Influence in State Legislatures

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Abstract

This article examines the process and implications of political influence in U.S. state legislatures. I argue that legislators' reliance on one another for information creates a distribution of informal power that can be used by any member, regardless of rank or seniority, to achieve political goals. Using ten years of temporal cosponsorship data from seven U.S. states, I test a theory of asymmetric polarization in co-partisan influence. Results show that the distribution of members' ideology is central to the importance of ideological cues. Unlike traditional models of legislative bargaining, I find that ideologically extreme legislators increasingly influence moderates, but this effect is only present in heterogenous chambers. Contextual evidence suggests that these results are driven by conservative Republicans, with influence occurring among ideologically proximate but increasingly extreme Republican dyads, but little evidence of systematic tie formation among pairs of Democrats. Together, these results imply that directional movement in party ideology may be partially achieved through spatial decisions made over a sustained period of time.

Keywords: State legislatures; political networks; polarization; parties; term limits; professionalism

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There is little question of Michael Madigan's political stature in Illinois, a state so notoriously hierarchical as to be nearly synonymous with power. Madigan is perhaps best known as the longest-serving Speaker in American legislative history, presiding over the Illinois General Assembly for thirty-eight years from 1983 until his resignation in 2021. From 1998, Madigan also acted as chairman of the state's Democratic Party, granting him control of most major political goods: from the legislative agenda and various appointments to campaign spending on rank-and-file partisans. Largely due to these qualities, Madigan's preferences likely exerted a major impact on both the ideological character and policy output of the state while in office, legacies likely to endure despite his retirement (McKinney 2021). As a result of holding these formal positions — or perhaps, in addition to them — Madigan exercised a substantial degree of informal power, particularly in his *influence*, or ability to shape the decisions made by others around him. Put simply, Madigan's claim to such a wide range of legislative roles incentivized cooperation and support, particularly among the politically ambitious. In fact, Madigan's status and infamous aptitude for persuasion have been so effective to have earned him nicknames including "the Velvet Hammer," "the Real Governor," and "the King of Illinois."[1] Clearly, Michael Madigan exemplifies the power and authority that often underlie political success (e.g. Cox, Kousser and McCubbins 2010; Battista 2011).[2]

Like Madigan, former legislator Emily McAsey also served as a Democrat in the Illinois General Assembly. First elected in 2008, McAsey worked as a middle school teacher and public defender before pursuing office. She never held a position in party leadership during her eight-year tenure. While active in policymaking, McAsey cosponsored fewer bills than the Assembly median and seldom introduced legislation herself. Still, she is remembered as no less influential than Madigan, although her reputation was earned through very different means. While Madigan's power derives from the promise – or threat – of contingent goods, McAsey's influence was unintended, an externality cultivated through her substantive commitment to renewable energy and dedication to constituency service. Upon her resignation in 2017, McAsey's efforts were applauded by rank-and-file members as well as leaders of both parties and voters from across the state (Lafferty 2017). Even in the most stratified of contexts, political influence is not limited to the few in positions of power.

Although cue-taking is a dominant means of legislative communication, political scientists frequently measure this process using terms that obscure its full scope and implications by prioritizing observable indi-

[1] See Nowlan et al. (2010), Ylisela (2013), and Moore et al. (2020).

[2] But see Edwards (2018).

cators. As a result, existing research on this and related concepts gravely underestimates the effect of rank-and-file members, namely partisan ideologues. Indeed, for many people, "power" connotes well-connected, visibly effective leaders like Madigan, rather than their junior colleagues. In part, this misconception arises from a conflation of formal power with the latent, informal hierarchy of influence, although the two can coincide. Nevertheless, there is an important distinction between *formal* hierarchy (and the powers that come with it) and influence, the capacity to affect decisions made by others.

Influence is a social economy describing the relative use of persuasive authority. Unlike most sanctioned privileges, this approach can be used by *anyone* to shape how others around them feel, think, and act. The accessibility of influence arises from its versatility: persuasion can be affected both by conscious effort as well as unintentionally, simply by virtue of expression alone. Although it is a largely invisible process, it is the central organizing component of most observable legislative activities and outcomes. It achieves this consequence by deciding who is at the top of the information hierarchy — in other words, whose opinions really matter — regardless of which individuals possess the most discrete formal power.

Applying insights offered by ideological power balance models of legislative interaction (e.g. Schickler 2000) and theories of electoral behavior (e.g. Rabinowitz and MacDonald 1989; Pardos-Prado and Dinas 2010), I argue that formally pivotal players, namely ideological moderates, lack the influence of extreme partisans in some cases. To do this, I use `NetInf` (Gomez-Rodriguez et al., 2010; 2012), a network inference algorithm (e.g. Desmarais, Harden and Boehmke 2015), along with temporal cosponsorship data from seven U.S. states to produce 120 networks of information diffusion. I find that leadership is a weak predictor of state legislative influence in many instances. Instead, this process largely favors ideologically extreme legislators, especially in heterogenous chambers. Closer, independent examinations of each network show that this effect is particularly driven by groups of conservative Republicans, with limited evidence that ideology structures Democrats' behavior. These results suggest that aggregate-level ideological movement may result from rational collaboration patterns among elected officials over time, rather than party organization effort alone. Consistent with prior research, I find a positive effect for committee chairs and legislators with at least one shared committee assignment.

The remainder of this paper proceeds as follows. First, I illustrate the utility and outcomes of political influence as reported in existing scholarship. With that foundation, I explain the specific goals and theoretical grounding for the present study. I then describe the research design, data, and empirical approach before summarizing my results. I conclude with a brief overview, discussion of practical implications, and

directions for future research.

1 Influence in American Legislatures

Like the voters who elect them, legislators are tasked with making consequential decisions in low-information settings (Curry 2015; Zelizer 2018). In addition, the length and frequency with which most bills are changed can prevent even motivated actors from reading draft legislation (Curry 2015). Similar to other means of decision-making under conditions of uncertainty, influence is a "satisficing" heuristic used unconsciously by nearly all of us. Relative to "optimal" choices – made with complete information – satisficing aims to reach a decision that is simply "good enough" using what is known at the time (Lau and Redlawsk 2006). For an illustrative example, consider party affiliation in the voting public. Though Americans usually know very little about candidates and their platforms (Delli Carpini and Keeter 1996), voters consistently choose officials from the same party, even if a different selection might result in a better outcome (Johnston Conover and Feldman 1989). Here, candidates' partisanship and the voter's own knowledge, party valence, and experiences jointly inform future decisions without necessitating additional research. Legislators' use of influence is similar: by observing how many and which of their colleagues support or oppose legislation, lawmakers can infer their own likely positions, often with little conscious effort (Gilens and Murakawa 1995). However, unlike similar conclusions reached by laymen, elites' high level of political expertise results in heuristic decision-making that is more often "correct," or correlated with the counterfactual choice made with full information (Kuklinski and Quirk 2000; Lau and Redlawsk 2001).

An impressive literature describes the persistence of cues as an easy and efficient means to information. Beginning with Kingdon (1973), this work demonstrates lawmakers' often singular reliance on intra-legislative signals to inform their own behavior. Substantial evidence suggests that legislators use cues more frequently than other possible sources of the same information such as constituent opinion, interest groups, or the executive (e.g. Ray 1982; Ringe, Victor and Gross 2012) In addition to its reliability and low costs, this system remains widespread for its institutional benefits. The legislative process is structured to facilitate information sharing among policymakers, which is useful for maximizing "correct" cue-taking inferences. Most fundamentally, influence is made easier by the iterated format of many institutional activities. This structure allows well-informed officials to publicly register their positions and rationale earlier than undecided colleagues (e.g. Box-Steffensmeier, Ryan and Sokhey 2015). Box-Steffensmeier, Arnold, and Zorn (1997) show evidence of selection into cue provision as a consequence of this institutional feature, whereby

those with crystallized opinions announce them early to signal their endorsed position and persuasive intent. Second, the organization and function of legislative committees further reduce the costs of cue-taking through member specialization. This system provides a clear means for members to identify sources with specific expertise and prioritize their direction (Curry 2015, 2018; Fong 2020). The hierarchy of legislative party organizations offers a related, if obvious, benefit by ensuring broad communication of leaders' preferences (Anderson, Butler and Harbridge 2016).

Existing work leaves little doubt as to the universal reach of legislative cues, but offers less guidance as to whose opinions these signals ultimately reflect. Literature suggests that legislators are typically influenced by colleagues who most visibly or proximately exemplify a particular kind of information (Matthews and Stimson 1975). In general, these cues derive from friends (Ringe, Victor and Gross 2012), co-partisans (Kingdon 1973), or otherwise similar actors (e.g. Fong 2020). These familiar signals contain more nuanced and reliable information than those from a relative stranger. Within the subset of like-minded colleagues, however, there is substantial variation in preferred informant across cue-takers, states, and over time (Kingdon 1973; Ray 1982). These differences likely result from a variety of considerations, such as electoral ambition (Ringe, Victor and Gross 2012; Zelizer Forthcoming), issue area (Ansolabehere, Snyder and Stewart 2001; Fong 2020), and public salience (Uslaner and Weber 1979; Zelizer Forthcoming), among others. More broadly, variation in cue-giver preference may also reflect systematic differences in legislators' perceptions of issues and the utility of specific colleagues to overcoming the implied uncertainty. This possibility motivates questions of institutional, ideological, or other of systematic sources of difference in elite behavior both within and across states, most of which are unknown (see also: Bailey and Sinclair 2008; Coleman Battista and Richman 2011).

In addition to serving as a low-cost source of information, influence also helps legislators achieve their own political goals as a means to greater effectiveness. If not the same quality, influence and effectiveness are mutually reinforcing: the greater a legislator's institutional standing and the broader his or her involvement on issues, the better positioned they are to efficiently achieve professional ends (Padro i Miquel and Snyder 2006). These include passing legislation, shaping the agenda, securing funding from interest groups, and seeking reelection (Koger 2003; Ringe, van Thomme and Wilson 2015). The utility of these concepts in affecting legislative outcomes is significant. In a similar way, this system may also serve a compensatory role for rank-and-file juniors or those who face barriers to traditional policy success by promoting collaboration in a channel parallel to the formal leadership hierarchy (Wallace 2014; Holman and Mahoney 2018).

1.1 Theoretical Expectations

Existing work shows that political influence often results from a legislator's salience within their chamber, particularly as a reliable source of credible information (Matthews and Stimson 1975). To achieve this stature, representatives must first establish a reputation; for example, by distinguishing themselves as a substantive specialist through committee membership (Fong 2020), word of mouth, or authoring bills related to a particular issue area (Kingdon 1973). Visibility can also result from effectiveness, as legislative success entails the maintenance of numerous durable relationships. In both cases, the consequent coalitions create a network through which reputation and influence propagate (e.g. Kirkland 2011; Skigin 2019).

To date, research on this concept has focused almost entirely on the qualities of individual legislators or dyadic pairs. However, the most visible and advantageous relationships, as well as their professional utility, are contingent on the political, institutional, and social aspects of the legislative environment. In this paper, I focus on the relational role of ideology in elite networks to compare the relative influence of moderates with more extreme co-partisans. To do this, I develop a theory of ideological cue-sharing that integrates three related levels of analysis: (1) the political traits of individual legislators, (2) characteristics of the district they represent, and (3) the rules and design of the legislative body. I argue that these factors, along with partisanship, jointly condition legislators' preferences for ideological influence with observable implications on American party development.

Legislators evaluate cues much like voters choosing between candidates in an election, selecting relevant information closest to their own ideal placement of a political object, broadly defined. Scholars of political networks find frequent and substantial evidence of homophily in legislative settings, or the tendency for elites to work with others like themselves. In cue-giving relationships, representatives most often follow colleagues they know well and whose decisions consistently correlate with their own. Interestingly, this correlation need not be positive; legislators learn as much from the behavior of political adversaries as they do from allies (Ringe and Wilson 2016). Perhaps a result of so many easily observable cues, subgroups in elite networks almost always share the correlational quality of self-selection into those perceived as most similar (Fowler 2006a,b; Neal, Domagalski and Yan 2022).

The necessity of cue-taking demands, in part, from the large number and wide range of complex issues elites face each day. Moreover, they are confronted by a proliferation of cues from co-partisans, party leaders, and substantive experts. To navigate this environment, extant literature describes two potential decision

rules: (1) *directional* (e.g. Schickler 2000; Rabinowitz and MacDonald 1989) or (2) *spatial* evaluations (e.g. Hitt, Volden and Wiseman 2017). Directional choices are largely agnostic to the degree of relative proximity between actors, and instead prioritize shared partisanship. As a result, these cue-takers are likely to follow the lead of fellow party members, particularly those with a clear ideological association to party platforms, regardless of single-issue dissonance. In contrast, spatial choices reflect the cue given closest to an official's own ideal point, regardless of party origin. In this perspective, a moderate legislator would more likely be influenced by centrists from the opposite party than extreme members of their own, if at all (Zelizer Forthcoming). Legislators influenced by relatively polarized cues – originating from relatively more extreme co-partisans – are likely to apply directional schemas of decision-making.

Often, the decisions reached by the directional and spatial logics are different, and could entail substantial costs. Directional evaluations foreground party discipline, while models of Congressional bargaining typically favor spatial assumptions (e.g. Krehbiel 1998). Indeed, the function and relevance of parties are a frequent point of contention among scholars of American politics. Observing the remarkable stability of divided government, Krehbiel (1998) and others argue that legislative institutions incentivize moderation in service of productivity (Black 1958; Mayhew 1991). Two-party democratic elections affect a similar end by ensuring that candidates appeal to the median voter in order to maximize public support (Downs 1957). Research on legislative effectiveness finds supporting evidence, where legislators near the median tend to pass a greater proportion of their bills relative to co-partisan extremists (Buccianeri, Volden and Wiseman 2020).

H_1: *Ideologically moderate* $\rightarrow$ *more influential.*

Despite its logical incentives, political behavior is frequently irrational. In addition, the trajectory of American party development suggests that ideologues elicit some level of mainstream support – at least in certain settings. Many scholars have observed a steady, top-down polarization among elite partisans since the 1960s (e.g. Carmines and Layman 1997; Shor and McCarty 2011), while public opinion has been slow to achieve similar outcomes (Lindaman and Haider-Markel 2002). Contrary to earlier, symmetric theories of American polarization (e.g. Stimson 1999), scholars have more recently observed a difference in the rate at which the parties are diverging. Asymmetric theories suppose that ideological polarity is more common among Republicans than Democrats, making the rightward shift of Republican elites a primary catalyst for current partisan unrest (Ura and Ellis 2012; Grossman and Hopkins 2016). Related work suggests that par-

tisan asymmetries may result from differences in responsiveness (Butler and Dynes 2016; Broockman and Skovron 2018), policy platforms (Krimmel, Lax and Phillips 2016), and campaign finance activity (Thomsen 2014). Similar findings from the European politics literature show an association between directional voting in the mass public and higher levels of elite polarization (Pardos-Prado and Dinas 2010).

Together, these insights suggest a potential for asymmetry in partisan cue preferences. Among Republicans, I expect a greater propensity to evaluate cues directionally, making party ideologues more influential than moderates. Among Democrats, however, I expect spatial cue-taking to result in greater influence among relative centrists.

H_{2a}: *Among Republican legislators, ideologically extreme* $\rightarrow$ *more influential.*

H_{2b}: *Among Democratic legislators, ideologically moderate* $\rightarrow$ *more influential.*

Importantly, as Krehbiel (1998) and others observe, it is not just party but the distribution of preferences that impact productivity (Black 1958; Mayhew 1991). According to Congressional scholars, gridlock is more common when preferences are heterogenous than under divided government (Krehbiel 1998). Relative to Congress, membership both within and across state legislatures is more ideologically diverse (Shor, Berry and McCarty 2010). Scholars have noted a high level of variability in partisan ideology across the states, where Republicans in some liberal contexts can have the same ideal point scores as Democrats in more conservative areas (Shor, Berry and McCarty 2010). If reflected by elite behavior, this heterogeneity could increase the representation of extreme preferences among legislative cues, in addition to complicating the information environment. A greater number of partisan ideologues also necessarily reduces the number of seats held by moderates. As a result, elites who use party-based heuristics may only be able to select from a range of relatively more extreme informants. In addition, even when optimal conditions are unmet, the incentives for legislative coalition building remain. In these cases, centrists are likely to adapt by collaborating with more extreme factions of their party to avoid gridlock (Cox and McCubbins 2005; Chiou and Rothenberg 2003). Comparative scholars describe analogous alliances arising in multiparty legislatures as an externality of a plurality's inability to gain plenary control and consequently, meet quorum (Calvo and Sagarzazu 2011). As a result of these diverse coalitions, agenda setting power shifts from party leaders to committee chairs – consequences similar to those implied by Cox and McCubbins' (2005) dual-veto model. Similarly, I expect extremists to be most influential in ideologically heterogenous chambers – settings where

partisans are more likely to use directional logic when selecting among a truncated range of cues, building otherwise unlikely coalitions.

H_3: *Ideological heterogeneity* $\rightarrow$ *extremists more influential.*

Lastly, I consider the potential impact of each state's legislative context on cue-sharing outcomes to examine how the institutional design of U.S. states affects both the utility and distribution of influence among members. Indeed, institutional structure is often foundational in most accounts of collective decision-making in both American and comparative settings (e.g. Black 1958; Downs 1957; Tsebelis 1995). This concept accounts for the intervening effect of idiosyncratic processes on political outcomes, which is often substantial. Prominent examples of this outcome are exemplified by Black's (1948) analysis of ranked choice voting, Downs's (1957) median voter theorem, and Tsebelis's (1995) distinction of partisan from institutional veto points.

Similarly, while the preceding portion of this theory accounts for partisan players, here I consider the impact of two unique institutions in American states: term limits and professionalism. Similar to a cross-national sample of countries, U.S. states have institutional differences that impact the foundations of formal power (Ray 1982). For a Congressional analogue, consider the effect of changes to House rules on the chamber's balance of power, which shifted markedly from committee chairs to party leaders (Rhode 1991). Relatedly, term limits are expected to moderate the power of state party leaders (Carey, Niemi, Powell and Moncrief 2006), while professionalized legislatures are thought to strengthen them (Clucas 2007).

