The Impact of Organizational Characteristics on Super PAC Spending in Congressional Elections

Jay Goodliffe
Department of Political Science
Brigham Young University
goodliffe@byu.edu

Paul S. Herrnson
Department of Political Science
University of Connecticut
paul.herrnson@uconn.edu

Abstract

Super PACs have spent billions of dollars in recent elections, exceeding the expenditures of both candidates in some congressional races. Despite their growing influence, these groups have been the subject of little systematic study. Using a new dataset comprising super PAC receipts and expenditures, we present a comprehensive analysis of super PAC expenditures in congressional elections. We demonstrate that super PACs vary along a surprisingly large number of dimensions, including their objectives, financing, transparency, strategy, and the interests they represent. We also show that organizational characteristics, candidate attributes, and the electoral context influence super PAC independent expenditures. Our study situates super PACs among traditional PACs and other groups, and it provides a baseline for future research on super PACs.

Super PACs spent more than $9.2 billion in federal elections between 2010 and 2024 to help shape the candidate pool, influence the tone of political debates, and possibly affect election outcomes. Between 2010 and 2016, three-fourths of the groups that made independent expenditures (IEs) were active in at least one congressional election. The most enduring and wealthiest of these "congressional super PACs" are connected to party leaders in Congress. During the 2024 elections alone, the Congressional Leadership Fund and the Senate Leadership Fund (associated with Republicans) and the WinSenate PAC (formerly the Senate Majority PAC) and the House Majority PAC (associated with Democrats) made a combined total of more than $934 million in IEs. Super PACs likely affect the decision-making of some voters, the course taken by some campaigns, and have the potential to affect the policy-making process.

Super PACs differ from "traditional" political action committees (PACs), political parties, and candidate committees in that they can raise unlimited sums from almost any source. However, super PACs are prohibited from contributing directly to federal candidates or the federal campaign accounts of groups that do so. Although super PACs have become a major feature of the political landscape, they are sometimes mischaracterized, and their complexities are often ignored. Using a dataset comprising every significant contribution to and expenditure by a super PAC during the 2010 through 2016 federal elections, we demonstrate that congressional super PACs vary along a surprisingly large number of dimensions, including financing, transparency, and the interests they represent. Our findings show that organizational characteristics, candidate attributes, and the electoral context significantly influence super PAC spending.

The Emergence and Development of Super PACs

Super PACs are similar to other interest group entities in that individuals or groups organize them to advance a shared economic interest, political ideology, candidate, or other cause. Super PACs emerged in the aftermath of a legal challenge filed by Citizens United, a nonprofit organization that produced a film critical of Hillary Clinton in 2007. In 2010, the Supreme Court held that Citizens United was not only exempt from the ban on corporate spending in politics, but the ban itself was unconstitutional. Ensuing decisions by the D.C. Circuit Court of Appeals and the Federal Election Commission (FEC) determined that individuals, corporations, unions, and other groups were free to pool resources to create organizations to expressly advocate the election or defeat of political candidates as long as the group's expenditures were not coordinated with a candidate's campaign organization or political party. These independent expenditure-only groups were labelled super PACs because their exemption from the fundraising restrictions imposed on traditional PACs, federal candidates, and party committees enabled some to quickly raise and spend huge sums of money (Briffault 2012).

New opportunities for political spending resulting from the *Citizens United v. FEC* ruling and increased competition over control of the federal government led to the proliferation of super PACs and massive escalation in their spending. During the nine months between the ruling and the 2010 midterm election, super PACs made more than $62.6 million in IEs. By the 2024 election, this figure had grown to almost $4.1 billion. From 2010 to 2024, 65% of the $9.2 billion in IEs targeted congressional races. Super PACs' receipts grew at a similar rate. Although often portrayed as vehicles for corporations and other groups to skirt campaign finance rules, congressional super PACs collect substantial funds from individuals, not organizations (Herrnson et al. 2024).

Despite the differences in financing, super PACs have similarities to other groups that participate in elections. Their entry into politics, like that of traditional PACs and most other spending groups, has increased the voice of wealthy and well-organized interests (Herrnson 2017; Herrnson, Heerwig, and Spencer 2018; Manento 2021; Pildes and Bauer 2025). Their communications add to the cacophony of voices raised in an election, making it difficult for voters to distinguish between a candidate's message and the messaging of others (Magleby and Goodliffe 2019). Super PACs have increased the likelihood voters hold candidates responsible for promises and attacks over which they had no control (Rozell, Wilcox, and Franz 2012; Lipsitz 2013). Outside group spending is especially likely to lead to voter confusion when it focuses on a single issue rather than a broad ideology (Franz, Fowler, and Ridout 2016).

As is the case with other groups that participate in elections, huge financial disparities exist among super PACs. Approximately 63% of all super PACs registered with the FEC between 2010 and 2016 raised no money, and another 6% raised less than $1,000. Between 2018 and 2024, 77% of super PACs were inactive, and another 1% raised less than $1,000. The five super PACs that raised the most in 2024 collected $1.3 billion, more than 25% of all super PAC receipts. These groups comprise the four party-connected congressional super PACs discussed above and Americans for Prosperity Action, a conservative PAC that participated in both the presidential and congressional elections. Because of the large number of groups that raised or spent insufficient funds to affect an election, we limit the analysis below to "active" as congressional super PACs—those that raised or disbursed $1,000 or more in a House or Senate race.

Super PACs' most visible activities are televised political advertisements. However, about 44% of active congressional super PACs do not air TV ads. Instead, these groups spend their money on voter mobilization, financial transfers to other committees, and administrative overhead (see Dwyre and Braz 2015). In addition, roughly 9% of congressional super PACs are actually hybrid committees.[1] Most hybrids began as traditional PACs that solicited funds from individuals under strict federal campaign finance rules and contributed those funds directly to candidates, party organizations and, in a few cases, other PACs. These groups then transformed into hybrids when they created a separate super PAC bank account to make IEs using money raised with few restrictions.[2] Some recently created hybrid committees originated as pure super PACs. They added a separate segregated "traditional PAC account" after raising substantial sums that met federal requirements for groups permitted to contribute to federal candidates and committees. When they were first allowed in the 2012 election cycle, only 3% of super PACs were hybrid committees. By 2024, 18% of super PACs were hybrids.

Super PACs, like other political organizations, represent a variety of interests and ideologies. Although *Citizens United* overturned the ban on political spending by corporations, business interests have not been at the forefront in creating super PACs (e.g., Hansen, Rocca, and Ortiz 2015). In fact, corporations, trade associations, and other business entities registered only 22 of the super PACs active in the 2010 through 2016 congressional elections, and these super PACs made a mere $33 million in IEs (see Figure 1). In relative terms, business groups constituted about 3% of congressional super PACs and were responsible for less than 3% of congressional super PAC IEs.[3] The business sector had much better representation among other

[1] Hybrids are sometimes referred to as "Carey committees" after the court case that sanctioned them.
[2] Note: traditional PACs are permitted to make (unlimited) independent expenditures, but their fundraising is subject to the same limits as their other activities.
[3] The information in Figure 1 is for the population of active congressional super PACs in 2010-2016. The unit of the analysis that follows is the super PAC-election cycle combination. Using this unit of analysis,

political groups. Businesses sponsored more than 5,000 traditional PACs (31% of all PACs), and these groups made \$1.3 billion in contributions and \$99 million in IEs (63% of the total) from 2010 to 2016. Businesses also spent \$20 billion on lobbying the federal government, roughly 87% of the total for this period. Between 2018 and 2024, businesses committed \$1.2 billion in contributions, \$76 million in IEs, and \$23 billion on lobbying. One explanation for the business sector's relatively small presence among super PACs is that few access-oriented business donors consider establishing a super PAC a good investment. Unlike traditional PACs and lobbying organizations, federal law prevents super PACs from coordinating their expenditures with elected officials and candidates. Another explanation is that many business leaders recognize that independent expenditures have the potential to alienate powerful officeholders, stockholders, and customers (Hansen, Rocca, and Ortiz 2015). Most of the corporations and business executives contribute to super PACs organized by other groups rather than establishing their own (Spencer and Wood 2014; Bonica 2016).

While not a party to *Citizens United*, many labor unions responded to the ruling by creating super PACs. From 2010 to 2016, labor-sponsored groups constituted almost 4% of all congressional super PACs and accounted for roughly 3% of their IEs. In 2024, little had changed: labor Super PAC spending comprised less than 2% of all outside spending. The explanation for these figures, and the correspondingly low figures for traditional labor PACs, is the existence of few labor unions, rather than an unwillingness to sponsor either type of group.

In contrast to super PACs sponsored by business or labor, ideological super PACs, which have no organizational sponsor, comprise 45% of congressional super PACs and account for 44% of their outside spending in 2010 to 2016.

About half of all congressional super PACs have ties to parties. These groups are responsible for half of all super PAC IEs from 2010 to 2016. Fewer than two dozen of these party-connected super PACs are multicandidate groups (MCGs) that seek to advance the prospects of two or more congressional candidates. The four largest party-connected MCGs are the Democrats' House Majority PAC (HMP) and WinSenate PAC (WSP), and the Republicans' Congressional Leadership Fund (CLF) and the Senate Leadership Fund (SLF). Each has close ties to its party's House or Senate leaders and its congressional or senatorial campaign committee.[4] The other party-connected MCGs possess less funding than the "Big Four," have a narrower focus, and participate in fewer elections. The differences between these super PACs and Big Four roughly parallel the differences between the leadership PACs formed by members of Congress and the parties' congressional and senatorial campaign committees.[5] Most of the remaining party-connected super PACs are single-candidate groups (SCGs) established to support just one candidate. Often established and directed by a candidate's donors and former

---

business, labor, party-connected, and ideological super PACs constitute 3.0%, 3.8%, 44.9%, and 48.3% of groups, respectively.

