

I Get By with a Little Help from My Friends: Leveraging Campaign Resources to Maximize Congressional Power

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Abstract: *Central to the study of Congress is the study of relationships among members. Electoral collaboration is a function of a member's position in the broader congressional power network. It allows members to leverage their campaign resources to achieve the four classic goals of members of Congress: reelection, making good public policy, obtaining power within the institution, and having one's party in the majority. Using nearly 3.2 million FEC records from 2010 to 2016, we explore the dynamics that influence electoral collaboration. We find members are most likely to collaborate electorally with other members from the same state, party, and committee, and the most electorally vulnerable. Further, party leaders share most frequently with the rank and file. These findings build upon our expanding understanding of congressional collaboration, the networks members of Congress form, and the congressional power structure members operate within.*

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Central to the study of Congress is the study of relationships among members. The relationships forged and the resulting collaboration are essential for accomplishing members' classic goals of reelection, good public policy, power within the institution, and having one's party in the majority. Network analysis is a useful approach for studying relationships. Legislative scholars are increasingly using network analysis to study why and how networks form and the implications of legislative networks in a variety of domains (Craig 2016, 2017; Ringe, Victor, and Carman 2013; Ringe, Victor, and Cho 2017). The preponderance of literature in legislative networks is devoted to the behavior of mem-

bers of Congress within the legislature—how they vote on a particular bill or amendment, or who they cosponsor legislation with. Many of these studies have examined the factors driving member collaboration in these policy domains (Rogowski and Sinclair 2012; Tam Cho and Fowler 2010), and how this active collaboration influences a variety of outcomes, including policymaking (Fowler 2006a, 2006b; Masket 2008).

We look outside the policy arena to electoral collaboration. We gather original data on the sharing of donor lists to fill a gap created by the unavailability of data on electoral collaboration. Ultimately, electoral collaboration addresses the goals of members of Congress

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since losing reelection forecloses upon the possibility of policymaking and future legislative collaboration. Furthermore, legislative collaboration and electoral collaboration are intrinsically related. If members collaborate in policymaking, they have every incentive to ensure their collaborators are reelected. If members collaborate for reelection, they have the prior contact necessary to sustain collaboration and turn it into collaboration for policymaking.

Inspired by the literature on legislative collaboration, we ask: What factors influence who collaborates with whom in congressional elections? Do the same factors that drive legislative collaboration drive electoral collaboration? We argue that electoral collaboration is a function of a member's position in the broader congressional power network and is influenced by the four classic goals of members of Congress: reelection, making good public policy, obtaining power within the institution, and having one's party in the majority (Fenno 1973; Mayhew 1974). Engaging in electoral collaboration allows members to navigate this power network by leveraging their campaign resources to achieve these four goals. Achieving these goals increases one's influence. Whereas legislative collaboration presumes active collaboration—two or more members actively working together toward a shared goal—electoral collaboration need not be active to be considered worthwhile. Even a more transactional collaboration like passive collaboration, where the focus is on who helps whom rather than who works together with whom, suffices as collaboration that can still assist members in navigating the congressional power network.

To measure electoral collaboration, we examine the sharing, trading, and selling of donor and/or supporter lists between congressional campaigns.¹ These lists comprise names and email addresses or postal addresses at a minimum, but they can also contain phone numbers, age, voting history, donor history, and other information traditionally in a voter file held by a campaign or party. We capture the exchange of lists by scraping nearly 3.2 million Federal Election Commission (FEC) records from 2010 to 2016. We test our theory using inferential network analysis to uncover the network and political dynamics that

¹Donor and supporter lists differ in a few ways. Citizens can donate to any campaign regardless of their home state or district, so donors may not live in the same state or district as the candidate for Congress. Supporter lists (often called voter lists) are more geographically concentrated lists of persons who are activists and volunteers (who may or may not be donors). For fundraising, we expect donor lists are more widely shared than supporter lists. Supporter lists are more narrowly shared, between candidates with overlapping or neighboring jurisdictions. Unfortunately, differentiation between donor and supporter/voter lists is infeasible for this study.

inform electoral collaboration. We find that members are likely to collaborate with copartisans, those serving from the same state, those serving on the same committee, and those facing contentious reelection races. Moreover, party leaders collaborate with the rank and file. These findings shed light on a strategic decision network, where members who have substantial lists of donors and supporters use those lists as a means to navigate and leverage the power structure of Congress.

Congressional Networks

The importance of legislative networks for the policy process, measured through Dear Colleague letters, caucus memberships, and cosponsorship of legislation, has been well documented by American politics scholars (Craig 2016, 2017; Kirkland 2011, 2012, 2014; Patterson 1959; Rountt 1938). When choosing with whom to work to advance legislation, members are inclined toward homophily—drawn toward those similar to themselves (Craig 2016). Other scholarship echoes similarly, finding friendship drives similarities in roll-call voting (Arnold, Deen, and Patterson 2000; Peoples 2008). Overall, the patterns of network formation outlined in these studies demonstrate that members of Congress lean most heavily on similarities with other members when collaborating to legislate.

However, scholars have less insight about the *electoral* networks for members of Congress. Studying electoral networks is important because legislative behavior is not purely about making good public policy—legislators almost always endeavor with an eye toward the next election, and reelection is necessary for policymaking. If that is true, the study of legislative collaboration should venture into electoral collaboration. Electoral collaboration is a further window into how members attempt to achieve the four classic goals, thereby maximizing their congressional power.

Congressional Motivations for Electoral Collaboration

Members of Congress build networks and collaborate electorally for four primary reasons. Each reason bridges at least one of their four classic goals.

First, it increases the influence of members who choose to collaborate. When these members vie for preferred committee assignments or chairmanships, they can call in these favors (Bullock 1985; Masters 1961).

Collaboration is also good for party cohesion. We posit that elected representatives who share may be more likely to climb the ladder of party leadership, as those who share demonstrate their loyalty to their party and its members (Heberlig 2003). The reverse may be true too. Members who have already climbed the ladder of party leadership may be expected to share with rank-and-file members. Sharing helps others raise money and increases their grassroots support, which increases the “stock” of the member who shared in the first place. For this reason, sharing serves the dual purpose of strengthening both the party apparatus and the institutional standing of members who share (Fenno 1973; Mayhew 1974). Members who refuse to share risk being seen as self-centered or disloyal by fellow members—as members who are not team players (Hasecke and Mycoff 2007). Loyalty is invariably related to legislative success and obtaining committee assignments (Hasecke and Mycoff 2007; Leighton and Lopez 2002). Electoral collaboration is a clear way to demonstrate loyalty. In some estimations, financial support for the party has even surpassed seniority as the deciding factor in obtaining preferred committee assignments (Cann 2008a, 2008b). Overall, collaborating for this reason simultaneously helps obtain power within the institution and advance one’s party in the majority, two of the four classic goals.

