (NEA).

While most of the relationships are weak, are there certain issue domains

¹¹For Democrats, the formula is $-1 \times (100 - \text{ACA rating})$; for Republicans, $+1 \times (\text{ACA rating})$. Occasionally, one of the 10 interest groups was interested in roll calls that were also included in the rating of the ACA. When the percentage of votes held in common between the ACA and one of the 10 interest groups exceeded one-third of either the ACA's rating or the other interest group's rating, the ACA rating was recalculated to exclude the overlapping votes. This prevents the interactive party variable from controlling for variance that could be explained by PAC contributions thereby causing the model to underestimate the impact of the contribution variable.

¹²Even though the data consist of a population, standard errors and significance levels are provided as a means for assessing the amount of error in the model and because the data can be considered a sample of a hypothetical population in several Congresses.

where PAC contributions do influence members' votes? Of the PACs examined here, AGC and LUPAC are concerned with the least visible and most narrow bills and, therefore, are expected to be most successful in influencing votes. However, none of the positive relationships between money and legislative voting are even close to significant for either PAC. However, a relationship for COPE, which has the broadest set of issue concerns, and for AFSCME, CWA, and NEA, which have agendas of intermediate breadth and visibility are significant. Several of the other PACs have a few positive relationships that are not statistically significant but still suggest that money could have some impact on members' voting.

Positive relationships between contributions and members' voting could result from two scenarios. Pro-PAC voting could be maintained by contributions received in the past or those anticipated in the future. Alternatively, a member could vote against a PAC because the PAC did not contribute. No examples of the second possibility were forthcoming in the interviews. Although about half of the PACs made defensive contributions to members they would rather not support, the cases of retaliation by members, in the words of an AFGE official, are "few and far between."

The first scenario was explored by asking PAC officials about specific cases in which members had consistently received PAC funds and had supported PAC legislation over eight years. While none thought their contributions were important enough to maintain a member's support, officials from AFGE, AFSCME, COPE, CWA, NARAL, NEA, and UAW claimed that the power their organizations wield in the district is capable of maintaining a legislator's support for the PAC's agenda. A COPE official emphasized that "labor's work in campaigns is much more important than our direct financial contributions." Because this campaign work "demonstrably influences large numbers of voting union members," COPE has some influence over House members. Similarly, the CWA official explained that "the CWA has people in every congressional district, because of the nature of the union. We can have wide networks of activists who work in campaigns." This official mentioned two Southern representatives who were becoming more supportive of the CWA because they wanted endorsements and help from its local activists. Campaign contributions were not even mentioned. A NEA official was particularly helpful in illuminating the relationships among legislator's votes, PAC contributions, and the interest group's power to mobilize votes in the legislator's district. He explained that very little money was given to one powerful House member who consistently supported the NEA because the PAC felt that it would have little influence with the legislator, since it did not have an organization in his district.¹³

¹³If this representative faced a difficult election, he would probably be placed in NEA's top priority category and receive maximum funding. However, the funding decision would be based upon the desire to keep a vulnerable ally in office, rather than the expectation that the contribution would improve the group's influence.

TABLE 1 (continued)

PAC, Years, and Congress	Static Model		Interactive			District Ideology	Number
	Constant	PAC \$ $t - 1^a$	PAC \$ $t - 1^b$	ACA- Party	ACA- Party		
AFGE 1977-78, 95th	44.986 (.021)	.030 (.052)	-.080 (.029)	-.396*** (.045)	.103 (.186)		169
1979-80, 96th	39.485 (.028)	-.004 (.020)	-.264*** (.045)	.180 (.251)			149
1981-82, 97th	13.125 (.186)	.085 (.289)	-.092 (.066)	.403 (1.030)			126
AFSCME 1977-78, 95th	26.591 (.030)	.064* (.059)	-.081 (.064)	-.284*** (.064)	.200 (.264)		169
1979-80, 96th	28.263 (.011)	.008 (.026)	-.016 (.062)	-.207*** (.062)	.367 (.273)		150
1981-82, 97th	20.096 (.007)	.010 (.009)	.001 (.058)	-.400*** (.058)	.372 (.272)		128
AGC 1977-78, 95th	58.739 (.024)	-.031 (.037)	.036 (.051)	.186*** (.051)	-.041 (.250)		167
1979-80, 96th	52.991 (.015)	.004 (.033)	-.018 (.044)	.164*** (.044)	-.020 (.289)		148
1981-82, 97th	64.659 (.009)	-.006 (.009)	-.008 (.042)	.567*** (.042)	-.034 (.272)		127
BIPAC 1977-78, 95th	47.769 (.039)	-.008 (.011)	-.010 (.035)	.487*** (.035)	.186 (.198)		149
1979-80, 96th	57.386 (.035)	-.018 (.053)	-.017 (.080)	.451*** (.029)	-.025 (.180)		147
1981-82, 97th	44.931 (.087)	-.014 (.038)	-.010 (.029)	.561*** (.029)	.224 (.189)		126
COPE 1977-78, 95th	28.287 (.002)	.004* (.002)	-.001 (.002)	-.285*** (.039)	.278 (.171)		169
1979-80, 96th	27.943 (.002)	.002 (.003)	-.000 (.003)	-.270*** (.053)	.309 (.192)		150
1981-82, 97th	24.466 (.001)	.001 (.002)	.001 (.002)	-.282** (.048)	.381* (.209)		128
CWA 1977-78, 95th	35.508 (.093)	.081 (.114)	-.114 (.146)	-.359*** (.079)	.113 (.407)		169