In any context, a primary responsibility of legislative leadership is to minimize defection among rank-and-file members on the party's agenda (Rhode 1991; Cox and McCubbins 1993; Battista 2011). Even in plurality-led settings, party discipline is a central goal (Calvo and Sagarzazu 2011). Frequently, leaders seek this support by exploiting structural and procedural rules such as discharge petitions, control of committee assignments, and seniority violations, that allow them to reward or punish actors with the allocation of contingent goods (Cox and McCubbins 1993). At the state level, I anticipate countermajoritarian institutions to lessen leaders' reliance on punitive tactics, reducing the supply and relevance of party-based cues to rank-and-file partisans. Consequently, legislators in term limited states should be less likely to engage in directional influence and instead take cues from ideologically similar colleagues. On the other hand, more professionalized states – with greater resources, longer sessions, and more powerful party leaders – likely facilitate partisan influence by increasing importance of group discipline as well as the number of

cues available generally. As a result, I expect a higher level of cue-sharing in more professionalized states with a greater reliance on spatial cues.

H_4: *Term limits* $\rightarrow$ *relatively more diffuse influence networks (fewer influence ties sent & received).*

H_5: *Professionalism* $\rightarrow$ *relatively more dense influence networks (more influence ties sent & received).*

2 Research Design

The latent nature of cue diffusion has long complicated empirical studies of political influence. Existing research on legislative networks typically models this concept using individual or dyadic centrality, poorly representing the totalizing context in which information sharing occurs. Individual-level statistics capitalize on the strong correlation between a legislator's policy effectiveness and "connectedness" to other members (Krutz 2005; Fowler 2006a,b). As a measure of influence, however, individual statistics only illustrate one, predominant cue-giver's role in structuring a network, neglecting the presence and activity of other actors. Dyadic measures improve on this problem, modeling influence as a relationship between two people. Here, the extent of observed cohesion between decisions made by cue-givers and -takers denotes the relative degree influence between them (e.g. Kirkland 2014; Ringe and Wilson 2016; Battaglini, Sciabolazza and Patacchini 2020). While these statistics can model the balance of power between actors in a given dyad, they remain myopic to the dynamic context of lawmaking, where actors can simultaneously serve as both cue-givers and cue-takers.

Although recent experimental evidence demonstrates practical cohesion between cosponsorship and influence, it reaches mixed conclusions as to the ability of deliberation to affect bipartisan outcomes (Zelizer Forthcoming; Fong 2020). Unsurprisingly, however, most research finds that cues strengthen partisan decisions (Curry 2018; Zelizer Forthcoming). Despite the interdependent nature of legislators' decisions, scholars have yet to approach this topic from the perspective of political networks. Using recent advancements in network methodology (e.g. Desmarais, Harden and Boehmke 2015; Denny 2016), I build on existing measures of influence to more accurately model the practical context in which it occurs.

2.1 Data

Legislators likely use cues to inform a variety of decisions and behavior. This heuristic is likely applied by the greatest number members – and most visible to external actors – in the contexts of of roll call voting

and cosponsorship.[3] This analysis focuses on cosponsorship decisions, which are impacted by information sharing (Zelizer 2018). In addition, cosponsorship is conducted in a relatively uniform manner across states, limiting bias from procedural differences. Theoretically, cosponsorship fulfills a variety of advantageous ends being at once a low-cost form of position taking (e.g. Mayhew 1974; Zelizer 2019), means of affecting the agenda (Kessler and Krehbiel 1996), and signal of relational commitment (Bernhard and Sulkin 2013). Cosponsorship also represents an important form of collaboration among legislators (e.g. Gutmann and Thompson 2012; Holman and Mahoney 2018), which is imperative to reciprocal coalition-building (Bratton and Rouse 2011; Kirkland and Gross 2014) and the improved professional outcomes that result from robust networks (e.g. Adler and Wilkinson 2013; Kirkland and Gross 2014).

To evaluate influence in state-level networks, I use individual-bill-level sponsorship data for all bills considered in regular sessions of seven U.S. states – Alaska, Illinois, Indiana, Minnesota, Nebraska, Oklahoma, and South Carolina – between the years of 2009 and 2018.[4] The method used to infer influence relationships requires knowledge of cosponsorship date for all bills in a given session. While many states document the date when bills are first introduced, only these seven also record that information consistently at the cosponsorship level. While this limited sample is imperfect, these states account for differences in party control, region, economic interests, and other factors relevant to case selection (Gerring and Cojocaru 2016). I follow Kirkland (2011) and other state legislative scholars in selecting cases due to their availability of the requisite data, with acknowledgement of constraints placed on external validity.

I obtained these data from Legiscan, a free and nonpartisan website that tracks legislative activity in the United States. For each state-session, I used a total of five files: (1) a directory of legislators in both chambers, (2) an index of all bills considered, (3) a list of roll call votes and (4) sponsors for every bill, and (5) its complete legislative history. To construct the temporal cosponsorship dataset, I first subsetted the legislative history file to include only sponsorship and cosponsorship events. Next, I operationalized a temporal measure for each bill in days by first identifying its author or primary sponsor and the date when it was introduced. Then, for each cosponsor, I subtracted the date of their cosponsorship from the date on which it was initially introduced. For each bill, this produced a measure of time in days such that primary

[3]Cosponsorship refers to legislators formally supporting a piece of legislation, often to attract more support , engage in position-taking with minimal effort, and due to direct involvement in its drafting.

[4]The legislative office of the South Carolina General Assembly only records these data for the General Assembly, so that analysis is limited to the lower chamber. The legislature of Nebraska is unicameral.

sponsors were assigned a value of 0 and all subsequent cosponsors a value of $0 + \#$ *of days*. To avoid endogeneity – for example, if a legislator cosponsored a bill on the same day it was introduced but was not its primary sponsor – I re-coded their time parameter as $+1$ rather than 0, adding one additional day to each subsequent cosponsor on that particular item. Finally, bills without cosponsors do not contain potential influence interactions and are automatically dropped in the pre-processing stage. These steps resulted in a raw sample of approximately 125,000 bills.

2.2 Inferring Influence Networks

To infer the diffusion networks underlying elites' behavior, I use NetInf, a network inference algorithm developed by Gomez-Rodriguez et al. (2010, 2012) and NetworkInference, its implementation in R (Desmarais, Harden and Boehmke 2015). This method relies on temporal data that describes both the time and order in which actors sequentially engage in a certain activity – in this case, the name of each legislator and the dates of bill introduction and subsequent cosponsorship. Using that information, NetInf identifies a directed diffusion network, in which the reciprocity or asymmetry (direction) of interactions between connected pairs (*i,j*) can be identified. Thus, an edge $i \rightarrow j$ indicates that influence diffuses from legislator *i* to legislator *j*, where *i* is referred to as the cue-giver and *j* as the cue-taker. In this example, the relationship is *directed* or asymmetric, because *j* does not influence *i* in return. Instances of reciprocation may also occur; these are known as *undirected* or mutual ties.

This spread of behavioral change can be modeled for a set of legislators in which actors serve as both cue-givers and cue-takers; in other words, they can be both influenced by one legislator and simultaneously influence another, creating a tree-like pattern of observable, dependent decisions called a "cascade." Using the entire dataset, this method fits a network of diffusion ties that can be used to partially explain decisions made in repeated events over time, but does not explain individual instances of cosponsorship in isolation. This constraint is also present in experimental designs (Zelizer Forthcoming).

A legislator is influential if his or her cosponsorship choices lead others to do the same. Like traditional measures of network centrality or "connectedness," the most influential actors in this context are those whose behavior strongly and consistently predicts the greatest number of others' over time, measured according to the temporal ordering of both actors' decisions. In this case, relatively early cosponsorship indicates cue-giving or influence, while subsequent behavior is considered cue-taking. Importantly, influence is not operationalized using the raw count of cosponsorship observations nor the recency of adoption. These factors would bias estimates of influence in favor of those who cosponsor the greatest number of bills or

frequently do so earliest. To overcome these problems, this method is responsive to decay over time and prefers to classify repeated and similarly-timed relationships as influential while penalizing those that take longer to form. As a result, estimates are robust to differences in both the number and immediacy of actions, where legislators whose decisions strongly and consistently predict others' are considered influential – even on a small number of bills – relative to those whose behavior does not. This measurement allows influence to be modeled as a comprehensively relational activity – occurring among all members of the legislature – rather than as an individual or dyadic trait.

2.3 Explaining Influence Ties

The resulting networks represent a likely set of ties formed from a complex combination of legislators' individual characteristics as well as district-level and institutional attributes that jointly condition their interactions. With a sufficiently large sample, the NetInf algorithm can accurately infer a potential underlying network. However, the relationships it identifies result from a wide range of predisposing factors. As a result, networks produced by this method in isolation are unable to offer an explanation as to how the ties within it were formed. To overcome this limitation, I use the NetInf output as a dependent variable in two different modeling strategies to evaluate the qualities of influential actors across states, by party, and over time.

2.4 Pooled State Analysis

To establish the general correlates of influence, I first estimate a multilevel negative binomial count model of legislators' out-degree, or the number of times they influenced other actors as classified by the NetInf output of each state-chamber-biennium.[5] As the dependent variable, I calculate a measure of individual out-degree, or number of influence ties *sent* by each participant in a given session. In this analysis, I use a pooled sample of the 4,627 legislator-level observations which occurred over ten years. I use this approach to assess the conditional effects of institutional and district-level variables: for example, the overall effect of term limits and party composition on cue preferences. These findings illuminate the qualities shared by influential officials in addition to informing the overall utility of cue-taking as a means to information across contexts.

In this model of legislators' out-degree, I include independent variables to test four main hypotheses regarding the general patterns of tie formation: H_1, moderate legislators will be more influential than ex-

[5]Justification for this model selection can be found in the appendix.

tremists, H_2, which tests the contextual aspects of legislative composition on the frequency of ideological influence, and $H_4 - H_5$, comparing the institutional effects of term limits and professionalism on elite stature.

To assess H_3, the interactive effect of ideology and chamber composition on out-degree, I first create a relative measure of ideological extremity by subtracting each member's score from their respective chamber medians. This variable is multiplied with the standard deviation of chamber ideology measure legislators' relative polarity, conditional on the overall level of ideological variation in each state-chamber-session. Term limits are coded as dichotomous (in effect/not), and legislative professionalism is measured using Squire's (2017) index. Finally, I operationalize a measure of electoral safety using the vote share each legislator received in the election most proximate to each session. For appointed officials, I use the vote share won by the candidate most recently elected to that seat. These data come from Klarner's (2020) and earlier state legislative returns; when necessary, missing observations were filled in using publicly available information found on Ballotpedia, the National Council of State Legislators (NCSL), and states' own archives.

In addition to the independent variables described above, I include controls as warranted by existing work to account for other factors that correlate with legislative influence and out-degree. At the individual level, these terms include legislators' race (coded as white/non-white), gender (female/non-female), length of tenure in office, majority party affiliation, and party leader- and committee chairmanship (leader or chair/non-leader or non-chair). With the exception of race and gender, these data were collected from each state's online legislative archive. To code legislators' race and gender, I cross referenced newspaper articles, campaign statements, and legislators' membership to minority caucus rolls. Both models estimated in this portion of the paper include year fixed effects, individual random effects, and state-chamber random effects, with standard errors clustered by state-year.

2.4.1 Results

The results of these models, shown in table 1, find mixed support for the expected outcomes. Both columns of table 1 report results for negative binomial count specifications, where positive coefficients indicate that higher values of that variable are associated with greater influence, while negative coefficients illustrate the inverse. Columns 1 and 2 report results for models estimated using a pooled sample of legislators, while columns 3 through 5 decompose the effects for Republican and Democratic partisans, respectively. Overall, these results support my theoretical expectations with interesting exceptions.

Traditional theories of Congressional and other political bargaining (e.g. Krehbiel 1998, 1991) as well as statistical models (e.g. Buccianeri, Volden and Wiseman 2020) typically support the so-called "median

legislator" perspective. This hypothesis is tested in model 1, shown in column 1 of table 1. In this model, I compare legislators' relative distance from their chamber medians with out-degree, or number colleagues they influenced. Surprisingly, although the coefficient is negative, it is not significant. Research on similar outcomes suggests that it may result from differences in an omitted contextual factor (e.g. Jackman 2014).

I test the conditional effect of one potential explanation, the ideological composition of the legislative body on ideologues' influence, in model 2 (found in column 2 and the top graph of figure 1). Contrary to the previous results, these findings are positive and significant effect, demonstrating that legislators far from their chamber's median ideal point are more influential when their colleagues' preferences are diverse. This result is in line with my theory that heterogenous preferences result in unexpected alliances, possibly in the interest of party goals or productivity. Columns 3 and 4 decompose this effect by party, showing that the observed result is primarily driven by Republican cue-giving. Although this interaction is positive in both partisan models, it is only significant for Republicans and with a larger substantive effect. The second empirical portion of this paper undertakes further contextual analysis of these results.

[Insert Figure 1 here]

Unlike ideology, both institutional variables fall short of statistical significance though in the expected direction. Looking first at professionalism, I find that members of better resourced legislatures tend give more cues than those in less professional contexts. Likewise, the coefficient for term limits is negative, possibly due to the absence of electoral incentives or reduced member visibility. Together, these results suggest marginal support for the hypothesis that differences in institutional context reflect levels of majoritarianism and consequently, party importance. Given that the coefficient for committee chairs is positive and significant, while the effect for party leaders is not, this outcome may also reflect a reduced overall importance of majoritarian considerations, as found in diverse legislative settings (e.g. Calvo and Sagarzazu 2011). These findings align with conclusions made in existing research in addition to the general theoretical expectation in this paper: high levels of ideological diversity among state-level elites strengthens the influence of committee chairs at the expense of party leadership.

Finally, these results demonstrate a number of results that fall outside the theoretical scope of this project but offer insight to the nature of political influence. First, these analyses reach the unsurprisingly conclusion that members of the majority party are more influential than those in the other. In addition, results also show that female legislators are significantly more influential than males – particularly among Democrats.

This outcome is consistent with recent scholarship on Congressional networks showing that gender is a more salient political identity among Democratic elites, second only to partisanship in importance (Neal, Domagalski and Yan 2022).

2.5 Within-State Networks

The count models above describe the general correlates of influence, but obscure important differences in its application across contexts. In this portion of the paper, I use a different empirical approach to directly test legislators' preferences for ideological extremism when taking cues from co-partisans. In this case, interactions among Republicans are expected to evidence directional influence, following the lead of conservative extremists. Among Democrats, influence networks should reflect spatial cues that result in ideological stagnation. This secondary analysis builds on the results above by illustrating the importance of extreme cues to co-partisan influence and the nature of its evolution with both parties across states and over time.

To isolate interactions between co-partisans over time, data for each state-chamber-session are analyzed independently. As above, dependent variables are operationalized using a different form of the `NetInf` results. Here, influence is measured as an interpersonal outcome between legislators, where pairs of cue-givers and -takers can form a chamber-encompassing directed network. For the dependent variable, influence is coded dichotomously to indicate the presence or absence of an influence tie. If the `NetInf` algorithm predicted edge, or tie, between legislators, the observation is coded as one. All other observations are coded as zero. Unlike conventional dependent variables, however, interdependence among observations in network data violates the assumption of conditional independence made by linear regression (Cranmer and Desmarais 2011). As a result, I follow Kirkland (2012, 2014) in using the Latent Space Model (LSM) of social networks, which offers several distinct benefits to modeling network outcomes relative to possible alternatives (Hoff, Raftery and Handcock 2002).

Unlike potential alternatives, LSMs model structural covariates while avoiding problems of poor fit or non-convergence typical of exponential random graph models (ERGMs). LSMs control for conditional dependence using a k-dimensional "latent social space," which is created using the observed ties as specified in the dependent variable. The placement of actors in this space reflects the distance between them; people tied to one another or who share a common transitive partner are close together, while those with different interlocutors are far apart. The distance between each actor in the network is measured as the euclidean distance between them in the "latent space," though this parameter is not specified by the researcher. In-

stead, this parameter reflects the observed connections in the original network: pairs of actors who engage with common partners are placed close together, while those connected through longer paths will be far apart (Cranmer, Leifeld, McClurg and Rolfe 2016). This difference relaxes or eliminates the structural and theoretical assumptions made by the ERGM framework, which renders those models prone to degeneracy and bias (Lusher, Koskinen and Robins 2013).[6]

The models reported in tables 2–13 are Bernoulli Latent Space Models where the dependent variable is a directed adjacency matrix describing the relationship between pairs of legislators, i and j for each state-chamber-biennium by party. Directed ties are those in which the sender and receiver – or cue-giver and cue-taker, respectively – can be discerned and those in which the presence of a tie does not imply reciprocity. In other words, a legislator i can influence her colleague j without being influenced by j herself. In this case, the direction of the tie is clear; it is sent from $i \rightarrow j$. An adjacency matrix describes relationships among individuals in a network, where actors are represented as row and column entries. In this case, entries denotes the presence or absence of influence among legislators as predicted by `NetInf` algorithm. If this process determined influence between two individuals, the intersection of their corresponding row and column entry is coded as one. If they do not interact, their intersection is zero. Entries along the main diagonal correspond to the relationship between a legislator and him or herself, and are coded as zero accordingly.

I include covariates for each legislator's major party affiliation (coded as separate dichotomous indicators, Republican/Democrat), race (coded as white/nonwhite), gender (female/non-female), and the distance between their ideal point and the chamber's median value (Shor and McCarty 2011). In addition, I include four theoretically motivated control measures to assess other factors typically associated with legislative influence. First, because representatives with long political careers tend to be more influential than juniors, consequent of their greater degree of visibility and higher levels of political effectiveness (e.g. Volden, Wiseman and Wittmer 2013; Battaglini, Sciabolazza and Patacchini 2020), I include a measure of legislators' tenure in office. Finally, I include binary indicators for committee chairmanship and party leadership, which are coded as chair/non-chair and leader/nonleader, respectively.[7] Finally, legislators on the same

[6]Before pursuing the specifications presented here, I estimated identical models using ERGMs,. The primary benefit of this approach is its sophisticated structural modeling capabilities. However, goodness-of-fit and MCMC diagnostics showed that networks simulated by most models did not fit the observed data, causing degeneracy and unreliable estimates. As a result, I do not report ERGM results.

[7]These data, as well as historical committee membership information, were gathered from each state's

committee tend to share a high level of information with one another (Fong 2020) perhaps as a result of shared substantive interests, professional proximity, or deference to a colleague's expertise (Curry 2018). To control for influence among legislators with shared committee assignments, I include a network covariate for shared committee assignment operationalized similar to the dependent variable in matrix form (e.g. Kirkland 2012). In this case, however, entries are undirected. Here, values of one indicate shared assignment during that session and zero otherwise.