Second, members use electoral collaboration to support those they align with ideologically. Members of the House Freedom Caucus, for instance, collaborate electorally to help elect like-minded Republicans (McGee 2019; Rubin 2017). The most effective campaigns make contact with the most potential voters and supporters (Green, and Gerber 2015). Without adequate lists of whom to reach out to, campaigns are at a disadvantage. They risk dampening their message or wasting campaign resources on voters who are unlikely to vote for their candidate, as well as activists who are unlikely to support and campaign for their candidate. Composed lists of the most ardent party activists and the strongest monetary supporters of the party are considered the lifeblood of a successful campaign, and they are an integral part of the informal party apparatus (Koger, Masket, and Noel 2009; Sabato 1981). Sharing helps spread these lists around. List transfers of donors among like-minded ideologues is one way to strengthen the party. Sharing for this reason weighs heavily on all four classic goals, as it increases one’s influence within the institution.

Third, electoral collaboration aids in legislative collaboration, another of the classic goals (making good public policy). Helping a member in a swing district raise money and build support for her reelection campaign can help establish a friendship that parlays into a

legislative collaboration (Caldeira and Patterson 1987, 1988). A favor could be called in when it comes time to vote on a piece of legislation. Certain members are better situated for legislative effectiveness, namely, party leaders, committee chairs, and those with more seniority (Anderson, Box-Steffensmeier, and Sinclair-Chapman 2003; Matthews and Stimson 1975; Volden and Wiseman 2014). From a rank-and-file member’s perspective, sharing with these particular individuals may increase the chance her bill is reported out of committee favorably, or even considered in committee at all.

The fourth and final reason members collaborate electorally is that doing so is a relatively simple way for campaigns to cooperate and find additional usage for their donor and supporter lists. If Candidate A’s campaign has compiled a sizable list of its donors or supporters, why not transact the list to Candidate B, a candidate in a similar or neighboring district whose donor and supporter list lacks significant depth? Doing so may be mutually beneficial; Candidate A has found a secondary way to assist or perhaps make money off of possessing the list, and Candidate B now has a list to begin fundraising from (Sullivan and Bearak 2016). Candidates who have been elected many times may sell or rent lists to candidates who are relatively new. This then parlays into the first reason members collaborate electorally, where the more junior Candidate B feels indebted to the more senior Candidate A. Although this reason for sharing lists is the most transactional of the four reasons, it still helps a collaborator achieve maximal influence in Congress (a classic goal) because it allows members to leverage their donor and support lists for mutual gain. This in turn strengthens all four classic goals.

Hypotheses for Campaign Collaboration

The four primary reasons members collaborate electorally—each tied to the four classic goals of members—explain *why* members collaborate but is equivocal about *whom* members choose to collaborate with. We hypothesize that six factors influence the propensity for campaigns to collaborate.

First, members of Congress should be more likely to collaborate electorally with other members of their party. Parties are central to a member’s identity; they are the core of how members get elected and how they organize their daily lives once there. Party is a proxy for many other characteristics, both demographic and geographic. When members share their donor or supporter

list with copartisans, they bolster their image as a loyal party member. The perceived loyalty of members to their party can dramatically improve their legislative prowess, helping them to obtain preferred committee assignments or move their legislation (Cann 2008a, 2008b; Hasecke and Mycoff 2007). Members of Congress are most likely to cosponsor, co-vote, and coauthor Dear Colleague letters with members of their party, so we expect the same dynamic holds for electoral collaboration (Craig 2016, 2017; Fowler 2006b; Kirkland 2011; Matthews and Stimson 1975).

H1: Sharing is more likely to occur between members of the same party.

Second, members should be more likely to collaborate with others from their state. Given that sharing lists can be most productive with members representing similar or shared constituencies, a senator from Ohio may exchange lists with a House member from Ohio, for instance. Members who are more geographically proximal may have more similar policy preferences, and as such, they may want to assist these campaigns. Members with the same political identity work together and vote together (Liu and Srivastava 2015), so we test whether they collaborate electorally as well.

H2: Sharing is more likely to occur between members representing the same state.

Third, members should be more likely to share with those holding the same committee assignments. When examining legislative collaboration, Fowler (2006a) finds that collaboration is more likely to occur between members assigned to the same committees. Committees condition how members spend their time and who members spend their time with. Members assigned to the same committee develop personal and professional relationships, have interest in the same substantive issue areas, and may be more likely to assist one another in reelection bids, regardless of party membership.

H3: Sharing is more likely to occur between members with common committee assignments.

Fourth, the competitiveness of members' districts should weigh into decisions to share. Members in the most competitive districts are the most likely to lose reelection. Connections to donors, local activists, and volunteers are crucial to continued electoral success. These members in particular have strong strategic incentives to seek out collaboration partners who can provide donor and/or supporter lists. Electorally vulnerable members are more likely to collaborate legislatively (Campbell 1982; Koger 2003), leading to the expectation that electorally vulner-

able members with prime electoral focus will be more likely to share.

H4: Sharing is more likely to occur when at least one member is in a competitive district.

Fifth, members holding leadership posts should be more likely to share. Leaders need to demonstrate their loyalty to their party and its members, lest their leadership acumen be challenged by others (Heberlig 2003). Sharing donor and support lists is a vehicle by which leaders can help the rank and file fundraise. As fundraising is the lifeblood of a successful campaign, leaders have an important role to play. In return, the rank and file are expected to toe the party line when roll-call voting (Cann 2008b). Furthermore, leadership posts are usually obtained through party loyalty and financial support rather than seniority alone (Cann 2008b). Members should therefore be inclined to financially support party activities in an effort to maintain their leadership posts. For clarity purposes, there are two types of leadership posts in Congress: party leaders (floor leaders and whips) and committee leaders (chairs and ranking members of committees and subcommittees). We believe both positively influence sharing likelihood.

H5: Members holding leadership posts will be more likely to share.

Finally, seniority should influence list sharing, much for the same reasons serving in leadership influences sharing. Senior members may be more likely to share with more junior colleagues because it can elicit loyalty, friendship, and respect (Caldeira and Patterson 1988; Clark, Caldeira, and Patterson 1993). All are necessary to obtain the four classic goals. Additionally, as opposed to freshman and sophomore members, senior members have spent multiple elections accumulating lists of donors and supporters. Because one presumes senior members are more likely to possess these lists, they can sell or rent them to candidates who are relatively new. The result is mutually beneficial. The more senior Candidate A assists the more junior Candidate B with much-needed fundraising, helping Candidate B get reelected, and the more junior Candidate B feels indebted to the more senior Candidate A because of this assistance, owing Candidate A a favor.

H6: More senior members will be more likely to share.

Empirical Strategy

Data Collection

Our focus is on the United States Congress as the preeminent legislative body of the world, one of the most professionalized and widely studied. The unique structure of the campaign finance regime in the United States allows us to obtain the data we need for this study. Transactions of the nature we seek to study are also widely chronicled in the American press. Our study can reveal patterns of collaboration that can be tested in other countries as well.

