LSQ
LEGISLATIVE STUDIES QUARTERLY
Published by the Department of Political Science at Washington University in St. Louis

SORELLE WYCKOFF GAYNOR
University of Maryland, College Park

The (Financial) Ties That Bind: Social Networks of Intraparty Caucuses

Intraparty caucuses in the US Congress are often recognized for the information sharing, voting blocs, and personal relationships they facilitate. This article introduces an additional benefit to joining intraparty caucuses: campaign donations. Applying social network analysis and exponential random graph models to the 115th and 116th Congresses, I find that members are more likely to donate to their fellow caucus members than other members in Congress. In addition, I find that party leaders, particularly Republican party leaders, are less likely to donate to members that join intraparty caucuses, indicating that Leadership PAC funding is strategic for rank-and-file members and party leaders alike. This article adds to our understanding of intraparty caucuses, particularly their role in facilitating member-to-member campaign donations, and the relationship between caucus members and party leaders.

Introduction

Congressional caucuses offer several well-documented benefits to members of Congress, including information sharing, legislative development, and leadership opportunities (Miler 2011; Rubin 2017). Ideological, intraparty caucuses, like the Freedom Caucus or Progressive Caucus, provide members with additional benefits: establishing an ideological "brand" within their party, tapping into a network of external donors and party advocates (Clarke 2020), and facilitating collective bargaining against powerful party leaders (Rubin 2013, 2017). Across these activities, the inherent goal for intraparty caucus members is to differentiate themselves from the party core, either symbolically or through legislative action.

But these advantages have their limitations. Intraparty caucuses are not universally successful and are forced to be selective about their legislative endeavors within the chamber. Although

DOI: 10.1111/lsq.12360

caucus connections can fill informational gaps (Hammond 2001; Miler 2011), well-organized groups can thwart procedural advantages (Rubin 2017, 2013), and ideological branding can attract new donors (Clarke 2020); the congressional leaders' toolbox remains immense and institutionalized. In an era of party centralization—in which plum committee assignments, legislative success, and financial support is in the hands of congressional leaders—the decision to join an intraparty caucus holds potential for repercussions (Curry 2015; Pearson 2015). While these institutional penalties are clearly not a deterrent (in the 115th Congress, 2017–19, 57% of members belonged to an intraparty caucus[1]), existing research on intraparty caucuses is still divided on whether the relationship between leaders and caucus members is complementary or divisive (Clarke 2020; McGee 2017).

This article introduces an additional—and tangible—motivation to joining an intraparty caucus that, unlike other benefits, is consistent and directly counters congressional leadership: member-to-member campaign donations via Leadership PACs (LPACs). Existing work on intraparty caucuses has noted the unique networks of external donors and party activists that intraparty caucuses can provide, alongside organizational support for campaign fundraising (Clarke 2020; Rubin 2017). But there is a vast network of direct donations within Congress worth exploring. While research on LPACs has largely presented them as a tool for congressional leaders (Currinder 2003; Kanthak 2007), I consider how LPACs can be a strategic tool for rank-and-file members as well. Contrary to their name, LPACs allow all members of Congress to make political contributions to their peers. Thus, unlike other tools of leadership control, LPACs can be equally utilized by rank-and-file members. And in the past 20 years, funds raised and donated by LPACs have grown exponentially: in 1990, LPACs contributed $2.8 million to federal candidates and members of Congress, but in 2018, LPACs contributed $79.8 million (OpenSecrets.org).[2] Yet despite this growth, we know little about how LPAC donations are awarded beyond party-leader strategies or case-study approaches (Currinder 2003; Kanthak 2007; McGee 2017).

By applying an Exponential Random Graph Model (ERGM) to a social network analysis of every member of the US House of Representatives in the 115th and 116th congresses, I consider how intraparty caucuses facilitate LPAC donations and protect members from party leaders' financial repercussions. I ultimately

find that intraparty caucus members are more likely to donate to their intraparty peers than other rank-and-file members, even when controlling for vulnerability, retirement, or voting records. Furthermore, these caucus-driven donations juxtapose against the financial decisions of party leaders: Republican intraparty caucuses more often *replace* leadership LPAC funding, while Democratic intraparty caucuses *supplement* leadership LPAC funding. Republican Party leaders are less likely to give to members who join an intraparty caucus, while Democratic leaders are still willing to donate to all members, yet still significantly more likely to give funds to noncaucus members. Within the two parties, moderate groups are more likely to maintain party-leader ties, while fringe caucuses are noticeably more exclusive in their donations—which I argue is a reflection of both ideological branding and financial strategy.

This research offers three contributions. First, it documents an additional motivation for joining an intraparty caucus. Intraparty caucuses provide more than institutional advantages or information—they also facilitate financial opportunities. Second, this research clarifies our understanding of intraparty dynamics by documenting how leaders respond to members that join an interparty caucus. Documenting LPAC giving provides an observable network of giving, receiving, and denying. Third, this research contributes to the understudied arena of LPACs. Understanding the role intraparty caucuses play in member-to-member giving adds depth to the subset of research on congressional campaigns, as well as to the larger literature on the powerful role money plays in legislative actions.

Methodologically, this research applies social network and ERGM analysis to new, original data that includes every intraparty caucus in Congress during the 115th and 116th congresses, capturing financial information for what it is: relationships. Further, by using information from the most recently completed congressional sessions, this research provides a modern look at the impact party centralization has on the decision-making of individual members, as well as the potential limitations of party power.

Intraparty Caucuses and Congressional Leadership

The power of congressional leaders over the legislative process has ebbed and flowed, (Cooper and Brady, 1981; Cox and

McCubbins 2005; Lee 2016). Today, party leaders control committee assignments, information, party messaging, and—most importantly for this research—party campaign donations (Curry 2015; Hall and Deardorff 2006; Pearson 2015). Congressional caucuses directly threaten that power by offering alternative channels of information, policy development, and constituent signaling (Hammond 2001; Rubin 2017; Wallner 2016). Historically, party leaders have been well attuned to the potential imbalance that caucuses facilitate. The 1995 reforms that ushered in a new era of congressional centralization took a purposeful swipe at all caucuses by stripping them of their Legislative Service Organization (LSO) status, which denied them permanent staff and appropriated funds (Hammond 2001). Today, it remains difficult to hire staff and maintain caucuses under these new rules (Meier 2020), making it more costly to join as a member (Rubin 2017). Yet these institutional roadblocks did not completely stifle them. Since 1995, the number of caucuses has continued to expand, from an estimated 118 in 1995 to over 400 today—a testament to their importance to rank-and-file members (Hammond 2001; Miler 2011).

Each of the three types of congressional caucuses—policy, national constituency, and intraparty or partisan—provide opportunities for members to sidestep various advantages of party leaders. Policy caucuses—the overwhelming majority of congressional caucuses—allow members to gain expertise outside of (leadership-assigned) committee jurisdictions and signal their dedication to a policy arena relevant to their district (Miler 2011). National constituency caucuses such as the Congressional Black Caucus or the Congressional Caucus for Women's Issues provide similar benefits of comradery, communication, and constituency signaling. Often, these national constituency caucuses act as a powerful voting bloc (Mixon and Ressler 2001).

But intraparty caucuses offer the most direct challenge to party leadership. Since their formation in the 1970s, intraparty caucuses have presented themselves as an ideological juxtaposition to the party core (Rosenfeld 2018). These groups are more ideologically cohesive than members in the party at large (Lucas and Deutchman 2009), leading to legislative and committee alliances, often in response to party leadership (Green 2019; Wallner 2016). Party leaders are attentive to these relationships, both for the threat they generate for the party's whip count as well as their external affiliation. These groups are often representative of the

ideological base of parties, including donors and activists (Clarke 2020).

Among intraparty caucuses, there are differences in the strategies and dedication of members. Some groups, such as the House Freedom Caucus or Blue Dog Coalition, have pacts that require members to band together for tenuous floor votes (Rubin 2017). Others, such as the Republican Study Committee, focus on providing research or ideological messaging. The goals and formality of individual caucuses will vary across time, depending on political environment, internal leadership, or member needs. Additionally, a caucus's actions will be dependent on the chamber environment. For example, intraparty caucuses, particularly moderate ones, are advantaged by a slim majority. Operational decisions ultimately affect the caucus's institutional impact, as well as the attractiveness of membership. Demanding caucuses may be more impactful in the chamber, but more costly to join (Rubin 2017). But across these internal differences, intraparty caucuses uniformly facilitate relationships—particularly intraparty relationships, a foundational requirement for member-to-member giving (Lazar 2015). Thus, donations to peers in intraparty caucuses benefit both the larger party goals (Currinder 2003) and their caucus connection and brand.