NOTE: Standard errors are in parentheses.

* $p < .1$; ** $p < .01$; *** $p < .001$; NA = Not Available.

^aFor the equation predicting roll call behavior during 1977-78, 95th Congress, t refers to PAC money contributed during the 1977-78 electoral cycle. For roll call behavior during the 96th Congress, t refers to PAC money contributed during the 1979-80 electoral cycle, and so forth, for the 1981-82 cycle.

^bFor the equation predicting roll call behavior during 1977-78, 95th Congress, $t - 1$ refers to PAC money contributed during the 1975-76 electoral cycle, and so forth, for the other cycles.

Thus, the positive relationships in the static model emerge for the PACs with extensive district networks but not for PACs with narrow, less visible agendas. When positive relationships do emerge, it is because the contributions are consistent with and may be considered a measure of the more important endorsement and campaign activities of the organization, not because PAC contributions influence a pattern of voting by members.

One should be cautious about exaggerating the importance of the endorsements and campaign activities of a PAC's sponsoring and related organizations. Interviews indicate that the relative size of a contribution is often representative of the magnitude of other kinds of support a candidate receives from other parts of the organization. To the extent that campaign contributions are a proximate measure of an interest group's entire package of support, the sparsity of strong positive coefficients in the data suggests that the legislative influence of even an entire campaign package may be limited.

Equally revealing are interviews conducted with PAC officials whose contributions were not positively related to members' voting. The negative coefficients could have resulted from either of two situations. The first pattern involves members who consistently support the PAC's legislation, in hopes of a contribution, but fail to see their expectations fulfilled. Some members who voted probusiness, for example, found that BIPAC funded their more conservative challengers. The second pattern involves cases where a PAC is very generous with contributions to members with low ratings, in the hope of buying influence, but the member continues to vote against the PAC. This helps to explain the preponderance of negative coefficients for AGC and LUPAC. Public records indicate that the AGC gave the maximum contribution to several important committee members who had low ratings, and these ratings stayed at zero despite the contributions. A LUPAC official suggested that their contributions are given with long-term goals in mind. He believed that it could take more than eight years of contributions to a House member before the member becomes favorably predisposed toward the PAC. Several other PAC officials mentioned that the rewards for supporting promising challengers and establishing early contacts would be forthcoming within a Congress or two. None of them suggested a perspective quite so long-ranging as that of LUPAC.

The findings gleaned from the interviews and the statistical static model provide little support for the hypothesis that money maintains a pattern of pro-PAC voting behavior.¹⁴ However, the validity of these conclusions is dependent on the extent to which the model can control for the propensity of the member to vote in a particular direction in the absence of PAC contributions. The static model, together with previous models, has difficulty controlling for the influence of members' districts and attitudes. The percentage voting Democratic in the presidential

¹⁴Support for the hypothesis that votes attract money is provided in Grenzke (forthcoming).

election may indicate the ideological bent of the district, but it does not identify exactly which groups in the district will be part of the elite that influences the House member. Also, the ACA rating is only a unidimensional measure of ideology, which fails to distinguish between domestic, foreign, and other policy dimensions.

On the other hand, one could argue that the interactive term with both party and ideology controls for too much. Although the ACA rating in each model is recalculated without the votes that are included in both the ACA and PAC ratings, it is certainly possible that a PAC's money could influence votes not included in its rating. If this occurs, the model may underestimate the impact of PAC contributions on member votes.