To test co-partisans' preferences for ideological cues, I use a measure of relative polarization for each individual and computed the absolute difference for each pair of legislators affiliated with the same party. This variable allows for partial pooling among same-party officials, approximating a multilevel model by clustering observations at the party level. To do this, I operationalize a measure of polarization using Shor and McCarty's (2011, 2018) ideal point scores. Here, I subtracted each legislator's ideal point from the median in each session, to create a measure of ideological distance for each representative. Next, I created a matrix to represent all possible dyads, where each (i, j) entry represents the relative distance between legislators i and j. Separately, I created a matrix of co-partisan legislators, where entries are coded as one if an (i, j) pair share party affiliation in that session and zero otherwise. Finally, I multiplied the matrices together to create a relative measure of within-party polarization, calculating it for each possible pair of legislators affiliated with the two parties. This interaction term partially pools same-party legislators who share an influence tie. As a result, I estimate two models – one for both parties in each state-chamber-session – to compare results between them.

The quantity of interest, in this case, is the dyadic behavior of same-party legislators in a given state-chamber-session. I measure this outcome using the absolute difference between each legislator's distance from the chamber median. This models the degree of similarity between cue-givers and cue-takers with respect to how extreme they are relative to the chamber as a whole. Using the `latentnet` package in R , this is done by including the matrix of co-partisan ideological distance described above as a dyadic covariate. This specification produces three statistics corresponding to specific patterns of interaction: mutual (reciprocated) ties, i $\rightarrow$ j (cue-taker effects), and j $\rightarrow$ i (cue-giver effects). Technically speaking, these statistics refer to distinct geometric parts of the observed outcome matrix, where mutual ties represent reciprocated (undirected) ties, i $\rightarrow$ j to the directed upper triangle, and j $\rightarrow$ i the directed lower. I follow Lizardo and Jilbert (forthcoming) in parallel, contextual interpretation of these latter two terms.

online legislative archive.

2.5.1 Results

The primary benefit of this second approach is its unique capability to illustrate the structure and direction of systematic relationships. In this section, I summarize the general findings of 120 independently estimated models, one for each party in a given state-chamber-session. Given the breadth of results generated by these models, I focus on the role of ideology in structuring partisans' relationships. More detailed results can be found in tables 2 – 18 and figures 2 – 8.[8] In addition, because systematic results are confined to lower chambers, interpretation is focused there.

Contrary to the expected results, findings show that influence among Republicans tends to occur between ideologically proximate partisans, reflecting spatial cue evaluations. Democrats, in the few cases where significant results are observed, engage with others relatively far from their own ideal point. Generally, results for Republicans are stronger and more consistent, while Democrats show little evidence of a cohesive party preference for ideological cues. Taken together, I conclude that directional movement by the Republican Party – where present – is likely achieved at least partially through systematic spatial interactions over time. Keeping with exiting research, I find a positive effect for influence among committee chairs and legislators with at least one shared committee assignment.

The quantity of interest is interpreted using three statistics produced by one term included in the model specification. In this case, that variable describes the relative degree of ideological similarity between co-partisan dyads in which influence occurs. Because this variable is measured as an absolute difference, negative coefficients indicate that actors have similar levels of relative polarization, and positive values correspond to dyads where actors' ideal points are far apart. As a result, negative coefficients generally approximate spatial influence, while positive values correspond to directional behacior. In each table and plot, reciprocated ties appear first and they are also the most straightforward, describing relationships in which a cue-taker also influences a cue-giver. In other words, both actors in a given dyad take cues from each other.[9] The second quantity describes unidirectional relationships where the cue-giver only influences the cue-taker. In this case, results describe the polarity of cue-givers relative to those they influence. Because

[8]Some models of co-partisan behavior produced outlying coefficient estimates. This occurred in six of 120 models presented. Results for these cases are not interpreted and are omitted from the relevant visualizations to reduce bias and improve legibility.

[9]This description alludes to conclusions drawn from dyadic estimations, rather than those where influence is defined across multiple dyads, as here.

these coefficients are calculated using the absolute difference between each person in a dyad, negative values indicate that influential legislators tend to be relatively similar to those affect, while positive values illustrate difference. The final term describes the relative polarization of cue-takers relative to those by whom they are influenced.

In most cases with statistically significant results, effects are strongest for reciprocated ties. Given the importance of ideological cohesion to political bargaining and collegial trust, this is somewhat unsurprising. However, systematic differences in the direction of these coefficients show that Republicans' preferences for ideological influence have changed drastically since 2009 in many states. Among Democrats, however, analogous coefficient values show movement toward zero over time, if at all. These observations suggest that Republican partisans in some contexts developed a preference for ideological cues that is absent among Democrats. In most cases, evidence of party-based behavior by both groups is stable across all three statistics (mutual and asymmetric ties). In other words, while effects are strongest for reciprocated ties, that pattern of behavior internally generalizable within each case over time. This outcome suggests that evidence of differential partisan activity may appear earlier or be most apparent among reciprocated relationships between party members.

In most cases, behavior by Republicans and Democrats reflect similar patterns across states over time. Specifically, coefficient estimates for Republicans typically begin at zero or a small positive value. In many cases, estimates of the same quantity among Democrats is statistically indistinguishable from Republicans' in 2009, typically showing little impact of ideology on cue preference. Over time, however, these positions diverge – sometimes markedly – resulting in substantial differences between the parties by 2018. In nearly every case, coefficient estimates for Republicans moves systematically (though not always significantly) from their initial values toward zero, before eventually inflecting across the horizontal axis and becoming negative. These results are clearest in the lower houses of Illinois, Minnesota, and to a lesser extent Oklahoma and Nebraska. Here, there is an obvious and significant shift among Republicans in all three dyadic metrics, showing that cue preferences changed slowly but substantially over time. The eventual result of this behavior for Republicans represents consolidation among ideologically proximate, but increasingly extreme dyads. At the same time, estimates for Democrats illustrate the reverse: usually beginning at null or small negative values, there is little evidence of significant change over time. Where evolution does occur, outcomes are modest and positive, indicating directional preferences. While Republican coalitions eventually reflect a greater emphasis on ideological influence facilitated by homogeneity, that heuristic is unable to

reach the same salience among groups of Democrats.

Interpreted with context from party and chamber-level descriptive information, it is clear that cases with strong evidence of these relationships are conditioned by the ideological composition of both each party and its relationship to the chamber as a whole. In Minnesota, for example, results for both parties are relatively similar for partisans in both houses over time. The same is broadly true of dyads in Illinois and Indiana. Looking at tables 14 and 15, which contain descriptive statistics for each ideal point distribution, these differential outcomes may be the result party membership. In Illinois, Republicans become less diverse and more conservative overtime. In Minnesota, the magnitudes of change and consolidation in partisan ideology are similar, however the coefficients fluctuate closer to its initial values by 2018. In all of these cases, this observation suggests that party discipline s higher than in states without a robust pattern, where Republicans form relationships so systematically as if to appear coordinated. It is possible that coalitions of Democrats are formed with a similar effort, perhaps unsuccessfully or with respect to some non-ideological quality.

Only Indiana shows countervailing effects with no immediately recognizable explanation. Descriptive measures show almost no change in party medians or standard deviation over time. If partisan behavior in this state was theoretically similar to its counterparts elsewhere, then stagnation in the parties' ideological composition and the legislature itself would produce non-significant effects for both parties. However, the opposing effects in Indiana are nonetheless strong. There are many potential causes of this outcome, most of which fall beyond the scope of this paper.

Using the information available, several differences seem relevant. First, coefficients for several variables are opposite of most other states. This is especially true for shared committee membership, committee chairs, and seniority. Notably reversed in the majority of cases, committee chairs in Indiana are not influential, although shared committee membership is. In addition, effects for seniority are positive, while in most other settings findings are null or negative. Together, these observations allude to an idiosyncratic but omitted institutional factor that impacts the foundations of formal power substantially in that state but not in the other six. Finally, it is worth noting that the distribution of Republicans' ideology is superlatively narrow in Indiana. As a result, ideological differences between cue-givers and cue-takers may not be as strong as they initially appear. In other words, seemingly divergent patterns of cue-taking among Indiana Republicans could actually reflect dyads that would be proximate in other settings. In any case, the small variance among partisan behavior in Indiana renders cue-sharing among truly dissimilar actors unlikely.

Collaboration between ideologically proximate elites is a nearly universal characteristic of legislative

networks in a diversity of contexts.(e.g. **??**) My findings are similar, but evidence asymmetric application of this rule between members of the two major parties. Overall, Republicans demonstrate a monotonically increasing preference for homophily at all three levels of dyadic interaction, while Democrats show no such preference (Neal, Domagalski and Yan 2022). Broadly speaking, this pattern implies that directional movement by parties on the ideological spectrum may not result from partisans engaging in directional decision-making, as hypothesized. Instead, systematic spatial cue-taking appears to be the primary contributor to this outcome across these seven states. However, initial values of party heterogeneity among Republicans is low in 2009 and only decreases by 2018. Practically speaking, this means that while Republicans are influenced by ideologically similar cues, the range over which those cues originate is narrow. As a result, a lack of diversity in co-partisans' ideal points may lead to an improved cue-sharing environment, even when influence occurs between polar members.

As evidenced by the descriptive measures in tables 14 and 15, both parties in most lower houses maintain similar levels of ideological heterogeneity across the period from 2009 to 2018. However, the composition of party membership changes in certain cases. Specifically, while the standard deviation of ideal point for both parties is relatively stable over time, the median of this measure often increases among Republicans. Conversely, Democrats' median ideal point shows little change in the ideological composition of its members, where party-level statistics show a modest increase in ideological diversity or median preferences over time. For Republicans, the same statistics show consolidation in a conservative direction. Together, these findings suggest that party-level movement toward a more extreme ideal point can be affected by greater levels of ideological homophily in co-partisans' influence interactions. In other words, a directional outcome can result from spatial behavior. More generally, these results indicate that systematic election of more extreme partisans plays an important role in party development. Future research should undertake questions of candidate recruitment, campaign finance, and other potential factors related to this phenomenon (e.g. Thomsen 2014).

In most cases, coefficient estimates for theoretically significant controls are supportive of conclusions made in existing research. As noted above, committee chairs in most states are influential and often substantially moreso than party leaders. This outcome is frequently observed in studies of American legislatures (e.g. Rhode 1991). In addition, coefficient estimates for influence occurring between members with at least one shared committee assignment are positive and significant in most states, as found among members of Congress (Curry 2018; Fong 2020). In many cases, effects for vote share are significant and negative, which

unsurprisingly shows that representatives facing high levels of electoral competition may engage in low-cost position taking like cosponsorship at higher rates than those in safe districts. As a result, influence is likely a more useful heuristic for those officials. Though somewhat volatile both within and across states, results for gender and race illuminate interesting patterns. Generally speaking, these coefficients are negative and imply that cross-gender and race influence is frequent. Given that the proportion of women and non-white legislators is small in most states (Holman and Mahoney 2018), this outcome could reflect an inability for influence among coalitions of women and minorities. Given the high level of variation in this result, however, more research should be done on the mechanism and impact of these qualities.

[Insert Figure 2 here]

[Insert Figure 3 here]

[Insert Figure 4 here]

[Insert Figure 5 here]

[Insert Figure 6 here]

[Insert Figure 7 here]

[Insert Figure 8 here]

3 Conclusion

This paper explores the concept of political influence, a principal method of collective decision-making used by elected officials. While informal, I argue that this process has substantial implications on the trajectory of American politics, and particularly party development. Relevant scholarship in both American and comparative politics demonstrates overwhelming evidence to support elites' use of this heuristic, a finding robust to differences in sampling procedures, methodology, and temporality (e.g. Kingdon 1973; Matthews and Stimson 1975; Box-Steffensmeier, Arnold and Zorn 1997; Box-Steffensmeier, Ryan and Sokhey 2015). As a result, it is likely that this practice plays some role in the contemporary polarization of American parties, although extant work has so far been unable to establish a quantitative relationship.

To fill theoretical vacancies left by existing research, this paper develops a comprehensive account of several potential sources of variation in cue preference by integrating three analytical factors with a demonstrated impact on elite behavior: individual, institutional, and electoral incentives. Using this foundation, I

analyze the role of ideology in co-partisans' cue-giving and -taking behavior over ten years in seven state legislatures. Findings generally support recent theories of asymmetric polarization, with Republicans' collaboration patterns showing substantial evidence of ideological conditioning. Behavior among Democrats shows little evidence of a systematic relationship between these factors. Furthermore, sample descriptives show that Republicans in most states consolidated in a conservative direction over the period between 2009 and 2018, while values for Democrats remained relatively stable. Together, this evidence suggests that partisans' differential preferences for ideological influence may be one contributing factor to ongoing partisan divergence at the elite level.

This research also establishes important correlates of influential behavior, particularly with respect to settings in which ideological extremists influence moderates. Most existing accounts of legislative bargaining rest on the assumption that median players are advantaged by the institutional design of contemporary democracy (Krehbiel 1998). However, party development and other political outcomes in both the U.S. and abroad are incongruous with this theoretical approach, where the success of populism suggests some informal source of non-median cues. To that end, this paper finds that extremists do influence moderate co-partisans, an effect that is amplified by greater ideological diversity rather than deterred by it.

Independent examinations of 120 session-level networks suggest that partisan behavior closely follows the distribution of ideology in party groups relative to the chamber as a whole. My findings suggest that systematic collaboration among ideologically similar, but increasingly extreme Republican legislators may provide a partial explanation for the party's rightward shift. Here, the often narrow distribution of members' preferences increases with rates of cue-taking among ideologically similar actors. Particularly when combined with a small range of member preferences, this behavior effectively approximates spatial cue-sharing, where elites are easily influenced by ideologically proximate co-partisans. Contrary to the hypothesized relationship, however, party-level movement seems to result from systematic spatial decisions made over a long period of time. As a result, aggregate ideological movement occurs almost glacially, eventually resulting in directional aggregate outcomes. This finding is especially convincing after accounting for the changing composition of legislatures and party membership. These results intuitively suggest that directional outcomes by aggregate (party) groups can be achieved through systematic spatial behavior by actors at lower levels. In the long-run, the effect of this practice is theoretically similar to so-called "tipping point" hypotheses (e.g. Shelling 2006), where small, systematic actions by individuals are sufficient to produce macro-level change.

The results of this paper suggest many interesting directions for future scholarship. In particular, these findings allude to the presence of an electoral foundation that synergistically conditions partisan behavior. Future research in American politics should build on this work to account for possible impacts of campaign finance (e.g Thomsen 2014), voter mobilization, and candidate recruitment, among other possible sources of the observed results. In addition, these findings show that ideological extremists are most powerful in heterogenous settings. Scholars of both American and comparative politics should assess the external validity of this finding, particularly in more diverse multiparty settings. Should these results generalize beyond the seven-state context examined here, then a greater focus on the effects of specific institutions (such as term limits, caucuses, and committee procedures) on elite behavior is warranted. Finally, this paper demonstrates a variable impact of gender and racial minority status on political influence. The heterogenous effects of these variables both within and across states imply that qualitative evidence is needed to determine the conditions under which demographic minorities achieve influential status, particularly with respect to bipartisan or caucus-level outcomes (Holman and Mahoney 2018).

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Table 1: Negative Binomial Coefficient Estimates

Sample:	Pooled	Pooled	Republicans	Republicans	Democrats	Democrats
Distance from Median	−0.077*	−0.46***	0.052	−0.513*	0.054	0.031
	(0.043)	(0.123)	(0.09)	(0.301)	(0.067)	(0.221)
Majority	0.193***	0.181***	0.73***	0.78***	0.063	0.068
	(0.049)	(0.049)	(0.122)	(0.124)	(0.098)	(0.108)
Female	0.117***	0.12***	0.071	0.072	0.141***	0.141***
	(0.037)	(0.037)	(0.056)	(0.056)	(0.05)	(0.05)
Nonwhite	−0.042	−0.013	0.089	0.088	−0.068	−0.067
	(0.05)	(0.051)	(0.114)	(0.114)	(0.059)	(0.059)
Party Leader	0.045	0.048	0.044	0.041	0.06	0.06
	(0.04)	(0.04)	(0.053)	(0.053)	(0.059)	(0.059)
Committee Chair	0.156***	0.153***	0.125***	0.125***	0.177***	0.177***
	(0.029)	(0.029)	(0.039)	(0.039)	(0.043)	(0.043)
Tenure	0.005**	0.005**	0.011***	0.011***	−0.001	−0.001
	(0.002)	(0.002)	(0.004)	(0.004)	(0.003)	(0.003)
Electoral competition	0.019	0.025	−0.027	−0.026	0.027	0.027
	(0.075)	(0.075)	(0.099)	(0.099)	(0.115)	(0.115)
Term Limits	−0.588*	−0.593*	−0.858**	−0.88**	−0.563*	−0.562*
	(0.308)	(0.306)	(0.4)	(0.419)	(0.329)	(0.328)
Professionalism	2.898	2.944	4.368	5.001	4.29	4.252
	(2.531)	(2.517)	(3.293)	(3.479)	(2.662)	(2.672)
Chamber Heterogeneity	0.217	0.001	−0.248	−0.331	0.28	0.247
	(0.288)	(0.296)	(0.393)	(0.397)	(0.409)	(0.503)
Heterogeneity x Distance from Median		0.405***		0.617**		0.026
		(0.122)		(0.313)		(0.236)
Intercept	1.09*	1.286**	0.792	0.723	0.716	0.749
	(0.641)	(0.64)	(0.847)	(0.882)	(0.713)	(0.772)
BIC	29432.09	29429.46	16634.76	16638.75	12847.38	12854.97
N	4626	4626	2625	2625	2003	2003

Note:*p<0.1;**p<0.05;***p<0.01

Note:All models include state/chamber random effects and year fixed effects. Standard errors are clustered by state/year.