[4] Most party-connected super PACs have close relationships with formal party committees: CLF's first president, Brian Walsh, was a former political director at the NRCC; the first three executive directors of HMP previously were former top staffers at the DCCC; and the leadership of the SLF and the WSP were previously top staffers at their respective party's senatorial or national party committees. Schatzinger and Martin (2020) call this the "staff shell game." WSP has undergone some name changes: it was called Commonsense 10 in 2010 and Majority PAC in 2012, and until 2024 was called the Senate Majority PAC (SMP).

[5] For insights into congressional leadership PACs and the Democratic and Republican congressional and senatorial campaign committees, see Cann (2008), Herrnson (2009), and Heberlig and Larson (2012).

aides, these groups neither raise nor spend as much as the Big Four. However, their singular focus and experience working with their preferred candidate provide them with strategic and tactical advantages over other groups. SCGs created to derail the candidacy of a single politician also benefit from a singular focus. The number of SCGs has grown from 125 in 2012 to 291 in 2024.

A final criterion that distinguishes super PACs from one another is the elections in which they participate. During the 2010 through 2016 elections, about 26% focused exclusively on Senate races, 37% concentrated solely on House races, and the remaining 37% made IEs in a combination of federal elections.

Strategies and Tactics

Given that the same organizational characteristics that distinguish traditional political committees from each other also differentiate among super PACs, it is reasonable to expect organizational factors have a similar impact on both sets of groups. A group's political objectives, sponsorship, financing, and years of experience have been shown to influence strategies and tactics of traditional PACs, party committees, and candidate campaign committees (Wright 1985; Li 2018; Herrnson 2016). These characteristics form the basis for most of our expectations about super PAC spending. Reinforcing these expectations is a recognition that PACs do not work in isolation from other groups. They are members of coalitions, sometimes referred to as extended parties (Bawn et al. 2012), comprising webs of relationships that facilitate the exchanges of information among a large and diverse array of actors. Party networks channel the flow of money and other campaign resources from party committees, leadership PACs, traditional PACs, and congressional leaders' campaign committees to candidates in competitive elections (Grossman and Dominguez 2009; Herrnson 2009; Koger, Masket, and Noel 2009, 2010; Skinner and Dulio 2012; Desmarais, La Raja, and Kowal 2015; Kolodny and Dwyre 2018; Herrnson and Kirkland 2018).

The Democratic Congressional Campaign Committee, Democratic Senatorial Campaign Committee, National Republican Congressional Committee, National Republican Senatorial Committee, and some other party organizations have recently used "redboxing" to increase their influence on super PACs and other outside spending groups. Redboxing occurs when a party or an affiliated candidate places detailed information about a candidate (or the candidate's opponent) on a publicly accessible website, called a microsite. Redbox microsites typically include messages a candidate or party committee would like outside spending groups to disseminate on TV or other media, the voters the ads should target, and the desirable timing for the ad. Many redboxes also post B-roll videos and still images that are flattering to a candidate. Additional materials routinely include the candidate's issue positions, endorsements, biography, and facts that corroborate the information posted. Redboxing enables campaigns to orchestrate super PAC communications without running afoul of federal campaign finance laws prohibiting coordination. The effects of these and other partisan efforts on super PAC advertising vary by party, incumbency, and the office sought (Foy-Southerland and Ghosh 2024; Foy-Sutherland 2025a, 2025b).

As noted above, we anticipate the same organizational characteristics that structure traditional PAC strategy, decision making, and susceptibility to party influence have a similar influence on super PACs. Most traditional PACs sponsored by corporations, trade associations, or other business PACs follow an access or pragmatic strategy designed to enable the group's sponsor to foster positive relationships with members of Congress, including some members of both parties (Hall and Wayman 1990; Hall and Deardorff 2006). These groups recognize a campaign contribution does little to change a politician's ideological perspective, but it can help a group influence an incumbent's actions in other policy areas (Kalla and Broockman 2016; Austen-Smith and Wright 2004). Access-oriented groups contribute most of their funds to incumbents, particularly members of Congress who chair committees or subcommittees, occupy party leadership positions, or have expertise in a specific policy area. Many of these legislators face little or no opposition, but incumbents involved in hard-fought contests usually receive extra support (e.g., Wright 1985, 1989). Some business PACs contribute to open-seat candidates with strong prospects for success. Business super PACs rarely support challengers to avoid creating enmity among incumbents, who possess very high odds of success. Instead, many business super PACs make amends by helping victorious challengers retire campaign debts or by contributing early in the upcoming election cycle. Traditional business PACs react to changes in partisan control of a chamber of Congress by shifting the balance of their support from one party to the other (Rudolph 1999). Traditional business PACs rarely make IEs for the same reasons that so few businesses sponsor super PACs.

The National Association of Realtors (NAR) sponsors a super PAC, a traditional PAC, and an extensive lobbying effort. The NAR Congressional Fund, the group's super PAC, gives insights into the activities of the few super PACs that businesses sponsor. During the four election cycles between 2010 and 2016, the NAR's super PAC spent more than $24 million on positive IEs supporting 58 Democratic and Republican incumbents in the House and Senate, and one Democratic candidate in an open-seat race. It did not make any anti-incumbent or pro-challenger expenditures, and it participated in few primaries. Its spending, though fairly bipartisan, was influenced by which party controlled the House or Senate. The spending pattern for the four election cycles that followed (2018-2024) largely continued this trend. The group spent $63 million in IEs, all on positive ads, and most in support of incumbents contesting a general election. Though bipartisan, its expenditures responded to partisan control of Congress.

The NAR's traditional PAC followed a similar pattern. Between 2010 and 2024, it contributed between $3 million and $6 million per election to hundreds of candidates from each party—almost all to incumbents—while favoring the party in control of the House or Senate. The traditional PAC also transferred funds to NAR's super PAC, various party committees, leadership PACs, and a few outside spending groups. Although the NAR is unusual in that it sponsors a super PAC, both committees follow standard practices for business organizations. Their pro-incumbent, bipartisan, positive campaigning and integration into networks comprising other campaign finance groups are designed to enhance the NAR's lobbyists' political access.

Traditional ideological PACs follow an electoral strategy designed to elect officials who share a group's broad political perspective or positions on salient value-laden issues. These organizations consider elections their major opportunity to influence the policy-making process, and they concentrate resources behind candidates in competitive elections who share their political views. More ideological PACs make IEs than PACs sponsored by business interests or labor unions, and they spend more on congressional primaries than any other type of group except candidates (Boatwright 2013; Boatright, Malbin, and Gavin 2016). Liberal ideological PACs support progressive Democrats, while their conservative rivals back conservative Republicans (e.g., Brunell 2005).

The National Right to Life (NRTL) Victory Fund is illustrative of a super PAC dedicated to promoting pro-life candidates. First active in 2012, the Victory Fund made $2.4 million in IEs between 2012 and 2016. The group spent roughly 80% of these funds to support Republican congressional candidates, another 19% to attack Democrats, and the remaining 1% sought to undermine the candidacies of pro-choice Republicans. Consistent with its earlier activities, the group spent $6.7 million in the next four elections—more than 92% of it in positive ads to help Republicans.

The NRTL's traditional PAC contributed about $29,000 to thirteen congressional candidates (twelve Republicans) and spent $3.3 million in IEs (99% to help Republicans) between 2010 and 2016. However, it reduced its IEs from $220,000 in 2018 to $990 in 2022 before eliminating them altogether in 2024. The coordination between the NRTL Victory Fund and the NTRL PAC extends beyond their supporting similar candidates. It is also visible through the former group assuming responsibility for IEs. The coordinated targeting and evolving division of labor between these two entities characterize relationships between many ideological PACs (and other groups) that have overlapping staff, donors, and goals.

Party organizations, leadership PACs, and congressional leaders' campaign committees are similar to ideological PACs, except their overriding objective is to maximize the number of party members in office rather than promote an ideology or issue (e.g., Heberlig and Larson 2012). The CLF exemplifies a party-connected MCG with ties to Republican House leaders. It made $59.6 million in IEs, 98% of them negative, to help elect House Republicans between 2010 and 2016. The group's activities in the four elections that followed was consistent with this pattern, despite its IE spending increasing to $725 million. Improvements in fundraising resulting from the CLF's transition to a hybrid committee in 2020 likely contributed to its increased spending.

The CLF's activity is similar to that of the House Republicans' traditional party organization, the National Republican Congressional Committee (NRCC). Also directed by party leaders, the NRCC made $41.2 million in contributions and coordinated expenditures, most of which were given to candidates in close elections between 2010 and 2024. Roughly 95% of the committee's $528.4 million IEs attacked Democrats. The similarities in spending by the CLF and the NRCC illustrate the influence of interlocking relationships among party-connected super PACs, party committees, Republican politicians, and other members of the Republican party network.

Traditional labor PACs implement "mixed" strategies. The ideological component of this strategy results in their overwhelmingly supporting candidates of one party, including those in competitive contests. The access component involves a group directing most of its support to party leaders and others positioned to advance their legislative agenda (e.g., Francia 2013). Similar to ideological PACs, some mixed-strategy PACs make IEs in closely contested races. However, fear of retribution results in few making anti-incumbent IEs in congressional primaries.

