Gridlock, Elite Polarization, and Attitudes About the Parties

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Abstract

Scholars have argued that the growth of polarization among partisan elites in the U.S. has made it easier for members of the mass public to differentiate the parties, thereby strengthening the power of partisanship as a predictor of mass attitudes and behaviors. And while partisans in the mass public may be relying more upon partisanship to guide them, it remains unclear why people feel *less* favorable towards their own party than they did in the past. I argue that peoples' attitudes towards both their own party and the other party are not only a function of the degree of differentiation between the parties, but are also a function of the parties' productivity in Congress: when gridlock keeps partisan elites from addressing salient political issues, partisans becomes less favorable toward both parties. Furthermore, when the divisions between elites become increasingly clear, the negative effects of gridlock on in-party favorability are exacerbated.

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1 Introduction

Few words better describe the American political scene in recent years than "polarized." At the elite level, Democratic and Republican members of Congress have steadily drifted apart, producing the ideologically homogeneous parties that we observe today (McCarty, Poole, and Rosenthal 2016; Levendusky 2009). At the mass level, partisans are increasingly relying upon their partisanship as a driver of their political attitudes and behaviors, such as their evaluations of candidates (Iyengar and Krupenkin 2018) and vote choice (Bartels 2000). It is puzzling, then, that during the same period in which elite polarization is said to have produced a "resurgence" of mass partisanship (Hetherington 2001), partisans' favorability ratings of their own party appear to have *decreased*, reaching a record low of 66 out of 100 according to the American National Election Studies' (ANES) "feeling thermometers" (Iyengar et al. 2019).[1] If elite polarization has facilitated the growing power of partisanship as a predictor of mass attitudes and behaviors, why have partisans not come to hold more favorable opinions of their own party?

I argue that mass attitudes towards one's own and the other party are not only determined by the degree of differentiation between the parties in Congress, but also by the parties' legislative productivity. Research shows that partisan conflict in Congress (Ramirez 2009) and the gridlock that may follow (Flynn and Harbridge 2016) leads to depressed evaluations of the legislative branch. And while partisan elites may not cooperate with one another, partisans in the mass public are not all that polarized in their issue positions (Hetherington 2009), and are largely favorable towards the concept of compromise (Wolak 2020). On the issues that opposing partisans do hold a consensus, most would rather the out-party pass their preferred policy than see gridlock continue (Flynn and Harbridge 2016). I build on this literature by suggesting that the contempt felt for a gridlocked Congress is extended to both the in- and out-party, such that, as the parties in government have brought the

[1]The ANES feeling thermometers ask respondents to rate the Republican and Democratic parties on scales that range from 0 (most negative attidues) to 100 (most positive attitudes), with 50 being neutral.

legislative branch to a halt, peoples' evaluations of both parties are expected to decrease. Furthermore, as the parties become increasingly distinct, the punishment dealt to both parties for producing gridlock in the legislative process is expected to be increasingly severe. This may explain why, even in an era when the parties are clearly differentiated, evaluations of the in-party have not reached historically high levels.

Using biennial data that range from the 95^{th} to the 114^{th} U.S. Congress, I examine the effects of elite polarization and gridlock on attitudes towards the in- and out-parties. I find suggestive evidence that partisan polarization among members of the House of Representatives lead individuals to feel more favorable toward their own party, while polarization in either chamber of Congress leads to depressed evaluations of the out-party. This is to say that partisans know who to love, and who to hate, when the divisions between the parties are clear. However, I also find that gridlock reduces evaluations of both the in- and out-parties, with the negative effects of gridlock on in-party attitudes becoming even stronger when elites are polarized. The implication here is that, not only has gridlock in Congress depressed partisans' favorability toward both parties, but that elite polarization has made it even easier for partisans to assign some of that blame to their own party.

This study advances our understanding of elite and mass partisan polarization in two clear ways. First and foremost, I provide an explanation for an apparent contradiction that has yet to be addressed in the literature – that is, people today appear to be relying more heavily upon their partisanship to guide their political behaviors, but continue to hold only mildly favorable views of their own party. The explanation I offer introduces a new institutional factor – Congressional gridlock – into the study of mass affective polarization. Through my analyses, I am able to show that gridlock is capable of influencing attitudes towards both the in- and out-parties. Second, although previous work has shown that gridlock and polarization impact evaluations of Congress as as whole, I demonstrate that the effects of these elite-driven processes extend to evaluations of the parties. Parties are influential actors in the legislative process, and when their actions bring the legislative process

to a halt, partisans in the mass public respond by lowering their evaluations of the parties. Together, these advancements suggests that the relationship between the polarization of partisan elites and attitudes of partisans in the mass public is more nuanced than previously believed.

2 Elite and Mass Polarization

Evidence of polarization among partisan elites in the United States is plentiful. Stemming largely from divisions over issues of civil rights (Carmines and Stimson 1989), Democratic and Republicans elites in Congress have gradually come to occupy distinct ends of the ideological spectrum (McCarty, Poole, and Rosenthal 2016; Levendusky 2009). This has led to a considerable amount of partisan conflict in the legislative body (Ramirez 2009), increased negativity in political advertising (Geer 2010), and increased media attention on elite divisions (Levendusky 2009; Robison and Mullinix 2016). Tensions between partisan elites have even heightened to the point that representatives often avoid mingling with members of the other party on the floor of the U.S House of Representatives following a vote (Dietrich, Forthcoming).