Table 2: Latent Space Coefficient Estimates of Alaska Networks (Lower)

	2009-2010 (R)	09-10 (D)	11-12 (R)	11-12 (D)	13-14 (R)	13-14 (D)	15-16 (R)	15-16 (D)	17-18 (R)	17- 18 (D)
Constant	−0.084	−0.016	0.228	−0.042	−0.553	−0.65*	0.054	−0.65	0.434	0.538
	(0.441)	(0.465)	(0.469)	(0.497)	(0.364)	(0.37)	(0.408)	(0.433)	(0.349)	(0.353)
Same Committee	−0.228	−0.279	0.111	0.11	0.266	0.318*	0.41**	0.358*	−0.096	−0.106
	(0.186)	(0.189)	(0.179)	(0.181)	(0.163)	(0.164)	(0.19)	(0.198)	(0.169)	(0.172)
Same Party	0.483**	0.552**	0.795**	1.322***	−0.135	−0.174	0.77***	1.77***	0.564**	0.47**
	(0.222)	(0.274)	(0.319)	(0.347)	(0.181)	(0.188)	(0.26)	(0.248)	(0.206)	(0.194)
Distance to Median	−0.067	−0.029	0.276	0.631*	−0.036	0.052	0.286	1.279***	0.079	0.022
	(0.281)	(0.344)	(0.322)	(0.369)	(0.277)	(0.249)	(0.397)	(0.402)	(0.352)	(0.363)
Same Gender	0.008	0.004	−0.114	−0.129	0.41**	0.429***	−0.244	−0.143	0.128	0.188
	(0.182)	(0.178)	(0.163)	(0.164)	(0.157)	(0.154)	(0.175)	(0.171)	(0.163)	(0.166)
Same Race	0.744***	0.695***	−0.02	−0.142	0.16	0.295	−0.531**	−0.581***	−0.349	−0.357
	(0.23)	(0.24)	(0.25)	(0.26)	(0.184)	(0.183)	(0.22)	(0.219)	(0.231)	(0.234)
Party Leader	0.012	−0.065	−0.538***	−0.575***	0.061	0.136	−0.659***	−0.714***	−0.237	−0.23
	(0.212)	(0.223)	(0.222)	(0.222)	(0.224)	(0.23)	(0.251)	(0.255)	(0.23)	(0.231)
Committee Chair	−0.095	−0.088	0.121	0.177	0.219	0.252	0.042	0.138	−0.202	−0.217
	(0.165)	(0.168)	(0.169)	(0.172)	(0.157)	(0.164)	(0.193)	(0.195)	(0.156)	(0.161)
Seniority	−0.07***	−0.072***	−0.054**	−0.052*	0.02	0.024	−0.001	0.002	0.03	0.029
	(0.026)	(0.026)	(0.027)	(0.027)	(0.018)	(0.018)	(0.025)	(0.025)	(0.021)	(0.021)
Vote Share	−1.135**	−1.101**	−0.198	−0.117	−0.13	0.004	0.971	1.178*	0.048	0.274
	(0.492)	(0.488)	(0.526)	(0.544)	(0.478)	(0.481)	(0.634)	(0.635)	(0.562)	(0.568)
Same Party x Distance to Median (mutual)	−2.703	−7.049***	0.902	−4.532***	1.204*	0.956	1.963	−23.261***	−1.609	−1.75
	(1.987)	(2.992)	(2.022)	(1.723)	(0.623)	(0.923)	(1.284)	(7.293)	(1.332)	(1.094)
Same Party x Distance to Median (i→ j)	0.629	−0.094	0.416	−1.288	0.11	1.458***	0.664	−3.415***	−1.227	−0.672
	(1.045)	(0.686)	(1.221)	(0.873)	(0.384)	(0.509)	(0.759)	(0.961)	(0.769)	(0.632)
Same Party x Distance to Median (j→ i)	0.943	0.446	2.06*	−0.468	0.598*	1.495***	1.269*	−3.852***	−1.453*	−0.195
	(1.029)	(0.653)	(1.122)	(0.792)	(0.359)	(0.52)	(0.735)	(1.056)	(0.807)	(0.601)
BIC (Overall)	1484.32	1478.92	1450.83	1445.36	1634.30	1639.91	1314.87	1288.28	1504.55	1510.07
BIC (Likelihood)	1323.19	1314.32	1276.09	1284.60	1502.16	1493.01	1126.88	1119.97	1273.57	1278.17
BIC (Latent Positions)	161.13	164.60	174.74	160.76	132.14	146.89	187.99	168.32	230.98	231.90
N	254	254	264	264	312	312	219	219	265	265

Note: *p<0.1; **p<0.05; ***p<0.01

Table 3: Latent Space Coefficient Estimates of Alaska Networks (Upper)

	2009-2010 (R)	09-10 (D)	11-12 (R)	11-12 (D)	13-14 (R)	13-14 (D)	15-16 (R)	15-16 (D)	17-18 (R)	17- 18 (D)
Constant	0.927	0.645	2.488***	2.496***	3.278***	2.598***	−0.931	−1.505	1.325	0.715
	(0.794)	(0.811)	(0.73)	(0.76)	(1.001)	(0.966)	(1.066)	(0.953)	(0.894)	(0.815)
Same Committee	0.666*	0.752**	0.401	0.472	−0.01	−0.112	0.084	0.142	0.588**	0.35
	(0.343)	(0.321)	(0.315)	(0.32)	(0.282)	(0.292)	(0.33)	(0.328)	(0.305)	(0.28)
Same Party (1 = both Republicans/Democrats)	0.327	0.037	−0.016	−0.099	0.433	2.333***	0.689	0.745	0.895	1.182**
	(0.44)	(0.483)	(0.429)	(0.397)	(0.708)	(0.692)	(0.931)	(0.822)	(0.596)	(0.549)
Distance to Median (Absolute Difference)	−0.713	−0.841	−1.247	−1.344	−0.759	0.08	0.14	0.133	0.581	0.606
	(0.601)	(0.633)	(0.738)	(0.808)	(0.552)	(0.535)	(0.645)	(0.608)	(0.574)	(0.487)
Same Gender (1 = both male/female)	−0.508	−0.247	−1.012***	−1.041***	−0.498	−0.574	−0.183	−0.194	−0.332	−0.167
	(0.416)	(0.359)	(0.338)	(0.35)	(0.325)	(0.363)	(0.353)	(0.337)	(0.328)	(0.285)
Same Race (1 = both white/non-white)	1.049***	0.867**	0.216	0.267	−0.55	−0.703*	0.518	0.974	−0.214	−0.361
	(0.353)	(0.358)	(0.359)	(0.387)	(0.433)	(0.436)	(0.627)	(0.706)	(0.39)	(0.388)
Party Leader (1 = both leaders/non-leaders)	0.559	0.675*	−0.152	−0.072	0.146	0.224	1.285**	1.269***	−0.634	−0.345
	(0.369)	(0.357)	(0.444)	(0.437)	(0.413)	(0.44)	(0.458)	(0.418)	(0.485)	(0.391)
Committee Chair (1 = both chairs/non-chairs)	−0.003	−0.155	0.825**	0.918**	0.043	0.097	0.384	0.255	0.626*	0.452
	(0.312)	(0.323)	(0.396)	(0.376)	(0.312)	(0.311)	(0.397)	(0.37)	(0.334)	(0.283)
Seniority (Absolute Difference)	0.014	0.024	0.004	0.016	−0.017	−0.007	0.022	0.018	−0.037	−0.03
	(0.046)	(0.045)	(0.051)	(0.053)	(0.031)	(0.032)	(0.032)	(0.029)	(0.03)	(0.028)
Vote Share (Absolute Difference)	−0.232	0.517	−2.488**	−2.577***	−3.047*	−2.683	0.072	0.311	1.368	0.964
	(0.866)	(0.997)	(0.926)	(0.934)	(1.515)	(1.542)	(1.168)	(1.125)	(1.04)	(0.94)
Same Party x Distance to Median (mutual)	−13.199***	−2.142	−1.052	−1.062	3.77*	−12.561***	2.819	4.103	2.22	−1.507
	(5.112)	(2.602)	(2.817)	(2.865)	(2.331)	(3.463)	(2.491)	(3.643)	(2.522)	(2.263)
Same Party x Distance to Median (i→ j)	−7.764**	0.034	−29.567***	−0.841	−0.719	−3.627**	0.866	4.062*	3.689**	−0.105
	(3.791)	(1.492)	(15.708)	(1.971)	(1.755)	(1.799)	(1.815)	(2.422)	(1.652)	(1.361)
Same Party x Distance to Median (j→ i)	0.989	−0.226	1.795	2.992*	1.791	−4.551**	3.832**	3.714	5.302***	−3.354
	(1.716)	(1.485)	(1.514)	(1.569)	(1.561)	(1.976)	(1.673)	(2.607)	(1.608)	(2.345)
BIC (Overall)	579.29	597.97	516.27	519.50	552.77	554.03	496.30	506.40	603.78	618.17
BIC (Likelihood)	451.37	473.52	412.30	417.04	446.35	434.33	400.65	409.36	496.10	519.00
BIC (Latent Positions)	127.92	124.45	103.97	102.46	106.42	119.70	95.66	97.04	107.68	98.68
N	136	136	132	132	177	177	104	104	161	161

Note:*p<0.1;**p<0.05;***p<0.01

Table 4: Latent Space Coefficient Estimates of Illinois Networks (Lower)

	2009-2010 (R)	09-10 (D)	11-12 (R)	11-12 (D)	13-14 (R)	13-14 (D)	15-16 (R)	15-16 (D)	17-18 (R)	17- 18 (D)
Constant	−0.064	−0.229	−0.626***	−0.734***	−0.108	−0.103	−0.415***	−0.419***	−0.500***	−0.428***
	(0.128)	(0.137)	(0.146)	(0.154)	(0.139)	(0.133)	(0.112)	(0.115)	(0.118)	(0.122)
Same Committee	0.243***	0.248***	0.357***	0.353***	0.263***	0.259***	0.195***	0.194***	0.290***	0.289***
	(0.050)	(0.050)	(0.055)	(0.056)	(0.049)	(0.047)	(0.049)	(0.049)	(0.045)	(0.045)
Same Party (1 = both Republican/Democrat)	1.026***	1.267***	0.932***	1.097***	0.497***	0.494***	1.049***	1.057***	0.899***	0.752***
	(0.067)	(0.071)	(0.070)	(0.078)	(0.101)	(0.100)	(0.063)	(0.072)	(0.077)	(0.089)
Distance to Median (Absolute Difference)	−0.406***	0.000	−0.277**	−0.037	−0.284***	−0.212*	−0.290***	−0.271**	−0.148*	−0.315**
	(0.097)	(0.112)	(0.093)	(0.099)	(0.076)	(0.099)	(0.077)	(0.100)	(0.070)	(0.116)
Same Gender (1 = both female/male)	0.028	0.025	0.014	0.008	0.321***	0.323***	0.210***	0.209***	−0.005	-0.002
	(0.047)	(0.048)	(0.065)	(0.067)	(0.050)	(0.051)	(0.047)	(0.046)	(0.047)	(0.046)
Same Race (1 = both white/non-white)	0.245*	0.248*	0.458***	0.471***	0.223**	0.220**	0.250***	0.247***	0.377***	0.355***
	(0.085)	(0.085)	(0.064)	(0.064)	(0.067)	(0.067)	(0.064)	(0.064)	(0.059)	(0.059)
Party Leader (1 = both leaders/non-leaders)	−0.055	−0.053	0.208*	0.211*	0.040	0.042	0.008	0.010	0.198**	0.209***
	(0.082)	(0.083)	(0.089)	(0.089)	(0.060)	(0.060)	(0.065)	(0.065)	(0.063)	(0.063)
Committee Chair (1 = both chairs/non-chairs)	−0.028	−0.022	−0.201***	−0.205***	0.051	0.048	−0.111*	−0.115*	−0.029	−0.031
	(0.050)	(0.051)	(0.059)	(0.061)	(0.061)	(0.063)	(0.054)	(0.054)	(0.060)	(0.060)
Seniority (Absolute Difference)	0.002	0.003	0.008	0.008	0.004	0.004	0.016***	0.016***	0.013***	0.014***
	(0.004)	(0.004)	(0.006)	(0.006)	(0.003)	(0.003)	(0.003)	(0.003)	(0.003)	(0.003)
Vote Share (Absolute Difference)	−0.150	−0.177	−0.546**	−0.546**	−0.335**	−0.301*	−0.287*	−0.279*	−0.292*	−0.293*
	(0.138)	(0.137)	(0.182)	(0.186)	(0.127)	(0.127)	(0.141)	(0.141)	(0.129)	(0.131)
Same Party x Distance to Median (mutual)	1.470***	−1.240***	0.871*	−0.603**	−0.007	−0.248	−0.056	−0.075	−1.432**	0.450
	(0.426)	(0.273)	(0.356)	(0.233)	(0.364)	(0.243)	(0.361)	(0.249)	(0.448)	(0.272)
Same Party x Distance to Median (i→ j)	0.016	−0.952***	−0.733**	−0.664***	−1.298***	−0.368**	−0.402	−0.235	−1.413***	−0.052
	(0.291)	(0.157)	(0.244)	(0.137)	(0.267)	(0.136)	(0.244)	(0.140)	(0.292)	(0.150)
Same Party x Distance to Median (j→ i)	1.310***	−0.243	0.559**	−0.215	0.353	0.107	0.118	0.109	−0.218	0.260
	(0.272)	(0.152)	(0.216)	(0.129)	(0.222)	(0.130)	(0.229)	(0.136)	(0.255)	(0.147)
BIC (Overall)	13847.35	13837.46	13370.04	13421.03	13587.09	13623.08	13897.49	13876.93	14670.39	14686.66
BIC (Likelihood)	13016.17	13009.23	12471.0	12533.07	12814.95	12854.98	13169.48	13140.77	13914.69	13939.35
BIC (Latent Positions)	831.18	828.23	899.03	887.95	772.14	768.10	728.01	736.16	755.70	747.31
N	3519	3519	2950	2950	3194	3194	3324	3324	3549	3549

Note: *p<0.1; **p<0.05; ***p<0.01

Table 5: Latent Space Coefficient Estimates of Illinois Networks (Upper)

	2009-2010 (R)	09-10 (D)	11-12 (R)	11-12 (D)	13-14 (R)	13-14 (D)	15-16 (R)	15-16 (D)	17-18 (R)	17- 18 (D)
Constant	0.680***	0.545**	−0.265	−0.093	0.015	0.286	0.357	0.777**	0.642*	0.870**
	(0.211)	(0.219)	(0.225)	(0.225)	(0.429)	(0.486)	(0.259)	(0.301)	(0.255)	(0.326)
Same Committee	0.165*	0.170*	0.198**	0.212**	0.216	0.089	0.377***	0.417***	0.113	0.130
	(0.093)	(0.094)	(0.100)	(0.099)	(0.378)	(0.393)	(0.106)	(0.105)	(0.103)	(0.101)
Same Party (1 = both Republican/Democrat)	0.792***	0.960***	1.177***	0.910***	0.940***	0.771***	0.704***	0.134	0.883***	0.629*
	(0.131)	(0.170)	(0.132)	(0.154)	(0.154)	(0.235)	(0.160)	(0.255)	(0.163)	(0.274)
Distance to Median (Absolute Difference)	−0.091	0.061	−0.140	−0.445	−0.225	−0.710*	−0.981***	−1.709***	−0.418	−0.712
	(0.209)	(0.279)	(0.225)	(0.295)	(0.258)	(0.391)	(0.25)	(0.372)	(0.237)	(0.38)
Same Gender (1 = both female/male)	−0.224**	−0.209**	−0.165	−0.169	−0.003	−0.014	−0.281**	−0.289**	−0.034	−0.037
	(0.104)	(0.107)	(0.109)	(0.108)	(0.093)	(0.095)	(0.094)	(0.093)	(0.084)	(0.084)
Same Race (1 = both white/non-white)	0.166	0.164	0.472***	0.473***	0.515***	0.573***	0.365**	0.400***	0.304**	0.313**
	(0.103)	(0.108)	(0.105)	(0.111)	(0.107)	(0.112)	(0.114)	(0.119)	(0.115)	(0.117)
Party Leader (1 = both leaders/non-leaders)	−0.038	−0.036	−0.005	−0.001	−0.085	−0.100	0.120	0.134	−0.081	−0.083
	(0.092)	(0.092)	(0.104)	(0.101)	(0.124)	(0.120)	(0.104)	(0.104)	(0.099)	(0.100)
Committee Chair (1 = both chairs/non-chairs)	−0.179*	−0.151	−0.023	−0.028	−0.185**	−0.156*	0.079	0.102	−0.283**	−0.305**
	(0.094)	(0.094)	(0.093)	(0.095)	(0.091)	(0.092)	(0.090)	(0.092)	(0.096)	(0.095)
Seniority (Absolute Difference)	−0.025**	−0.025**	0.005	0.006	−0.023**	−0.023**	0.005	0.003	−0.027**	−0.028**
	(0.011)	(0.011)	(0.011)	(0.011)	(0.01)	(0.011)	(0.011)	(0.011)	(0.009)	(0.009)
Vote Share (Absolute Difference)	0.327	0.320	−0.251	−0.216	−0.442*	−0.430	−0.114	−0.120	0.351	0.400
	(0.271)	(0.273)	(0.276)	(0.274)	(0.256)	(0.263)	(0.227)	(0.234)	(0.223)	(0.235)
Same Party x Distance to Median (mutual)	2.134**	−0.482	−2.129**	0.923	2.496	1.351	−2.032	2.991*	−1.769	1.073
	(0.986)	(0.861)	(1.058)	(0.901)	(2.175)	(1.072)	(1.769)	(1.214)	(1.950)	(1.249)
Same Party x Distance to Median (i→ j)	0.835	−0.797	−3.608***	0.584	−0.186	0.014	−5.571***	1.399*	−2.892*	0.549
	(0.689)	(0.519)	(0.825)	(0.528)	(1.396)	(0.609)	(1.515)	(0.683)	(1.288)	(0.704)
Same Party x Distance to Median (j→ i)	1.059	−0.184	−0.730	0.853	1.606	1.286**	0.835	2.277***	−0.850	1.240
	(0.671)	(0.510)	(0.624)	(0.531)	(1.291)	(0.588)	(1.046)	(0.683)	(1.187)	(0.701)
BIC (Overall)	4065.43	4055.81	3685.90	3711.03	3729.23	3717.48	4097.72	4107.90	4381.72	4381.31
BIC (Likelihood)	3768.15	3752.58	3343.91	3374.82	3449.31	3458.67	3750.12	3756.56	4077.67	4066.34
BIC (Latent Positions)	297.27	303.23	341.99	336.21	279.91	258.81	347.60	351.34	304.05	314.97
N	1144	1144	874	874	932	932	1062	1062	1198	1198

Note: *p<0.1; **p<0.05; ***p<0.01

Table 6: Latent Space Coefficient Estimates of Indiana Networks (Lower)