The National Education Association (NEA) is typical of a union that sponsors a super PAC in that it also sponsors a traditional PAC. The NEA Advocacy Fund, the super PAC, made $15 million in IEs in congressional elections between 2010 and 2016 and another $7.5 million between 2018 and 2024. The NEA's traditional PAC made $7.4 million in direct contributions during the former period and $12.7 million during the latter. The traditional PAC spent an additional $2.7 million in IEs in 2010 and $2.8 in 2012, before largely shutting down its IE operation. Both the NEA Advocacy Fund and PAC typically spend more than 90% of their funds to help elect Democratic candidates. However, the traditional PAC uses most of its funds to maintain access to powerful members of Congress, including some who face little or no opposition. The super PAC is more combative, less access-oriented, and more opportunistic in that it responds to the political environment when deciding whether to allocate more funds to protecting Democratic incumbents or electing Democratic challengers.

Our hypotheses about congressional super PACs draw on the literature on traditional PACs, super PACs, party committees, and candidate campaign committees, as well as interviews with super PAC leaders and consultants. Our principal hypotheses concern group sponsorship. First, we hypothesize ideological super PACs and party-connected super PACs (which include SCGs) commit more resources to primary contests (as opposed to general elections) than labor-affiliated groups or business-affiliated or groups. Second, we hypothesize labor super PACs allocate more funds to help Democratic candidates, while business super PACs spend more to help Republican candidates. Party-connected super PACs and most ideological super PACs, by definition, spend all their funds to help one party. Our third hypothesis is that business super PACs budget the most on IEs to help incumbents, followed by labor super PACs, then party-connected super PACs, and finally ideological super PACs. Our last group sponsorship hypothesis is that ideological and party-connected super PACs allocate the most funds to negative campaigning (as opposed to positive campaigning), followed by labor super PACs, and then business super PACs. Our secondary hypotheses assess the impact of a super PAC's financial constituency, experience, and the breadth of its electoral participation on its strategy and spending.

Data and Methods

Our research relies on quantitative and qualitative data. Interviews with a dozen super PAC officials were useful in formulating the hypotheses and interpreting the results. The quantitative analysis relies on campaign finance data and other election data for 2010 through 2016. As noted above, various court and administrative decisions made these years critical in the development of super PACs, including their strategies and relationships with affiliated groups. They also serve as a baseline for investigating super PAC behavior in the years that follow, as super PACs became more institutionalized. The quantitative data originated from the OpenSecrets and the FEC. These data were extremely messy. They had significant data entry and coding errors that led to discrepancies between the total contributions and IEs reported and the sums of the itemized contributions and IEs reported. In some cases, they amounted to millions of dollars. We extensively cleaned the data and recoded and supplemented it to suit our research. (See the Appendix.) The data record each super PAC's receipts, expenditures, organizational characteristics, and the types of candidates whose elections the group sought to influence. Given that many super PACs' electoral participation is trivial or nonexistent, the analysis includes only active super PACs—those that raised or disbursed $1,000 or more in a given election cycle between 2010 and 2016. We further limit our analysis to super PACs that were active in congressional races, excluding super PACs that participated only in presidential contests.[6] The unit of observation is a super PAC-election cycle, so that one data point is included for each election in which a super PAC was active. There are 700 congressional super PAC-election cycle observations.

We use these data to assess the impact of organizational characteristics on super PAC spending to help candidates in primaries and general elections, Democrats and Republicans, and incumbents and challengers. We also analyze the effects of organizational characteristics on the negativity of super PAC spending. Each dependent variable is operationalized in two ways: the

[6] Due to their unusual dynamics, we also exclude runoff elections, special elections, and general elections where two candidates from the same party ran against each other (as occasionally take place in California, Louisiana, and Washington).

percentage of dollars a super PAC spends for each purpose and the percentage of candidates that is the focus of the super PAC's expenditures. IEs classified as helping a candidate are those that advocate the candidate's election plus those that call for the defeat of the candidate's opponent(s). Negative IEs comprise only those made to oppose a candidate.

The principal independent variable is super PAC sponsorship. We expect to find significant differences in the distributions of business, labor, party-connected, and ideological super PAC IEs. (See the Appendix for its operationalization.) Additional independent variables describe a group's financing, which has been shown to constrain traditional PAC decision making and expenditures (Wright 1985; Li 2018). We anticipate the number of contributors a super PAC relies on for funding and the percentage of funds it raises from organizations, particularly 501(c) organizations and other groups that shield their donors' identities, to have an impact on its IEs.[7] Differences in the financing of hybrid committee and pure super PACs also could lead to differences in spending practices. We also expect a super PAC's level of experience, operationalized as the number of election cycles in which it was previously active, to affect how it distributes its IEs.

The breadth of a super PAC's focus also is likely to have an impact on its expenditures. We expect super PACs that participate solely in House contests, exclusively in Senate races, or in some combination of federal elections to spend funds differently. Finally, we include a variable for each election cycle to assess changes in super PAC spending over time. We do not measure the competitiveness of individual elections because congressional super PACs make virtually all their IEs in hotly contested races (e.g., Herrnson 2017).

First, we present an overview of congressional super PAC characteristics and IEs. Then, for each hypothesis, we model the impact of organizational characteristics and strategy on each of the dependent variables. We use a fractional logit model to test our hypotheses because our dependent variables are proportions bounded by 0 and 1 (Papke and Wooldridge 1996).[8] Ordinary least squares regression is inappropriate because it treats independent variables linearly, including at their extreme values, and can result in predictions outside the possible range of outcomes (Paolino 2001). We generate models with standard errors clustered on the super PAC because many super PACs participated in more than one election cycle. We translate the fractional logit estimates into predicted values to facilitate their interpretation.[9]

When investigating the partisanship of super PAC IEs, we include only expenditures made in the general election because super PACs that spend money in a primary make a decision

---

[7] The number of donors is highly correlated with super PAC wealth. Substituting the (logged) total independent expenditures for the number of donors yields qualitatively similar results.

[8] The fractional logit model is a generalized linear model with a logit link and binomial distribution. A traditional solution to proportions data is the logit transformation, but this does not allow zeros or ones in the dependent variable. For example, it cannot directly model a labor super PAC that spends all its IEs helping Democrats. Beta regression has a similar limitation. Another approach is zero/one inflated beta regression (Buis 2010). It uses a beta regression model for proportions between 0 and 1, and separate logit models for when the proportion equals 0 (or not) and when the proportion equals 1 (or not). It is applied in circumstances where one process drives whether a proportion is 0 (or not), another process drives whether a proportion is 1 (or not), and a third process influences the observations between 0 and 1. Because we consider the process to be the same in all three circumstances, the fractional logit model is more appropriate. However, we obtained qualitatively similar results using zero/one inflated beta regression and OLS.

[9] We set all other variables to their observed values and set the independent variable of interest to different values to calculate the average predicted comparisons (Gelman and Pardoe 2007).

based on candidates rather than partisanship. Our analysis of super PAC spending on incumbents includes IEs in incumbent-challenger races.

Results

The preliminary analysis demonstrates that there is considerable diversity among super PACs, and it contradicts the conventional wisdom that super PACs represent a small cabal of secretive corporations that seek access to influence powerful incumbents. First, and as noted earlier, business-sponsored groups, including corporations, comprise a tiny percentage of all congressional super PACs and account for a mere fraction of their IEs. (See Figure 1.) Labor-sponsored groups also are minor players in a super PAC universe dominated by ideological groups and party-connected committees.

Second, super PACs that have little or no financial transparency, or turn mainly to other groups or a small number of donors for backing, are neither as abundant nor active as media reports suggest. Super PACs that collect at least 15% of their dollars from organizations that do not publicly disclose their backers constitute 17% of active congressional super PACs; those with more organizational than individual donors constitute 44%; and those that raise funds from fewer than 25 donors constitute 27%. (See Table 1.) These three categories account for only 32%, 39%, and 21% of IEs, respectively.

Third, few super PACs appear to be permanent fixtures in congressional elections, and those that have the longest lifespan do not account for most super PAC spending. Indeed, nearly three-fourths of all groups are active in only one election cycle, and they finance almost half of all super PAC independent spending. Nevertheless, the small set of super PACs that participated in all four election seasons were responsible for the most spending per capita. As with other political organizations, age and experience are associated with the ability to deploy resources that bring political influence.

Fourth, super PACs that concentrate entirely on the House are as prevalent as those that participate in a combination of races, but are the source of considerably less independent spending. Super PACs that focus exclusively on the Senate account for 26% of all groups and 25% of all outside spending, which is impressive given Senate races make up only 7% of all congressional elections in a given cycle. The behavior of party-connected super PACs is largely responsible for these spending patterns. Party-connected super PACs constitute 73% of the congressional super PACs that concentrate on elections for one office, and they account for 85% of these groups' total IEs. Among these are the WSP, HMP, SLF, and CLF—which rank among the highest spending congressional super PACs—and roughly 300 SCGs that support of just one candidate.

The fifth set of preliminary findings consider the influence of incumbency. They demonstrate that super PACs that make IEs solely to help incumbents, including by opposing their challengers, account for only 17% of congressional super PACs and a mere 9% of their independent spending. Super PACs committed exclusively to the election of challengers significantly outnumber pro-incumbent groups but are responsible for financing a mere 4% of IEs. Groups that participate only in open-seat contests are similar in number and IEs as the challenger-oriented groups, which is noteworthy given the relative dearth of open-seat contests. Super PACs that support a combination of candidates have an unrivaled presence, accounting for 38% of all groups and the financing of 83% of all IEs.

The multivariate analysis demonstrates that organizational sponsorship has a substantial impact on many aspects of super PAC strategy and spending. The findings for super PAC participation in primary elections (versus the general elections) show, as anticipated, that the typical labor group allocates a significantly smaller share of its funds to primary contests than an ideological or party-connected group. (See Table 2, column 1.) Unexpectedly, business groups typically spend considerable resources in primaries, which indicates a willingness among the few businesses that sponsor a super PAC to break with traditional business orthodoxy. Instead of deploying resources to shore up relations with incumbents, these groups commit considerable funds to shaping the field of general election candidates.