To measure campaign collaboration, we examine sharing by tracking in-kind contributions between campaigns across the 2010–16 election cycles. This produces a longitudinal network of list transfers. The sharing of these lists is widely documented. Barack Obama’s campaign compiled a database of 20 million email addresses during his 2008 and 2012 runs for the presidency. Nearly \$500 million was raised through email and online in his 2012 reelection campaign alone. Hillary Clinton, his heir apparent, sought usage of this valuable list for her 2016 campaign. Obtaining Obama’s list would provide a head start in the donation solicitation and activist outreach processes. In June 2016, the Democratic National Committee (DNC), now an informal arm of the Clinton campaign, reached a deal with the inactive Obama campaign to rent this list, but only after agreeing to settle President Obama’s nearly \$2.4 million in outstanding campaign debt (Fabian and Parnes 2016). Analysis by CNN shows almost all 17 of the Republican primary candidates for president, after dropping out of the 2016 primary, sold (or rented) their donor lists to either data brokers, who then sell them to other candidates, or other candidates directly. This anecdotal evidence highlights the importance of email lists to campaigns, and how campaigns can use these lists to gain influence.

FEC Study

The project began by drawing on informal interviews with individuals on Capitol Hill regarding the sharing practices of data by their campaigns and affiliated groups. Then we engaged in an audit study where we identified which politicians, campaigns, and leadership political action committees (PACs) were sharing email lists in the 2016 election and, more importantly, with whom. Results from the audit study, detailed in Appendix H in the supporting information (SI), were limited and merited a deeper inferential approach to understanding campaign collaboration. As such, we turned to a big data approach that examined FEC filings of in-kind campaign contri-

butions. Federal law requires that candidates for federal office report their campaign contributions and expenditures to the FEC in quarterly filings.² These filings are then posted publicly on the FEC’s website, allowing anyone to view and download them. For those candidate campaigns selling donor and supporter lists to other campaigns or PACs, such a sale would be listed under disbursements. For those buying or receiving lists, payment for the list would be listed under expenditures.

To see whether sharing had occurred, how much had occurred, and, more importantly, with whom, raw data from the FEC’s website were scraped for every major party general election candidate for federal office. Given the availability of data on the FEC’s website, this was completed for a period of 8 years, with four election cycles in total: 2010, 2012, 2014, and 2016. This limit is not burdensome, though, as the incentive structure within Congress precipitating electoral collaboration has not changed since the McCain-Feingold Act of 2002, which did not alter how members could collaborate in the context of sharing data between their campaigns. For these reasons, it is unlikely that patterns of sharing would be different in the few election cycles preceding 2010 for which data are unavailable. Four election cycles provide ample data from which to examine electoral collaboration through sharing.

We scraped 3,192,087 unique records. Each record gives the name of the candidate or campaign committee sold to or bought from, a description of the expenditure or disbursement,³ the date of the transaction, and the monetary amount of the transaction. Interest here lies in who shares with whom, measured as the intercampaign transaction network. Recognizing that records exist on both sides of a transaction, we matched the records of one campaign to another using common monetary amounts and time stamps, as well as the mutual presence of relevant keywords (e.g., “listserve,” “email”) in the subject field. Doing so indicates that two campaigns are connected, and that a donor or supporter list had transferred from one to the other.⁴ Operationally, a program was built to

²These are regulated under 11 CFR 101.2(b), 101.3, 102.9(b), and 104.3(a) and 104.3(b); also under 52 USC 30102(e)(2).

³Descriptions are called “purposes” in FEC filings. A purpose is reported as selected by the candidate, rather than the FEC, so it varies widely in terms of how vague or how specific the purpose is, and how standard it is across candidates and filings. List sales could have been obscured if they were reported to the FEC using other keywords.

⁴Campaigns tend to fundraise for each other directly rather than transact lists. One campaign manager for a prominent member of the House told of how rather than giving out lists of donors to other campaigns, this member uses his own list to solicit on a fellow

compare each record to other records, matching for names, dates,⁵ monetary amounts, and keywords signifying the purpose of the transfer as it pertained to these lists and not something else, like catering or political contributions or campaign office rent.⁶ After these three filtering conditions, the result was 169,400 matches, which were later filtered down to 3,769 when accounting for the most strict usages of keywords, where the memo lines of both records included one of the keywords.⁷ Dyads were then aggregated by election cycle, and duplicate entries were removed.⁸ This produced the FEC sharing networks visualized in Figure 1 and measured over the four election cycles (2010, 2012, 2014, 2016).⁹ See SI Appendices B and D for descriptive statistics about the monetary amounts of the FEC transactions (SI Table B.1 and SI Figure D.1), network-specific statistics

member's behalf. For instance, rather than giving his donor list to the presidential nominee of his party, he organized and hosted a fundraiser on their behalf. No money crossed from this member to the presidential nominee, and nowhere was this fundraising technique reported to the FEC or disclosed in any records—it did not need to be.

⁵We matched dates in two ways: exact date matching and fuzzy matching for transactions occurring within 2 days of each other. We include results with fuzzy matching in the text of our article, as we think it is better able to capture the empirical reality of campaign finance reporting. For example, a sale that happened on a Wednesday night may be reported as the next business day by the other campaign. SI Table G.2.1 contains alternative models with exact matching. The results are robust to the matching routine.

⁶Keywords included “mailing,” “addresses,” “list,” “personal info,” “e-mail,” “email,” and “lists of.”

⁷Due to reporting and coding constraints, it is likely we are missing some instances of sharing in the FEC study. In that regard, our estimates are a floor rather than a ceiling. The only transactions reported in quarterly statements to the FEC are those in which money changed hands—a list was sold from one entity to another. Additionally, if the purpose of the campaign expenditure or disbursement was not reported using one of our special keywords, it would have fallen through our strict filter. This means that more times than not, vague purposes like “in-kind contribution” rather than “email” would not get picked up as an instance of sharing. All in all, there are likely few false positives, but many false negatives.

⁸Nonincumbents were removed from inferential analyses given their covariate missingness. No central source exists with lists of the candidates who unsuccessfully challenge incumbents. Because of this, the necessary demographic descriptors we collected for each incumbent to use as covariates are unavailable for unsuccessful challengers.

⁹These networks are undirected, as we cannot infer directionality from the FEC records and we cannot distinguish between outgoing or incoming disbursements (illustrated in Figures 2 and 3). Analyzing these networks as undirected networks prevents us from analyzing the networks using more specialized aspects of directed network structure (e.g., cyclicity, reciprocity, sender/receiver effects). However, this is not problematic given we have no clear theoretical justification for prioritizing the use of directed structural analysis to undirected structural analysis.

for the contribution networks (SI Table B.2), descriptive statistics about isolated members by chamber and year (SI Table B.3), the sharing within and between chambers and parties (SI Table B.4), and the timing of transactions (SI Figure B.5).