Dynamic Model

These measurement problems are alleviated by a dynamic model that investigates whether changes in PAC contributions bring about changes in members' voting behavior between 1974 and 1982. Because ideology is generally defined as a fairly stable set of attitudes, the difference in ideology between two Congresses is assumed to be zero, and the variable drops out of the equations.¹⁵ Similarly, the member's supporting coalition in the district and the coalition's position on an issue is also stable, primarily because the district's characteristics (nature of employment and other demographics) change very slowly.¹⁶

Also, the dynamic model offers a different perspective on the relationship between contributions and members' voting. While the static model could address whether a contribution maintains support for the PAC, the dynamic model addresses whether changes in contributions bring about changes in the pattern of members' voting. Whereas neither model, alone, explains the entire story, the combination of the two models and the interviews provides a more complete picture.

The dynamic model examines whether a change in the PAC's contributions between two election cycles ($t - 1$ and $t - 2$) will lead to a change in legislative voting behavior in the ensuing Congresses (t and $t - 1$) and whether a change in contributions between the next two election cycles (t and $t - 1$) simultaneously

¹⁵ Ideology, as it is used here, refers to the member's general attitudes about the appropriate role of government. Although a member's fundamental political perspective is unlikely to change, conversions are possible. These conversions will not affect the results of the analysis unless there is an overwhelming pattern of conversions among House members. If ideology does change, a PAC's contributions may incorrectly receive credit for a new voting pattern that flows from the new political perspective.

¹⁶ Redistricting may have changed a few members' districts enough to affect their voting at the end of the 97th Congress. As of September 1981, the districts of five of the study's incumbents were noticeably changed, but the change did not threaten any of them. Even as late of April 1982, only slightly over half of the states had completed redistricting (*Congressional Quarterly*, 29 Aug. 1981; 17 Apr. 1982).

causes a change in the member's voting between the next two Congresses ($t - 1$), controlling for the direction in which the district and party are pushing and the member's initial voting behavior (see Appendix A).

It is important to note that the regression analysis determines whether members with larger than average changes in contributions also have larger than average changes in votes. Consequently, the strength of the relationship is determined after adjusting for the trends toward increased PAC contributions and the general shift toward fiscal conservatism in the later sessions.¹⁷

There is very little evidence from the dynamic model to support the hypothesis that changes in PAC contributions bring about changes in members' behavior. The only significant positive relationship in Table 2 is for the change in members' voting behavior on the AFGE's agenda between the 96th and 97th Congresses. An official from AFGE explained that the changes in members' voting occurred because the district organization created problems for several members in their districts and that changes in contributions were a surrogate measure of these district pressures.

The relationships between changes in members' voting and contributions for NARAL and AFSCME between the 96th and 97th Congresses, while not statistically significant, are stronger than the others. The NARAL official suggested two examples that are typical of the pattern of behavior that accounts for its weak positive relationship. When a representative from the Midwest and another from the East decided to run for Senate office, they wanted support from women's groups. The past voting record of the eastern representative had been 100 percent wrong; the midwesterner's votes had systematically alternated between prochoice and prolife. Both members "saw the advantage of being pro-choice, and for purely political reasons," they adopted a consistent prochoice position and received NARAL support. The change in behavior was motivated by a desire for endorsements and general support in the campaign. The contribution was of minor importance to the member from the Midwest, and the member from the East did not accept contributions from any PACs in his Senate race.

All of the PAC officials were asked about every case in which a surge of pro-PAC support accompanied or followed an increase in PAC contributions. In over 100 probes, only LUPAC could come up with a single case of a member whose voting may have been changed by its contribution.

As with the static model, there are negative regression coefficients, two of which are significant (COPE and NEA). Some of the cases that account for these

¹⁷In order to verify that secular trends do not affect the strength of the relationships, the static variables were standardized, then differenced, and a few of the regressions were rerun. The strength of the relationships, as indicated by the ratio of the regression coefficients and the standard errors, were the same. The constant, of course, was different. The unstandardized coefficients are presented here because they can be easily related to actual dollars of contributions. Movement of a whole legislature as well as movement of members relative to one another, is examined elsewhere (Grenzke, 1982).

negative coefficients are those in which the PAC attempts to change a member's vote by boosting its contribution, but the member fails to respond. For example, the NEA had legal problems, and money was particularly difficult to raise in the 1978 election cycle. In spite of its shortage of money that year, it targeted several members for increased contributions. Nevertheless, many of these members' ratings fell in 1979-80. In a similar example, the AFSCME increased contributions to Reps. Udall (D-AZ), Pepper (D-FL), Schroeder (D-CO), and Obey (D-WI) for the 1978 elections, but they all voted against three revenue-sharing measures in 1979-80. Although revenue sharing was AFSCME's top priority during the session, it could not muster the votes it needed from House members.