The extent to which partisans in the mass public have polarized is less clear. Some scholars have pointed to fact that partisans today hold more consistently liberal or conservative issue positions – though not necessarily more extreme positions – as compared to partisans of the past (Abramowitz and Saunders 2008). Others have argued that the public remains relatively non-ideological (Kinder and Kalmoe 2017) and has not polarized on the issues to any significant degree (Fiorina, Abrams, and Pope 2005). Instead, what appears as polarization may be an artifact of partisan sorting, where individuals adjust their partisan identity to fit their ideological identity (Levendusky 2009; Mason 2015, 2018).[2] Such a process can give the illusion that Republicans and Democrats in the mass public are polarizing when all that has truly occurred is a shift in partisan or ideological identification.

[2]It is also possible for individuals to adjust their ideological identity to fit their partisan identity.

While scholars continue to the debate the causes and depth of polarization in the mass public, most agree that the behavior of partisan elites is at least partially responsible for the manifestations of mass polarization that we do observe. Here I describe two specific ways in which growing elite divisions have impacted partisans in the mass public. First, elite polarization has strengthened partisans' *psychological* attachment to their party. Scholars have long recognized partisanship as a form of psychological attachment, responsible for driving important political behaviors such as vote choice and candidate evaluations (Campbell et al. 1960; Converse 1964). As cues from elites become more clearly divided along partisan lines, it becomes even easier for partisans in the mass public to rely upon the attachment to their party to guide their decision-making (Druckman, Peterson, and Slothuus 2013; Levendusky 2010; Bartels 2000). This, Hetherington (2001) argues, explains the "resurgence" of partisanship — in the form of increased straight-ticket voting and partisans' greater ability to differentiate the parties — that we observe in the latter half of the 20^{th} century.

The second consequence of elite polarization is that it has strengthened partisans' *social* attachment to their party. Co-partisans may not agree entirely on the issues, but they nonetheless share a social bond over their membership in the same party. The strengthening of this social bond between partisans has resulted in the growth of affective polarization, defined as the gap in favorability towards the in-party/in-partisans and the out-party/out-partisans (Iyengar, Sood, and Lelkes 2012; Iyengar and Westwood 2015). Evidence of this type of partisan bias can be seen in dating patterns (Huber and Malhotra 2017), character evaluations of other partisans (Iyengar, Sood, and Lelkes 2012; Mason 2018), and judgments of those that are helped or harmed by public policy (Allamong and Peterson, Forthcoming). In each of these settings, the social attachment shared among partisans leads them to demonstrate preferential treatment towards those that share their partisan identity, but discriminate against those from the opposite party.

The preceding discussion makes clear the relationship between elite polarization and the political attitudes of partisans in the mass public: as the differences between the par-

ties at the elite level have become further clarified, the psychological and social attachment that individuals have with their party has strengthened. Partisans are now better able to distinguish the issues and individuals associated with either party and have adjusted their political attitudes and behaviors accordingly. And while there is preliminary evidence to suggest that elite polarization is related to the growing *gap* in partisans' attitudes towards the parties (Banda and Cluverius 2018), I argue that this gap should stem from both increasingly favorable views of the in-party, as well as increasingly unfavorable views of the out-party. Therefore, I expect increases in elite polarization to produce positive evaluations of the in-party, but negative evaluations of the out-party, all else held constant. This represents my *Elite Polarization Hypothesis*:

Elite Polarization Hypothesis: *increases in elite polarization lead to increases in favorability toward the in-party and decreases in favorability towards the out-party*

3 Gridlock as a Determinant of Party Attitudes

If my argument regarding the effects of elite polarization and attitudes about the parties is correct, we might expect a simple examination of favorability toward the parties over time to reveal upward movement partisans' favorability ratings of their own party and a downward movement in favorability ratings of the out-party. After all, this is the pattern observed in partisans' ratings of the in-party and out-party presidential candidates (Iyengar and Krupenkin 2018). And while measures of party favorability, such as the ANES feeling thermometers (Iyengar and Krupenkin 2018), do reveal gradual decreases in out-party favorability, in-party favorability appears surprisingly stable over time, even showing signs of decay in recent years. This is important because it seems to conflict with the large body of work arguing that – by clarifying the differences between the parties – elite polarization has led partisans in the mass public to rely more heavily upon their partisan identity as a driver

of their political attitudes and behaviors (Bartels 2000; Hetherington 2001).[3] However, I provide a solution to this seeming contradiction by arguing that that the growth of gridlock in Congress has depressed partisans' evaluations of both parties.