	2009-2010 (R)	09-10 (D)	11-12 (R)	11-12 (D)	13-14 (R)	13-14 (D)	15-16 (R)	15-16 (D)	17-18 (R)	17- 18 (D)
Constant	-2.458^{***}	-2.333^{***}	0.826^{**}	0.302	0.306	0.401	0.248	-0.285	0.189	0.003
	(0.363)	(0.362)	(0.416)	(0.471)	(0.513)	(0.517)	(0.511)	(0.49)	(0.452)	(0.421)
Same Committee	0.778^{***}	0.807^{***}	0.570^{***}	0.561^{*}	0.676^{***}	0.698^{***}	0.630^{***}	0.642^{***}	0.735^{***}	0.770^{***}
	(0.111)	(0.109)	(0.073)	(0.076)	(0.074)	(0.077)	(0.074)	(0.076)	(0.07)	(0.012)
Same Party (1 = both Republican/Democrat)	0.458^{*}	0.209	-1.282^{***}	-0.568^{*}	-1.098^{***}	-1.126^{***}	-1.065^{***}	-0.425	-0.918^{***}	-0.560^{*}
	(0.208)	(0.335)	(0.274)	(0.319)	(0.393)	(0.388)	(0.369)	(0.349)	(0.337)	(0.318)
Distance to Median (Absolute Difference)	0.486	0.315	-1.251^{***}	-0.811^{***}	-0.933^{***}	-0.993^{***}	-0.850^{***}	-0.473	-0.755^{***}	-0.574^{**}
	(0.284)	(0.410)	(0.257)	(0.306)	(0.332)	(0.331)	(0.313)	(0.293)	(0.279)	(0.271)
Same Gender (1 = both female/male)	0.193	0.184	-0.144^{*}	-0.168^{*}	0.298^{***}	0.308^{***}	0.242^{***}	0.236^{***}	0.017	0.008
	(0.121)	(0.119)	(0.084)	(0.100)	(0.086)	(0.086)	(0.088)	(0.087)	(0.078)	(0.080)
Same Race (1 = both white/non-white)	0.512^{**}	0.554^{*}	0.250	0.255	0.182	0.132	-0.065	-0.008	0.119	0.062
	(0.190)	(0.249)	(0.191)	(0.193)	(0.163)	(0.158)	(0.176)	(0.164)	(0.150)	(0.139)
Party Leader (1 = both leaders/non-leaders)	0.250	0.235	-0.107	-0.094	-0.179	-0.173	0.061	0.047	-0.098	-0.155
	(0.167)	(0.167)	(0.114)	(0.115)	(0.156)	(0.169)	(0.151)	(0.155)	(0.127)	(0.129)
Committee Chair (1 = both chairs/non-chairs)	-0.038	-0.062	0.027	0.031	-0.132	-0.089	-0.299^{***}	-0.272^{***}	-0.210^{***}	-0.166^{***}
	(0.138)	(0.143)	(0.091)	(0.082)	(0.082)	(0.081)	(0.070)	(0.081)	(0.076)	(0.059)
Seniority (Absolute Difference)	-0.009	-0.008	-0.022^{***}	-0.024^{***}	-0.014^{***}	-0.014^{***}	-0.011^{**}	-0.011^{**}	0.001	0
	(0.007)	(0.007)	(0.005)	(0.005)	(0.005)	(0.005)	(0.005)	(0.005)	(0.004)	(0.005)
Vote Share (Absolute Difference)	-0.120	-0.116	-0.359	-0.278	-0.195	-0.217	0.426^{*}	0.447^{*}	0.521^{**}	0.533^{*}
	(0.348)	(0.356)	(0.261)	(0.259)	(0.238)	(0.236)	(0.246)	(0.251)	(0.261)	(0.28)
Same Party x Distance to Median (mutual)	-1.507	-0.099	4.459^{***}	-1.666	3.549^{*}	-4.353^{*}	6.011^{***}	-7.916^{***}	2.881	-1.987^{***}
	(2.777)	(1.835)	(1.429)	(1.304)	(2.018)	(2.796)	(2.067)	(3.433)	(1.808)	(0.004)
Same Party x Distance to Median (i$\rightarrow$ j)	-3.079^{*}	0.202	0.29	-3.713^{***}	-2.716^{**}	-2.946^{***}	0.255	-1.651^{**}	-0.14	-2.399^{***}
	(1.347)	(0.859)	(0.844)	(0.945)	(1.194)	(1.116)	(1.145)	(0.815)	(1.027)	(0.628)
Same Party x Distance to Median (j$\rightarrow$ i)	-1.508	0.561	1.504^{**}	-0.918	-1.414	0.553	1.791	-1.121	-0.549	-1.124^{*}
	(1.2)	(0.834)	(0.701)	(0.634)	(1.133)	(0.665)	(1.124)	(0.768)	(1.032)	(0.643)
BIC (Overall)	3522.99	3531.95	6125.22	6121.40	6294.59	6321.13	6351.89	6362.28	6761.79	6766.71
BIC (Likelihood)	3107.32	3118.52	5669.39	5668.84	5856.66	5859.58	5909.81	5905.56	6280.99	6281.97
BIC (Latent Positions)	415.67	413.43	455.82	452.56	437.93	461.55	442.08	456.72	480.80	484.74
N	422	422	972	972	984	984	988	988	1102	1102

Note: *p<0.1; **p<0.05; ***p<0.01

Table 7: Latent Space Coefficient Estimates of Indiana Networks (Upper)

	2009-2010 (R)	09-10 (D)	11-12 (R)	11-12 (D)	13-14 (R)	13-14 (D)	15-16 (R)	15-16 (D)	17-18 (R)	17- 18 (D)
Constant	−1.366*	−1.608**	−2.206***	−0.196	0.521	1.463**	0.929	0.915	1.239	1.529**
	(0.724)	(0.642)	(0.621)	(0.529)	(0.812)	(0.636)	(0.761)	(0.665)	(0.771)	(0.673)
Same Committee	0.333**	0.349**	0.462***	0.450***	0.491***	0.487***	0.622***	0.606***	0.665***	0.708***
	(0.143)	(0.142)	(0.120)	(0.118)	(0.116)	(0.133)	(0.09)	(0.048)	(0.106)	(0.114)
Same Party (1 = both Republican/Democrat)	0.427	0.810*	2.303***	0.259	0.151	−0.489	−0.573	−0.518	0.174	−0.007
	(0.517)	(0.444)	(0.461)	(0.403)	(0.546)	(0.396)	(0.557)	(0.479)	(0.617)	(0.489)
Distance to Median (Absolute Difference)	0.292	0.519	1.717***	0.139	0.077	−0.547	−0.615	−0.603	−0.169	−0.362
	(0.521)	(0.458)	(0.465)	(0.382)	(0.539)	(0.384)	(0.497)	(0.430)	(0.532)	(0.430)
Same Gender (1 = both female/male)	0.480***	0.477***	0.421***	0.380***	0.392**	0.384**	0.742***	0.727***	−0.042	−0.039
	(0.151)	(0.149)	(0.125)	(0.125)	(0.152)	(0.150)	(0.131)	(0.132)	(0.189)	(0.191)
Same Race (1 = both white/nonwhite)	0.261	0.153	0.547**	0.395**	−0.638**	−0.938***	−0.770**	−0.802***	−0.862***	−0.982***
	(0.263)	(0.26)	(0.21)	(0.201)	(0.323)	(0.302)	(0.329)	(0.312)	(0.32)	(0.313)
Party Leader (1 = both leaders/non-leaders)	0.355**	0.318*	0.047	0.019	0.138	0.048	0.088	0.090	−0.105	−0.094
	(0.174)	(0.173)	(0.128)	(0.133)	(0.179)	(0.185)	(0.204)	(0.2)	(0.171)	(0.17)
Committee Chair (1 = both chairs/non-chairs)	−0.222	−0.161	−0.08	−0.130	−0.305**	−0.277**	−0.162**	−0.188*	−0.133	−0.132
	(0.156)	(0.155)	(0.132)	(0.124)	(0.114)	(0.118)	(0.087)	(0.115)	(0.103)	(0.104)
Seniority (Absolute Difference)	−0.002	0	−0.005***	−0.011	−0.014**	−0.013*	0.002	0.004	−0.006	−0.006
	(0.009)	(0.009)	(0.002)	(0.008)	(0.007)	(0.007)	(0.007)	(0.005)	(0.008)	(0.007)
Vote Share (Absolute Difference)	0.655	0.537	−0.397	−0.367	0.465	0.462	0.232	0.23	0.026	0.034
	(0.473)	(0.439)	(0.337)	(0.353)	(0.35)	(0.357)	(0.335)	(0.308)	(0.323)	(0.3)
Same Party x Distance to Median (mutual)	−1.089	−13.396***	−6.981***	7.744***	−2.383	−1.777	−0.037	−0.813	−0.491	−3.702
	(2.302)	(6.332)	(1.621)	(2.532)	(1.874)	(2.288)	(1.917)	(2.196)	(1.883)	(2.939)
Same Party x Distance to Median (i→ j)	0.052	−3.783**	−5.151***	2.981*	−2.342**	−1.452	−1.100	−2.572	−1.938*	−1.798
	(1.303)	(1.933)	(0.951)	(1.768)	(1.028)	(1.555)	(1.075)	(2.069)	(1.083)	(1.96)
Same Party x Distance to Median (j→ i)	1.354	−0.842	−3.102***	6.131***	−1.627	−0.219	1.116	−0.313	−0.803	1.424
	(1.189)	(1.47)	(0.869)	(1.656)	(1.006)	(1.336)	(0.932)	(0.367)	(1.055)	(1.4)
BIC (Overall)	2048.98	2040.81	2729.55	2744.38	2666.91	2672.07	2797.54	2802.24	2883.43	2887.04
BIC (Likelihood)	1855.31	1840.68	2514.89	2539.49	2450.68	2454.43	2595.09	2599.55	2671.30	2667.85
BIC (Latent Positions)	193.67	200.13	214.65	204.89	216.23	217.65	202.45	202.69	212.14	219.19
N	347	347	636	636	590	590	643	643	693	693

Note: *p<0.1;**p<0.05;***p<0.01

Table 8: Latent Space Coefficient Estimates of Minnesota Networks (Lower)

	2009-2010 (R)	09-10 (D)	11-12 (R)	11-12 (D)	13-14 (R)	13-14 (D)	15-16 (R)	15-16 (D)	17-18 (R)	17- 18 (D)
Constant	-2.138^{***}	-2.013^{***}	-1.710^{***}	-1.295^{***}	-2.197^{***}	-1.699^{***}	-2.157^{***}	-1.730^{***}	-1.811^{***}	-1.411^{***}
	(0.294)	(0.312)	(0.277)	(0.29)	(0.317)	(0.33)	(0.352)	(0.395)	(0.348)	(0.353)
Same Committee	0.352^{***}	0.344^{***}	0.402^{***}	0.396^{***}	0.44^{***}	0.435^{***}	0.276^{***}	0.272^{***}	0.430^{***}	0.440^{***}
	(0.072)	(0.07)	(0.07)	(0.073)	(0.072)	(0.074)	(0.063)	(0.066)	(0.058)	(0.059)
Same Party (1 = both Republican/Democrat)	0.83^{***}	0.692^{***}	1.062^{***}	0.541^{***}	0.973^{***}	0.407^{**}	1.277^{***}	0.701^{***}	0.737^{***}	0.312
	(0.145)	(0.193)	(0.184)	(0.179)	(0.155)	(0.197)	(0.207)	(0.229)	(0.168)	(0.197)
Distance to Median (Absolute Difference)	-0.163	-0.23	-0.1	-0.386^{***}	-0.313^{**}	-0.619^{***}	0.133	-0.138	-0.271^{**}	-0.469^{***}
	(0.109)	(0.142)	(0.144)	(0.142)	(0.128)	(0.158)	(0.134)	(0.15)	(0.116)	(0.134)
Same Gender (1 = both female/male)	0.115^{*}	0.105	0.112	0.104	0.034	0.031	0.106^{*}	0.114^{*}	0.066	0.102
	(0.063)	(0.065)	(0.069)	(0.069)	(0.075)	(0.075)	(0.063)	(0.065)	(0.048)	(0.061)
Same Race (1 = both white/non-white)	0.354^{**}	0.341^{**}	0.032	-0.006	0.246	0.236	0.223	0.192	-0.235^{**}	-0.265^{**}
	(0.144)	(0.15)	(0.134)	(0.13)	(0.165)	(0.163)	(0.164)	(0.162)	(0.105)	(0.107)
Party Leader (1 = both leaders/non-leaders)	0.484^{**}	0.509^{***}	0.289^{**}	0.266^{*}	0.470^{**}	0.418^{**}	0.207	0.22	1.107^{***}	1.039^{***}
	(0.175)	(0.173)	(0.14)	(0.142)	(0.193)	(0.194)	(0.232)	(0.246)	(0.264)	(0.247)
Committee Chair (1 = both chairs/non-chairs)	0.131	0.101	-0.238^{***}	-0.212^{***}	0.144	0.113	0.309^{***}	0.345^{***}	0.045	0.039
	(0.097)	(0.1)	(0.087)	(0.079)	(0.098)	(0.099)	(0.086)	(0.094)	(0.086)	(0.089)
Seniority (Absolute Difference)	0.001	0.001	-0.002	-0.001	0.012^{**}	0.009	0.003	0.003	0.009^{*}	0.009^{*}
	(0.005)	(0.006)	(0.006)	(0.006)	(0.005)	(0.005)	(0.004)	(0.004)	(0.005)	(0.005)
Vote Share (Absolute Difference)	-0.927^{*}	-0.853^{*}	-1.118^{***}	-1.118^{***}	-1.593^{***}	-1.671^{***}	-1.826^{***}	-1.740^{***}	-1.973^{***}	-1.947^{***}
	(0.473)	(0.495)	(0.41)	(0.416)	(0.408)	(0.433)	(0.327)	(0.35)	(0.387)	(0.404)
Same Party x Distance to Median (mutual)	-1.632^{**}	-0.242	-2.772^{***}	0.905^{*}	-6.175^{***}	1.637^{***}	-1.9^{**}	0.868^{*}	-0.931^{**}	1.098^{**}
	(0.682)	(0.59)	(0.764)	(0.525)	(1.577)	(0.593)	(0.704)	(0.473)	(0.391)	(0.466)
Same Party x Distance to Median (i$\rightarrow$ j)	-0.773^{**}	-0.069	-1.195^{***}	0.262	-2.539^{***}	0.363	-2.238^{***}	0.32	-1.484^{***}	0.348
	(0.349)	(0.295)	(0.35)	(0.273)	(0.541)	(0.319)	(0.413)	(0.256)	(0.285)	(0.265)
Same Party x Distance to Median (j$\rightarrow$ i)	-0.286	0.171	-0.619^{*}	0.511^{*}	-0.509	0.466	-0.875^{**}	0.361	-0.323^{***}	0.302
	(0.312)	(0.3)	(0.331)	(0.26)	(0.377)	(0.309)	(0.371)	(0.26)	(0.02)	(0.26)
BIC (Overall)	9141.27	9147.37	7741.27	7752.12	7192.90	7220.07	9331.24	9351.58	10258.74	10279.39
BIC (Likelihood)	8421.35	8426.11	7088.28	7096.80	6507.25	6526.34	8638.80	8635.28	9613.33	9623.55
BIC (Latent Positions)	719.92	721.26	652.99	655.31	685.65	693.73	692.44	716.30	645.41	655.84
N	1361	1361	1062	1062	998	998	1425	1425	1652	1652

Note: *p<0.1; **p<0.05; ***p<0.01

Table 9: Latent Space Coefficient Estimates of Minnesota Networks (Upper)

	2009-2010 (R)	09-10 (D)	11-12 (R)	11-12 (D)	13-14 (R)	13-14 (D)	15-16 (R)	15-16 (D)	17-18 (R)	17- 18 (D)
Constant	-1.446^{***}	-0.942^{**}	-1.246^{**}	-1.251^{**}	-1.778^{***}	-1.917^{***}	-1.451^{***}	-1.012^{**}	-1.518^{***}	-1.34^{***}
	(0.386)	(0.444)	(0.543)	(0.561)	(0.469)	(0.486)	(0.431)	(0.49)	(0.378)	(0.347)
Same Committee	0.754^{***}	0.747^{***}	0.646^{***}	0.665^{***}	0.459^{***}	0.464^{***}	0.188	0.208	0.559^{***}	0.549^{***}
	(0.137)	(0.139)	(0.137)	(0.129)	(0.13)	(0.131)	(0.131)	(0.13)	(0.106)	(0.107)
Same Party (1 = both Republican/Democrat)	1.051^{***}	0.543^{*}	0.112	0.066	0.733^{***}	0.937^{***}	0.638^{***}	0.12	0.814^{***}	0.636^{***}
	(0.188)	(0.323)	(0.231)	(0.223)	(0.222)	(0.293)	(0.193)	(0.297)	(0.198)	(0.154)
Distance to Median (Absolute Difference)	0.017	-0.227	-0.698^{***}	-0.716^{***}	-0.162	0.12	-0.219	-0.454^{*}	0.242	0.073
	(0.149)	(0.287)	(0.213)	(0.21)	(0.203)	(0.261)	(0.176)	(0.259)	(0.212)	(0.169)
Same Gender (1 = both female/male)	-0.03	-0.045	0.09	0.104	-0.072	-0.056	0.081	0.073	0.047	0.055
	(0.122)	(0.12)	(0.126)	(0.133)	(0.132)	(0.131)	(0.117)	(0.118)	(0.116)	(0.114)
Same Race (1 = both white/non-white)	-0.06	-0.121	0.446	0.422	0.713^{***}	0.516^{**}	0.535^{**}	0.491^{**}	0.369	0.262
	(0.242)	(0.256)	(0.396)	(0.412)	(0.236)	(0.233)	(0.205)	(0.23)	(0.238)	(0.236)
Party Leader (1 = both leaders/non-leaders)	-0.104	-0.175	0.309	0.292	0.333	0.362	-0.118	-0.17	0.102	0.048
	(0.175)	(0.174)	(0.243)	(0.255)	(0.224)	(0.227)	(0.196)	(0.212)	(0.142)	(0.146)
Committee Chair (1 = both chairs/non-chairs)	0.179	0.088	0.016	0.018	0.019	-0.048	0.239	0.161	0.005	0.083
	(0.153)	(0.153)	(0.151)	(0.162)	(0.173)	(0.168)	(0.199)	(0.202)	(0.136)	(0.133)
Seniority (Absolute Difference)	-0.022^{**}	-0.022^{**}	-0.014	-0.014	-0.011	-0.008	0.032^{***}	0.035^{***}	0.009	0.01
	(0.01)	(0.01)	(0.009)	(0.009)	(0.01)	(0.01)	(0.009)	(0.01)	(0.008)	(0.008)
Vote Share (Absolute Difference)	-0.379	-0.37	-0.555	-0.57	0.097	0.944	-0.522	-0.457	-1.192^{*}	-0.675
	(0.649)	(0.643)	(0.704)	(0.673)	(0.641)	(0.696)	(0.639)	(0.675)	(0.663)	(0.668)
Same Party x Distance to Median (mutual)	-108.504^{***}	0.602	-1.359	0.294	-4.88^{***}	-2.424^{**}	-4.100^{***}	0.805	-1.729^{**}	-0.804
	(62.796)	(0.707)	(1.279)	(0.9)	(2.197)	(0.991)	(1.682)	(0.977)	(0.844)	(0.839)
Same Party x Distance to Median (i$\rightarrow$ j)	-1.674^{*}	0.183	0.417	0.187	-1.862^{**}	-1.433^{***}	-2.43^{***}	0.483	-0.628	-0.888^{*}
	(0.92)	(0.375)	(0.47)	(0.457)	(0.806)	(0.518)	(0.793)	(0.515)	(0.439)	(0.475)
Same Party x Distance to Median (j$\rightarrow$ i)	-4.458^{***}	0.506	-0.209	0.11	-1.497^{**}	-0.674	-1.514^{**}	0.589	-0.539	-0.021
	(1.542)	(0.362)	(0.526)	(0.474)	(0.757)	(0.48)	(0.662)	(0.51)	(0.447)	(0.416)
BIC (Overall)	2472.64	2491.63	2444.44	2443.33	2456.55	2461.85	2734.65	2754.56	3251.50	3247.96
BIC (Likelihood)	2234.69	2264.27	2143.09	2155.02	2160.41	2154.20	2430.36	2434.03	2973.57	2960.91
BIC (Latent Positions)	237.95	227.36	301.35	288.30	296.14	307.65	304.30	320.53	277.93	287.05
N	370	370	331	331	350	350	416	416	526	526