Another explanation is more appropriate for the negative coefficients of COPE and the UAW. Officials from these PACs cited cases of members' taking the PAC's support for granted and voting in response to other pressures. While a number of consistent labor supporters perceived more support for conservative ideas and responded to these conservative influences, COPE and the UAW continued to support them at the same level. The COPE official in particular offered several examples of members whose voting record is "disgusting," but he explained that COPE is not vindictive and would continue to support these candidates. AGC, NARAL, and BIPAC officials could not think of cases where members took the organization's support for granted. LUPAC was concerned that it might happen and adjusted its strategy to try to prevent such an occurrence. It is important to emphasize that both the interviews and the hard data support the conclusion: there is little relationship between the contributions of these PACs and congressional voting in areas that had to do with the PACs' agendas.

Five comments about the generality of these findings are appropriate. First, the findings apply to contributions from a diversity of large PACs. However, all the votes in the ratings receive some attention because the PACs publicize these votes in hopes that their members will apply pressure on House members to vote in a pro-PAC fashion. It is possible that contributions from PACs with even narrower and less public issue concerns may be more influential.¹⁸

Second, most of the PACs examined here have local organizations that influence the distribution of contributions. Wright (1985) suggests that PACs such as these have difficulty using contributions to influence members' votes because local members are less interested in giving to people with power over the organization's agenda and more concerned with the electoral prospects of candidates. In contrast to Wright's argument, related research into the strategies of PACs affiliated with these 10 organizations (Grenzke, forthcoming) establishes that these PACs do give to members with power over their agendas. These organizations try to influence members' voting with both contributions and their district network.

¹⁸As explained earlier, corporate PACs could not be included in the study. While LUPAC, BIPAC, and AGC are similar to corporate PACs in many ways, their agendas may still be more public and broad than those of many corporations.

TABLE 2

Two-Stage Least Squares Regression Results for Change in Incumbent Voting Behavior

Part A. Change in Voting Behavior between the 95th and 96th Congresses

PAC	Constant	Change in PAC \$ between the 95th and 96th Congresses	Change in PAC \$ between the 94th and 95th Congresses	District Ideology	Party*	Roll Call Votes, 95th Congress	Number
AFGE	10.848	.001 (.022)	.003 (.018)	.042 (.212)	1.583 (4.483)	-.259* (.106)	149
AFSCME	3.626	.002 (.008)	-.005 (.004)	.289** (.143)	-18.092*** (3.338)	-.119* (.053)	150
AGC	9.838	.006 (.011)	-.001 (.004)	-.164 (.193)	4.303 (4.171)	-.193* (.089)	148
BIPAC	13.993	-.009 (.006)	-.002 (.002)	-.085 (.079)	-8.078*** (2.099)	-.127*** (.027)	147
COPE	-1.730	-.001 (.001)	-.001* (.000)	.074 (.107)	-3.117 (2.172)	.004 (.057)	150
CWA	-11.449	-.005 (.003)	-.004 (.004)	.142 (.113)	9.369*** (2.725)	-.072* (.036)	150
LUPAC	83.141	.012 (.008)	-.000 (.004)	-.558 (.179)	8.796* (4.134)	-.782*** (.068)	149
NARAL	7.408	.007 (.011)	NA NA	-.141 (.245)	-1.592 (4.636)	-.015 (.044)	150
NEA	-5.189	-.003 (.005)	-.006** (.002)	.118 (.182)	-8.672* (4.775)	-.101 (.075)	149
UAW	-9.267	-.003 (.003)	-.000 (.003)	.214 (.232)	10.004* (3.271)	-.124 (.067)	149