Intraparty Caucuses and Leadership PACs

Political Action Committees (PACs) are an essential part of congressional elections, donating millions of dollars every year to congressional candidates and party organizations. Congressional leaders dedicate thousands of dollars to vulnerable members and encourage (or require) rank-and-file members to donate to the party's campaign arm. Rank-and-file members have their own personal motivations for falling in line with party requests for money: desirable committee assignments and leadership positions are well-documented rewards for members who assist with party fundraising goals (Heberling and Larson 2012; Ornstein 2000). Member-to-member giving outside of party campaign committees occurs through Leadership Political Action Committees (LPACs), Joint Fundraising Committees (JFCs), and personal campaign accounts.

LPACs pose unique advantages that are relevant for understanding congressional relationships. While party leaders often

advise members how to allocate the expenditures of their PACs (Gierzynski and Jewell 1992), ultimately, the individual member has the final say on who receives money from their LPAC. Unlike campaign committees, LPAC funds can be applied to campaign travel and expenditures and are considered a litmus test for a member's fundraising prowess (Lazar 2015). LPACs are funded by donors and interest groups, but the purpose is solely to promote other politicians. This financial arrangement allows members to give and receive from one another. Even congressional caucuses maintain their own LPAC. With the exception of the Tea Party Caucus, every intraparty caucuses in the 115th and 116th Congress had their own dedicated LPAC fund managed by caucus staff. This indicates both a uniform professionalization among intraparty caucuses and the important role finances play within caucuses (Rubin 2017).

The system of LPACs permeates Congress. While not all members headed a LPAC in the 115th Congress, 282 did, and 373 received money from one. Even members who have publicly disavowed their party's campaign committees have done so while maintaining their own LPAC. In a 2020 interview, Rep. Ted Yoho (R-FL) denounced the party's reliance on members of Congress to raise funds for the party, stating, "I don't do the dialing for dollars… that's not my role as a congressman. I see too many people of these people spending 10 to 20 hours [at the NRCC] to raise funds" (Wamp 2020). Yet in 2018, he raised over $38,000 dollars for his own LPAC, America Unlimited—of which $35,000 was donated to fellow Republicans.[3] Rep. Yoho is not alone. In total, 417 members of the 115th Congress were connected to one another either by giving to or receiving from a LPAC. This web of donations provides opportunities for individual members to show support for colleagues—either echoing party leaders' own LPACs support or as an opportunity to form bonds.

However, existing theories of LPAC donations have largely ignored the role of intraparty caucuses in these donations, instead centering on the strategies of party leaders given their majority or minority status in the chamber. Members of the majority party, in an attempt to maintain their majority status, will give heavily to current members; minority party members will look outward, directing funds toward congressional candidates and challengers with the hope of expanding the size of their party (Currinder 2003). Work that has noted differences in LPAC giving between leaders and intraparty caucus members has limited analysis to the

prominent Freedom Caucus (McGee 2017). Other work has found relationships between party leaders, divergent DW-Nominate scores, and LPAC giving (Kanthak 2007). But in an era in which floor votes are preordained by party leaders (Cox and McCubbins 2005; Curry and Lee 2020), these scores are increasingly correlated with partisanship rather than ideology. Beyond statements to the press, there is little opportunity for rank-and-file members to express ideological differences. When looking to donate to like-minded colleagues, members have few options to differentiate among their peers. Intraparty caucuses offer rank-and-file members a unique opportunity to publicly signal an ideological deviation that is increasingly unachievable in an era of centralized floor votes.

The Role of Intraparty Caucuses in Leadership PAC Giving

Beyond the aforementioned benefits that intraparty caucuses offer, I posit that there is a financial gain to be made in joining an intraparty caucus. In addition to an external network of ideological donors and activists (Clarke 2020), intraparty caucuses facilitate internal giving and receiving from like-minded members. Not only is this a tangible benefit, but these financial connections ultimately strengthen the bond between caucus members in a meaningful way, making the decision to join an intraparty caucus all the more appealing.

If intraparty caucuses play a role in the decision to donate to a fellow member of Congress, I expect the social networks of LPAC donations to reflect this dynamic in two ways. First, given that intraparty caucuses, at their core, facilitate personal relationships, members who have chosen to join an intraparty caucus will be well connected with each other, but not necessarily with other members of the chamber or their party. *Thus, I expect that members will be more likely to donate to members in their shared intraparty caucuses and less likely to donate to members outside of their caucus. Members who do not belong to an intraparty caucus will be less likely to donate to members in an intraparty caucus.*

Second, in an era where party leaders strategically work behind the scenes to only allow for successful floor votes, there is little opportunity to rebuff individual members for ideological differences. LPACs offer a traceable, yet subtle, measure of potential punishment. *Given intraparty caucuses' direct ideological*

competition with congressional leadership, I expect congressional leaders to be less likely to give to members who join an intraparty caucus.

Lastly, this research also takes into consideration the realities of party maintenance (Currinder 2003). Party leaders are still inclined to prioritize a fractured majority over an ideologically homogeneous minority. *I expect congressional leaders to support vulnerable members, regardless of caucus membership*. I also consider vulnerability as a way to control for the possibility that ideologically extreme members—and thus, those more inclined to join a caucus—are more likely to be electorally safe (Bafumi and Herron 2010; Jacobson and Carson 2015). The null hypothesis of these expectations is no significant monetary relationship between intraparty caucus members compared to nonmembers, or no relationship between party leaders and intraparty caucus members.

Application of Social Network Analysis

Network analysis is best applied when studying an entire population—in this case, members of the 115th Congress and 116th Congress (Larson 2016). Yet while social network analysis has been applied to congressional relationships through committee assignments (Porter et al. 2005), legislative cosponsorship (Fowler et al. 2007), lobbying donations (Victor and Koger 2016), and shared caucus membership (Victor and Ringe 2009), research has underutilized the relationship between rank-and-file members and party leaders via LPACs.

In a social network, there are individual "nodes" (members of Congress) that are connected by "edges" or "links" (LPAC donations). Social network analysis considers the relationship between two nodes, regardless of their individual attributes (Box-Steffensmeier and Christenson 2014). Because of this, social network analysis is largely descriptive. However, application of an Exponential Random Graph Model (ERGM) allows us to consider the statistical probability of a shared connection given nodal covariates—in other words, how individual characteristics of a member impact the likelihood of a monetary connection with another member. In addition to an ERGM of nodal attributes, I also consider how the amount of money being donated (the "weight" of the edges) impacts an individual node's location within the network.

Data

This study focuses on the House of Representatives, where caucuses play a more prominent role than in the Senate. I compiled an original dataset with every member of the House of Representatives in the 115th and 116th congresses by pairing biographical and district information with archival research on congressional caucus membership. I analyze the full social network of the 115th and 116th congressional session—every member, including those who retired or resigned. In addition to capturing changes among intraparty groups in a modern setting, this selection also allows us to compare how giving habits change with majority control (the Republican Party held the majority in the 115th; the Democratic Party in the 116th).

Each member represents a node within our analysis and includes covariates that reflect common variables expected to affect campaign donations, including electoral vulnerability and announced retirements. There is a total of 450 individual nodes in the 115th Congress, with 417 of these members attached to the network (38 members did not give or receive any LPAC donations).[4] In the 116th Congress, there are 398 members connected, including the 101 new members.[5] This research will detail the 115th congressional session, but results are consistent across the two sessions. Full results for the 116th Congress are found in the Appendix.

For caucus memberships, I relied on the archives of the Congressional Yellow Book—a quarterly publication of member-submitted biographical and professional information.[6] Within the 115th and 116th congresses, there are eight active intraparty caucuses[7]—five Republican and three Democratic. Based on the average first dimension of DW-Nominate scores (Poole and Rosenthal 1985), the most conservative intraparty caucuses during the 115th Congress were the Liberty and Freedom Caucuses, while the most liberal was the Progressive Caucus. The Republican Study Committee is the largest by far with 153 members, followed by the Progressive Caucus's 72 members. The smallest caucus is the conservative Liberty Caucus Table 1.