The findings also demonstrate that a super PAC that relies heavily on organizations, particularly organizations with limited financial transparency, budgets relatively few dollars on average for IEs in primary contests. These results suggest that super PACs are similar to traditional PACs in that fundraising considerations restrict their spending decisions.

Experience and the types of elections super PACs participate in also matters. Groups that participated in four election cycles spent the most in primaries, contributing to the steady growth of super PAC primary spending. Super PACs that make IEs solely in House races usually earmark more resources for primaries, most likely because of an awareness that IEs typically have a greater impact on elections that involve fewer voters and lower overall expenditures. The findings for the percentage of candidates a super PAC supports in primaries (as opposed to the general election) are almost identical to the findings for the percentage of dollars a super PAC spends in primaries. (See Table 2, column 2.)

The predicted values for primary spending underscore the impact of organizational sponsorship. Business, party-connected, and ideological groups typically allot between 30% and 38% of their spending to primaries, compared to just 8% for a typical labor super PAC. (See Figure 2.[10]) Super PACs financed entirely by individuals spend 40% of their funds in primaries, on average, compared to 31% for super PACs funded entirely by organizations and 23% for super PACs that raise most of their dollars from nontransparent sources. Three of the predicted values highlight the effects of super PAC experience and electoral focus. Super PACs active in four election cycles typically commit 56% of their funds in primaries, compared to only 35% for the groups only active in one election season. Super PACs that participated exclusively in House contests allocate 46% of their funds to primary contests on average, while those that make IEs solely in Senate races or in some combination of elections allocate 23%. Finally, the predicted values for the percentage of candidates a super PAC supports in primary elections are essentially identical to the predicted values for the allocation of dollars.

Organizational characteristics also have an impact on the partisan tilt of super PAC spending. The coefficients for group affiliation strongly support the expectation that labor super PACs are highly supportive of Democratic candidates, while business super PACs appear to have a pro-Republican tilt compared to ideological super PACs. (The coefficient falls short of statistical significance; see Table 2, columns 3 and 4.) Party-connected super PAC spending is not significantly different from that of ideological groups. The findings also demonstrate that groups that rely on organizational donors or have been active in more election cycles favor Democratic congressional candidates, but super PACs, in general, have become increasingly supportive of Republican candidates. Once again, the findings for the percentage of candidates supported are practically the same to the distribution of super PAC spending.

The predicted values make the impact of super PAC affiliation more apparent. Labor super PACs favor Democratic candidates with 98% of their IEs, on average—a stark contrast to

---

[10] As noted earlier, the results are qualitatively similar when we used OLS or a zero/one inflated beta regression. We provide a figure for super PAC affiliation because it is a categorical variable with multiple classifications.

the mere 19% of funds business groups typically spend to help Democrats. (See Figure 3.) Every party-connected super PAC and almost every ideological super PAC spends all its funds to help just one party's candidates. This pattern is not illustrated by the figure because we did not code party-connected groups by party affiliation (Democrat vs. Republican) or ideological groups by ideological leaning (liberal vs. conservative), as doing so would create a tautology.[11]

Other factors also have a significant effect on the partisan distribution of super PAC IEs. Groups financed entirely by individual donors apportion 26% of their IEs dollars to help congressional Democrats, on average, compared to 61% for groups funded entirely by organizations. Super PACs that participated in three election cycles typically designate 57% of their outside spending to helping Democratic candidates, compared to only 38% for super PACs that participated in fewer elections. However, it is important to recognize that the partisan complexion of the super PAC spending appears to be changing: the typical super PAC favored Democratic candidates with 57% of its IEs 2010, compared to only 36% in 2016. Once again, the predicted values for the percentages of candidates a super PAC supports are qualitatively similar to the predicted values of the distribution of super PAC expenditures.

We find support for some of our expectations regarding super PACs' preference for incumbents. The coefficients for party-connected and business-affiliated groups are positive, indicating more pro-incumbent spending compared to ideological groups, though the coefficient for the percentage of IE spending falls slightly short of significance. (See Table 3, columns 1 and 2.) Super PACs that depend on organizational donors are more incumbent-oriented. Following the 2010 election cycle, super PACs' inclinations to back incumbents lessened.

The predicted values demonstrate that a business super PAC typically spends 57% of its funds to help reelect congressional incumbents, followed by party-connected groups at 49% and then ideological groups at 39%. (See Figure 4.) Labor super PACs' lesser spending for incumbents (29%) is somewhat surprising and diverges from the spending patterns of traditional labor PACs. Super PACs that raise all their funds from individuals make 32% of their IEs to help incumbents, on average, compared to 56% for super PACs that raise all their money from organizations. Overall, these results support the expectation that access-seeking organizations, whether super PAC sponsors or financiers, have a bigger impact on a super PAC's decision making and spending than its individual donors. Even so, super PACs' overall pro-incumbent biases have declined since they first entered the political arena: super PACs spent 60% of their funds to help reelect sitting members of Congress in 2010, on average, compared to just 42%, in 2012, 34% in 2014, and 49% in 2016. The results for the percentages of incumbents supported closely resemble those for the distribution of super PAC funds.

As anticipated, the results for negative campaigning show that party-connected super PACs, which include SCGs, budget more resources to attack politics than other groups. (See Table 3, columns 3 and 4.) The signs of the coefficients for the other group variables are in the anticipated direction, but fall short of statistical significance. There is a positive relationship between the size of a super PAC's financial constituency and the amount it typically spends on attack ads—once again supporting the generalization that a group funded by many is likely to campaign more aggressively than one beholden to a few. They also show that super PACs have increasingly devoted fewer dollars to negative campaigning each election cycle, which is consistent with reports of increased interest group activism in voter registration and mobilization drives and other positive efforts traditionally the purview of candidate campaign organizations and party committees (Dwyre and Braz 2015; Fishkin and Gerken 2015).

[11] The partisan distributions of party and ideological super PAC IEs are presented in Appendix Table A-1.

The predicted values demonstrate that party-connected, ideological, and labor super average typically earmark substantially more of their IE dollars for negative ads than business super PACs. (See Figure 5.) The numbers of donors that finance a super PAC have a positive impact on inclination to air attack ads. For example, groups funded solely by one donor—either an individual or organization—typically spend 39% of their IE dollars on negative ads, compared to 50% for super PACs that raise their funds from 54 donors.[12] It is noteworthy that super PAC spending appears to have been moderating over time. Super PAC negative IEs averaged 62% of the total in 2010 and only 38% in 2016. Once again, the findings for the impact of group affiliation on the allocation of super PAC dollars also apply to the percentage of candidates these groups oppose or support.

Conclusion

Many journalists and political reformers allege super PACs enable corporations to dominate American politics, and there is little doubt that some super PACs seek to advance the interests of wealthy or well-organized elements of society. Our findings, based on the first systematic assessment of the impact of organizational characteristics on super PAC spending in congressional elections, show a state of affairs that is more complex. They reveal substantial diversity among super PACs. They also show that super PACs are not entirely distinct in strategy and participation. Many of the factors that influence super PAC decision making and spending have a similar impact on traditional PACs and the other political organizations active in federal elections prior to the *Citizens United* ruling.

First among the considerations that have a bearing on super PAC formation, strategy and expenditures is group sponsorship. Ideological and party-connected groups dominate congressional super PACs, both in terms of numbers and spending, while groups sponsored by labor unions and businesses have a much smaller presence. Ideological and party-connected super PACs allocate more resources to congressional primaries than other groups. They, along with labor super PACs, rarely, if ever, support candidates of more than one party. By comparison, business super PACs are the most bipartisan, most pro-incumbent, and the least enamored with attack politics of all groups. The differences in super PAC spending are consistent with those reported for traditional PACs.

Fundraising demands also affect super PAC participation in elections. Most notably, super PACs primarily financed by individuals allocate more to congressional primaries and to help challengers. Combined with the results for group sponsorship, this finding suggests super PACs that depend the least on economic organizations for survival tend to face the fewest constraints. Absent pressures from access-oriented contributors, they have leeway to risk opposing an incumbent or helping a candidate who may not make it into the general election. The relative freedom with which these groups operate is similar to traditional ideological PACs, congressional leadership PACs, and party committees.

Congressional super PACs' responses to the political environment are consistent with the adjustments made by traditional political committees. That is, the variations in super PAC spending indicate that, like traditional PACs and parties, super PACs adjust their strategies in reaction to the number of closely contested congressional seats in a given election season, the candidates who run for them, the partisan control of the House and Senate, and the likelihood partisan control could change. Super PACs' diminishing levels of overall support for incumbents

---

[12] The estimated change moves from the 16th percentile to the 84th percentile. For a normal distribution, this would move from 1 standard deviation below the mean to 1 standard deviation above the mean, which is equivalent to moving from 0 to 1 of a balanced binary variable.

and candidates of one party are reminiscent of the changes in traditional PAC activity that accompanied rising electoral competition during the 1990s.

Despite the similarities identified between super PACs and traditional PACs, it is important to appreciate that the results also pinpoint substantial differences between them. The willingness of very few corporations and other businesses to sponsor a super PAC, for example, contrasts sharply with business's sponsorship of thousands of traditional PACs. Another difference concerns the magnitude of these entities' expenditures: business super PACs spend less on IEs than any other group of congressional super PACs, while traditional business PACs spend more in congressional elections than all other traditional PACs combined. This is ironic given the centrality of business interests in the legal suits and regulatory decisions that precipitated the formation of super PACs. Business super PACs' participation in congressional primaries and labor super PACs' support for congressional challengers are other areas of divergence between super PACs and traditional PACs.