Part B. Change in Voting Behavior between the 96th and 97th Congresses

PAC	Constant	Change in PAC \$ between the 96th and 97th Congresses	Change in PAC \$ between the 95th and 96th Congresses	District Ideology	Party*	Roll Call Votes, 96th Congress	Number
AFGE	-9.831	.009* (.005)	.014* (.007)	.507* (.226)	20.965*** (5.310)	-.544*** (.082)	125
AFSCME	-29.743	.020 (.017)	.014 (.011)	.524 (.462)	39.813** (12.234)	-.501*** (.097)	127
AGC	73.108	.002 (.007)	-.001 (.005)	-.287 (.237)	-57.623*** (4.461)	-.549*** (.096)	126
BIPAC	15.900	.001 (.006)	.002 (.003)	.088 (.115)	-22.063*** (3.094)	-.198*** (.042)	125
COPE	1.932	-.000 (.000)	-.000 (.000)	-.005 (.114)	18.988*** (2.525)	-.210*** (.040)	127
CWA	13.041	-.004 (.006)	-.004 (.005)	-.160 (.179)	8.409** (3.006)	-.102* (.062)	127
LUPAC	109.762	-.005 (.009)	-.008 (.007)	-.343 (.235)	-84.289*** (4.700)	-.917*** (.102)	127
NARAL	-22.702	.025 (.017)	.025 (.016)	.699* (.333)	-.690 (7.948)	-.350** (.110)	127
NEA	-1.451	.001 (.004)	-.000 (.002)	.217 (.269)	44.641*** (6.947)	-.518*** (.068)	127
UAW	9.019	-.000 (.002)	-.000 (.000)	-.057 (.120)	22.245*** (2.676)	-.265*** (.041)	127

NOTE: Standard errors in parentheses.

* $p < .1$; ** $p < .01$; *** $p < .001$; NA = Not Available.

*Party is coded: 0 = Republican; 1 = Democrat.

Third, whereas this study determines that a single group's contribution does not generally influence a member's voting pattern, it is possible that the combined contributions from many PACs may influence members' votes. For example, contributions from the entire business community may be influential, whereas those from a portion of the community may not be. This is unlikely, since COPE and BIPAC are umbrella PACs in that their ratings, endorsements, and contributions determine the contributions of many smaller labor and corporate/business PACs. In spite of the fact that a contribution from BIPAC or COPE may bring with it thousands of dollars, there is still little statistical evidence that BIPAC or COPE contributions influence general voting patterns.¹⁹

Fourth, this study addresses the impact of money on a pattern of roll call voting. Interest groups also attempt to influence decisions made in committee. During committee markup sessions, numbers of these decisions involve small wording changes that favor a particular interest. Undoubtedly it is easier to convince members to support a minor change on a committee draft of a bill that attracts little publicity than it is to influence their public roll call votes on an amendment to major legislation. However, while contributions may influence *who* gets the contract to build a particular missile, *whether* anyone gets the contract and the broad outlines of how much is spent are the more critical decisions for the American public. The latter decisions are generally surrounded by publicity and are decided by roll call votes on the House floor. There is little evidence of a pattern of vote buying on these issues.

In addition to placing special interest legislation onto the agenda, a campaign contribution may facilitate an interest's attempts to block legislation in committee. Although nine of the PACs insisted that the ratings on roll call votes were consistent with the support, or lack thereof, that members offered in committees, one PAC official identified several House members who were more supportive in committee than the PAC's rating indicated, partly because the agenda in the committee was somewhat different from that on the House floor. To the extent that PAC contributions help interest groups bury issues in committee, the findings underestimate the impact of money (Bachrach and Baratz, 1962).

This study's conclusion that PAC money has little influence on the roll call voting is important, regardless of what impact contributions may have at the committee stage. A roll call vote must be taken on controversial legislation that eventually becomes law. Furthermore, the interest groups examined here identified these roll calls as especially important to them.

Fifth, while the voting patterns of these incumbents were not influenced by contributions from these PACs, one needs to ask whether there are other candi-

¹⁹The difficulties of looking at the effect of contributions from groups of PACs on many bills over several Congresses include the heterogeneity of interest group concerns and contribution patterns, even within the general categories of labor and corporate PACs (Clawson, Neustadt, and Bearden, 1986).

dates who might be more easily influenced by money. Are contributions more influential with first-term legislators or with incumbents from marginal districts? Although these questions were not directly addressed by this study, the majority of representatives are not in their first term, and they are from relatively safe districts. This research finds little evidence that the votes of these legislators are systematically bought.