Figures 2 and 3, as well as SI Figure A.1 visualize the relationships found through FEC records. Figure 2 is a screenshot of campaign disbursements from the FEC's website for House Speaker Paul Ryan's 2016 campaign. As speaker, Ryan is expected to give donations from his campaign account to electorally vulnerable members of his party, which he did when he made contributions to Carlos Curbelo, Mike Coffman, and Pat Meehan.¹⁰ He also made two \$2,000 contributions to the Republican senator from his home state of Wisconsin, Ron Johnson—a donation likely due to both shared ideology and interest, as well as shared constituency. But draw your eye to the second row from the bottom, where Ryan received a contribution worth \$1,876 on March 14, 2015, from Johnson's Senate campaign purposed as “inkind campaign e-mail addresses for solicitation.” Johnson purchased email lists from Ryan's campaign. This is precisely the type of sharing of interest here. A look at the third row of Figure 3, a screenshot of campaign expenditures for Johnson's 2016 Senate campaign, shows its complement, a purchase for the same monetary amount on the same date. A match has been made on both ends of the FEC data.¹¹

Covariate Collection. The nearly 3.2 million FEC records provide little insight as to why sharing occurred. As such, we include a series of covariates in our analyses. We include a party homophily variable (Hypothesis 1), each member's state (Hypothesis 2), and each member's committee assignments (Hypothesis 3). Next, the partisan voting index (PVI) from Charlie Cook's Cook Political Report was included (Hypothesis 4). Cook PVIs reveal the electoral competitiveness of a state or congressional district.¹² We also include committee leadership

¹⁰All three districts have Cook PVI scores favorable to Democrats, and all three voted for Clinton in 2016.

¹¹SI Figure A.1 shows an additional case of sharing by Ryan. The second row from the bottom shows Ryan selling his list to Glenn Grothman, a fellow Republican representative from Wisconsin, for \$1,912 on September 17, 2014. Going into Grothman's campaign expenditures list on the FEC website, its complement can be found reported under itemized disbursements. The relatively low dollar amount of the exchange suggests only a partial list was shared.

¹²The greater the number, the less competitive the seat is, as one party's competitive advantage increases. Noncompetitive seats are those with Cook PVIs either D+5 and greater or R+5 and greater. Very competitive seats are those rated D+1, EVEN, and R+1. Partially competitive seats are those rated D+2 to D+4 and R+2 to R+4.

FIGURE 1 Networks by Cycle

Note: Nodes are colored by party identification (Democrats in black, Republicans in light gray, Independents in mid gray) and sized by degree. The network is undirected.

and party leadership variables to account for members who serve in these roles (Hypothesis 5), and we include a seniority variable to account for the year a member took office (Hypothesis 6).

Finally, characteristics about the members and the states/districts they serve are included since endogenous characteristics like demographics and district type can affect who shares with whom (Matthews and Stimson 1975). These control variables include the difference in how urban or rural a state/district is (state for senators, district for representatives) in both population and land area (data drawn from the U.S. Census Bureau) and the race of the member.

Results

An Example: Sharing during the 2014 Election Cycle

Dissecting one of the networks graphs in Figure 1 may be helpful to paint a picture of what a sharing network looks like. Showing specific instances of sharing displays our theory and hypotheses in practice. Such an application is important for both face validity and external validity—is our theory for how and why sharing occurs matching the sharing we see? Our aim is to show our theory of sharing is a useful device for explaining the sharing decisions members make. Because we expect all four election cycles to