In conclusion, our research demonstrates that super PACs have not completely redefined the roles of interest groups in political campaigns. Super PACs pursue the similar objectives and react to some of the opportunities and constraints that influence other campaign finance groups. Like the traditional PACs considered innovative in the 1970s, super PACs have increased the costs of federal elections, challenged candidates' ability to control the political debate, and encroached on some of the core functions of political parties. They also have injected more uncertainty and negativity into electoral politics, made it more difficult for voters to hold candidates and officeholders accountable, and provided wealthy and well-organized interests with yet another megaphone for making their views heard by voters and politicians. The emergence of redboxing promises to further blur the distinction in the eyes of voters between super PAC and candidate communications. The rise of super PACs has not revolutionized the political landscape, but it has altered it. Super PACs have important implications for representation and policymaking in the United States.

Appendix

The dataset used for this research is based on data first collected by the Federal Election Commission (FEC) and then enhanced by OpenSecrets (formerly known as the Center for Responsive Politics). The earliest steps in this project consisted of extensively cleaning the data, addressing inconsistencies in the coding of some variables, and recoding variables so they would better suit our research question. We also supplemented the dataset with new variables and data.

The data required extensive cleaning because of significant data entry and coding errors. This included fixing discrepancies between the total independent expenditures (IEs) reported and the sum of the itemized IEs reported. Other data issues addressed involve differences between the contributions a super PAC reported raising from a particular donor and the contributions the donor reported making to the super PAC. Some discrepancies were the result of a super PAC or super PAC contributor entering information in an unconventional section of a disclosure report or recording the same transaction in more than one place. Other data concerns originated from variations in a donor's name. Reconciling these was necessary to get an accurate record of the donor's contributions to an individual super PAC in a given election cycle; the contributions form the basis of many of our financing variables. In addition, we filled in a substantial amount of information that was missing or miscoded for the variables that record the characteristics of super PACs and donors. The data were corrected after reviewing the details of FEC reports filed by a super PAC or a contributing group, reviewing information posted on a super PAC's or a donor's website, and in some cases corroborating information obtained from media reports. Early explorations of the data revealed that some of the data shortcomings concerned transactions of millions of dollars.

We also revised some of OpenSecrets' initial codes to make them better fit our research question. OpenSecrets uses information about each contributor's occupation to classify them into hundreds of industries. Using OpenSecrets' classifications, we categorized super PAC donors into four groups: ideological super PACs, which focus on value-laden issues of broad ideological causes, and are not affiliated with an economic interest, political candidate, nor a party committee; party-connected super PACs, which are affiliated with a political candidate or party organization; business super PACs, which are sponsored by a corporation, trade association, or some other business; and labor super PACs, which are sponsored by a labor union.

We also addressed an inconsistency in OpenSecrets' coding of single-candidate groups (SCGs) and multicandidate groups (MCGs). OpenSecrets coded a super PAC that made independent expenditures of $50,000 or more to help (or harm) a single candidate in one election cycle as a SCG, and all other super PACs as MCGs (OpenSecrets' default category). A preliminary examination of the super PACs that spent less than $50,000 on IEs showed a substantial number of them (which OpenSecrets coded as MCGs) had made all their IEs to help only one candidate. Internet searches of this subset of groups demonstrated that nearly all of them had no association with a parent organization, thereby confirming their single-candidate mission; we coded these groups as SCGs (except for the few associated with a parent organization, which were coded to the same as their organizational sponsor). Moreover, we applied our coding scheme consistently, whereas OpenSecrets made exceptions. The most notable change in coding is a super PAC in the full data set, from which the congressional super PAC data originated: we coded Priorities USA as an MCG in 2016 because it supported one Democratic presidential candidate Hillary Clinton and several congressional candidates, while OpenSecrets coded it as an SCG supporting Clinton. The result is that our data contain more SCGs, and fewer MCGs, than OpenSecrets' data.

Table A-1: Partisan Distribution of Super PACs by Category

Party Helped	Business	Labor	Party-Connected	Ideological
Democrat Only	11%	92%	38%	37%
Mixed	39%	8%	0%	5%
Republican Only	50%	0%	62%	58%

Table 1. An Overview of Congressional Super PAC Characteristics and Independent Expenditures

	Group Representation	Independent Expenditures
Financing		
Partial or no transparency	16.8%	32.0%
More than 50% org donors	44.4%	38.8%
25 or more donors	26.8%	79.3%
Hybrid	6.4%	1.8%
Number of election cycles active		
One	73.6%	46.2%
Two	16.5%	18.7%
Three	7.1%	21.5%
Four	2.7%	13.5%
Candidates helped		
Incumbents only	17.3%	9.3%
Challengers only	23.0%	4.1%
Open seat only	21.7%	3.9%
Combination	38.0%	82.7%
Electoral participation		
House only	37.1%	13.9%
Senate only	26.2%	25.5%
Combination	36.7%	60.6%

Sources: OpenSecrets, Federal Election Commission, data collected by authors.
N=700 observations from 560 unique super PACs.

Table 2. The Impact of Organizational Characteristics on the Allocation of Super PAC IEs by Electoral Context and Partisanship.

	Spend in primary		Help Democrats	
	(1)	(2)	(3)	(4)
	% funds spent	% of candidates	% funds spent	% of races
Organizational Characteristics				
Affiliation (baseline: nonconnected/ideology)				
Business	−0.255	−0.238	−1.064	−1.104
	(0.493)	(0.398)	(0.782)	(0.786)
Labor	−2.015**	−2.217**	5.028**	4.221**
	(0.639)	(0.495)	(0.947)	(0.754)
Party-connected	0.128	0.186	0.404	0.400
	(0.212)	(0.195)	(0.303)	(0.301)
Financing				
Partial or no transparency (compared to full)	−0.769**	−0.729**	0.174	0.170
	(0.266)	(0.232)	(0.286)	(0.286)
Proportion receipts from organizations	−0.449*	−0.359	1.712**	1.691**
	(0.227)	(0.211)	(0.348)	(0.345)
Hybrid (compared to pure super PAC)	−0.128	−0.221	0.539	0.525
	(0.324)	(0.291)	(0.488)	(0.487)
Number of donors (logged)	−0.100	−0.0634	0.107	0.0979
	(0.054)	(0.0498)	(0.080)	(0.0797)
Number of election cycles active (baseline: one)				
Two	0.237	0.194	0.398	0.434
	(0.212)	(0.196)	(0.250)	(0.249)
Three	−0.301	−0.223	0.939*	0.974**
	(0.317)	(0.284)	(0.375)	(0.376)
Four	1.039**	1.305**	1.059	1.014
	(0.380)	(0.324)	(0.601)	(0.599)
Office spent on (baseline: a combination)				
House Only	0.861**	0.769**	0.114	0.103
	(0.227)	(0.212)	(0.318)	(0.315)
Senate Only	0.0801	0.148	−0.382	−0.386
	(0.252)	(0.230)	(0.314)	(0.312)
Election Cycle: (baseline: 2010)				
2012	1.479**	1.424**	−0.605	−0.638*
	(0.456)	(0.423)	(0.329)	(0.325)
2014	1.644**	1.567**	−0.890*	−0.919**
	(0.459)	(0.426)	(0.358)	(0.355)
2016	1.843**	1.707**	−1.032*	−1.035*
	(0.462)	(0.430)	(0.421)	(0.416)
Constant	−2.039**	−2.038**	−1.159*	−1.101*
	(0.481)	(0.450)	(0.458)	(0.451)
Observations	700	700	480	480

Pseudo R2	0.11	0.10	0.16	0.15

Sources: OpenSecrets, Federal Election Commission, data collected by authors.

Notes: Coefficients are from fractional logit models. All models use heteroskedasticity and auto-correlation (by Super PAC) consistent standard errors in parentheses. $^{**}p < 0.01$, $^{*}p < 0.05$ (2-tailed)
Dependent variable of (1) is the percentage of all IEs made in the primary election.
Dependent variable of (2) is the percentage of candidates in which IEs were spent in primary elections.
Dependent variable of (3) is the percentage of all IEs made in support of Democratic candidates or in opposition to Republican candidates in the general election. Only Super PACs that spent in the general election are included.
Dependent variable of (4) is the percentage of races in which IEs were spent in support of Democratic candidates or in opposition to Republican candidates in the general election. Only Super PACs that spent in the general election are included.

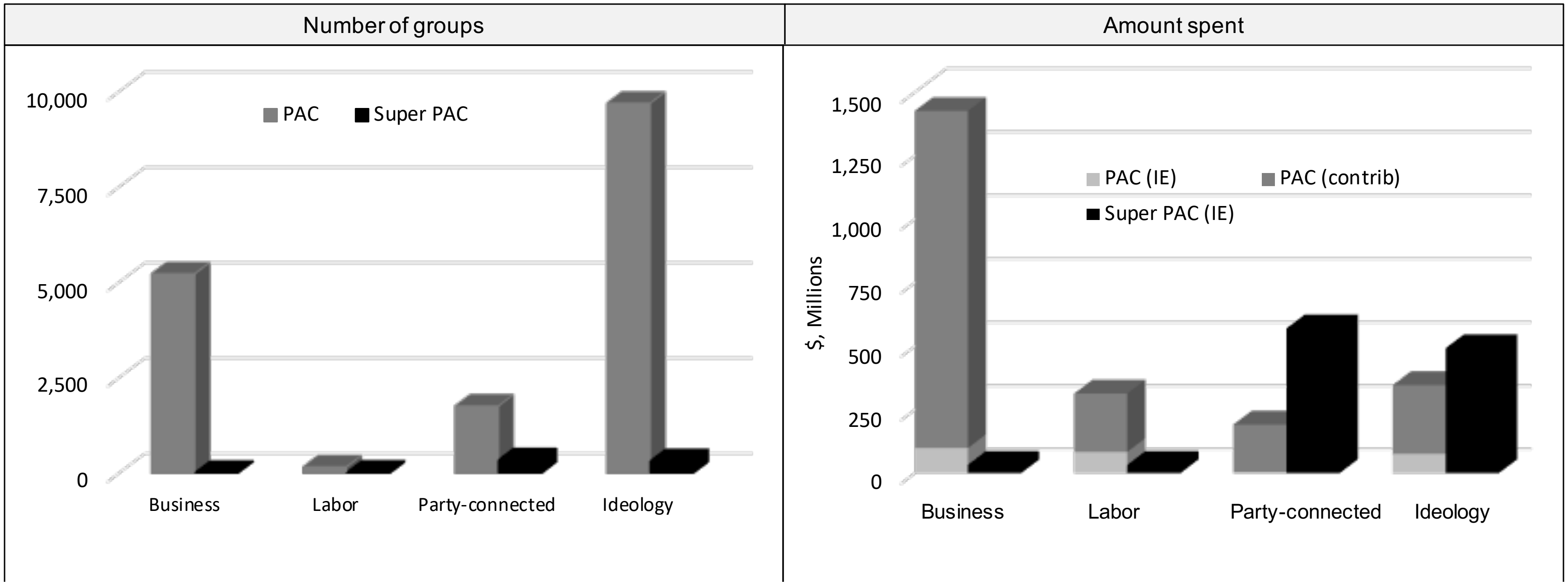
Table 3. The Impact of Organizational Characteristics on the Allocation of Super PAC IEs by Candidate Type and Tone of Advertisements