Note: *p<0.1;**p<0.05;***p<0.01

Table 10: Latent Space Coefficient Estimates of Nebraska Networks (Upper)

	2009-2010 (R)	09-10 (D)	11-12 (R)	11-12 (D)	13-14 (R)	13-14 (D)	15-16 (R)	15-16 (D)	17-18 (R)	17- 18 (D)
Constant	−0.315	−0.449	−1.584***	−1.374**	−1.017*	−1.005**	−1.18**	−0.900*	−1.335**	−1.114*
	(0.66)	(0.651)	(0.572)	(0.535)	(0.506)	(0.488)	(0.486)	(0.469)	(0.578)	(0.568)
Same Committee	0.254	0.305	0.013	0.002	0.262	0.243	0.326**	0.358**	0.117	0.144
	(0.223)	(0.222)	(0.177)	(0.175)	(0.169)	(0.17)	(0.162)	(0.157)	(0.169)	(0.169)
Same Party (1 = both Republican/Democrat)	0.193	0.129	0.535**	0.066	0.602***	0.433**	0.906***	0.698***	0.876***	0.624***
	(0.267)	(0.265)	(0.264)	(0.214)	(0.196)	(0.196)	(0.21)	(0.194)	(0.188)	(0.173)
Distance to Median (Absolute Difference)	−0.487	−0.578	−0.008	−0.624*	−0.235	−0.422	0.514***	0.366**	−0.092	−0.382**
	(0.556)	(0.552)	(0.509)	(0.385)	(0.284)	(0.264)	(0.205)	(0.181)	(0.157)	(0.191)
Same Gender (1 = both female/male)	0.207	0.241	0.19	0.198	0.386*	0.422*	0.393**	0.335*	−0.129	−0.134
	(0.255)	(0.257)	(0.196)	(0.195)	(0.214)	(0.218)	(0.183)	(0.181)	(0.162)	(0.162)
Same Race (1 = both white/non-white)	−0.557	−0.478	0.448	0.385	−0.266	−0.206	0.344	0.244	0.79	0.735
	(0.46)	(0.47)	(0.43)	(0.432)	(0.407)	(0.399)	(0.366)	(0.377)	(0.52)	(0.536)
Party Leader (1 = both leaders/non-leaders)	0.05	0.032	0.843***	0.832***	0.112	0.145	−0.174	−0.198	0.067	0.05
	(0.284)	(0.283)	(0.257)	(0.258)	(0.196)	(0.192)	(0.191)	(0.189)	(0.208)	(0.215)
Committee Chair (1 = both chairs/non-chairs)	0.275	0.288	0.285*	0.300**	0.137	0.164	−0.052	−0.052	0.067	0.011
	(0.219)	(0.215)	(0.166)	(0.138)	(0.168)	(0.168)	(0.158)	(0.162)	(0.166)	(0.162)
Seniority (Absolute Difference)	−0.055	−0.042	−0.051	−0.04	−0.005	−0.003	−0.064*	−0.063	−0.013	−0.012
	(0.075)	(0.076)	(0.061)	(0.057)	(0.041)	(0.041)	(0.037)	(0.038)	(0.048)	(0.048)
Vote Share (Absolute Difference)	−0.676	−0.615	0.647	0.728	1.33**	1.282**	0.407	0.467	0.013	0.004
	(0.819)	(0.821)	(0.51)	(0.569)	(0.517)	(0.513)	(0.583)	(0.603)	(0.604)	(0.613)
Same Party x Distance to Median (mutual)	1.139	2.8	−3.437**	4.648**	0.068	1.387	−1.242	−0.971	−0.665	1.273**
	(2.338)	(1.852)	(1.619)	(2.028)	(0.939)	(0.95)	(0.775)	(0.834)	(0.804)	(0.516)
Same Party x Distance to Median (i→ j)	0.582	−0.658	−2.227***	0.898	−0.924	0.634	−1.228***	0.202	−1.146**	0.274
	(1.187)	(1.265)	(0.879)	(1.202)	(0.598)	(0.539)	(0.459)	(0.42)	(0.474)	(0.351)
Same Party x Distance to Median (j→ i)	0.162	1.061	−0.529	0.675	−0.039	0.581	−0.35	0.314	−0.760*	0.533
	(1.215)	(0.99)	(0.763)	(1.227)	(0.506)	(0.519)	(0.401)	(0.42)	(0.448)	(0.327)
BIC (Overall)	1064.97	1061.34	1538.90	1535.61	1581.65	1586.13	1740.70	1751.93	1611.06	1609.83
BIC (Likelihood)	869.87	862.10	1241.33	1246.46	1340.11	1340.56	1494.09	1496.58	1369.83	1365.85
BIC (Latent Positions)	195.10	199.24	297.57	289.15	241.53	245.57	246.62	255.34	241.23	243.98
N	124	124	219	219	229	229	281	281	240	240

Note: *p<0.1; **p<0.05; ***p<0.01

Table 11: Latent Space Coefficient Estimates of Oklahoma Networks (Lower)

	2009-2010 (R)	09-10 (D)	11-12 (R)	11-12 (D)	13-14 (R)	13-14 (D)	15-16 (R)	15-16 (D)	17-18 (R)	17- 18 (D)
Constant	−0.414	−0.262	−2.025***	−1.516***	−0.748	−0.116	−1.969***	−1.137**	−1.395*	−1.357**
	(0.362)	(0.375)	(0.578)	(0.531)	(0.507)	(0.557)	(0.566)	(0.579)	(0.745)	(0.675)
Same Committee	0.220***	0.233***	0.214**	0.219**	0.442***	0.385***	0.272***	0.249***	0.124	0.190***
	(0.078)	(0.08)	(0.096)	(0.094)	(0.09)	(0.088)	(0.099)	(0.089)	(0.107)	(0.061)
Same Party (1 = both Republican/Democrat)	0.088	−0.052	1.355***	0.805*	0.328	−0.354	1.364***	0.515	0.298	0.305
	(0.261)	(0.288)	(0.487)	(0.432)	(0.429)	(0.487)	(0.468)	(0.492)	(0.607)	(0.577)
Distance to Median (Absolute Difference)	−0.313	−0.422	0.867**	0.449	0.232	−0.241	0.788*	0.179	−0.899*	−0.893*
	(0.256)	(0.281)	(0.459)	(0.416)	(0.375)	(0.415)	(0.415)	(0.421)	(0.555)	(0.523)
Same Gender (1 = both female/male)	−0.279***	−0.308***	−0.117	−0.126	−0.071	−0.077	0.258**	0.266**	0.326**	0.290*
	(0.114)	(0.113)	(0.104)	(0.107)	(0.105)	(0.105)	(0.125)	(0.128)	(0.141)	(0.145)
Same Race (1 = both white/non-white)	0.210**	0.243***	0.215*	0.217*	0.046	0.076	0.352**	0.257	0.723***	0.578**
	(0.095)	(0.092)	(0.118)	(0.127)	(0.114)	(0.112)	(0.173)	(0.173)	(0.21)	(0.205)
Party Leader (1 = both leaders/non-leaders)	0.329**	0.333**	0.023	0.019	−0.207	−0.18	−0.561***	−0.661***	−0.068	−0.078
	(0.153)	(0.148)	(0.159)	(0.159)	(0.199)	(0.19)	(0.188)	(0.201)	(0.148)	(0.132)
Committee Chair (1 = both chairs/non-chairs)	−0.01	−0.008	0.079	0.075	0.041	0.036	0.171*	0.164*	0.042	0.075
	(0.078)	(0.079)	(0.093)	(0.094)	(0.088)	(0.088)	(0.091)	(0.094)	(0.104)	(0.098)
Seniority (Absolute Difference)	−0.037**	−0.038**	−0.024	−0.026*	−0.037**	−0.038***	−0.020	−0.017	−0.014	−0.009
	(0.017)	(0.016)	(0.016)	(0.015)	(0.014)	(0.015)	(0.016)	(0.016)	(0.017)	(0.018)
Vote Share (Absolute Difference)	0.124	0.110	−0.197	−0.180	0.410*	0.378	0.112	0.083	0.122	−0.082
	(0.217)	(0.218)	(0.254)	(0.259)	(0.202)	(0.253)	(0.265)	(0.256)	(0.365)	(0.227)
Same Party x Distance to Median (mutual)	1.468	0.608	−1.012	1.604	−0.281	4.805***	−10.069***	−13.974**	−5.999***	1.000
	(1.394)	(1.064)	(2.112)	(1.779)	(2.048)	(1.712)	(2.606)	(8.103)	(0.51)	(0.815)
Same Party x Distance to Median (i→ j)	0.179	0.045	−0.613	1.566*	0.333	1.699*	−4.180***	0.843	−4.08***	−5.496***
	(0.777)	(0.603)	(1.09)	(0.89)	(1.085)	(1.008)	(1.246)	(0.924)	(1.093)	(1.897)
Same Party x Distance to Median (j→ i)	−1.963**	0.837	−1.989*	1.508*	−2.746**	2.043**	−2.231**	0.67	0.215	−1.669***
	(0.891)	(0.552)	(1.161)	(0.864)	(1.232)	(0.927)	(1.087)	(0.949)	(0.942)	(0.222)
BIC (Overall)	6318.21	6337.01	4536.99	4542.18	4892.12	4900.56	4606.58	4613.00	4101.98	4104.73
BIC (Likelihood)	5728.61	5740.02	4090.23	4094.81	4348.96	4338.86	4108.02	4128.16	3541.65	3535.99
BIC (Latent Positions)	589.60	596.99	446.75	447.37	543.16	561.70	498.56	484.84	560.33	568.74
N	1029	1029	631	631	712	712	632	632	543	543

Note:*p<0.1;**p<0.05;***p<0.01

Table 12: Latent Space Coefficient Estimates of Oklahoma Networks (Upper)

	2009-2010 (R)	09-10 (D)	11-12 (R)	11-12 (D)	13-14 (R)	13-14 (D)	15-16 (R)	15-16 (D)	17-18 (R)	17- 18 (D)
Constant	0.472	0.07	−0.577	−0.49	−0.863	0.342	−1.748**	−1.811**	−0.261	−0.214
	(0.491)	(0.41)	(0.697)	(0.561)	(0.667)	(0.607)	(0.709)	(0.716)	(0.646)	(0.646)
Same Committee	0.106	0.169	0.273	0.263	0.337*	0.349*	0.486	0.546	0.563	0.558
	(0.148)	(0.149)	(0.181)	(0.175)	(0.182)	(0.2)	(0.383)	(0.396)	(0.347)	(0.347)
Same Party (1 = both Republican/Democrat)	0.063	0.355	0.703	0.491	0.572	−0.762*	0.518	0.511	−1.572***	−1.651***
	(0.328)	(0.246)	(0.524)	(0.409)	(0.454)	(0.411)	(0.507)	(0.542)	(0.388)	(0.407)
Distance to Median (Absolute Difference)	−0.142	0.267	0.39	0.227	0.473	−0.595	1.019*	1.022*	−0.123	−0.590*
	(0.426)	(0.337)	(0.559)	(0.443)	(0.485)	(0.413)	(0.577)	(0.597)	(0.349)	(0.293)
Same Gender (1 = both female/male)	−0.178	−0.019	0.203	0.176	0.23	0.141	0.11	0.128	−0.284	−0.350*
	(0.222)	(0.217)	(0.236)	(0.235)	(0.247)	(0.279)	(0.241)	(0.241)	(0.205)	(0.208)
Same Race (1 = both white/non-white)	−0.136	−0.122	0.045	−0.011	0.3	0.197	0.442*	0.431*	1.122***	1.150***
	(0.176)	(0.176)	(0.217)	(0.203)	(0.237)	(0.231)	(0.237)	(0.237)	(0.329)	(0.344)
Party Leader (1 = both leaders/non-leaders)	−0.113	−0.147	0.144	0.172	−0.026	−0.022	0.353*	0.357*	−0.369*	−0.295
	(0.139)	(0.142)	(0.168)	(0.192)	(0.28)	(0.274)	(0.204)	(0.201)	(0.227)	(0.219)
Committee Chair (1 = both chairs/non-chairs)	−0.194	−0.201	0.033	0.012	0.071	0.06	−0.013	−0.015	−0.032	−0.044
	(0.147)	(0.153)	(0.159)	(0.147)	(0.157)	(0.151)	(0.167)	(0.167)	(0.181)	(0.181)
Seniority (Absolute Difference)	0.024	0.034	−0.052	−0.047	−0.072***	−0.068***	−0.046*	−0.044*	0.012	0.006
	(0.034)	(0.034)	(0.032)	(0.032)	(0.029)	(0.028)	(0.025)	(0.025)	(0.031)	(0.03)
Vote Share (Absolute Difference)	−0.474	−0.521	−0.014	−0.076	0.763*	0.777*	0.442	0.405	0.048	0.055
	(0.37)	(0.375)	(0.4)	(0.446)	(0.436)	(0.448)	(0.474)	(0.481)	(0.485)	(0.499)
Same Party x Distance to Median (mutual)	1.814	−3.64	−4.532**	−0.238	−5.462***	−2.18	−1.203	−1.211	−1.547***	−40.249*
	(1.491)	(2.986)	(2.252)	(2.113)	(2.021)	(5.922)	(0.904)	(0.864)	(0.539)	(31.181)
Same Party x Distance to Median (i→ j)	0.818	2.264*	−0.998	−0.449	−4.395***	−0.05	−0.634	−0.636	−0.450*	2.982***
	(0.901)	(1.34)	(1.145)	(1.495)	(1.117)	(2.843)	(0.459)	(0.448)	(0.250)	(1.104)
Same Party x Distance to Median (j→ i)	2.07**	3.069***	1.365	0.246	−1.588*	5.376***	−0.428	−0.437	−0.482*	2.267*
	(0.843)	(1.156)	(1.062)	(1.357)	(0.888)	(1.409)	(0.452)	(0.439)	(0.252)	(1.257)
BIC (Overall)	2011.29	2003.33	1851.57	1860.81	1793.21	1795.23	1561.62	1562.38	1426.88	1422.17
BIC (Likelihood)	1790.31	1775.39	1581.73	1596.59	1545.67	1544.74	1336.80	1338.70	1238.57	1229.77
BIC (Latent Positions)	220.98	227.94	269.84	264.23	247.54	250.49	224.81	223.69	188.31	192.40
N	357	357	317	317	290	290	234	234	197	197

Note: *p<0.1; **p<0.05; ***p<0.01

Table 13: Latent Space Coefficient Estimates of South Carolina Networks (Lower)