Race competitiveness is undoubtedly related to the amount of money members receive. To measure candidate vulnerability, I relied on the Cook's Partisan Voting Index (PVI), measured in October 2018—the last PVI released prior to the 2018 midterm elections. During the 115th Congress, Republicans were far more

TABLE 1
Intraparty Caucuses (115th Congress)

Caucus Name, Party Affiliation	N	Mean DW-Nom, 1st Dim
House Freedom Caucus, R	26	0.674
Liberty Caucus, R	10	0.602
Tea Party Caucus, R	24	0.532
Republican Study Committee, R	153	0.529
Tuesday Group, R	14	0.32
Progressive Caucus, D	72	−0.469
New Democrat Coalition, D	57	−0.298
Blue Dog Coalition, D	18	−0.226

vulnerable than Democratic members. Cook's PVI considered 45 Republican districts as a "toss up" district, compared to three Democratic districts. I ultimately used the broadest measure of vulnerability: what Cook PVI labels "likely" seats that are "not considered competitive at this point but have the potential to become engaged" (Cook and Wasserman 2018).[8] Using this measure ensures that vulnerability is not biased by the most prominent and expensive races and captures unexpected political "upsets," such as Rep. Steve Russel (R-OK), who lost to Democrat Kendra Horn (Wingerter 2018). Furthermore, incumbents tend to believe their reelection efforts are more vulnerable than they likely are (Jacobson and Carson 2015; Mayhew 1974). Thus, using this "likely" measurement more appropriately captures members' own reelection concerns.

These individual nodes were then paired with a directed edgelist of LPACs. Each edge is an individual donation from one LPAC to an individual member or another LPAC. For this, I collected original data from OpenSecrets.org, a nonpartisan research center that maintains a running list of LPACs, the amounts and recipients of LPAC funding, compiled from Federal Election Commission (FEC) records.[9] Because these are unreciprocated donations, the relationship is a "directed" edge. While members can maintain their LPAC after they leave office, I only include those that are operated by members of the 115th Congress. I only include edges (donations) that connect to a fellow member, although several LPACs donate to candidates as well. The average LPAC (across both parties) donates $144,031.91 in total. In the 115th Congress, there are 12,870 unique directed edges (donations) in

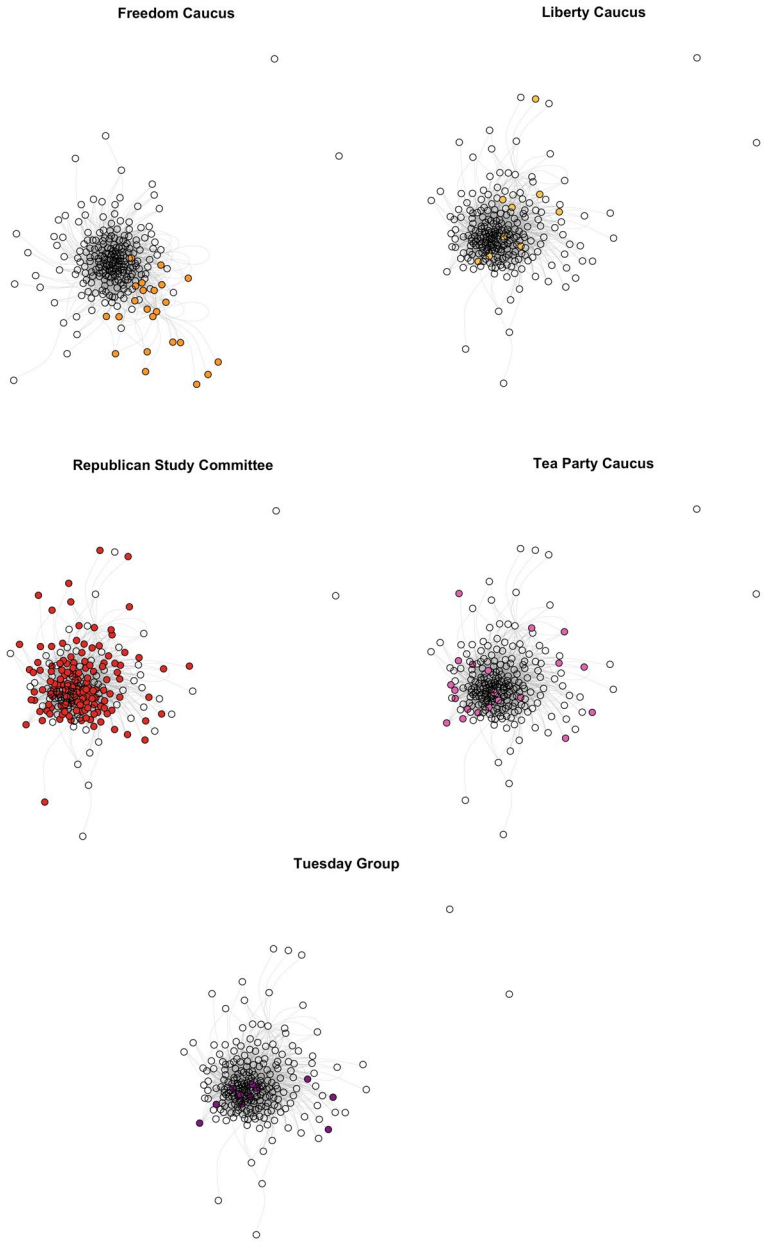
our dataset and 417 connected nodes (450 total nodes, 38 nodes are unattached). LPACs can donate to several members of Congress, and members can receive funds from multiple PACs. Mutual giving between members is common, as detailed in the results below.

As expected, the two parties are clearly separated, with almost zero cross-party donations.[10] Because of this, I analyze each party as their own network.[11] Figure 1 presents the social network of Republican members in the 115th Congress, highlighting caucus memberships. Figure 2 illustrates caucus members across the Democratic network.[12] The closer the node is to the center of the network, the more connected it is to other members. Nodes on the edge of the network are less connected to fewer and less well-connected individuals.

The networks highlight initial visual differences between the two parties. Republican nodes are much more concentrated toward the center, making a denser, more compact network. While clearly centralized, the Democratic network is not as tight knit as the Republican network. Measuring the clustering coefficients of each party's weighted, directed network confirms this—the mean transitivity (the probability that adjacent nodes of a given member are connected, or form a "triangle") of the Republican graph is 0.497, while the mean of the Democratic graph is 0.2768. Republican members are more densely connected to their party peers than Democratic members are to theirs. Continuing with a preliminary visual analysis, in the Republican network, the Freedom Caucus is both tight-knit and on the edge of the network, far from party leaders in the center. The large membership size of the Republican Study Committee is also notable in Figure 1, with members spread throughout the network. The moderate Tuesday Group is centered in the network, with a few connected nodes drifting toward the edge of the network. Lastly, the Liberty and Tea Party caucuses are collected on the edge of the network, but the pattern is less clearly defined, particularly when compared to their more organized ideological counterpart, the Freedom Caucus. Within the Democratic Party, the Progressive Caucus is dissipated throughout the network, veering toward the outer rim. The moderate New Democrat Coalition has several nodes located near the center of the network and nodes dispersed to the edges. Lastly, the Blue Dog Coalition is largely compiled in the center of the network, with a small cluster near the edge.

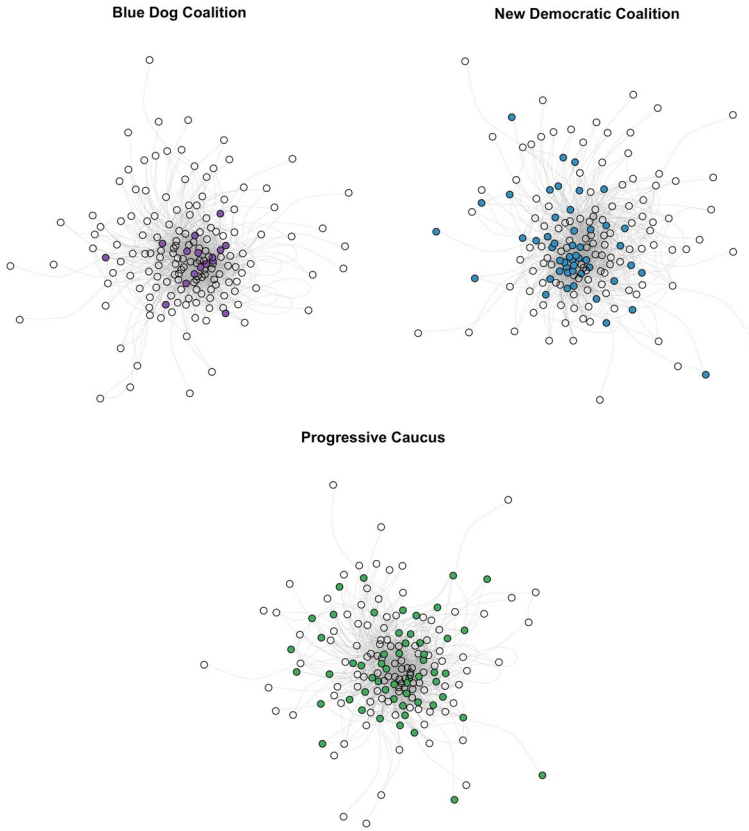
Degree measures quantify the visual observations. "Raw" degree is the number of individuals a node is linked to. A higher

FIGURE 1
Social Network of Republican Members (115th Congress)



Note: Each node represents a member of Congress. Each edge (gray line) represents a donation via LPAC. For ease of viewing, edges do not capture weight (amount of donation). Layout is established using a force-directed algorithm (Fruchterman Reingold).