	Help incumbents		Spend to oppose	
	(5)	(6)	(7)	(8)
	% funds spent	% of candidates	% funds spent	% of candidates
Organizational Characteristics				
Affiliation (baseline: nonconnected/ideology)				
Business	0.761	0.844	−1.038	−0.999
	(0.449)	(0.444)	(0.669)	(0.683)
Labor	−0.489	−0.200	0.195	0.240
	(0.368)	(0.330)	(0.473)	(0.376)
Party-connected	0.418	0.444*	0.494**	0.397*
	(0.226)	(0.218)	(0.185)	(0.159)
Financing				
Partial or no transparency (compared to full)	−0.00369	−0.0316	0.0817	0.133
	(0.198)	(0.198)	(0.197)	(0.173)
Proportion receipts from organizations	1.013**	0.884**	−0.198	−0.170
	(0.240)	(0.228)	(0.193)	(0.175)
Hybrid (compared to pure super PAC)	−0.446	−0.276	−0.301	−0.138
	(0.357)	(0.331)	(0.302)	(0.284)
Number of donors (logged)	0.0148	0.0134	0.145**	0.0942*
	(0.0485)	(0.0447)	(0.046)	(0.0406)
Number of election cycles active (baseline: one)				
Two	0.451*	0.363	0.267	0.159
	(0.209)	(0.194)	(0.182)	(0.164)
Three	0.572	0.362	0.442	0.363
	(0.334)	(0.294)	(0.241)	(0.224)
Four	−0.505	−0.649	0.439	0.325
	(0.550)	(0.513)	(0.348)	(0.292)
Office spent on (baseline: a combination))				
House Only	−0.264	−0.447	−0.0599	0.164
	(0.246)	(0.231)	(0.199)	(0.176)
Senate Only	0.0555	−0.187	0.160	0.369
	(0.257)	(0.249)	(0.212)	(0.189)
Election Cycle: (baseline: 2010)				
2012	−0.806**	−0.701*	−0.726**	−0.517*
	(0.312)	(0.298)	(0.270)	(0.234)
2014	−1.164**	−0.964**	−0.749**	−0.586*
	(0.321)	(0.306)	(0.275)	(0.241)
2016	−0.494	−0.382	−1.042**	−0.805**
	(0.337)	(0.319)	(0.287)	(0.244)
Constant	−0.246	−0.137	−0.0278	−0.290
	(0.359)	(0.338)	(0.325)	(0.280)
Observations	545	545	700	700
Pseudo R2	0.06	0.05	0.04	0.03

Sources: OpenSecrets, Federal Election Commission, data collected by authors.

Notes: Coefficients are from fractional logit models. All models use heteroskedasticity and auto-correlation (by Super PAC) consistent standard errors in parentheses. $^{**}p < 0.01$, $^{*}p < 0.05$ (2-tailed)
Dependent variable of (5) is the percentage of all IEs made in support of incumbent candidates or in opposition to challenger candidates (excluding open seat spending). Only Super PACs that spent to help incumbents or challengers are included.
Dependent variable of (6) is the percentage of candidates in which IEs were spent in support of incumbent candidates or in opposition to challenger candidates (excluding open seat spending). Only Super PACs that spent to help incumbents or challengers are included.
Dependent variable of (7) is the percentage of all IEs made to oppose candidates.
Dependent variable of (8) is the percentage of candidates in which IEs were spent opposing candidates.

Figure 1. The organizational affiliations of traditional PACs and congressional super PACs



Notes: The left panel presents the number of political committees affiliated with business, labor, party, or ideological interests. The right panel presents the total disbursements by these groups. Figures only include active groups (those that raised or disbursed at least $1,000).

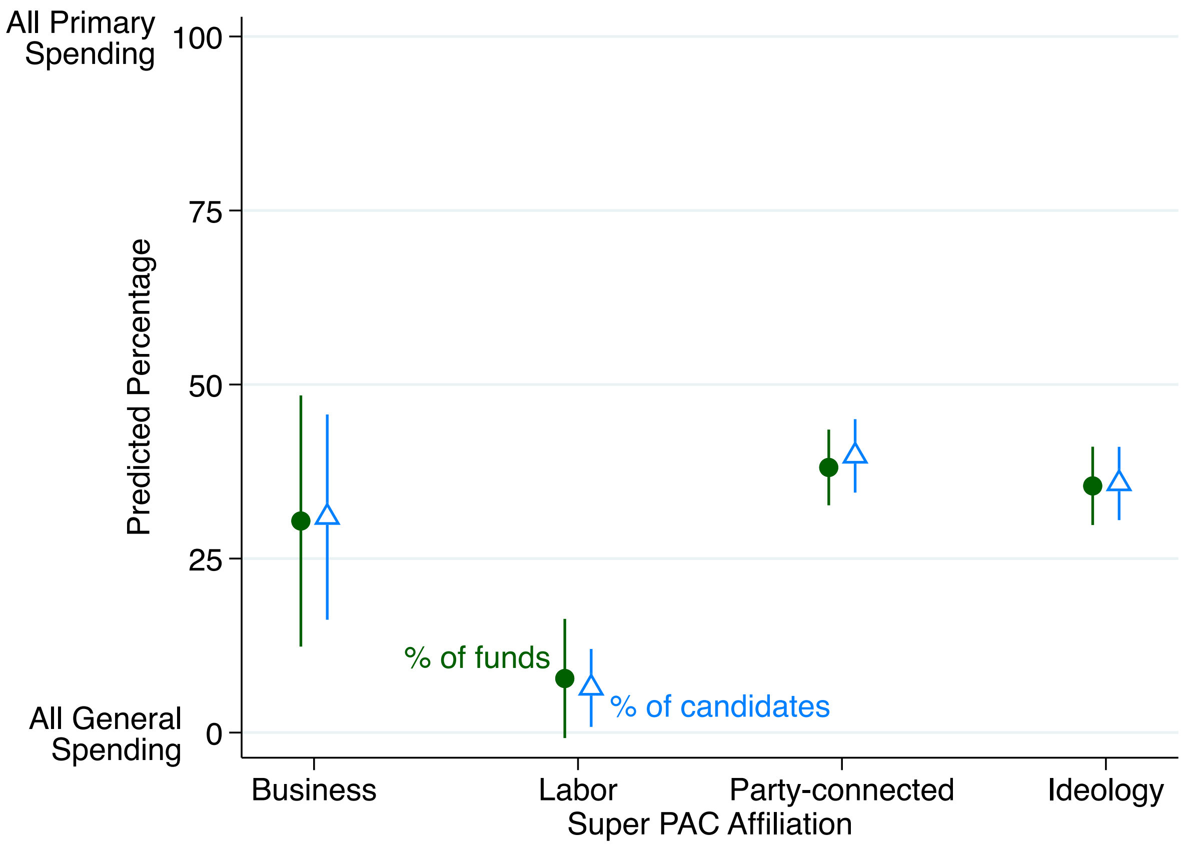


Figure 2. Predicted percentages of IEs spent in primary elections and predicted percentages of primary candidates supported or opposed.

Notes: Predictions derived from Models 1 and 2 of Table 2. Vertical lines are 95% confidence intervals.