Conclusions and Implications

On the basis of statistical analysis, supplemented with interviews, this research concludes that contributions from 120 PACs affiliated with 10 large interest groups generally do not maintain or change House members' voting patterns.²⁰ Thus the question becomes: If contributions from these PACs do not buy votes on major legislation, why do they contribute? Partly they contribute in hopes of influencing the outcomes of elections (Grenzke, forthcoming). PACs also contribute in hopes of gaining access that might lead to influence on legislation. All of the officials agreed that "a contribution definitely helps access," but they varied with respect to how much (see also Langbein, 1986). Most also agreed that access was easy for organizations as large as the 10 selected for this study, even without contributions. In other words, a contribution was not a necessary condition for access. Members would meet with a PAC if district interests, issue concerns, or other reasons would make it advantageous for them to do so.

Whereas a contribution may not be a necessary condition for access, is it a sufficient condition? One official (AFSCME) felt that it was; another (NEA) disagreed. The former argued that, without district ties, his PAC would have limited access to a House member, regardless of whether or not it contributed. Because the other PACs in this study thought they had access to whomever they wanted, with or without a contribution, they could not comment on whether a contribution could guarantee access for a PAC without power in the district.

What does it mean to say that money helps with access, but does not influence members' voting patterns? Perhaps a reasonable way to conceptualize the difference is to equate access to a hearing. Money may facilitate an opportunity to present one's case, and in the absence of conflicting testimony, the member may change his or her position as a result of the meeting. Changes on legislation where there is little conflict and publicity may be worth hundreds of thousands of dollars to a particular interest group. However, while the sides may not be balanced, major legislation is generally surrounded by conflict and many interest groups are involved. In the 1982 election cycle, the average member in this study received contributions from 138 PACs and many individuals, all of whom may have expected some access and an opportunity to present their case. If large con-

²⁰It should be noted that PAC officials are likely to understate the extent to which they attempt to purchase votes with contributions. Therefore, the statistical analysis is the primary basis for these conclusions.

tributions systematically cause members to consider the donor's arguments more carefully and more positively, then a relationship would emerge in the statistical models. *It does not*. The public debate about PACs grossly exaggerates their influence because it does not distinguish between a few cases of PAC influence on legislation of relatively minor importance to the public and a general pattern of influence that systematically buys members' votes on major pieces of legislation.

All of the PAC officials agreed that in order to turn access into influence, the PAC must convince the House members that a particular position will improve their electoral prospects. Members' electoral prospects are improved by issue positions that generate support from district elites and voters, by contracts that provide jobs, and by a home style that matches the district. A particular PAC's contribution is not critical because a sizable war chest and votes are forthcoming if there is general support in the district for the candidate.

Thus, the 10 organizations examined here gain access to members and can influence members' votes and elections, but not because their PACs give campaign contributions. Rather, they are large organizations with widespread support in members' districts and consequently have a variety of resources, including money for campaign contributions, with which to attempt to influence members' roll call votes and elections. Limiting PAC contributions will not significantly change the power of these organizations because when they do influence legislators, it is because they can mobilize votes in the district.

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APPENDIX A

The equations for the static model are

First-stage equations:

$$*PACS_t = f(\text{Margin}_t, \text{Margin}_{t-1}, \text{Dist. ideology}, \text{ACA-Party}, \text{Power}_{t-1}, \text{Power}_t, \text{Power}_{t+1})$$

$$*PACS_{t-1} = f(\text{Margin}_t, \text{Margin}_{t-1}, \text{Dist. ideology}, \text{ACA-Party}, \text{Power}_{t-1}, \text{Power}_t, \text{Power}_{t+1})$$

Second-stage equation:

$$\text{Roll call} = f(*PACS_t, *PACS_{t-1}, \text{ACA-Party}, \text{Dist. ideology})$$

where

$$*PACS_t = \text{PAC contributions to each incumbent during one electoral cycle, summed across PACs affiliated with one of the 10 organizations (instrumental variable)}$$

$$*PACS_{t-1} = \text{PAC contributions in the previous electoral cycle (instrumental variable)}$$

$$\text{Margin}_t = \text{Electoral margin of the closest election in the current electoral cycle}$$

$$\text{Margin}_{t-1} = \text{Electoral margin of the closest election in the previous electoral cycle}$$

Dist. ideology = Average percentage in district voting Dem. in 1976 and 1980 presidential elections

ACA-Party = Interactive ACA and party variable, ranging from -100 for liberal Dem. to +100 for conservative Rep.