FIGURE 2
Social Network of Democratic Members (115th Congress)



Note: Each node represents a member of Congress. Each edge (gray line) represents a donation via LPAC. For ease of viewing, edges do not capture weight (amount of donation). Layout is established using a force-directed algorithm (Fruchterman Reingold).

degree signals that a member is better connected: giving to (or receiving from) several other members. In the 115th Congress, the top donors based on outward degree include several members of leadership. High inward degree correlates with vulnerable members. These well-connected members are located in the center of the network. Weighted degree takes into consideration the weight—or size—of the donation in each connection. This captures differences between members who give smaller amounts of

money more broadly and members who give greater amounts of money to fewer people.

In the 115th Congress, the density of the Republican network is explained by the sheer volume of donations, both in the number of connections and the amount of money being donated. In the Republican network, the average node is connected to 20 other nodes at an average donation of $1,908 outward and $4,759 receiving. Within the Democratic network, the average node is only connected to eight nodes, while the average donation outwards is $1,360 and $2,334 inwards. A look at the top donors for each party further highlights this: then-Speaker Paul Ryan (R-WI), the top donor of the Republican Party, gave to 195 members, while the top Democratic donor, former Rep. Joe Crowley (D-NY) only gave to 80. Top recipients mirror this partisan trend as well.[13] This follows a consistent trend of greater LPAC donations to Republican candidates over the past several years.

Within the two networks, there is consistency between raw degree and weight, meaning that those who are donating to a lot of people are also donating large amounts. The only anomaly between these two measures is in the Republican network, where Rep. Mark Meadows (R-NC)—a prominent member of the Freedom Caucus in the 115th Congress—is the third-highest donor by weighted degree. Yet Rep. Meadows is only ranked 55th when measuring by unweighted degree, only donating to 36 members but giving $44,560 on average per donation. Compare this to Speaker Ryan, who donated to 195 members at an average donation of only $8,892. Outside of this discrepancy, the top donors and receivers are largely consistent across degree type.[14] While this does not translate to consistency between degree and weighted degree throughout the entire network, a regression analysis confirms a positive relationship between congressional leadership and higher outward degree as well as candidate vulnerability and higher inward degree for both degree types.[15]

ERGM Application

While it's clear that party leaders dominate spending and vulnerable members dominate receiving, we still lack information about donations throughout the entire network and potential motivations of the majority of members. To answer questions about LPAC relationships, I apply an ERG model to our social network of LPAC giving to capture the likelihood of an individual member

giving to his or her peer. ERG models develop their probability by comparing an actual network with the probability of a randomly generated network under the provided parameters (Cranmer and Desmarais 2011). In application, these models are similar to logistic regression models by considering the likelihood of y (member-to-member donation) given x (nodal covariates) but considers the relationships in a matrix format—thus capturing the likelihood of a connection between two members given all possible connections in the network. ERGM then uses these observed network statistics to maximize the likelihood (MLE) of the actual network. I estimate the ERGM with Markov Chain Monte Carlo (MCMC) simulation, which improves the estimates until sample iterations are stable. This is a common approach to ERG models (Box-Steffensmeier and Christenson 2014; Snijders et al. 2006).[16] I apply this model using the ERGM package in R (Hunter et al. 2008).

The dependent variable in the ERGM analyses below is the likelihood of a donation from one member to another. These links are captured by LPAC giving to another member's LPAC or directly to another member. A caveat of ERG models is that edge analysis is limited to binary ties (Cranmer and Desmarais 2011). Thus, this analysis does not take into consideration the weight (amount of money) of the edge (donation), instead focusing solely on the presence of a relationship given nodal (member) qualities.[17] Given that LPAC donations are largely consistent by degree type as discussed above, this does not have significant implications for this research, but future applications should consider ways to engage with the monetary amount of each donation. For each member, dichotomous variables represent caucus memberships and whether they are in a leadership position.[18] In addition to caucus membership and party leadership, I consider variables commonly thought to affect the likelihood of giving or receiving a member-to-member donation, including dichotomous measures of vulnerability (Cook's PVI) and whether a member retired later that year. For the models on party-leader giving, I include a continuous variable of DW-Nominate score distance from the party leader mean.[19]

Lastly, network degeneracy is an important concern when analyzing network analysis. I address this in several ways. First and foremost, the use of ERGM analysis captures relational data more accurately than other approaches, such as dyadic regression models, by inherently taking into consideration the likelihood of network ties given the observed network. Thus, applying ERGM

to the actual LPAC network of the 115th and 116th Congresses means that our results accurately model both the exogenous (covariate) effects as well as the endogenous attributes (network structure) (Cranmer and Desmarais 2011). In addition, the specification of my models considers the reality of homophily among members of Congress—I control for mutual reciprocity between members of Congress, as noted in the table notes below. Lastly, I address concerns of network degeneracy by separating the congressional network into two separate party networks. We know that partisans are much more likely to donate to members of their own party. By estimating caucus-affiliated ties within a party, rather than throughout the chamber at large, I ensure that estimates are not overestimated, simply due to partisan alignment.[20]

In the results below, I first consider the likelihood of any member of Congress donating or receiving money to another member, given an individual's caucus membership in the party-wide giving models. Second, to capture party leadership giving habits, I isolate the outward donations of party leaders. Because there is no significant cross-party giving, I consider each party as its own separate network. I present the results of the 115th Congress below. The full results of the 116th Congress can be found in the Appendix.

Results

Member-to-Member Giving (115th Congress)

I expect that network ties will be more likely when two members are in the same intraparty caucus and less likely between members who are not in a shared caucus. Table 2 presents the results of our undirected analysis for the Republican Party network, and Table 3 presents the results of our Democratic Party network.[21] In each of these tables, the nodes—all members of the Republican or Democratic party—remain the same across all models, but the edge characteristics differ by model. Model A in each table presents the probability of a LPAC relationship between members who are mutually in the same intraparty caucus, while Model B presents the likelihood of a donation when neither member is in a given caucus. Model C and D present the likelihood of a mixed donation, one in which the donor (Model C) or recipient (Model D) is in the caucus, and the recipient (Model C) or donor (Model

TABLE 2
Republican Member-to-Member Giving (115th Congress, ERGM analysis)

	Model A: Donor and Recipient Both Caucus Members	Model B: Donor and Recipient Both Noncaucus Members	Model C: Donor in Caucus, Recipient Not	Model D: Recipient in Caucus, Donor Not
Freedom	1.208***	1.266***	−1.780***	−1.020***
	(0.029)	(0.061)	(0.108)	(0.085)
Tea Party	0.686***	0.429***	−0.314***	−0.545***
	(0.165)	(0.049)	(0.072)	(0.078)
Liberty	−0.389*	0.015	0.027	-0.198*
	(0.192)	(0.068)	(0.090)	(0.101)
RSC	0.127	0.030	0.248***	−0.333***
	(0.165)	(0.038)	(0.045)	(0.052)
Tuesday Group	−1.033***	−1.307***	0.344***	0.272***
	(0.117)	(0.046)	(0.067)	(0.064)
Vulnerable Member	0.842***	0.816***	0.810***	0.810***
	(0.024)	(0.024)	(0.025)	(0.025)
Retiring Member	−0.219***	−0.224***	−0.244***	−0.244***
	(0.044)	(0.043)	(0.049)	(0.049)
Edges	−3.038***	−4.207***	−2.762***	−2.762***
	(0.030)	(0.100)	(0.049)	(0.049)
AIC	31,635	30,989	30,754	
Bayesian Inf. Crit	31,707	31,070	30,924	

Note: The dependent variable is the presence of an edge between two nodes. There are 238 connected nodes in these models. ERGM estimates are reported with standard errors in parenthesis: *$p < 0.1$; ***$p < 0.01$. The baseline likelihood of any two members sharing a donation within this network is −2.449*** (0.017), while the likelihood of mutual giving and receiving, regardless of caucus is 0.854*** (0.062).