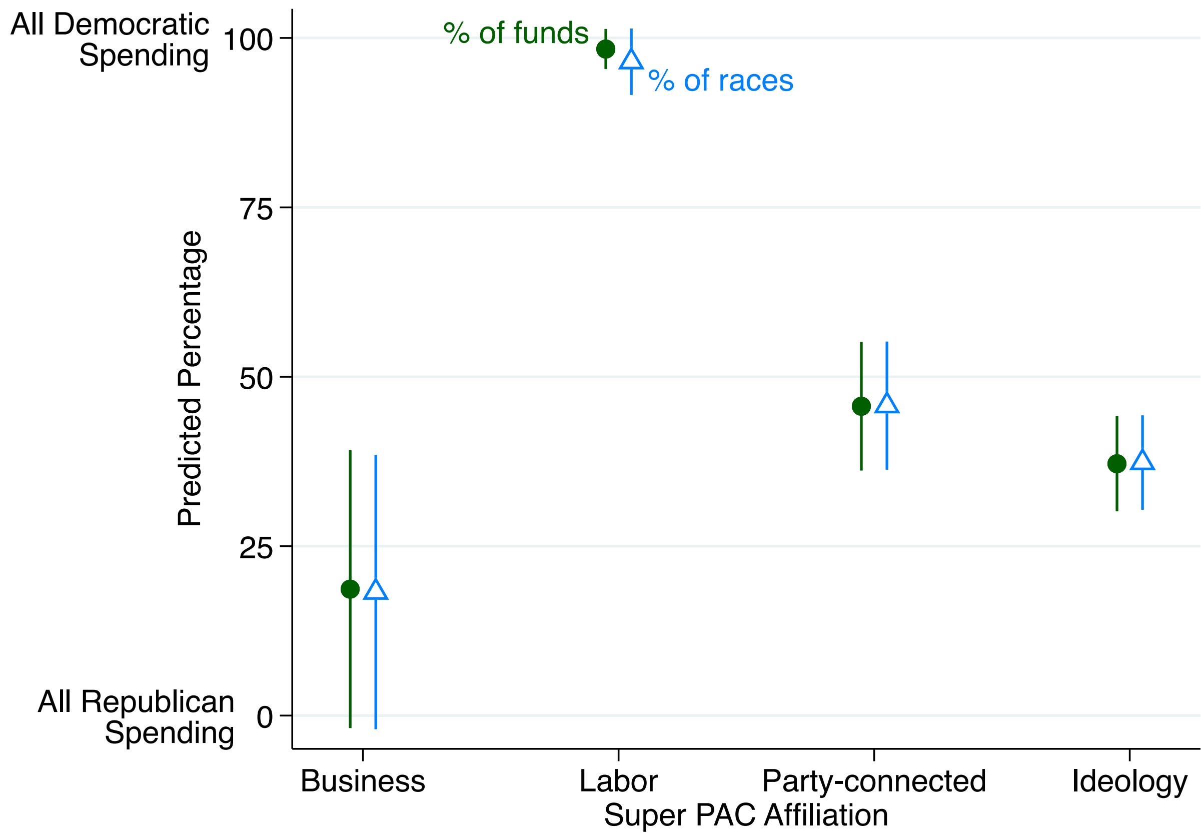


Figure 3. Predicted percentages of general election IEs to help Democratic candidates and predicted percentages of Democratic candidates helped.

Notes: predictions derived from Models 3 and 4 of Table 2. Vertical lines are 95% confidence intervals. Only super PACs that spent in general elections are included.

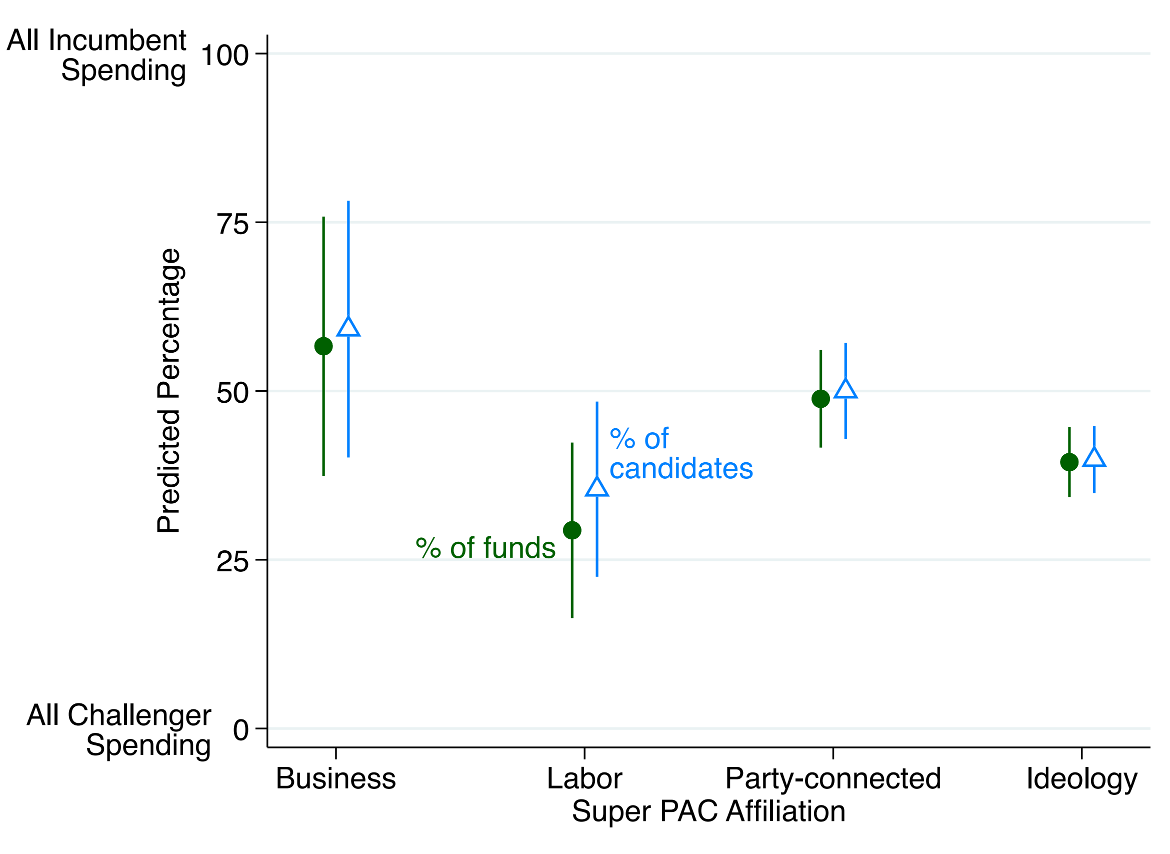


Figure 4. Predicted percentages of IEs to help incumbents and predicted percentages of incumbents helped.

Notes: Predictions derived from Models 5 and 6 of Table 3. Vertical lines are 95% confidence intervals. Only super PACs that spent to help incumbents or challengers are included.

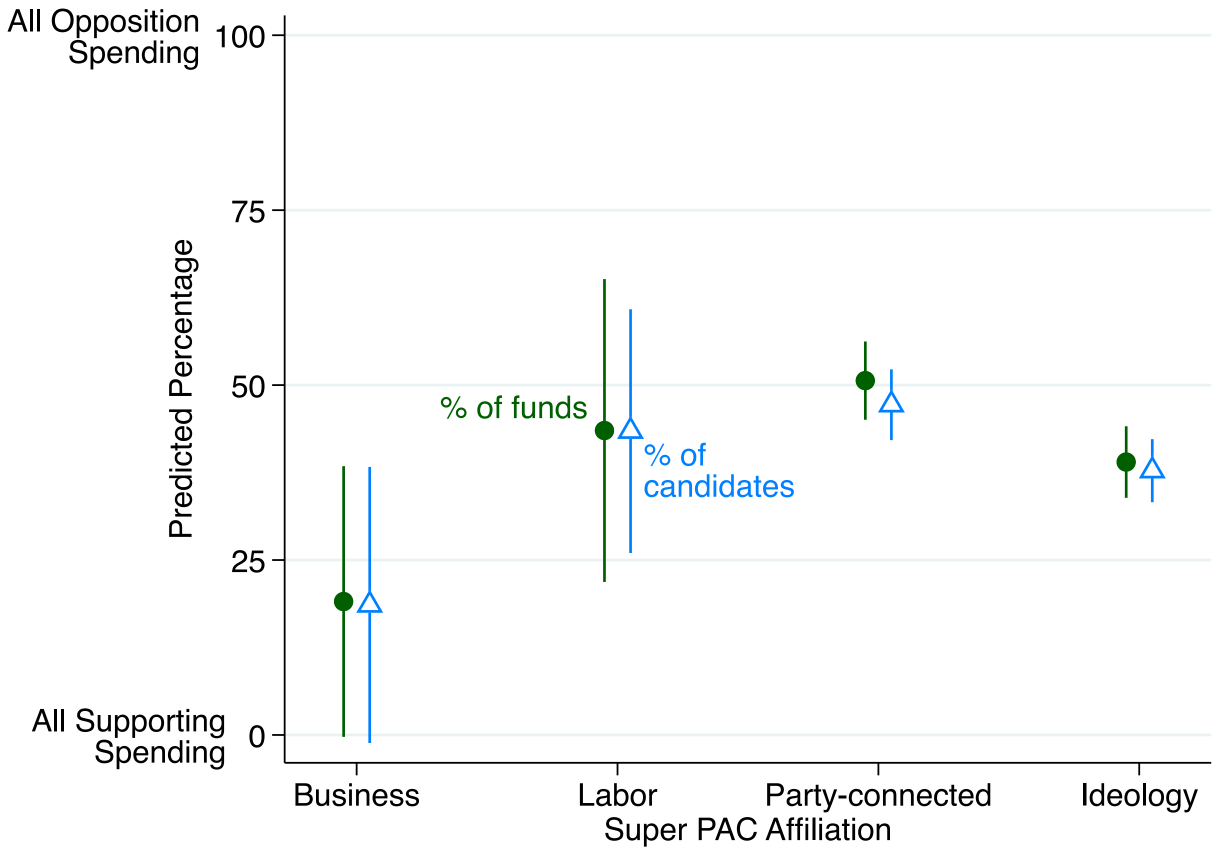


Figure 5. Predicted percentages of IEs opposing candidates and predicted percentages of candidates opposed.

Notes: Predictions derived from Models 7 and 8 of Table 3. Vertical lines are 95% confidence intervals.

References

Austen-Smith, David, and John R. Wright. 2004. "Counteractive Lobbying." *American Journal of Political Science* 38(1): 25–44.