FIGURE 2 House Speaker Paul Ryan FEC Disbursements Screenshot

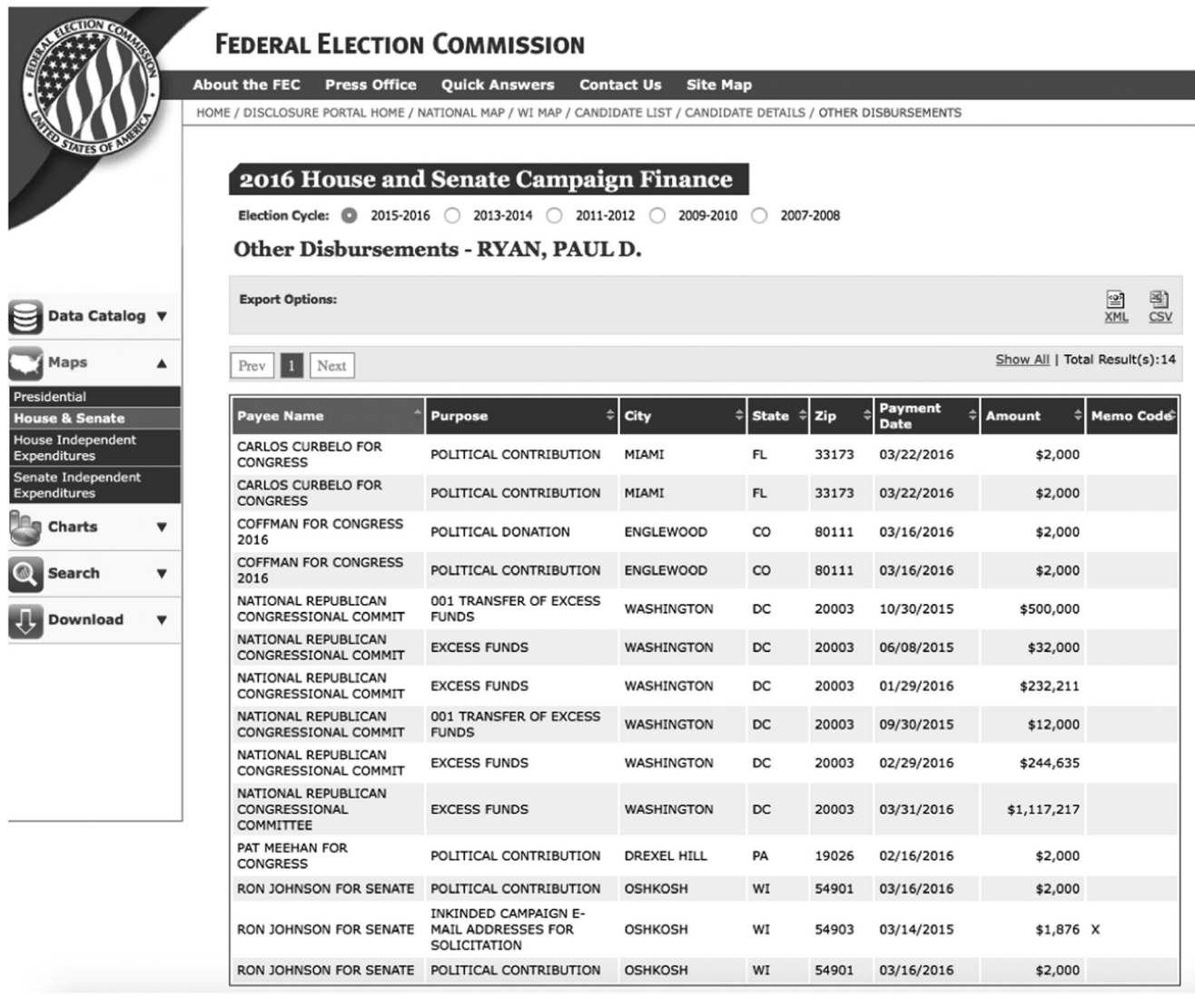


exhibit a similar data-generating process (i.e., members behaved similarly in all four election cycles, given similar incentives and a similar campaign finance regime), focusing here on one of the four is not at the expense of the other three. Figure 4 displays the collaboration network for the 2014 election cycle.¹³ Democrat Joseph Crowley is the largest node, engaging in the most instances of sharing. Having once been mentioned as a possible replacement for Democratic leader Nancy Pelosi, Crowley appears to have sought institutional prominence, a classic goal. He already served in party leadership at that time. He was likely sharing for two reasons. First, party leaders are ex-

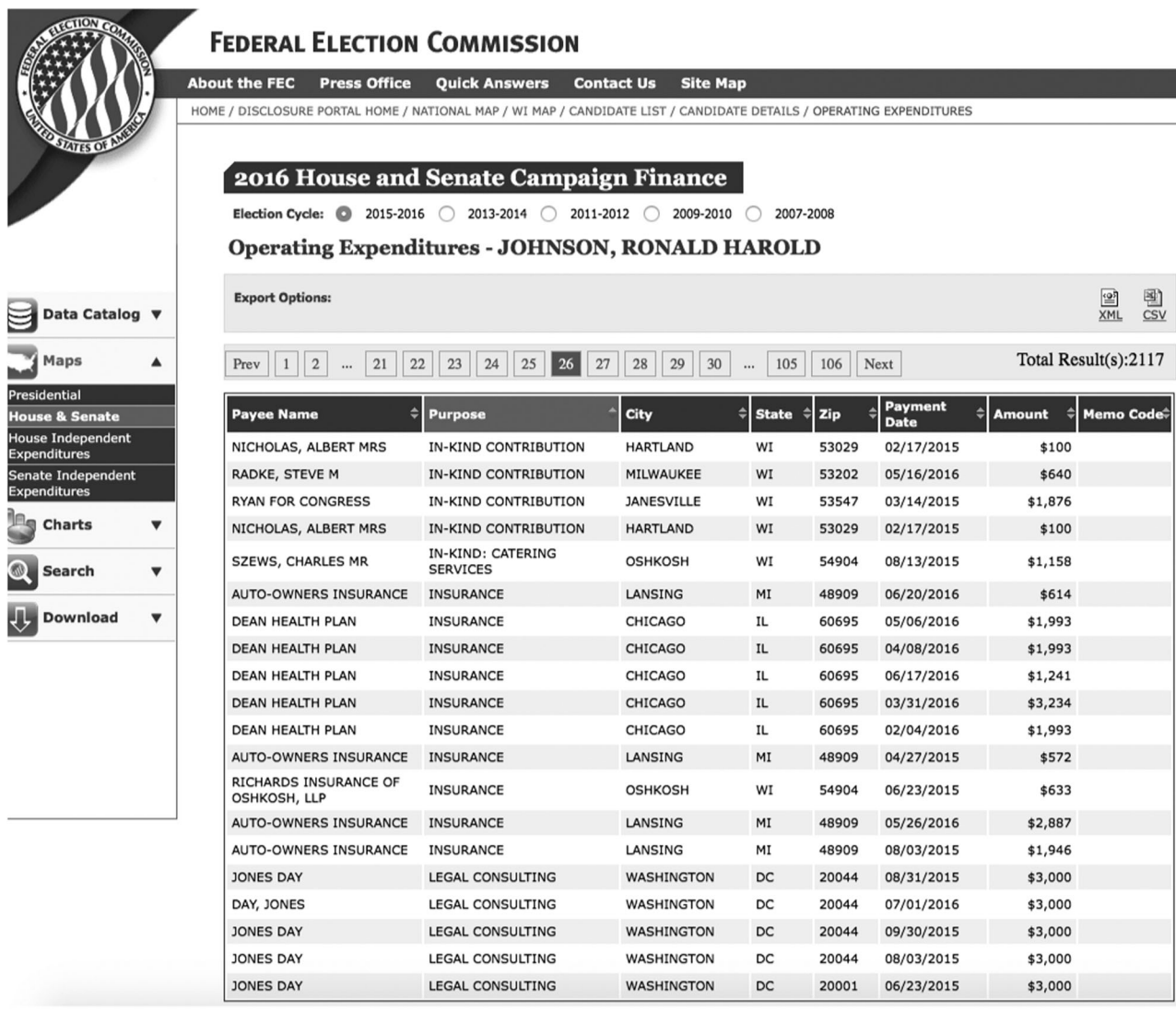
pected to share. Second, he was sharing in an attempt to build friendships and gain power within the institution.

Another large node is Al Franken, then-senator from Minnesota, once considered a prominent figure in the Democratic Party and one of its most prolific fundraisers. Sharing likely served a dual purpose of boosting his profile within the party and strengthening his policy profile in Congress by building networks of friends he could later work with to obtain his legislative goals. A further central node is Debbie Wasserman Schultz, a Democratic representative from Florida, then chair of the Democratic National Committee.

Like within-party sharing, cross-party sharing is mutually beneficial too, either because one candidate's campaign is purchasing a list from another for a monetary amount or there is a list swap, where each candidate's

¹³See SI Figures F.1, F.2, and F.3 for sharing in the other three election cycles, respectively.

FIGURE 3 Senator Ron Johnson FEC Expenditures Screenshot



campaign receives a list of the other’s donors or supporters. One instance of sharing between parties is Republican Erik Paulsen and Democrat Betty McCollum, of Minnesota’s 3rd and 4th congressional districts, respectively. Although opposing partisans, both represent the same state, both sit in districts Obama won in 2012 and Clinton won in 2016, and both districts border each other on a map. Since they represent similar types of constituents, serve similar parts of the same state, and sit in similar districts both politically and geographically, it makes sense they could share an overlapping donor base, at least on some of the less politically charged issues. They cannot share specific voters, as someone cannot legally vote in two congressional districts, but they can share supporters (e.g., a small business owner who employs individuals living in both districts). This would lead Paulsen and

McCollum to share at least partial lists for issues they collaborate on.¹⁴

One further case of cross-party sharing is that of Scott Peters, who shared with fellow California Democrat Mark Desaulnier, but also with Republicans Randy Forbes (Virginia) and Chris Stewart (Utah). Despite hailing from different parties and states, Peters and Forbes sit together on the Armed Services Committee. Stewart served in the

¹⁴Lists can be shared by issue rather than sharing the entire list. If two members like Paulsen and McCollum collaborate legislatively on small business legislation, they could share with each other the portions of their donor lists that are local small business owners. Though it is unlikely they would share their full lists, as some ideological differences preclude sharing all donors—take abortion, for example, where one is pro-life and the other pro-choice—it would make sense to share donor lists on a less politically polarizing issue like small businesses.