Power_{t-1} = Agenda power of incumbent in the previous Congress

Power_t = Agenda power of incumbent in the current Congress

Power_{t+1} = Agenda power of incumbent in the subsequent Congress

Roll call = Incumbent rating from one of the 10 interest groups

The multiple R^2 s from the first-stage equations are high enough to justify the loss of precision in the two-stage least squares estimates that accompanies the calculation of coefficients that are consistent. It ranges from .25 (NARAL, 96th Congress) to .64 (UAW, 97th Congress), with an average of .47. The independent variables in the second-stage equation were checked for multicollinearity. PAC contributions at t and $t-1$ are highly correlated (Pearson's $r = .7$) in only four of the 29 equations. When these equations were rerun with only one PAC contribution variable (PACS_t), the regression coefficients and standard errors are very similar. However, the difference in the ratio of the regression coefficient to the standard error for COPE and UAW (97th Congress) was enough to make these two relationships significant at $p > .1$.²¹

The equations for the dynamic model are:

First-stage equation:

$$*DPACS_t, t-1 = f(DPACS_{t-1}, t-2; \text{Party}; DPower_t, t-1; DPower_{t+1}, t; DMargin_t, t-1; \text{Dist. ideology}; \text{Roll call } t-1; PACS_t, t-1)$$

Second-stage equation:

$$\text{DRoll call } t, t-1 = f(*DPACS_t, t-1; DPACS_{t-1}, t-2; \text{Party}; \text{Dist. ideology}; \text{Roll call } t-1)$$

where

$$*DPACS_t, t-1 = \text{Difference in PAC contributions between } t \text{ and } t-1 \text{ electoral cycles (instrumental variable)}$$

$$DPACS_{t-1}, t-2 = \text{Difference in PAC contributions between } t-1 \text{ and } t-2 \text{ electoral cycles}$$

$$\text{Party} = \text{Incumbent party affiliation, coded } 0 = \text{Rep.}, 1 = \text{Dem.}$$

$$DPower_t, t-1 = \text{Difference in agenda power, } t \text{ and } t-1 \text{ Congresses}$$

$$DPower_{t+1}, t = \text{Difference in agenda power, } t+1 \text{ and } t \text{ Congresses}$$

$$DMargin_t, t-1 = \text{Difference in margin of closest election, } t \text{ and } t-1 \text{ electoral cycles}$$

$$\text{Dist. ideology} = \text{Average percentage in district voting Dem. in 1976 and 1980 presidential elections}$$

$$\text{Roll call } t-1 = \text{Initial incumbent roll call behavior (rating)}$$

$$PACS_{t-1} = \text{Initial PAC contribution}$$

$$\text{DRoll call } t, t-1 = \text{Difference in roll call behavior between Congresses } t \text{ and } t-1$$

The dynamic model parallels the static model with a few notable differences. First, the amount of change and the direction of change for the incumbent and PAC behavior variables is partially dependent upon the initial position. In order to control for the tendency of the change measures to re-

²¹ For a discussion of two-stage least squares regression, see Pindyck (1981) or Wonnacott and Wonnacott (1979).

TABLE A.1
Description of Variables Measuring Change in Roll Call Votes
(PAC Ratings)

	Change in PAC Rating 94th, 95th Congresses		Change in PAC Rating 95th, 96th Congresses		Change in PAC Rating 96th, 97th Congresses	
	Mean	S.D.	Mean	S.D.	Mean	S.D.
AFGE	-6.9	18.9	-4	19.1	-1.1	24.4
AFSCME	-7.1	13.1	1.0	17.3	-1.1	27.2
AGC	-6	15.5	-4.6	19.1	.8	35.0
BIPAC	na	na	-1.5	7.9	-1.5	12.1
COPE	-2.9	7.9	-1.3	8.3	2.1	10.5
CWA	-2.5	11.0	-2.5	11.7	4.0	9.3
LUPAC	7.7	23.1	20.7	26.4*	-21.4	47.0*
NEA	-10.7	15.5	-8.5	18.2	10.4	24.7
NARAL	na	na	-7	15.3	2.8	19.4
UAW	-3.7	18.0	-1.0	16.3	6.3	16.3

NOTE: The ratings range from 1 to 100.

*These standard deviations are inflated because the ratings included only five votes in the 1979-80 Congress and four votes in the 1981-82 Congress.

gress toward the mean, the initial positions of the endogenous variables have been added to the model.²²

Although neither the political leaning of the district nor party are change variables, they have a dynamic interpretation in the model. District ideology controls for the direction in which the district is pushing the member to vote. While the incumbent's party affiliation rarely changes, the implications of being a Democrat or a Republican are different for both the incumbent and the PACs for each Congress and electoral cycle. Party is an important part of the explanation for changes in member behavior between the 96th and the 97th Congresses, presumably because Reagan's presidency pushed Republicans in a conservative direction, while the average Democrat moved relatively little. Strategic considerations vary for PACs, depending on whether the electoral prospects look good for Republicans or Democrats (Jacobson and Kernell, 1981).