	2009-2010 (R)	09-10 (D)	11-12 (R)	11-12 (D)	13-14 (R)	13-14 (D)	15-16 (R)	15-16 (D)	17-18 (R)	17- 18 (D)
Constant	-1.466^{***}	-1.779^{***}	-2.798^{***}	-2.267^{***}	-2.809^{***}	-1.828^{***}	-1.790^{***}	-2.070^{***}	-1.835^{***}	-1.782^{***}
	(0.345)	(0.305)	(0.452)	(0.362)	(0.541)	(0.388)	(0.408)	(0.383)	(0.363)	(0.348)
Same Committee	0.183^{*}	0.184^{*}	0.244^{**}	0.244^{**}	0.175	0.179	0.385^{***}	0.285^{***}	0.279^{***}	0.276^{***}
	(0.104)	(0.105)	(0.104)	(0.097)	(0.111)	(0.114)	(0.097)	(0.075)	(0.095)	(0.093)
Same Party (1 = both Republican/Democrat)	0.089	0.392^{***}	1.227^{***}	0.832^{***}	1.506^{***}	0.465^{**}	0.510^{**}	0.980^{***}	0.387^{*}	0.370^{**}
	(0.177)	(0.142)	(0.255)	(0.184)	(0.33)	(0.217)	(0.225)	(0.199)	(0.209)	(0.186)
Distance to Median (Absolute Difference)	-0.576^{***}	-0.321^{*}	0.685^{**}	0.242	0.886^{**}	0.098	-0.189	0.123	-0.176	-0.204
	(0.199)	(0.16)	(0.281)	(0.181)	(0.329)	(0.209)	(0.228)	(0.188)	(0.195)	(0.170)
Same Gender (1 = both female/male)	0.187^{*}	0.182^{*}	0.14	0.132	-0.081	-0.087	-0.038	-0.007	0.119	0.111
	(0.104)	(0.104)	(0.113)	(0.108)	(0.113)	(0.119)	(0.102)	(0.103)	(0.087)	(0.088)
Same Race (1 = both white/non-white)	0.056	0.1	0.524^{***}	0.259	0.696^{***}	0.592^{***}	0.081	0.082	0.353^{***}	0.307^{***}
	(0.124)	(0.122)	(0.172)	(0.157)	(0.174)	(0.157)	(0.130)	(0.130)	(0.113)	(0.105)
Party Leader (1 = both leaders/non-leaders)	0.459^{**}	0.466^{**}	0.576^{***}	0.568^{***}	-0.009	-0.061	0.179	0.129	0.529^{**}	0.521^{***}
	(0.209)	(0.209)	(0.197)	(0.202)	(0.188)	(0.18)	(0.253)	(0.266)	(0.220)	(0.214)
Committee Chair (1 = both chairs/non-chairs)	-0.059	-0.040	-0.217^{**}	-0.191^{*}	-0.222^{**}	-0.222^{**}	-0.04	-0.039	-0.087	-0.082
	(0.099)	(0.100)	(0.092)	(0.094)	(0.102)	(0.094)	(0.089)	(0.090)	(0.082)	(0.083)
Seniority (Absolute Difference)	-0.019^{**}	-0.017^{**}	-0.014^{*}	-0.01	0.018^{*}	0.019^{*}	0.021^{***}	0.020^{**}	-0.014^{*}	-0.013^{*}
	(0.008)	(0.008)	(0.008)	(0.008)	(0.01)	(0.01)	(0.008)	(0.008)	(0.007)	(0.007)
Vote Share (Absolute Difference)	0.16	0.187	-0.315	-0.324	-0.305	-0.290	-0.451	-0.521	0.123	0.075
	(0.248)	(0.254)	(0.283)	(0.298)	(0.279)	(0.285)	(0.305)	(0.333)	(0.283)	(0.277)
Same Party x Distance to Median (mutual)	-0.477	-0.978	-3.622^{***}	-3.356^{**}	-3.760^{***}	2.572^{**}	1.202	-4.922^{***}	-1.343	-0.826
	(1.006)	(1.015)	(1.141)	(1.908)	(1.088)	(1.11)	(0.861)	(1.94)	(0.922)	(1.015)
Same Party x Distance to Median (i$\rightarrow$ j)	0.088	-0.991^{**}	-2.361^{***}	-0.422	-1.992^{***}	0.26	0.083	-1.676^{***}	-0.729^{*}	-0.419
	(0.438)	(0.466)	(0.542)	(0.541)	(0.516)	(0.613)	(0.451)	(0.569)	(0.419)	(0.451)
Same Party x Distance to Median (j$\rightarrow$ i)	1.253^{***}	-0.112	-0.364	0.042	-1.184^{**}	2.005^{***}	1.433^{***}	0.166	0.305	-0.147
	(0.391)	(0.386)	(0.496)	(0.484)	(0.48)	(0.468)	(0.418)	(0.466)	(0.389)	(0.437)
BIC (Overall)	5541.87	5553.16	5653.49	5684.41	5114.09	5115.81	5677.31	5676.51	6662.47	6666.99
BIC (Likelihood)	5030.98	5050.46	5078.90	5105.75	4536.03	4536.37	5153.53	5142.56	5978.36	5972.61
BIC (Latent Positions)	510.89	502.70	574.59	578.66	578.06	579.44	523.78	533.95	684.12	694.39
N	686	686	731	731	619	619	711	711	857	857

Note: *p<0.1; **p<0.05; ***p<0.01

Table 14: Ideal Point Descriptive Statistics by State-Party-Year (Lower)

State	Year	Party	Party Median	Chamber Heterogeneity	Party Heterogeneity
Alaska	2010	Democrats	-0.65	0.71	0.40
	2010	Republicans	0.80	0.71	0.22
	2012	Democrats	-0.65	0.71	0.39
	2012	Republicans	0.76	0.71	0.21
	2014	Democrats	-0.57	0.65	0.43
	2014	Republicans	0.79	0.65	0.28
	2016	Democrats	-0.53	0.68	0.39
	2016	Republicans	0.84	0.68	0.34
	2018	Democrats	-0.58	0.80	0.34
	2018	Republicans	0.86	0.80	0.33
Illinois	2010	Democrats	-0.90	0.71	0.56
	2010	Republicans	0.28	0.71	0.30
	2012	Democrats	-1.05	0.82	0.58
	2012	Republicans	0.35	0.82	0.34
	2014	Democrats	-0.87	0.81	0.59
	2014	Republicans	0.43	0.81	0.35
	2016	Democrats	-0.88	0.84	0.59
	2016	Republicans	0.49	0.84	0.28
	2018	Democrats	-1.06	0.89	0.60
	2018	Republicans	0.55	0.89	0.28
Indiana	2010	Democrats	-0.49	0.74	0.23
	2010	Republicans	0.94	0.74	0.12
	2012	Democrats	-0.50	0.74	0.24
	2012	Republicans	0.93	0.74	0.11
	2014	Democrats	-0.53	0.71	0.24
	2014	Republicans	0.93	0.71	0.10
	2016	Democrats	-0.53	0.69	0.24
	2016	Republicans	0.93	0.69	0.10
	2018	Democrats	-0.54	0.71	0.24
	2018	Republicans	0.93	0.71	0.12
Minnesota	2010	Democrats	-1.02	1.02	0.37
	2010	Republicans	0.95	1.02	0.30
	2012	Democrats	-1.15	1.11	0.36
	2012	Republicans	1.01	1.11	0.26
	2014	Democrats	-1.09	1.11	0.33
	2014	Republicans	1.03	1.11	0.24
	2016	Democrats	-1.16	1.14	0.32
	2016	Republicans	1.02	1.14	0.22
	2018	Democrats	-1.19	1.14	0.32
	2018	Republicans	1.02	1.14	0.25
Oklahoma	2010	Republicans	1.16	0.63	0.10
	2010	Democrats	-0.06	0.63	0.21
	2012	Republicans	1.18	0.61	0.10
	2012	Democrats	-0.07	0.61	0.20
	2014	Republicans	1.19	0.61	0.10
	2014	Democrats	-0.09	0.61	0.19
	2016	Republicans	1.21	0.63	0.10
	2016	Democrats	-0.09	0.63	0.21
	2018	Republicans	1.19	0.61	0.09
	2018	Democrats	-0.11	0.61	0.17
South Carolina	2010	Democrats	-0.56	0.80	0.34
	2010	Republicans	0.91	0.80	0.26
	2012	Democrats	-0.62	0.82	0.29
	2012	Republicans	0.92	0.82	0.28
	2014	Democrats	-0.61	0.81	0.27
	2014	Republicans	0.92	0.81	0.25
	2016	Democrats	-0.66	0.82	0.27
	2016	Republicans	0.95	0.82	0.26
	2018	Democrats	-0.69	0.85	0.30
	2018	Republicans	0.95	0.85	0.29

Table 15: Ideal Point Descriptive Statistics by State-Party-Year (Upper)

State	Year	Party	Party Median	Chamber Heterogeneity	Party Heterogeneity
Alaska	2010	Democrats	-0.70	0.80	0.28
	2010	Republicans	0.71	0.80	0.22
	2012	Democrats	-0.69	0.83	0.29
	2012	Republicans	0.68	0.83	0.29
	2014	Democrats	-0.95	0.87	0.31
	2014	Republicans	0.81	0.87	0.31
	2016	Democrats	-0.95	0.82	0.32
	2016	Republicans	0.70	0.82	0.30
	2018	Democrats	-0.95	0.88	0.46
	2018	Republicans	0.72	0.88	0.34
Illinois	2010	Democrats	-0.65	0.59	0.28
	2010	Republicans	0.43	0.59	0.22
	2012	Democrats	-0.66	0.60	0.30
	2012	Republicans	0.43	0.60	0.22
	2014	Democrats	-0.66	0.58	0.30
	2014	Republicans	0.45	0.58	0.16
	2016	Democrats	-0.66	0.60	0.29
	2016	Republicans	0.46	0.60	0.15
	2018	Democrats	-0.67	0.60	0.24
	2018	Republicans	0.47	0.60	0.13
Indiana	2010	Democrats	-0.49	0.65	0.17
	2010	Republicans	0.86	0.65	0.17
	2012	Democrats	-0.51	0.61	0.19
	2014	Republicans	0.86	0.63	0.18
	2014	Democrats	-0.51	0.63	0.21
	2016	Republicans	0.89	0.59	0.16
	2016	Democrats	-0.55	0.59	0.20
	2018	Republicans	0.88	0.60	0.16
	2018	Democrats	-0.57	0.60	0.23
Minnesota	2010	Democrats	-0.94	0.94	0.68
	2010	Republicans	0.68	0.94	0.31
	2012	Democrats	-0.95	1.06	0.38
	2012	Republicans	0.85	1.06	0.34
	2014	Democrats	-0.98	1.04	0.36
	2014	Republicans	0.85	1.04	0.31
	2016	Democrats	-0.98	1.03	0.36
	2016	Republicans	0.83	1.03	0.32
	2018	Democrats	-1.15	1.11	0.33
	2018	Republicans	0.93	1.11	0.37
Nebraska	2010	Democrats	-0.02	0.48	0.31
	2010	Republicans	0.73	0.48	0.28
	2012	Democrats	-0.14	0.51	0.31
	2012	Republicans	0.72	0.51	0.33
	2014	Democrats	-0.12	0.56	0.32
	2014	Republicans	0.66	0.56	0.39
	2016	Democrats	-0.18	0.65	0.47
	2016	Republicans	0.64	0.65	0.45
	2018	Democrats	-0.26	0.82	0.51
	2018	Republicans	0.96	0.82	0.53
Oklahoma	2010	Democrats	0.05	0.62	0.16
	2010	Republicans	1.13	0.62	0.21
	2012	Democrats	0.04	0.61	0.19
	2012	Republicans	1.16	0.61	0.17
	2014	Democrats	0.07	0.56	0.21
	2014	Republicans	1.18	0.56	0.19
	2016	Democrats	-0.01	0.52	0.18
	2016	Republicans	1.17	0.52	0.18
	2018	Democrats	-0.14	0.66	0.35
	2018	Republicans	1.17	0.66	0.18

Figure 1: Marginal Effect of Chamber Heterogeneity on Predicted Count of Outdegree across the Range of Ideological Polarity