FIGURE 4 Sharing during the 2014 Election Cycle


Air Force before serving in Congress. If Peters is focused on committee work in the military domain, which he appears to be, that could explain his sharing with Forbes and Stewart.

Assessing Campaign Collaboration

Having shown aggregate characteristics of these networks, we model general patterns of sharing using temporal exponential random graph models (TERGM).¹⁵ TERGM

¹⁵See SI Appendix C for further discussion of why TERGMs are most appropriate for our analyses.

coefficients are interpreted much like logistic regression coefficients, where each coefficient is the change in the log-odds likelihood of sharing for a one-unit change in the predictor variable.¹⁶ Our models are shown in

¹⁶Two iterations of the full model in Table 1 were built. See SI Table G.1.2 for the alternate model, which does not include sharing between members based upon the competitiveness of their district. Some combinations had insufficient variation to estimate a reliable effect. Furthermore, at least one combination had to be omitted to avoid multicollinearity.

TABLE 1 Bootstrapped Maximum Pseudolikelihood Estimated Temporal Exponential Random Graph Model Results, Pooled 2010–16

| | Full Model |
|---|-------------------|
| Edges | -7.86* |
| | [-8.45, -7.02] |
| Alternating K-Stars (0.5) | 1.07* |
| | [0.85, 1.33] |
| GWESP (0.5) | 1.59* |
| | [1.25, 1.89] |
| Chamber Homophily | -0.26* |
| | [-0.56, -0.07] |
| Party Homophily | 0.46* |
| | [0.06, 0.87] |
| Race Homophily | 0.25 |
| | [-0.07, 0.48] |
| State Homophily | 0.55* |
| | [0.41, 0.81] |
| Party Leadership | 0.39 |
| | [-6.60, 1.05] |
| Committee Leadership | -0.23* |
| | [-0.49, -0.17] |
| Mixing: Party Leader and Non-Party Leader | 0.03 |
| | [-0.39, 7.07] |
| Mixing: Committee Leader and Non-Committee Leader | -0.08 |
| | [-0.19, 0.11] |
| Mixing: Notcompetitive and Partially Competitive Districts | 0.23 |
| | [-0.26, 0.44] |
| Mixing: Partially Competitive and Partially Competitive Districts | 0.87* |
| | [0.22, 1.27] |
| Mixing: Notcompetitive and Very Competitive Districts | 0.48* |
| | [0.27, 0.65] |
| Mixing: Partially Competitive and Very Competitive Districts | 0.89* |
| | [0.26, 1.21] |
| Mixing: Very Competitive and Very Competitive Districts | 0.54 |
| | [-13.84, 1.34] |
| Years in Office | -0.01 |
| | [-0.03, 0.00] |
| Absolute Difference in Years in Office | -0.00 |
| | [-0.02, 0.01] |
| Absolute Difference in Pct. Urban Land | 0.01 |
| | [-0.00, 0.01] |
| Absolute Difference in Pct. Urban Population | -0.01* |
| | [-0.02, -0.00] |
| Common Committee Memberships | 0.38* |
| | [0.18, 0.55] |
| Observations | 403,595 |

Note: * 0 outside the confidence interval.

TABLE 2 Bootstrapped Maximum Pseudolikelihood Estimated Temporal Exponential Random Graph Model Results, Party Networks, Pooled 2010–16

| | GOP Party Network Model | Democratic Party Network Model |
|---|--|---|
| Edges | −7.39* | −7.32* |
| | [−21.68, −6.48] | [−8.36, −6.40] |
| Alternating K-Stars (0.5) | 1.00 | 0.68 |
| | [−0.11, 1.77] | [−0.12, 1.94] |
| GWESP (0.5) | 1.22 | 2.15* |
| | [−3.88, 1.82] | [1.60, 2.87] |
| Chamber Homophily | −0.48* | 0.20 |
| | [−0.87, −0.00] | [−0.38, 1.20] |
| Race Homophily | 0.50 | 0.24 |
| | [−0.04, 14.64] | [−0.51, 0.75] |
| State Homophily | 1.05* | 0.23 |
| | [0.64, 1.45] | [−0.65, 1.30] |
| Party Leadership | −5.87* | 0.81 |
| | [−12.83, −6.37] | [−6.77, 1.66] |
| Committee Leadership | 0.00 | −0.14 |
| | [−0.39, 0.37] | [−0.58, 0.02] |
| Mixing: Party Leader and Non–Party Leader | 5.96* | −0.30 |
| | [6.46, 12.60] | [−1.86, 7.10] |
| Mixing: Committee Leader and Non–Committee Leader | −0.02 | 0.14 |
| | [−0.17, 0.17] | [−0.17, 0.41] |
| Mixing: Noncompetitive and Partially Competitive Districts | −0.18 | 0.35 |
| | [−0.84, 0.26] | [−1.26, 1.16] |
| Mixing: Partially Competitive and Partially Competitive Districts | 0.25 | 1.45* |
| | [−13.83, 0.85] | [0.85, 2.35] |
| Mixing: Noncompetitive and Very Competitive Districts | 0.35 | 0.34 |
| | [−0.22, 0.96] | [−0.26, 0.72] |
| Mixing: Partially Competitive and Very Competitive Districts | 0.68 | 1.02 |
| | [−0.08, 1.02] | [−13.67, 1.45] |
| Mixing: Very Competitive and Very Competitive Districts | 0.93 | 0.24 |
| | [−12.99, 2.08] | [−14.73, 1.51] |
| Years in Office | −0.01* | −0.05* |
| | [−0.02, −0.00] | [−0.08, −0.03] |
| Absolute Difference in Years in Office | −0.01 | 0.02* |
| | [−0.03, 0.00] | [0.02, 0.04] |
| Absolute Difference in Pct. Urban Land | −0.00 | −0.00 |
| | [−0.01, 0.01] | [−0.01, 0.00] |
| Absolute Difference in Pct. Urban Population | 0.00 | 0.01 |
| | [−0.01, 0.02] | [−0.00, 0.01] |
| Common Committee Memberships between Republicans | −0.72* | |
| | [−2.21, −0.26] | |
| Common Committee Memberships between Democrats | | 0.50 |
| | | [−0.19, 0.82] |
| Observations | 123,436 | 80,807 |

Note: * 0 outside the confidence interval.

Tables 1 and 2.¹⁷ The latter two models separate the full model into models for each party.

We begin by reviewing the network features of the models. Edges indicate connection between two nodes, in this case sharing between two members of Congress. Edges are negative and statistically significant in all models. This evinces a relatively sparse network, where not sharing is, on average for the network, more likely to occur than sharing. Many members are sharing, but most members are not sharing. Either most members do not have lists to share or these members find other ways to achieve their four classic goals.