TABLE 3
Democratic Member-to-Member Giving (115th Congress, ERGM analysis)

	Model A: Donor and Recipient Both Caucus Members	Model B: Donor and Recipient Both Noncaucus Members	Model C: Donor in Caucus, Recipient Not	Model D: Recipient in Caucus, Donor Not
Progressive	0.381*	−0.073	−0.057***	0.417***
	(0.230)	(0.057)	(0.080)	(0.077)
New Dems	0.307	−0.323***	−0.625***	0.734***
	(0.256)	(0.060)	(0.102)	(0.071)
Blue Dog	−0.189	−0.283***	−0.433***	0.522***
	(0.249)	(0.072)	(0.129)	(0.086)
Vulnerable Member	1.175***	0.970***	0.882***	0.882***
	(0.067)	(0.085)	(0.087)	(0.087)
Retiring Member	−0.160*	-0.106	−0.056	−0.056
	(0.095)	(0.095)	(0.097)	(0.097)
Edges	−3.094***	−2.673***	−3.425***	−3.425***
	(0.032)	(0.079)	(0.064)	(0.064)
AIC	10,854	10,810	10,404	
Bayesian Inf. Crit	10,903	10,867	10,511	

Note: The dependent variable is the presence of an edge between two nodes. There are 168 connected nodes in these models. ERGM estimates are reported with standard errors in parenthesis: *$p < 0.1$; ***$p < 0.01$. The baseline likelihood of any two members sharing a donation within this network is −2.948*** (0.030), while the likelihood of mutual giving and receiving, regardless of caucus is 0.316* (0.159).

D) is not. All models control for electoral vulnerability and member retirement. If a legislator is in multiple caucuses, each caucus membership is considered individually. For example, if a member is in both the Freedom Caucus and RSC, Model A will demonstrate the likelihood of that member receiving a donation from a fellow Freedom Caucus Member and the likelihood of receiving from an RSC member separately. These four models, applied to both parties, allow us to understand how caucus membership affect intraparty giving within the two major political parties.

Interpretation of ERG models is similar to that of a logit model: when a parameter estimate is positive (negative), the probability of a link between two members is larger (smaller), conditional on the other parameters in the model. In this case, a positive estimate indicates a likelihood over 50%, a negative estimate is a likelihood under 50%. For ease of interpretation, I discuss the findings as the converted predicted log-likelihood of a donation.[22] Each of these member-to-member connections results in substantial reelection funds—an average donation of $3,682.19 per individual. This sum, while seemingly small compared to the cost of an overall campaign, can translate to two national television advertisements or several dozen advertisements at a state level (Bycoffe 2020). Given members' insecurity about their reelection prospects, particularly in congressional primaries (Bonica 2017), the increased (or decreased) probabilities of receiving money are significant.

Looking first at our Republican network (Table 2), there is a clear pattern of selective giving by caucus members and nonmembers. The baseline probability of any LPAC connection in the Republican Party is 8%—meaning that the random likelihood of one member giving to another member is only 8%. Across the models, we see a consistently positive effect for giving to electorally vulnerable members (around 70% more likely) and a consistently negative effect of retired members receiving funds (around 40%). However, when we look across congressional caucuses, there are noticeable differences in LPAC connections. Members that share a caucus membership in the Freedom Caucus and Tea Party Caucus are more likely to donate to each other at significant amounts—but are also the most likely to lose out on donations from noncaucus members. Members not in the Freedom or Tea Party caucuses are more likely to donate to one another and are less likely to receive or give to members of those caucuses.

Other groups are less impacted by their caucus membership. For within-caucuses giving (Model A), the Liberty Caucus and the Tuesday Group are less likely to donate to fellow caucus members than other members of their party. But they are also unlikely to lose out on funding. Tuesday Group membership is particularly inoffensive: Nonmembers are only 40% more likely to donate to one another, indicating there is no real punishment for Tuesday Group members. Further, Model C and D show that giving to and receiving from Tuesday Group members is more likely to occur with nonmembers—around 57% likelihood for both giving and receiving outside of the caucus. Likewise, the Liberty Caucus and Republican Study Committee are also largely unaffected by their caucus membership. There is no significant impact on Republican Study Committee membership, hovering around a 50% likelihood for donations between members and noncaucus peers.

The Democratic Party network (Table 3) has less consistent and clear patterns of intraparty giving. The likelihood of any random member-to-member connection is 5%, and across the models, and there is a consistently positive likelihood of donating to vulnerable members (around 75%) and a consistently negative likelihood of donating to retiring members (45%), as expected. In Model A, Progressive Caucus and New Democrat Coalition members are more likely to donate to one another, while Blue Dog Coalition members are not. However, only the giving habits between Progressive Caucus members reach standard levels of significance. But overall, Model B indicates there is less punishment from Democratic rank-and-file members for joining an intraparty caucus compared to the Republican Party. Across all caucuses, there is a decreased likelihood of exclusive donations for nonmembers. This is further illustrated by Model D, showing connections in which noncaucus members donate to caucus members. All caucuses see a positive and statistically significant likelihood of receiving a donation from nonmembers, ranging from 60% likelihood (Progressive Caucus) to 67% likelihood (New Democrat Coalition). However, caucus members are not necessarily reciprocating. Model C shows that caucus members are significantly less likely to donate to noncaucus members. Progressive Caucus members are 48% likely to donate outward, New Democrat members are 35% likely, and Blue Dog members are 40% likely.

While there is not a consistent pattern of giving and receiving across all caucuses, it appears that there is a strategic financial behavior occurring. Some caucuses—including the Freedom Caucus,

Tea Party Caucus, and Progressive Caucus—are more likely to connect with and reward their own members over nonmembers. Within the Republican model, the caucuses that are more likely to give and donate within their caucus—the Freedom Caucus and the Tea Party Caucus—are seemingly punished by noncaucus members and are less likely to receive LPAC donations from noncaucus members. Conversely, the Tuesday Group and Republican Study Committee are less likely to rely on their caucus peers for donations and subsequently more likely to have financial connections with members outside of their caucus. And while Democratic caucus members are more likely to donate to one another, there does not seem to be a notable punishment for these connections from noncaucus members. But while noncaucus members do not feel a need to respond negatively to intraparty caucus signaling, Democratic caucus members are still giving preferential treatment to their caucus peers. Lastly, across all models, vulnerable members are likely to receive funds, yet they do not dampen caucus effects. Retiring members are consistently less likely to receive donations.

Party-Leader Giving (115th Congress)

Given theories of congressional centralization and intraparty caucus branding, I expect congressional leaders to be more likely to donate to noncaucus members. Groups that are juxtaposed against congressional leaders should be less likely to receive money from party leaders and loyal partisans. To test this, I run a directed ERG model, maintaining the full-party network from the above analysis, but I only consider the likelihood of edges directed by party leadership. In order to ensure party-leader giving is responding to caucus memberships rather than differences in floor votes, I control for vote difference using the squared difference between individual members' DW-Nominate score and the mean score of party leadership.

Table 4 presents the results of the Republican Party model. For every caucus but the Tuesday Group, there is a negative and statistically significant likelihood of Republican leaders donating to intraparty caucus members. Freedom Caucus members particularly see punishment: on average, Republican leaders are 86% likely to donate to Republican members of Congress, but this likelihood falls to only 30% for Freedom Caucus members. Tuesday Group members are again, unpunished: likely (59%) to receive funding

TABLE 4
Republican Party-Leader Giving (115th Congress, ERGM analysis)

	Likelihood of Donation
All members	1.806***
	(0.035)
Freedom	−0.816***
	(0.080)
Tea Party	−0.533***
	(0.079)
Liberty	−0.225*
	(0.103)
RSC	−0.329***
	(0.034)
Tuesday Group	0.361***
	(0.066)
Vulnerable Member	1.004***
	(0.027)
Retiring Member	−0.397***
	(0.048)
DW-Nom distance	−0.838
	(0.159)
Edges	−3.048***
	(0.051)
AIC	29,110
Bayesian Inf. Crit	29,200

Note: The dependent variable is the presence of an edge between two nodes. ERGM estimates are reported with standard errors in parenthesis: *$p < 0.1$; ***$p < 0.01$. The baseline likelihood of any two members sharing a donation within this network is −3.07*** (0.054), while the likelihood of mutual giving and receiving is 0.455* (0.0064).

from Republican leaders. As expected however, Republican leaders are more likely to donate to vulnerable members of any status (73%), while retiring members are less likely to receive party leader funds (39%). Contrary to Republican leadership, Democratic intraparty caucus members face no substantially negative impact on the likelihood of receiving a donation for party leaders. Table 5 presents the Democratic Party results. While Democratic members as a whole are more likely to receive LPAC funding from congressional leaders than members in intraparty caucuses, there is no punishment for caucus members. Every caucus maintains a positive and statistically significant relationship with party leaders.