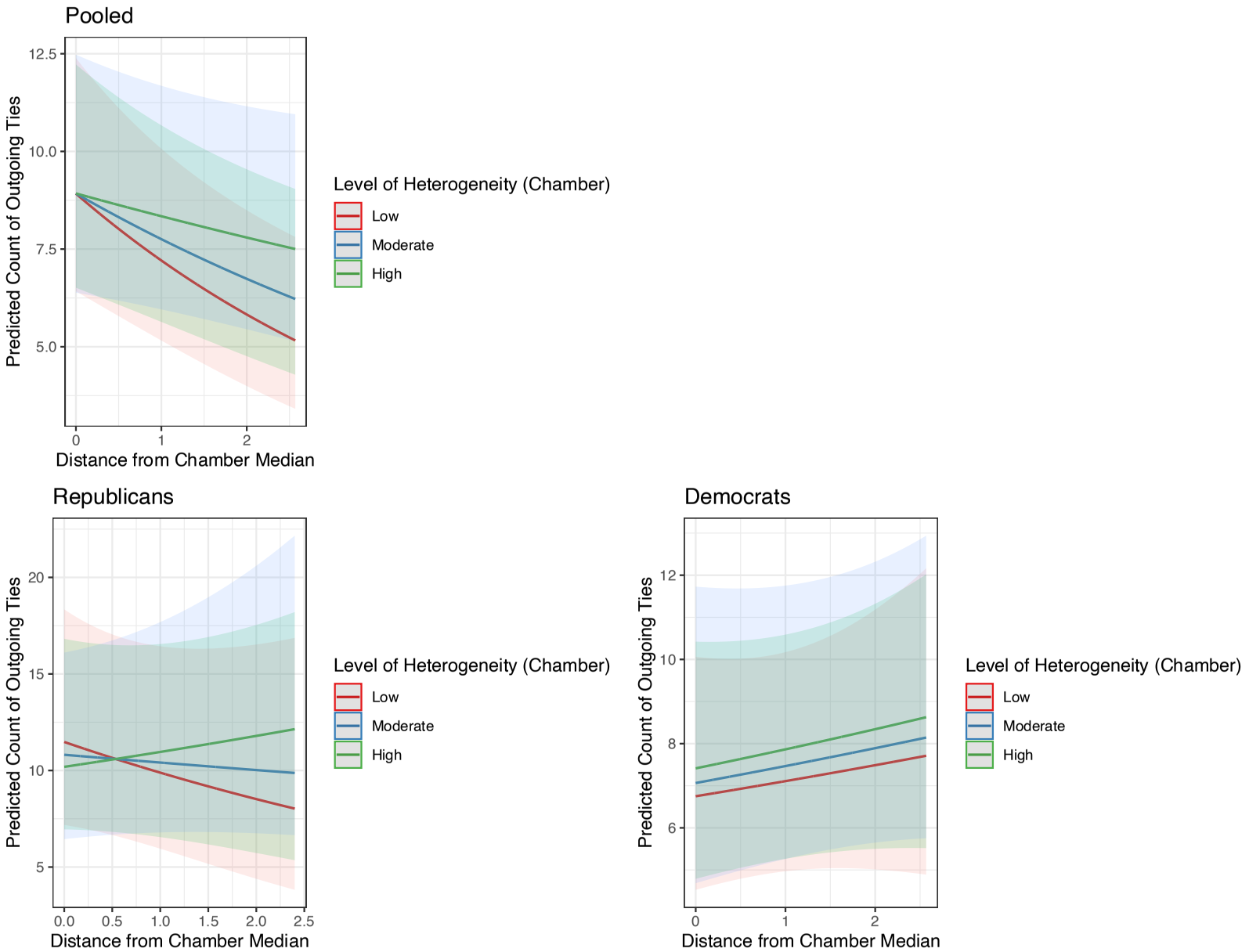

Figure 2: Coefficient plots of within-party influence in Alaska, 2009-2018

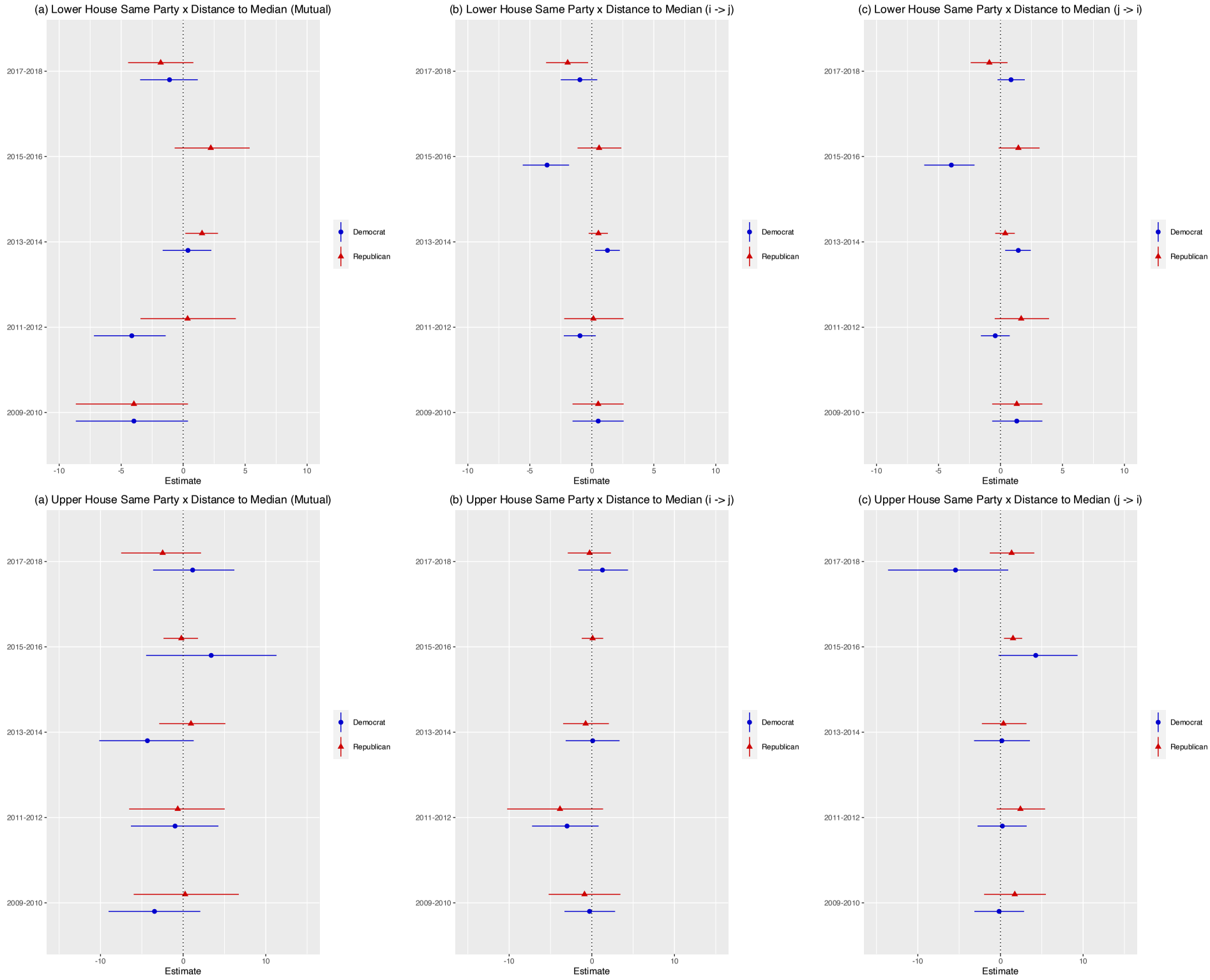

Figure 3: Coefficient plots of within-party influence in Illinois, 2009-2018

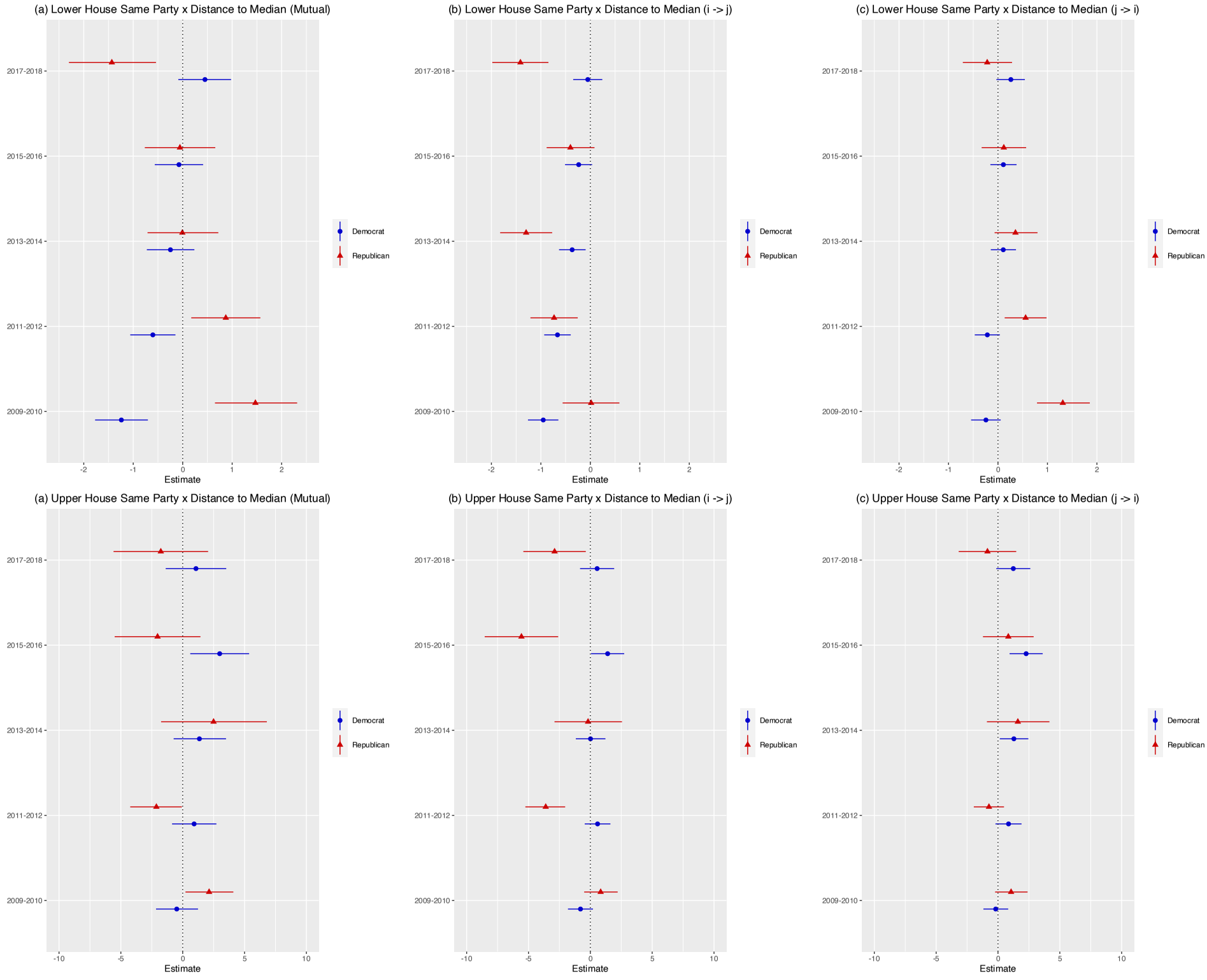

Figure 4: Coefficient plots of within-party influence in Indiana, 2009-2018

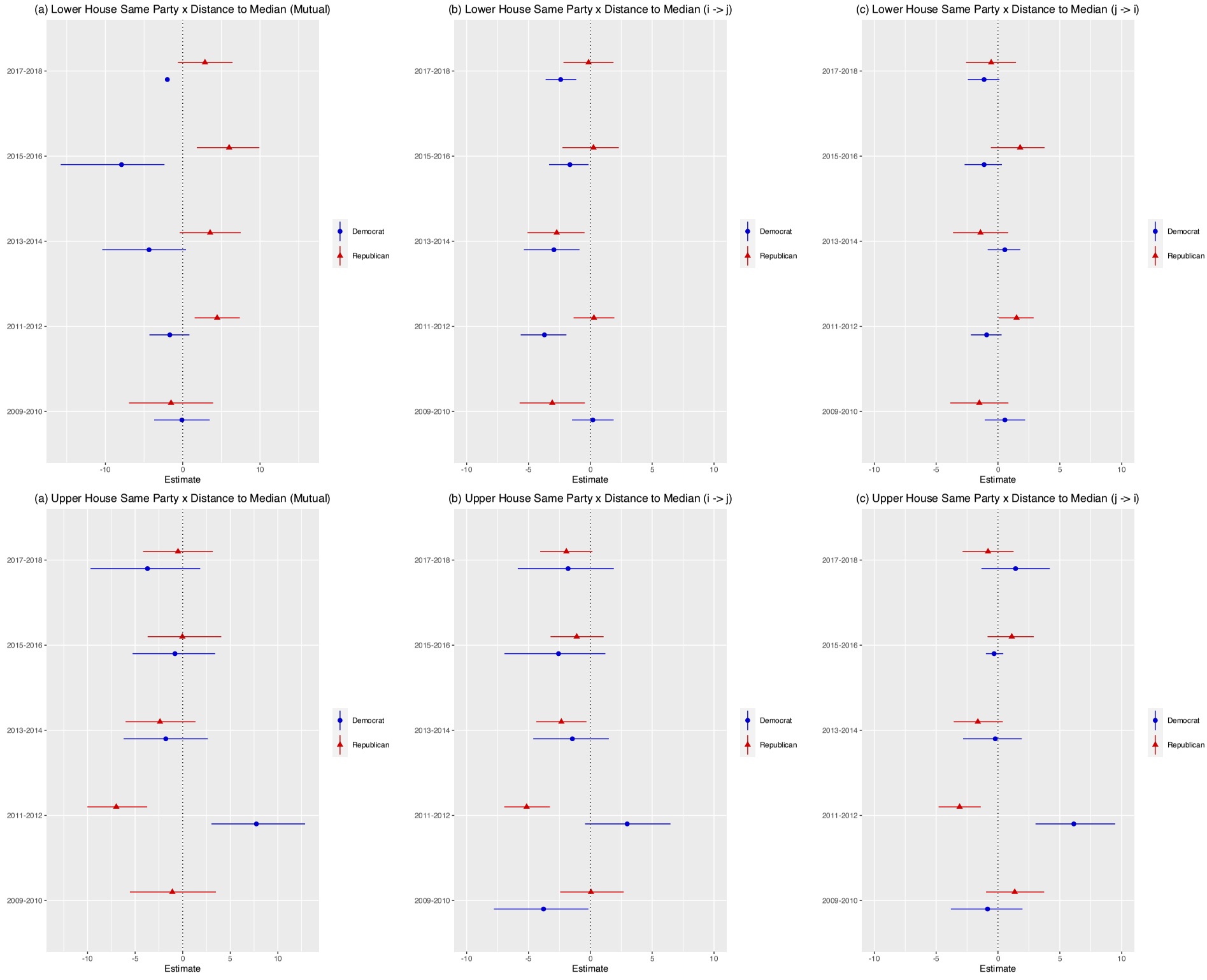

Figure 5: Coefficient plots of within-party influence in Minnesota, 2009-2018

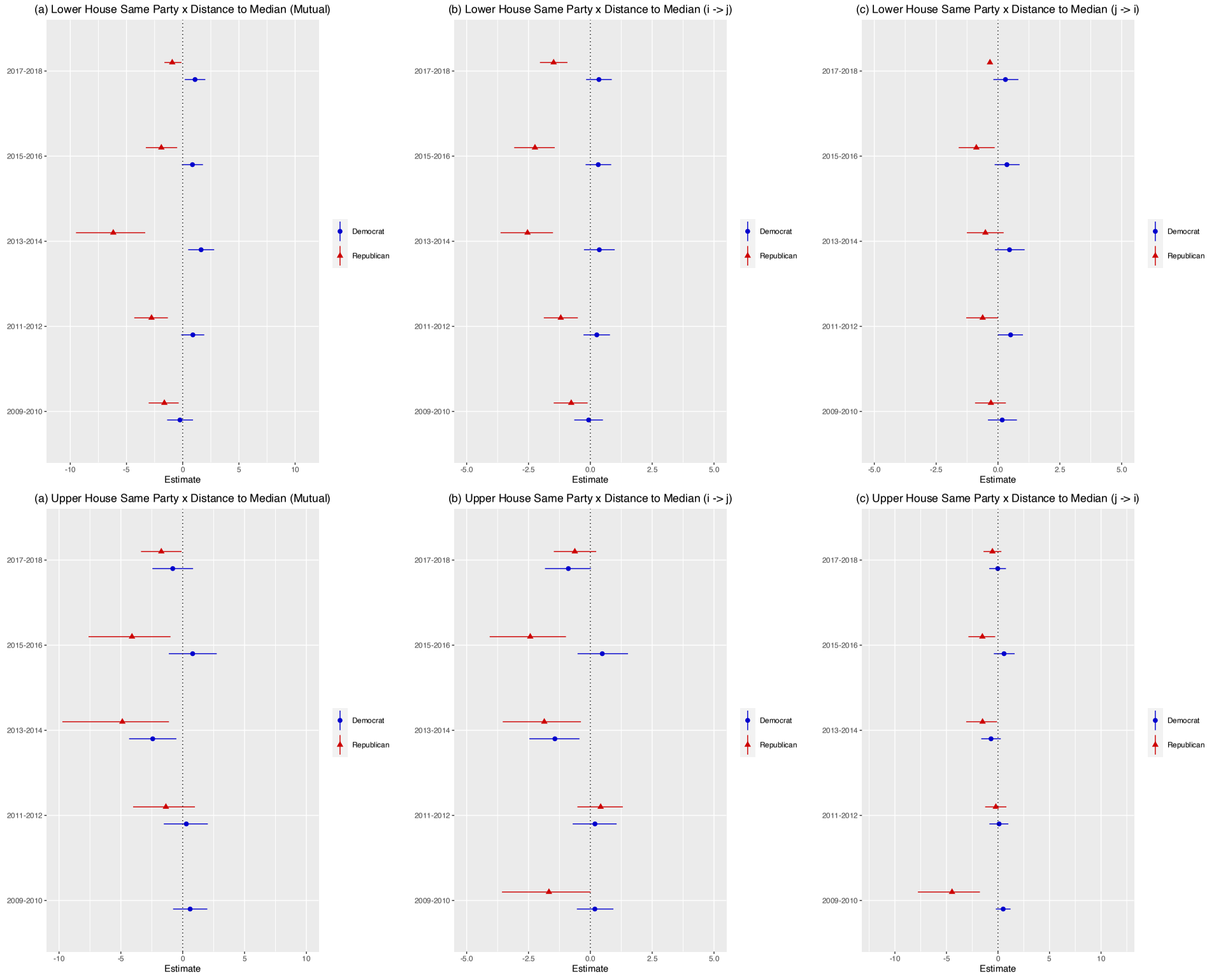

Figure 6: Coefficient plots of within-party influence in Nebraska, 2009-2018

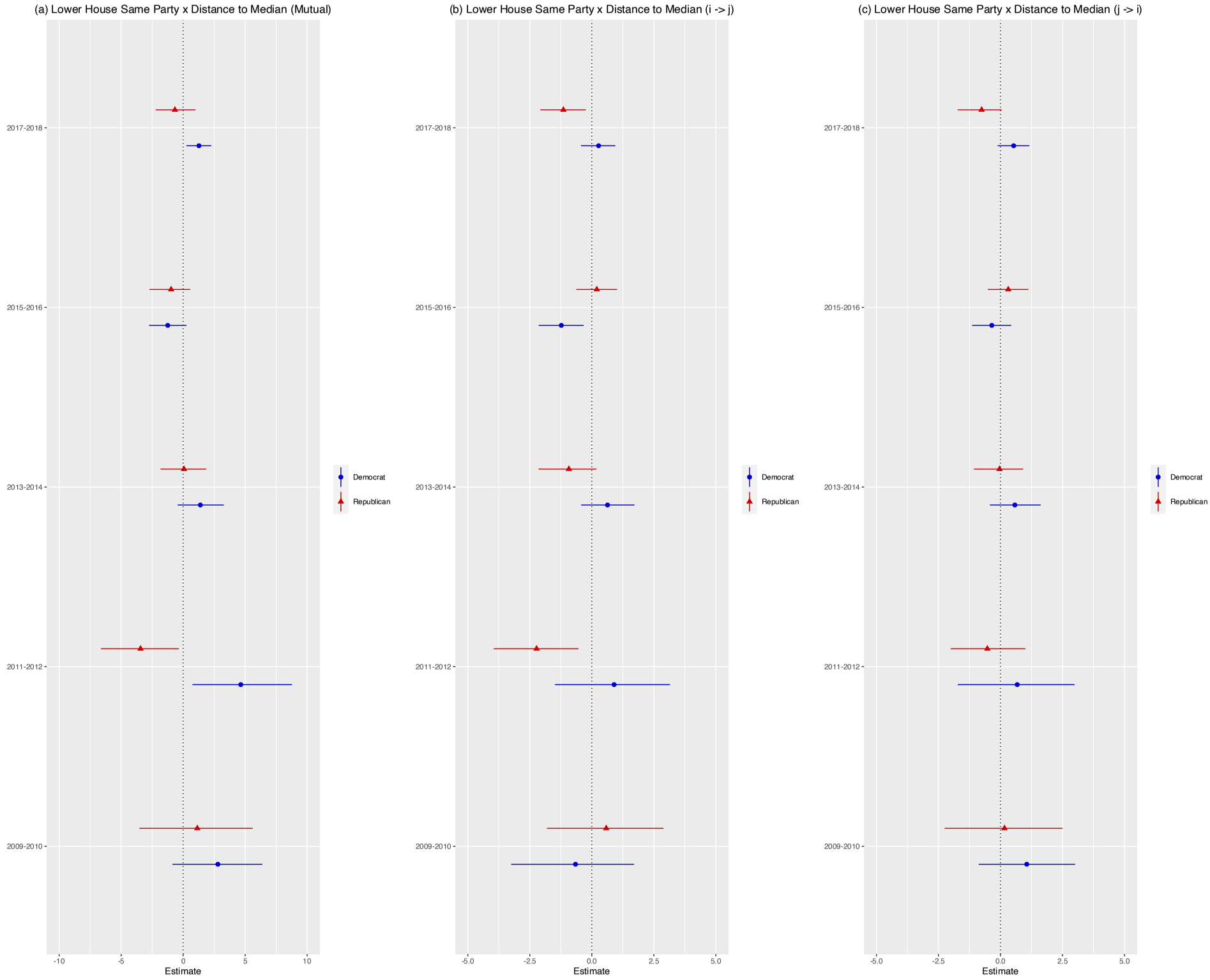

Figure 7: Coefficient plots of within-party influence in Oklahoma, 2009-2018

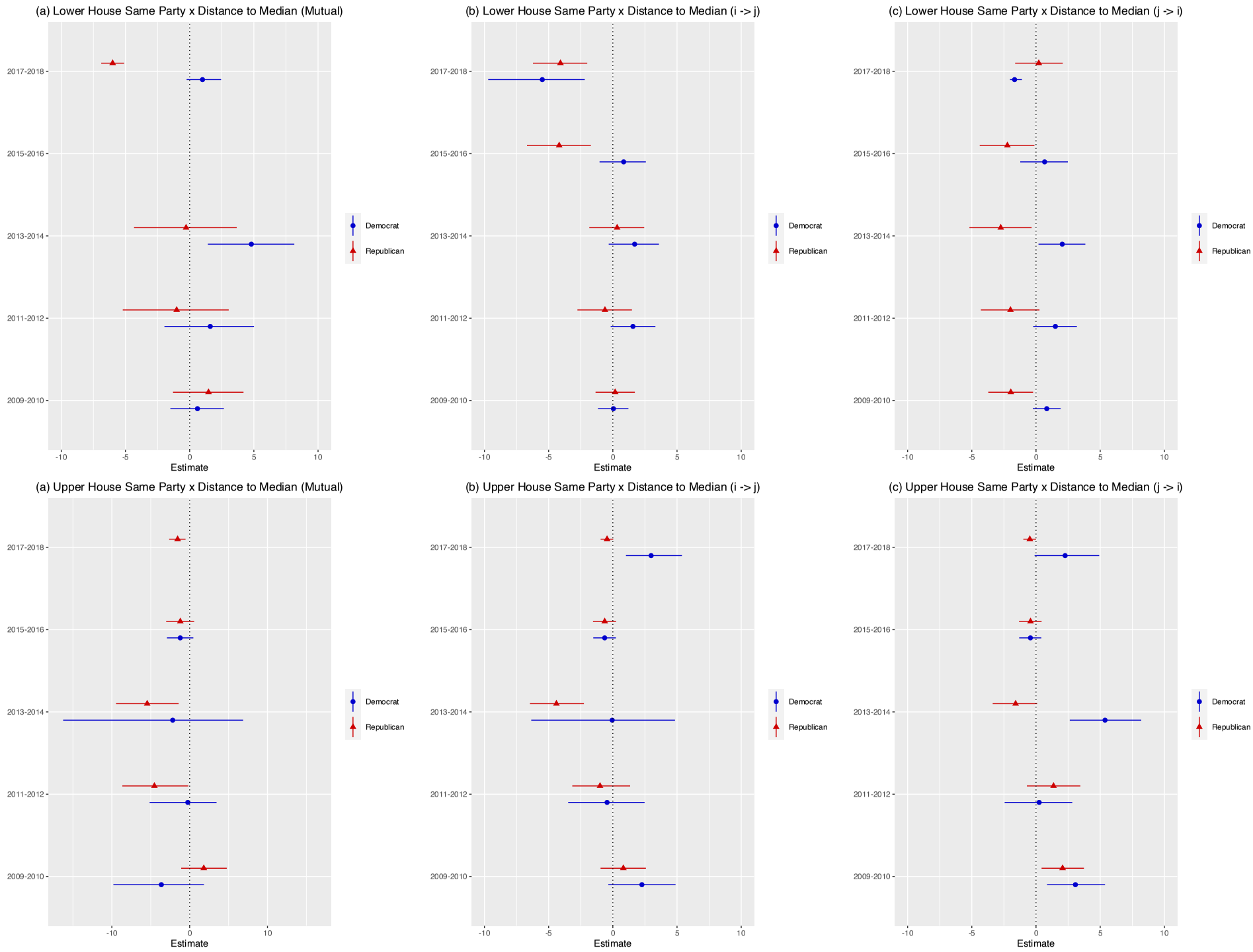

Figure 8: Coefficient plots of within-party influence in South Carolina, 2009-2018