Alternating *k*-stars measures the tendency of a network to contain a hub–spoke structure, where a member of Congress (the focal node) shares with many others. Alternating *k*-stars is positive and statistically significant in the full model and insignificant in the two party models. A positive and significant effect illustrates a tendency toward preferential attachment. Preferential attachment occurs when members connect to other members with many preexisting relationships. It describes a rich-get-richer dynamic wherein the probability of a member forming a relationship marginally increases for each prior relationship formed (Barabási, and Albert 1999). This produces a handful of members who have many more relationships than the other members. Joseph Crowley, discussed in Figure 1 above, exhibits this tendency. In Crowley’s case, party leaders appear more likely to collaborate electorally with many other members, whereas most other members collaborate with relatively few members. Both Crowley’s behavior and the network coefficients in the models comport with prior research on the behavior of party leaders (Cann 2008b; Heberlig 2003), and also our theory of sharing.

Many congressional collaboration networks exhibit the transitivity property, where people who have common friends tend to become friends themselves (Craig 2016, 2017; Fowler 2006b; Kirkland 2011). In network parlance this is called triadic closure (Goodreau, Kitts, and Morris 2009). Triadic closure is generally interpreted as a measure of community building. To account for a tendency toward triadic closure, we include geometrically weighted edge-wise shared partners (GWESP). GWESP refers to configurations wherein some member *i* is connected to member *j* while also having a series of common connections *k*. Similar to the alternating *k*-stars statistic, GWESP can improve model fit by using geometric weights to prevent

the presumed prevalence of having too many cliques or too few cliques.¹⁸

We find a positive and statistically significant effect for GWESP for the full model and the Democratic Party model, illustrating a prevalence toward triadic closure within these networks. Members of Congress are engaging in a broader community, where some may be facilitating exchanges between their friends and allies. The implication is that sharing with members like Joseph Crowley, for instance, can serve as a catalyst for further sharing. And because Crowley serves in party leadership, his sharing encourages party building and friendship, helping to achieve his classic goals and also the party’s goals.

Now we will review tests of our hypotheses.¹⁹ Hypothesis 1 predicts the role of party homophily in collaboration. The party homophily coefficient in the full model is 0.46 and is statistically significant. Translated into an odds ratio, members of Congress in the same party are 1.58 times (61%) more likely to share than members in opposing parties. This lends direct support to Hypothesis 1, that more sharing will occur between copartisans rather than cross-partisans.

Figure 1 shows some instances of cross-party sharing, though. This was shown anecdotally above in Figure 4, with examples from the 2014 election cycle, and descriptively in SI Appendix Table B.4. While on its face this is likely surprising to most, given how polarized American politics is thought to be, it may not actually be entirely surprising that members share data across party lines. It would be surprising if they did so with their competitors. However, for other types of sharing, members have non-partisan agendas and policy goals that could be helped by sharing lists for particular purposes. For example, in a state with both a Democratic senator and a Republican senator, one would expect that they would work together on some issues, especially since they share general election constituencies (albeit not primary election constituencies, where they undoubtedly focus much of their attention). Therefore, even though they are from different parties, they may share lists of supporters and donors pertinent to this bipartisan work (e.g., small business

¹⁷Goodness-of-fit diagnostics per the routine described by Hunter, Goodreau, and Handcock (2008) show that the full model fits well. In one hard test, presented in SI Figure G.1.1 we fit a model on the 2010–14 election cycles and predict well out-of-sample in the 2016 election cycle.

¹⁸Alternating *k*-stars and GWESP control for the presumed prevalence of a hub–spoke structure, allowing for improved model fit by preventing overly dense networks (too many connections) or overly sparse networks (too few connections). Overall, these terms assist in improving model fit by allowing the analyst to use theoretically motivated weights to constrain covariate values (Snijders et al. 2006).

¹⁹Further robustness checks for our full model are included in SI Appendix G. We include both out-of-sample and within-sample predictions. Our analyses of model fit demonstrate that regardless of network, the full model fits well.

owners). Cross-party sharing is the exception, though, not the rule.

Hypothesis 2 predicts that members representing the same state will be more likely to collaborate electorally. Members from the same state represent similar types of constituents, and their districts have similar needs. Members serving the same state are 1.73 times (63%) more likely to share than members representing two different states. A deeper look by party indicates much of this effect is driven by Republican legislators (2.86 times more likely to share, 74%), as the coefficient in the Democratic Party model is insignificant.²⁰ Hypothesis 2 is supported by our analyses.

Hypothesis 3 predicts that members serving on the same committee will be more likely to share. This is due to overlapping policy interests; also, members serving on the same committee interact frequently, establishing a host of relationships. In the full model, the common committee memberships coefficient illustrates that members serving on the same committee are 1.46 times (59%) more likely to share. Like serving the same state, this effect is driven by Republican legislators (0.49 times more likely to share, 33%), as the coefficient in the Democratic Party model is insignificant. Overall, the models lend direct support to Hypothesis 3, that members of Congress serving on the same committee are more likely to share than members who are not.

Hypothesis 4 considers how electorally competitive a seat is as a basis for collaboration. Cook PVI scores are used to judge competitiveness. Five covariates are included in the models to test the hypothesis. Of the five covariates, three have statistically significant coefficients. There is no tendency toward sharing between those in very competitive seats, and between those in noncompetitive seats and partially competitive seats (the first and fifth mixing covariates, respectively). There is a tendency toward sharing between those in competitive and stronghold seats. This is shown by the third mixing covariate indicating members in noncompetitive districts and very competitive districts are 1.62 times (62%) more likely to share. This is likely electorally safe members doing their part to assist the electorally vulnerable members of their party—a party-building activity. Such party building is demonstrated in our theory of sharing, as it enhances a member's influence, helping him or her to achieve the four classic goals.

²⁰Our explanation for this finding is that more Republicans than Democrats served in Congress in three of the four elections considered, and there were more Republicans, on average, serving each state. The result is more within-state sharing among Republicans than Democrats.

However, members in partially competitive seats are the most likely to share among each other (2.39 to 2.44 times more likely, 71%, in the full model, and 4.26 times more likely, 81%, in the Democratic Party model). Perhaps they are worried about an eventual high, quality challenger. Or maybe they engage in electoral collaborations to indirectly achieve policy goals or directly achieve institutional advancement (both classic goals). Overall, support for Hypothesis 4 is mixed, conditional on how competitive the district is.

In Hypothesis 5, we predict that members serving in leadership roles will be more likely to share. In the full model and Democratic Party model, the party leadership covariate is insignificant (it is 0.003% in the Republican Party model). This is anticipated, though, as this covariate captures party leaders sharing with other party leaders. Our expectation is that party leaders will share with rank-and-file members. The more appropriate coefficient to view is the mixing covariate for party leaders and non-party leaders. This covariate captures the tendency of party leaders like Joseph Crowley to share with the rank and file. In the Republican Party model, party leaders and non-party leaders are 388 times more likely to share. This translates to 99.7% more likely to share.