TABLE 5
Democratic Party-Leader Giving (115th Congress, ERGM analysis)

	Likelihood of Donation
All Members	1.054***
	(0.059)
Progressive	0.410***
	(0.066)
New Dems	0.936***
	(0.064)
Blue Dog	0.748***
	(0.078)
Vulnerable Member	0.823
	(0.077)
Retiring Member	−0.055***
	(0.102)
DW-Nom distance	1.159***
	(0.265)
Edges	−4.146***
	(0.077)
AIC	10,198
Bayesian Inf. Crit	10,264

Note: ERGM estimates are reported with standard errors in parenthesis: ***$p < 0.01$. The baseline likelihood of any two members sharing a donation within this network is −3.956*** (0.059), while the likelihood of mutual giving and receiving is 0.185 (0.164).

Lastly, between the two models, the impact of DW-Nominate score distance differs by party. Republican members are less likely to donate to members who veer from the party center, while Democratic members see a positive impact for DW-Nominate distance, but there is no statistical or substantial impact on the relationship between caucus (or noncaucus) members. Additionally, when this measure is not included as a robustness check, results for leaders' giving habits to caucus members remain consistent.

The findings across all models hold for the 116th Congress. In the Republican network, Freedom Caucus members are again the most likely to donate to one another and the least likely to donate to nonmembers. All Republican members who join an intraparty caucus are less likely to receive funds from noncaucus members. The Democratic network shows again that while caucuses are unlikely to donate outward, they are not inherently punished by their peers for caucus memberships.[23] For party leaders, the Republican

network indicates party leaders are less likely to give to Freedom, Liberty, and Republican Study members but are still likely to maintain relationships with Tuesday Group members. Democratic leaders are less likely to give to intraparty caucus groups compared to party members as a whole, but they still maintain a positive relationship with intraparty groups.[24]

Discussion

These findings indicate that intraparty caucuses play a role in facilitating LPAC donations between members. For Republican members, these intraparty connections often make up for a lack of donations received from noncaucus peers and congressional leaders. In Republican caucuses that overwhelmingly donated to one another (i.e., the Freedom and Tea Party caucuses), this financial punishment from nonmembers was particularly stark. And given that the Republican Party should have been focused on coalition maintenance in the 115th Congress, this decreased likelihood to give to members of their own party is notable. But this treatment was not uniform across all caucuses. The Tuesday Group, who themselves were unlikely to give to their own caucus members (Table 2), were still likely to receive funds from the entire party. Democratic members appear to use congressional caucuses to supplement depressed—but still present—giving from nonmembers and party leaders. Caucus members often give preferential treatment to one another, but even then, noncaucus members are still likely share the wealth. Likewise, Democratic Party leaders did not necessarily punish their members for joining intraparty caucuses, particularly compared to Republican leaders. But given that Democratic leader donations to caucus members were still lower than to that of all members, intraparty caucuses likely *supplement* congressional giving rather than *replace* it, as appears to be the case for some Republican groups.

Despite the differences between the two parties, some similarities along ideological divisions appear. The most ideologically extreme groups—the Freedom Caucus and Progressive Caucus—were the most likely to donate to one another and less likely to receive from party leaders. In many cases, members that joined moderate groups such as the Tuesday Group and Blue Dog Coalition experienced weaker bonds within the caucus but an increased likelihood of receiving from their peers and party leaders.

However, ideology (at least as commonly captured in Congress) does not alone explain the likelihood of caucus members receiving donations. This research found no impact of distance from party-center DW-Nominate scores on financial donations. Another alternative explanation is that internal legislative negotiating could have negatively impacted organized Republican groups' relationships in the chamber. Intraparty caucuses' influence can ebb and flow depending on majority control and agenda setting, and we should assume that ideological Republican groups were particularly powerful under unified party control in the 115th Congress (Rubin 2017). However, the consistent findings across congressional sessions indicates that any potential bargaining advantage did not impact financial donations.

Rather, this research presents financial gain as an additional benefit of intraparty caucuses that is not inherently tied to other institution-wide goals. First, at the most basic level, members are being strategic for monetary gain. Caucuses are an opportunity to build relationships, including financial ones. Intraparty caucuses allow members to tap into smaller, more exclusive networks of prominent fundraisers beyond the wide reach and demands of party leaders. And given there was no negative impact for members who joined multiple caucuses, it's possible that certain caucuses have well-known financial relationships. Second, given that financial connections are stronger for fringe caucuses, these financial relationships also further bolster members' ideological brands (Clarke 2020). LPAC funding allows members to connect to peers within Congress, facilitated by formal intraparty groups. Some caucuses use these relationships as a way to further differentiate themselves from party leaders. Conversely, intraparty groups inclined to brand themselves as moderates are less motivated to isolate themselves from their peers. I suspect the limited impact of the conservative Republican Study Group throughout our analysis is reflective of these benefits (or rather, the lack thereof)—as a majority of the Republican party, this membership may provide them with an ideological brand, but no meaningful or exclusive relationships.

This research also challenges the idea that intraparty caucus membership is purely beneficial for intraparty relations. Party members and leaders are less likely to donate to members that join certain caucuses, particularly in the Republican party. However, because LPAC funding—unlike other forms of leadership retribution—can be accessed by all members of Congress, for

members that prioritize individual or caucus goals over that of the party as a whole, this cost is potentially worth it.

Conclusion

By using an original dataset of congressional caucus memberships paired with the LPAC donations, this research presents a new benefit to joining an intraparty caucus: LPAC funding. But this benefit is not without cost, particularly for caucuses that choose financial exclusivity. For Republican members in the majority of intraparty caucuses, LPAC giving from caucus peers is often in juxtaposition to a lack of funding from congressional leaders. For Democratic and moderate Republican caucus members, intraparty caucuses provide a supplementary source of LPAC funding. In return, party-leader LPAC giving habits cannot be explained by attempting to maintain majority status or to punish members for rogue votes. Party leaders are cognizant of financial networks beyond their control, as reflected by their giving habits.

Existing work has noted intraparty caucuses often allow members to tap into exclusive donors and ideological party activists, particularly for Republican caucus groups (Clarke 2020; McGee 2017), and LPAC funding pairs with these findings. And as the Republican Party becomes more ideologically distant from their Democratic counterparts (Theriault 2008), the decision to break from the party center both within and outside of Congress could be increasingly rewarding, or even necessary, for primary survival.

Comparatively, existing work has not sufficiently considered modern intraparty divisions within the Democratic Party. The Democratic Party is somewhat plagued by a diverse and often vulnerable constituency (Gaynor and Gimpel 2021), and these findings indicate party leaders are aware of this by choosing to reward all members with financial giving. But there are still traceable divisions along interparty lines. Democratic members are gaining not only a brand, but actual financial support from these caucuses. As members of Congress—and their constituencies—continue to polarize, I expect the importance of intraparty caucuses to increase for both parties. While differences in party-leader giving habits certainly warrant further research, these findings show LPACs can be a useful way to monitor an evolving Congress.

This research also encourages future work on the role of LPACs in other aspects of Congress. For example, researchers

should consider how LPAC giving is tied to voting, committee action, and bill sponsorship. For members vying for committee chair positions and internal party leadership, how do LPACs build an individual network of support? Likewise, what do cross-chamber donations indicate for the senator or representative's legislative goals and personal ambitions? Lastly, how do demographic groups build financial relationships? For example, the Congressional Black Caucus has a powerful, institutionalized fundraising arm, but LPACs could trace more informal connections based on gender or race.

Ultimately, this research shows how money in Congress can provide wider insight into how rank-and-file members bond in an age of powerful party leaders. Given that a major benefit to joining an intraparty caucus is differentiating oneself from party leadership—namely, ideological branding (Clarke 2020) and legislative bargaining (Hammond 2001; Rubin 2017)—it's understandable that party leaders would respond negatively to intraparty caucus members. But unlike other types of leadership punishment (Pearson 2015), LPACs provide an opportunity for rank-and-file members to respond directly. This research shows that members are working together, using intraparty caucuses to not only share information or make a legislative stand, but to financially support one another through LPAC giving.

SoRelle Wyckoff Gaynor is a PhD Candidate in government and political science at the University of Maryland. Her research interests the U. S. Congress, specifically party leadership and committees, interest groups, and the policymaking process.