Bawn, Kathleen, Martin Cohen, David Karol, Seth Masket, Hans Noel, and John Zaller. 2012. "A Theory of Political Parties: Groups, Policy Demands and Nominations in American Politics." *Perspectives on Politics* 10(3): 571–597

Boatright, Robert G. 2013. *Getting Primaried: The Changing Politics of Congressional Primary Challenges*. Ann Arbor: University of Michigan Press.

Boatright, Robert G., Michael J. Malbin, and Brendan Glavin. 2016. "Independent Expenditures in Congressional Primaries after Citizens United." *Interest Groups and Advocacy* 5(2): 119–140.

Bonica, Adam. 2016. "Avenues of Influence: On the Political Expenditures of Corporations and Their Directors and Executives." *Business and Politics* 18(4): 367–394.

Briffault, Richard. 2012. "Super PACs." *Minnesota Law Review* 96(6): 1644–1693.

Brunell, Thomas L. 2005. "The Relationship Between Political Parties and Interest Groups: Explaining Patterns of PAC Contributions to Candidates for Congress." *Political Research Quarterly* 58(4): 681–88.

Buis, Maartin L. 2010. "Analyzing Proportions." German Stata Users' Group Meetings 2010 04, Stata Users Group.

Cann, Damon M. 2008. *Sharing the Wealth: Member Contributions and the Exchange Theory of Party Influence in the U.S. House of Representatives*. Albany: SUNY Press.

Desmarais, Bruce A., Raymond J. La Raja, and Michael S. Kowal. 2015. "The Fates of Challengers in U.S. House Elections: The Role of Extended Party Networks in Supporting Candidates and Shaping Electoral Outcomes." *American Journal of Political Science* 59(1): 194–211.

Dwyre, Diana, and Evelyn Braz. 2015. "Super PAC Spending Strategies and Goals." *The Forum* 13(2): 245–267.

Fishkin, Joseph, and Heather Gerken. 2015. "The Party's Over: McCutcheon, Shadow Parties, and the Future of the Party System." *Supreme Court Review* 2014(1): 175–214.

Foy- Sutherland, Gabriel, and Saurav Ghosh. 2024. "Coordination in Plain Sight: The Breadth and Uses of 'Redboxing' in Congressional Elections." *Election Law Journal* 23(2): 149–172. https://doi.org/10.1089/elj.2023.0038

Foy-Sutherland, Gabriel. 2025a. "Candidate B-Roll as Super PAC Subsidy." *American Politics Research* (forthcoming). http://dx.doi.org/10.2139/ssrn.5270902

Foy-Sutherland, Gabriel. 2025b. "Working Hand in Hand: Interest Groups and Cooperative Dynamics in Elections." *Journal of Politics* (forthcoming). https://doi.org/10.1086/737690

Francia, Peter L. 2013. "Onward Union Soldiers." In *Interest Groups Unleashed*, edited by Paul S. Herrnson, Christopher J. Deering, and Clyde Wilcox. Washington, DC: CQ Press: 93–109.

Franz, Michael M., Erika Franklin Fowler, and Travis N. Ridout. 2016. "Loose Cannons or Loyal Foot Soldiers? Toward a More Complex Theory of Interest Group Advertising Strategies." *American Journal of Political Science* 60(3): 738–751.

Godwin, Kenneth R. 1988. *One Billion Dollars of Influence.* Chatham: Chathan House.

Gopoian, David. 1984. "What Makes PACs Tick." *American Journal of Political Science* 28(2): 259–281.

Grossmann, Matt, and Casey B. K. Dominguez. 2009. “Party Coalitions and Interest Group Networks.” *American Politics Research* 37(5): 767–800.

Hanmer, Michael J., and Kerem Ozan Kalkan. 2013. “Behind the Curve: Clarifying the Best Approach to Calculating Predicted Probabilities and Marginal Effects from Limited Dependent Variable Models.” *American Journal of Political Science* 57(1): 263–277.

Hall, Richard, and Frank Wayman. 1990. “Buying Time.” *American Political Science Review* 84(3): 797–820.

Hall, Richard, and Alan V. Deardorff. 2006. “Lobbying as Legislative Subsidy.” *American Political Science Review* 100(1): 69–84.

Hansen, Wendy L., Michael S. Rocca, and Brittany Leigh Ortiz. 2015. “The Effects of *Citizens United* on Corporate Spending in the 2012 Presidential Election.” *Journal of Politics* 77(2): 535–545.

Hasen, Richard L. 2014. “Super PAC Contributions, Corruption, and the Proxy War Over Coordination.” *Duke Journal of Constitutional Law & Public Policy* 9(1): 1–21.

Heberlig, Eric S., and Bruce A. Larson. 2012. *Congressional Parties, Institutional Ambition, and the Financing of Majority Control*. Ann Arbor: University of Michigan Press.

Herrnson, Paul S. 2009. “The Roles of Party Organizations, Party-Connected Committees, and Party Allies in Elections.” *Journal of Politics* 71(4): 1207–24.

Herrnson, Paul S. 2016. *Congressional Elections: Campaigning at Home and in Washington*, 7th ed. Washington, DC: CQ Press.

Herrnson, Paul S. 2017. “The Impact of Organizational Characteristics on Super PAC Financing and Independent Expenditures.” Washington, DC: Campaign Finance Task Force, Bipartisan Policy Center.

Herrnson, Paul S., Jay Goodliffe, Jennifer A. Heerwig, and Douglas M. Spencer. 2024. “The Impact of Associational Ties on the Financing of Super PACs.” *Interest Groups & Advocacy* 13(1): 43–68.

Herrnson, Paul S., Jennifer A. Heerwig, and Douglas M. Spencer. 2018. “The Impact of Organizational Characteristics on Super PAC Financing.” In *The State of the Parties 2018: The Changing Role of Contemporary American Political Parties*, edited by John C. Green, Daniel J. Coffey, and David B. Cohen. New York: Rowman & Littlefield.

Herrnson, Paul S. and Justin H. Kirkland, “Political Parties and Campaign Finance Networks,” in Jennifer Nicoll Victor, Alexander H. Montgomery, and Mark Lubell, eds., *The Oxford Handbook of Political Networks* (New York: Oxford University Press, 2018), 407–432.

Kalla, Joshua L., and David E. Broockman. 2016. “Campaign Contributions Facilitate Access to Congressional Officials: A Randomized Field Experiment.” *American Journal of Political Science*. 60(3): 545–558.

Koger, Gregory, Seth Masket, and Hans Noel. 2009. “Partisan Webs: Information Exchange and Party Networks.” *British Journal of Political Science* 39(3): 633–53.

Koger, Gregory, Seth Masket, and Hans Noel. 2010. “Cooperative Party Factions in American Politics.” *American Politics Research* 38(1): 33–53.

Kolodny, Robin, and Diana Dwyre. 1998. “Party-Orchestrated Activities for Legislative Party Goals: Campaigns for Majorities in the US House of Representatives in the 1990s.” *Party Politics* 4(3): 275–95.

Kolodny, Robin and Diana Dwyre. 2018. “Convergence or Divergence? Do Parties and Outside Groups Spend on the Same Candidates, and Does It Matter?” *American Politics Research* 46(3): 375–401.

Li, Zhao. 2018. “How Internal Constraints Shape Interest Group Activities: Evidence from Access-Seeking PACs.” *American Political Science Review* 112(4): 792–808.
Lipsitz, Keena. 2013. “Issue Convergence Is Nothing More Than Issue Convergence.” *Political Research Quarterly* 66(4): 843–55.
Magleby, David B., and Jay Goodliffe. 2019. “Interest Groups in the 2016 Election.” In *Financing the 2016 Election*, edited by David B. Magleby. Washington, DC: Brookings Institution Press.
Magleby, David B., Jay Goodliffe, and Joseph A. Olsen. 2018. *Who Donates in Campaigns? The Importance of Message, Messenger, Medium, and Structure*. Cambridge: Cambridge University Press.
Manento, Cory. 2021. “Party Crashers: Interest Groups as a Latent Threat to Party Networks in Congressional Primaries.” *Party Politics* 27(1): 137–148. https://doi.org/10.1177/1354068819834528
Paolino, Philip. “Maximum Likelihood Estimation of Models with Beta-Distributed Dependent Variables.” *Political Analysis* 9(4): 325–346.
Papke, Leslie E., and Jeffrey M. Wooldridge. 1996. “Econometric methods for fractional response variables with an application to 401(k) plan participation rates.” *Journal of Applied Econometrics* 11: 619–632.
Pildes, Richard, and Bob Bauer. 2025. “The Supreme Court, The Political Parties, and the SuperPacs.” *Election Law Blog*. https://electionlawblog.org/?p=150545
Rozell, Mark J., Clyde Wilcox, and Michael M. Franz. 2012. *Interest Groups in American Campaigns: The New Face of Electioneering*, 3rd ed. New York: Oxford University Press.
Rudolph, Thomas J. 1991. “Corporate and Labor PAC Contributions in House Elections: Measuring the Effects of Majority Party Status.” *Journal of Politics* 61(1): 195–206.
Schatzinger, Henrik M., and Steven E. Martin. 2020. *Game Changers: How Dark Money and Super PACs are Transforming U.S. Campaigns*. Lanham, MD: Rowman & Littlefield.
Skinner, Richard M., Seth E. Masket, and David A. Dulio. 2012. “527 Committees and the Political Party Network.” *American Politics Research* 40(1): 60–84.
Spencer, Douglas M., and Abby K. Wood. 2014. “Citizens United, States Divided: An Empirical Analysis of Independent Political Spending.” *Indiana Law Journal* 89(1): 315–372.
Wright, John R. 1985. PACs, Contributions, and Roll Calls: An Organizational Perspective.” *American Political Science Review* 79(2): 400–414.
Wright, John R. 1989. “PAC Contribution, Lobbying, and Representation.” *Journal of Politics* 51(3): 713–729.