While change in electoral vulnerability is directly related to PAC contributions, its relationship to changes in member voting is indirect and through the district variable. Therefore, the district variable, but not the electoral margin variable, is included in the second-stage equation of change in member behavior.

The dynamic model was tested with a variety of transformations of the rating variables, which expanded the distances for the middle ratings and collapsed those at the ends of the scale. The hypothesis was that changes in ratings in the 40 to 60 range may move one from an enemy to an ally of the PAC. A member who changes from 100 to 80 may still be considered a friend. Because these transformations made little difference in the value of the coefficients, the simpler, linear rating variable is used. Similar transformations of the agenda power index and the electoral margin were tested, again with little difference in the results.

An examination of the distributions of the variables reveals that there is sufficient variance in

²² A lagged model yields essentially the same results, but it is not as intuitively appealing.

the change in member roll call voting variable (Table A.1). Also, incumbents are not concentrated at the extremes of the rating scales. The highest concentration at the extremes is for NARAL, where about 30 percent of the incumbents have ratings of either 0 or 100. For the other PACs, only one, or at most two, of the eight limits (four Congresses, 0 and 100 limit for each rating) have as many as 22-25 percent of the incumbents at one of the extremes. Boundaries are not a problem for the PAC contribution variables either. Only a handful of incumbents in this study received the maximum contribution from a PAC. The zero contribution is not really a limit because a PAC could give to a challenger. The amount of money given to the challenger was not subtracted from that given to the incumbent because only BIPAC gave significantly to challengers, and then rarely to challengers of the incumbents included in this study.

The multiple *R* in the first stage of the regression for the change in PAC contribution variables ranges from .26 (NARAL, 1977-78 and 1979-80 cycles) to .73 (CWA, 1977-78 and 1979-80 cycles), with a mean of .50.

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Equilibrium Outcomes in Two-Stage Amendment Procedures*

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This paper analyzes the set of sophisticated voting outcomes under the following two-stage amendment procedure: the set of alternatives is partitioned into two subsets: one subset is voted on via an amendment procedure at the first stage, followed by the remaining subset at the second stage. The surviving alternatives are then paired at the final vote. This procedure is related to that used in congressional decision making when both a bill and a substitute bill are in order on the floor and hence are open to amendments. It is shown that it is "easier" for alternatives initially considered at the second stage to be the outcome of the voting game than those considered at the first stage. The set of outcomes is contrasted with that generated by the (one-stage) amendment procedure as well as the concept of the uncovered set.

The impact of voting procedures and agendas on the outcomes of collective decision problems has recently become the subject of substantial research by social scientists (see Ordeshook and Schwartz, 1987, and the citations therein). This interest can be seen as deriving from the larger program of analyzing the influence that institutional structures have in determining the outcomes of voting processes; the greater the influence, the greater the amount of "power" held by those in control of these institutional arrangements relative to those deciding at the voting stage of the process. Much of the work on voting procedures and agendas has focused on the *amendment* voting procedure, where two alternatives are put to a vote, the winner being paired with a new alternative, the winner of that then paired against a new alternative, and so on (Miller, 1980; Shepsle and Weingast, 1984; Banks, 1985). This procedure is attractive for a number of reasons, not the least of which is that it is consistent with the rules in Congress governing the perfecting of a bill through a series of amendments to the bill (Roberts' Rules).

Ordeshook and Schwartz (1987) rightly point out, however, that the amendment voting procedure is only one type, and not necessarily the most prevalent type, of procedure employed by voting bodies such as Congress. They cite the work of congressional scholars in establishing the fact that any number of voting procedures are used in formulating a collective decision. Ordeshook and Schwartz then proceed to show that, given the ability to choose any type of voting procedure, those in charge of such decisions have virtually complete control over the outcome, in that nearly every alternative is the outcome of some procedure and agenda. However, while these results are helpful in establishing upper bounds on the influence of those who decide on procedures and agendas, Ordeshook and Schwartz do not present any evidence concerning whether the procedure they analyze that generates these bounds (i.e., the *successive elimination*

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