A further test for Hypothesis 5 is committee leaders. In the full model, the committee leadership covariate is significant, with committee leaders 0.79 times (44%) more likely to share among each other. But the mixing covariate for committee leaders and non-committee leaders is insignificant, as are the four committee leader coefficients in the two party models, indicating committee leaders are not more likely to share with the rank and file. Overall, support varies for Hypothesis 5.

Our last hypothesis predicts that the more senior a member is, the more likely he or she will be to share. We measure this by years in office. Our data lend support to Hypothesis 6. For each additional year in office, a member is roughly 50% more likely to share. In both party models, seniority equated with members being 0.95 to 0.99 times more likely to share.

Finally, we examine whether the race of the member or the urban nature of the district has an impact. The race covariate is insignificant in all three models. Race in our data set is nearly encompassed by party, as only four of the African American members in our data set are Republicans, and most Hispanic/Latino members are Democrats.

Regarding how urban or rural a district is, we detect null effects in both party models. This holds whether urban is measured by land area or population. How urban or rural a district is does not largely seem to matter vis-à-vis who shares with whom. Why so? We speculate

this is because the urban versus rural divide in American politics has become a partisan one. Few urban districts are represented by Republicans, and few rural districts are represented by Democrats (Gelman 2009). Also, urban and rural districts have entirely different economies. In Congress, this plays out in committee membership, as members seek to join committees with jurisdictions over issues pertinent to their districts. In only the full model is the urban population coefficient significant. As the absolute difference in percentage urban population increases, members are 50% more likely to share.

Substantively, our results indicate that patterns of electoral collaboration mimic patterns of legislative collaboration. Much as members engage in legislative collaboration to achieve their goals, members engage in electoral collaboration as a supplement to this. Whom members choose to cooperate with electorally is often similar to whom they cooperate with legislatively, based upon homophily characteristics such as party, committee, and state, and also electoral vulnerability. Effect sizes ranged from 0.03% to 99.7% among effects we detected. The modal effect size was 50%, and the median was 54.5%. The strongest effects were for state homophily, mixing between party leaders and the rank and file, and members in competitive districts. Members representing partially competitive and very competitive districts were more than 70% more likely to share. Sitting in a competitive seat is nearly twice as likely to explain sharing activity than serving in the same chamber, and it is more likely to explain sharing activity than even party. Sitting in a competitive seat is roughly 17–30% more likely to lead to sharing as being in the same party is. Additionally, representing the same state is nearly one and a half times as likely to explain sharing activity than serving in the same chamber, and it is more likely to explain sharing activity than even party. Representing the same state is roughly 43% more likely to lead to sharing as being in the same party. These probabilities illustrate that election vulnerability and shared state can dictate more instances of sharing than party.

The effect most contrary to our predictions was the sharing behavior of committee leaders. Unlike party leaders, committee leaders are not more likely to share with the rank and file. But the committee leadership covariate in the full model was one of the weakest effects we detected. All told, factors like state, electoral vulnerability, and being in party leadership guide the most instances of sharing. For party leaders, sharing helps keep their party in the majority, a classic goal. For the rank and file and those not in safe seats, sharing helps them raise much-needed funds for reelection, another classic goal. Sharing with others representing the same state and serving on the

same committee is a form of coalition building to make good public policy, also a classic goal. Finally, sharing with others in the same party helps raise one's "stock" in the party, increasing one's influence, the final classic goal.

Conclusion: Congressional Power Networks

Lists of donors and supporters are treasure chests for campaigns. These individuals have contributed to political campaigns in the past, they are typically some of the most active supporters, and they are the ones most likely to support candidates in the future. Lists are part of the informal party apparatus because it is far easier to buy, sell, trade, and share them than it is to create them from scratch, especially when campaigns are often stretched for time and personnel. For the members of Congress whose campaigns possess this resource, it can be used for both electoral and policy purposes. It can be transacted with a member in a similar congressional district facing a tough reelection campaign, perhaps one struggling to raise money. Or it can be transacted with the chair of a committee one is looking to gain favor from. The former case is more ideological, whereas the latter is strategic and more policy related.

Two unique data sets provide insight into network formations, an audit study of the 2016 congressional elections (SI Appendix H), and an analysis of nearly 3.2 million FEC records from 2010 to 2016. The extent of sharing over time is vigorous, indicating members share election cycle after election cycle. There is also a reasonable amount of interparty collaboration. This contradicts the popular narrative of partisan polarization being at an all-time high, of Democrats and Republicans not interacting or being friends anymore, and that cross-party bitterness has led to epic levels of dysfunction. Not so, at least according to our FEC study of four recent elections. Members of Congress are able to lay down partisan animosities when it benefits their campaign function (namely, fundraising). And because sharing largely occurs under the radar, members can quietly attend to their classic goals while simultaneously being loyal to their party in public. With further thought, this apparent bipartisanship should not be surprising, given we have known since Mayhew (1974) that members are usually reelection focused. Moreover, bipartisanship is a strategic consideration. Sharing can be mutually beneficial, and members are cognizant enough to recognize this, even when cooperating across parties.

We consider the electoral collaboration network a strategic decision network. Thinking about the four

classic goals of members of Congress—reelection, making good public policy, obtaining power within the institution, and having one's party in the majority—the impact of sharing donor and supporter lists weighs heavily on these goals. For example, considering power within the House of Representatives, top members get rewarded because they are effective fundraisers and talented messengers of the party's vision. By sharing resources like donor lists, one gains influence within the institution. In addition, this helps keep one's party in the majority, allowing them to continue passing legislation they favor, for example. Members who have substantial lists of donors and supporters use those lists as a means to navigate and leverage the power structure of Congress. This could be in an attempt to gain a leadership post, either in committee or on the floor, or it could be to build connections for their legislative activities, like passage through committee. None of these reasons are mutually exclusive. Senator X could share her donor list with Senator Y because they both represent similar constituents, but also because they share policy goals. Electoral collaboration is an intriguing and important part of democratic elections and more generally of legislative relationships. The resulting congressional power network has the potential to impact who is elected, the power structure of institutions, and, ultimately, the policies enacted.

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Supporting Information

Additional supporting information may be found online in the Supporting Information section at the end of the article.

Appendix A: FEC Data Sharing Examples

Appendix B: The Raw Network: Four Election Cycles, 2010–2016

Appendix C: Modeling Approach

Appendix D: Ridge Plots for Monetary Amounts for FEC Transactions

Appendix E: The Raw Exact-Both Network: Four Election Cycles, 2010–2016

Appendix F: Named Individuals, 2010, 2012, and 2016 Election Cycles

Appendix G: Analysis of Model Fit

Appendix H: Email Traffic Study