NOTES

Many thanks to Sebastián Vallejo Vera, Kristina Miler, Patrick Wohlfarth, participants of the Fall 2020 University of Maryland American Politics Workshop, and three anonymous reviewers for their helpful comments and feedback. All errors are my own.

1. Membership in intraparty caucuses is not exclusive. Some members are in multiple caucuses. In the 115th Congress, around 30 Republicans and Democrats in intraparty caucuses are in two or more intraparty caucuses. Leaders, for their part, are far less likely to join caucuses—one Republican and five Democratic leaders joined an intraparty caucus in the 115th Congress.

2. Adjusting for inflation, LPAC contributions in 1990 were around $5.5 million in 2018 dollars.

3. OpenSecrets.org: America Unlimited, Contributions to Federal Candidates, 2018 Cycle. https://www.opensecrets.org/pacs/pacgot.php?cmte=C00567180&cycle=2018. Accessed April 28, 2020.

4. There was natural fluctuation in membership of the 115th Congress, including resignations, deaths, and special elections to replace departing members.

5. LPAC data for the 116th Congress network was collected January 27, 2020, capturing donations made during the first session of the 116th Congress. The 116th Congress serves as a robustness check to the overall findings of the 115th Congress. See the Appendix.

6. The Congressional Yellow Book relies on self-reporting for its biographical information. Thus, there may be some members who are part of an intraparty caucus but chose not to report it. This research relies solely on the Congressional Yellow Book to establish caucus membership to ensure consistency and replicability.

7. While Clarke (2020) considers the Liberty and Tea Party caucuses defunct post-2014, members were still reporting membership in the Liberty Caucus through 2020 and the Tea Party Caucus until the 2018 Congress.

8. This is measured as a dichotomous variable in the below ERGM analysis—vulnerable: 1; not vulnerable: 0. As a robustness check, each measure of vulnerability is statistically significant with a similar degree of impact.

9. Replication files to collect this data from OpenSecrets.org are available via the author.

10. There was one cross-party giver in the 115th Congress. Matt Cartwright (D-PA) donated to Trent Franks (R-AZ) and Steve Knight (R-CA).

11. In addition to clarity of figures, separating the parties into two separate networks has methodological benefits to counter the common problem of degeneracy in ERGM models (discussed further below).

12. See the online supporting information for figures of the full congressional session network and all caucus memberships graphed on the same party network.

13. See Tables OA1 and OA2 in the online supporting information.

14. See Tables OA1 and OA2 in the online supporting information.

15. See Table OA3 in the online supporting information.

16. MCMC degeneracy diagnostics for the variables can be found in Figure OA4 in the online supporting information.

17. There are further extensions of ERGM models that *can* account for edge weight, such as XERGM. However, this research is centered on the presence of a relationship between members of Congress, dependent on their caucus affiliation. Thus, the use of ERGM analysis capturing dichotomous variables is appropriate. Data on the weighted and unweighted degrees of the network highlights that party leaders are the most prominent leaders in amount donated and number of people they are donating to—i.e., the weight of the edge does not impact the likelihood of a donation to another member.

18. This includes, but is not limited to, Speaker of the House, Majority and Minority Leader, Whip, Conference Chair, Campaign Committee chairs, and Whip Team.

19. I also consider shared home state as a robustness check, finding a positive relationship between members from the same state. However, these findings have no impact on the role of congressional caucus giving.

20. Alternative models including Geometrically Weighted Edgewise Shared Partnerships (GWESP) to control for model closure (triads) are computationally unfeasible, given the size of the network. However, I have attempted to address this in alternative ways, namely by countering effects of intraparty bias by dividing the two parties into separate networks and controlling for mutual reciprocity between members of Congress (Cranmer and Desmarais 2011). Additional diagnostics of model and covariate degeneracy, including inclusion of GWESP variables to control for model triangulation in individual caucus models are available in the online supporting information and upon request.

21. All models achieve accepted levels of network degeneracy, with covariates achieving normal distribution.
See the online supporting information for goodness-of-fit evaluations.

22. Log-odds of the below results can be found in Tables OA4–OA7 in the online supporting information.

23. See Tables A1 and A2 in the Appendix.

24. See Tables A3 and A4 in the Appendix.

REFERENCES

Bafumi, Joseph, and Michael C. Herron. 2010. "Leapfrog Representation and Extremism: A Study of American Voters and their Members in Congress." *American Political Science Review* 104: 519–42.

Bonica, Adam. 2017. "Professional Networks, Early Fundraising, and Electoral Success." *Election Law Journal* 16: 153–71.

Box-Steffensmeier, Janet M., and Dino P. Christenson. 2014. "The Evolution and Formation of Amicus Curiae Networks." *Social Networks* 36: 82–96.

Bycoffe, A. 2020. Tracking Every Presidential Candidate's TV Ad Buys. *FiveThirtyEight* April 8. https://fivethirtyeight.com (Accessed March 1, 2021).

Clarke, Andrew J. 2020. "Party Sub-Brands and American Party Factions." *American Journal of Political Science* 64: 452–70.

Cook, C., and D. Wasserman. 2018. "2018 House Race Ratings." The Cook Political Report. https://cookpolitical.com/ratings/house-race-ratings (Accessed March 1, 2021).

Cooper, Joseph, and David W. Brady. 1981. "Institutional Context and Leadership Style: The House from Cannon to Rayburn." *American Political Science Review* 75: 411–25.

Cox, Gary W., and Mathew D. McCubbins. 2005. *Setting the Agenda: Responsible Party Government in the U.S. House of Representatives*. New York: Cambridge University Press.

Cranmer, Skyler J., and Bruce A. Desmarais. 2011. "Inferential Network Analysis with Exponential Random Graph Models." *Political Analysis* 19: 66–86.

Currinder, Marian l. 2003. "Leadership PAC Contribution Strategies and House Member Ambitions." *Legislative Studies Quarterly* 28: 551–77.

Curry, James M. 2015. *Legislating in the Dark: Information and Power in the House of Representatives*. Chicago: University of Chicago Press.

Curry, James M., and Frances E. Lee. 2020. *The Limits of Party: Congress and Lawmaking in a Polarized Era*. Chicago: University of Chicago Press.

Fowler, James H., Timothy R. Johnson, James F. Spriggs, Sangick Jeon, and Paul J. Wahlbeck. 2007. "Network Analysis and the Law: Measuring the Legal Importance of Precedents at the US Supreme Court." *Political Analysis* 15: 324–46. https://doi.org/10.1093/pan/mpm011

Gaynor, SoRelle Wyckoff, and James G. Gimpel. 2021. "Reapportioning the US Congress: The Shifting Geography of Political Influence." *Political Geography* 86: 102365.

Gierzynski, Anthony, and Malcolm Jewell. 1992. Legislative Caucus and Leadership Campaign Committees. In *Changing Patterns in State Legislative Careers*, edited by Gary Moncrief and Joel Thompson, 107–26. Ann Arbor, MI: University of Michigan Press.

Green, Matthew. 2019. *Legislative Hardball: The House Freedom Caucus and the Power of Threat-Making in Congress*. Cambridge: Cambridge University Press.

Hammond, Susan Webb. 2001. *Congressional caucuses in national policymaking*. Baltimore: JHU Press.

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

Hall, Richard L., and Alan V. Deardorff. 2006. "Lobbying as Legislative Subsidy." *American Political Science Review* 100: 69–84. https://doi.org/10.1017/S0003055406062010

Hunter, David R., Mark S. Handcock, Carter T. Butts, Steven M. Goodreau, and Martina Morris. 2008. "ergm: A Package to Fit, Simulate and Diagnose Exponential-Family Models for Networks." *Journal of statistical software* 24: nihpa54860.

Jacobson, Gary C., and Jamie L. Carson. 2015. *The Politics of Congressional Elections* (9th ed.). Lanham, MD: Rowman and Littlefield.

Kanthak, Kristin. 2007. "Crystal Elephants and Committee Chairs: Campaign Contributions and Leadership Races in the US House of Representatives." *American Politics Research* 35: 389–406.

Larson, Jennifer M. 2016. "The Evolutionary Advantage of Limited Network Knowledge." *Journal of Theoretical Biology* 398: 43–51. https://doi.org/10.1016/j.jtbi.2016.03.017

Lazar, Alex 2015. "Leadership PACs: Background." OpenSecrets.Org. https://www.opensecrets.org/industries/background.php?cycle=2020&ind=q03 (Accessed March 2021).

Lee, Frances E. 2016. *Insecure Majorities: Congress and the Perpetual Campaign*. Chicago: University of Chicago Press.

Lucas, DeWayne, and Iva Ellen Deutchman. 2009. "Five Factions, Two Parties: Caucus Membership in the House of Representatives, 1994–2002." *Congress & the Presidency* 36: 58–79. https://doi.org/10.1080/07343460802683166

Mayhew, David R. 1974. *Congress: The Electoral Connection*. New Haven: Yale University Press.

McGee, Zachary Alden. 2017. "Keeping Your Friends Close: A Study of Punishment and Intraparty Insurgency." Prepared for the Midwestern Political Science Association Annual Meeting, 2017.

Meier, M 2020. Testimony to the House Select Committee on the Modernization of Congress, 116th Congress. "Select Committee Hosts Virtual Discussion on Boosting Internal Expertise in Congress." June 25. https://modernizecongress.house.gov/committee-activity/virtual-discussions/select-committee-hosts-virtual-discussion-on-boosting-internal-expertise-in-congress (Accessed March 2021).

Mixon, Franklin G., Jr., and Rand W. Ressler. 2001. "Loyal Political Cartels and Committee Assignments in Congress: Evidence from the Congressional Black Caucus." *Public Choice* 108: 313–30.

Miler, Kristina C. 2011. "The Constituency Motivations of Caucus Membership." *American Politics Research* 39: 885–920.

Ornstein, Norm J. 2000. *The Permanent Campaign and its Future*. Washington, DC: American Enterprise Institute.

Pearson, Kathryn. 2015. *Party Discipline in the US House of Representatives*. Ann Arbor, MI: University of Michigan Press.

Poole, Keith T., and Howard Rosenthal. 1985. "A Spatial Model for Legislative Roll Call Analysis." *American Journal of Political Science* 29: 357–84.

Porter, Mason A., Peter J. Mucha, Mark E. J. Newman, and Casey M. Warmbrand. 2005. "A Network Analysis of Committees in the US House of Representatives." *Proceedings of the National Academy of Sciences* 102: 7057–62.

Rosenfeld, Sam. 2018. *The Polarizers: Postwar Architects of our Partisan Era*. Chicago: University of Chicago Press.

Rubin, Ruth B. 2013. "Organizing for Insurgency: Intraparty Organization and the Development of the House Insurgency, 1908–1910." *Studies in American Political Development* 27: 86–110.

Rubin, Ruth Bloch. 2017. *Building the Bloc: Intraparty Organization in the US Congress*. Cambridge: Cambridge University Press.

Snijders, Tom A. B., Philippa E. Pattison, Garry L. Robins, and Mark S. Handcock. 2006. "New Specifications for Exponential Random Graph Models." *Sociological Methodology* 36: 99–153.

Theriault, Sean M. 2008. *Party Polarization in Congress*. Cambridge: Cambridge University Press.

Victor, Jennifer Nicoll, and Gregory Koger. 2016. "Financing Friends: How Lobbyists Create a Web of Relationships Among Members of Congress." *Interest Groups & Advocacy* 5: 224–62.

Victor, Jennifer Nicoll, and Nils Ringe. 2009. "The Social Utility of Informal Institutions: Caucuses as Networks in the 110th US House of Representatives." *American Politics Research* 37: 742–66.

Wallner, James I. 2016. "Unprecedented: Informal Rules and Leader Power in the United States Senate." In *Presentation at the Congress and History Conference*. Carl Albert Center, University of Oklahoma.

Wamp, W. (Host). 2020. Extorting the People's House (Ep. 2) [Audio podcast episode]. Swamp Stories. Issue One. https://www.swampstories.org/episode-2-extorting-the-peoples-house (Accessed March 1, 2021).

Wingerter, J. 2018. Kendra Horn upsets Steve Russell in an Oklahoma City stunner. *The Oklahoman* November 6. https://www.oklahoman.com (Accessed March 1, 2021).

Supporting Information

Additional supporting information may be found in the online version of this article at the publisher's web site:

Table OA1. Top Donors and Recipients, Republican network
Table OA2. Top Donors and Recipients, Democratic network
Table OA3. Likelihood of Network Degrees, 115th Congress, OLS regression
Table OA4. Republican Member-to-Member Giving, 115th Congress, Log-odds of ERGM analysis
Table OA5. Democratic Member-to-Member Giving, 115th Congress, Log-odds of ERGM analysis
Table OA6. Republican Party Leader Giving, 115th Congress, Log-odds of ERGM analysis
Table OA7. Democratic Party Leader Giving, 115th Congress, Log-odds of ERGM analysis
Figure OA1. Social Network of the 115th Congress
Figure OA2. Social Network of the Republican Party, 115th Congress
Figure OA3. Social Network of the Democratic Party, 115th Congress
Figure OA4. Degeneracy Diagnostics for ERGM models
Figure OA5. Goodness-of-Fit Analysis for ERGM analysis

APPENDIX

TABLE A1
Republican Member-to-Member Giving (116th Congress, ERGM analysis)

	Model A: Donor and Recipient Both Caucus Members	Model B: Donor and Recipient Both Noncaucus Members	Model C: Donor in Caucus, Recipient Not	Model D: Recipient in Caucus, Donor Not
Freedom	1.692**	0.845***	−1.425***	−0.477***
	(0.540)	(0.086)	(0.152)	(0.106)
Liberty	0.327	0.279*	0.197	−1.769***
	(0.588)	(0.140)	(0.175)	(0.396)
RSC	0.249	−1.33	0.536***	−0.422**
	(0.333)	(0.097)	(0.114)	(0.129)
Tuesday Group	−1.632***	−1.361***	1.308***	1.421
	(0.391)	(0.083)	(0.114)	(0.109)
Edges	−3.216***	−2.937***	−3.348***	−3.348***
	(0.031)	(0.151)	(0.14)	(0.14)
AIC	10,125	9,755	9,586	
Bayesian Inf. Crit	10,166	9,743	9,703	

Note: There are 175 connected nodes in these models. This data was collected midway through the 116th Congress and does not include information on vulnerability or retirement. *$p < 0.1$; **$p < 0.05$; ***$p << 0.01$.

TABLE A2
Democratic Member-to-Member Giving (116th Congress, ERGM analysis)

	Model A: Donor and Recipient Both Caucus Members	Model B: Donor and Recipient Both Noncaucus Members	Model C: Donor in Caucus, Recipient Not	Model D: Recipient in Caucus, Donor Not
Progressive	0.059	0.283***	−0.318***	0.146
	(0.348)	(0.054)	(0.069)	(0.076)
New Dems	0.124	−0.519***	−0.461***	0.893***
	(0.385)	(0.064)	(0.096)	(0.073)
Blue Dog	−1.315***	0.024	−0.594***	0.536*
	(0.365)	(0.059)	(0.105)	0.142 (0.072)
Edges	−2.935***	−2.925***	−3.189***	−3.189***
	(0.026)	(0.060)	(0.076)	(0.076)
AIC	13,797	13,657	13,222	
Bayesian Inf. Crit	13,831	13,699	13,315	

Note: There are 188 connected nodes in these models. This data was collected midway through the 116th Congress and does not include information on vulnerability or retirement. *$p < 0.1$; ***$p < 0.01$.

TABLE A3
Republican Party-Leader Giving (116th Congress, ERGM analysis)

	Likelihood of Donation
All members	1.154***
	(0.066)
Freedom	−0.085
	(0.105)
Liberty	−1.439***
	(0.343)
RSC	−0.172**
	(0.065)
Tuesday Group	1.405***
	(0.118)
New Members	0.693***
	(0.071)
DW-Nom distance	−2.062***
	(0.197)
Edges	−2.540***
	(0.096)
AIC	9,389
Bayesian Inf. Crit	9,464

Note: There are 175 connected nodes in these models. This data was collected midway through the 116th Congress and does not include information on vulnerability or retirement. **$p < 0.05$; ***$p < 0.01$.

TABLE A4
Democratic Party-Leader Giving (116th Congress, ERGM analysis)

	Likelihood of Donation
All Members	1.539***
	(0.287)
Progressive	0.212**
	(0.064)
New Dems	0.899***
	(0.063)
Blue Dog	0.177*
	(0.071)
New Members	0.652***
	(0.039)
DW-Nom distance	−1.462***
	(0.229)
Edges	−3.987***
	(0.098)
AIC	12,571
Bayesian Inf. Crit	12,638

Note: There are 188 connected nodes in these models. This data was collected midway through the 116th Congress and does not include information on vulnerability or retirement. *$p < 0.1$; **$p < 0.05$; ***$p < 0.01$.