During the same time period in which elite polarization has steadily increased — roughly 1960 through the present — scholars have observed a similar increase in the level of gridlock in Congress (Binder 1999; Binder 2015). That is, Congress has continuously gotten worse at addressing matters of national importance. Binder (1999) identifies several possible sources of gridlock such as divided government, ideological differences between the House and Senate, and even elite polarization. Of course, it is easy to see how polarization might lead to gridlock: as partisan members of Congress move toward the ideological poles, it becomes more difficult to find common ground and pass important legislation. However, the relationship between elite polarization and gridlock remains debated. In a series of papers in *Political Analysis*, Chiou and Rothenberg (2008a, 2008b) and Binder (2008) discussed the sensitivity of Binder's (1999) findings to changes in the measurement of the independent variables.[4] The jury is still out on the relationship between elite polarization and gridlock, but the growth of gridlock over the last several decades is nevertheless undeniable.

Why, though, might increases in gridlock lead to lower evaluations of the parties? Here, I provide two answers to this question. First, partisans are generally averse to gridlock. While a handful of strong partisans may wish for their party to take a principled stand that could result in conflict and gridlock (Harbridge and Malhotra 2011), these individuals are the exception and not the rule, as most partisans would rather see Congress address the important issues of the day. For instance, Wolak (2020) shows that a large majority of partisans in the mass public, both Democrat and Republican, are generally favorable toward the idea of compromise and prefer politicians that say they are willing to do so.

[3]There is even evidence to suggest that Independents have also been affected by elite polarization and the clarification of the differences between the parties. Independents of today are better able to distinguish the differences between the parties and are less likely to switch their votes across elections (Smidt 2017).

[4]My use of DW-NOMINATE scores, along with the fact that I make over time, but not cross-chamber, comparisons helps me avoid the measurement issues raised by Chiou and Rothenberg (2008a).

Flynn and Harbridge (2016) also shows that partisans prefer compromise to gridlock on issues with no consensus, while on consensus issues, partisans would rather see the out-party pass their preferred policy than see gridlock continue. This makes sense considering that partisans in the mass public do not generally hold strong and consistently partisan issue positions (Hetherington 2009), but do have an interest in seeing Congress produce legislation to address national problems.

The second reason that gridlock may reduce evaluations of the parties is that gridlock often entails partisan incivility and conflict. For many individuals, the hostile nature of partisan politics can be off-putting, leading some individuals to purposefully avoid discussing politics (Klar and Krupnikov 2016; Klar, Krupnikov, and Ryan 2018).[5] When partisan conflict occurs in Congress, many people respond by lowering their evaluations of the legislative branch (Ramirez 2009). Given that the actions of partisan elites on both sides of the aisle are responsible for producing the uncivil and gridlocked Congress we observe today, cutting against the desire for compromise found among many individuals in the mass public (Wolak 2020), I believe that partisans are likely to respond to Congressional gridlock by lowering their evaluations of both parties. Together, these two reasons lead me to present the *Gridlock Hypothesis*:

Gridlock Hypothesis: *increases in gridlock lead to decreases in favorability toward both the in-party and the out-party*

So far, I have argued that one of the primary ways in which elite polarization has strengthened the psychological and social attachment that partisans have to their party is by making the distinctions between the parties more clear. This should make it easier for

[5]Part of Klar and Krupnikov's (2016) argument is that polarization leads some partisans to hide their partisan identity by claiming to be independent. I attempt to alleviate concerns about the rise of independents by noting here and in the Data and Methods that I include party-leaning independents – who may simply be "undercover partisans" (Klar and Krupnikov 2016) – in my analysis. These "leaners" are equally (if not more) knowledgable and interested in politics than "weak" partisans (Klar and Krupnikov 2018).

partisans to recognize which party they should like and which they should hate (hence the Elite Polarization Hypothesis). However, it may be the case that when elites become more polarized, it also becomes easier for partisans to assign responsibility for gridlock to the both parties. When partisan elites are relatively non-polarized, it may be difficult to tell who is responsible for gridlock in the legislative process. But, as the polarization clarifies the differences between the parties, partisans may view the parties as the source of gridlock if and when it occurs. This would imply that gridlock and elite polarization are interactively related, such that the power of gridlock to reduce partisans' favorability toward either party is strengthened when elite polarization is heightened. This represents my Partisan Gridlock Hypothesis:

Partisan Gridlock Hypothesis: *the negative effects of gridlock on in-party and out-party favorability will be strongest when elite polarization increases*

4 Data and Methods

I will empirically evaluate my Elite Polarization and Gridlock hypotheses using a time-series analysis. My two primary explanatory variables (described in greater detail below) are measures of (1) elite polarization in either chamber of Congress and (2) Congressional gridlock. My two primary dependent variables (also described in greater detail below) are measures of (1) in-party favorability — or Republicans (Democrats) attitudes towards the Republican (Democratic) Party — and (2) out-party favorability — or Republicans (Democrats) attitudes towards the Democratic (Republican) Party.[6] All items are measured biennially, with each observation representing a particular Congress. The data range from the 95$^{\text{th}}$ Congress (1977-79) to the 114$^{\text{th}}$ Congress (2015-2016) for a total of 20 observations.

[6]Leaning-independents are coded as partisans in this analysis. This decision was motivated by the evidence that leaning independents tend to behave politically much like self-identified partisans (Keith et al. 1992), as well as the evidence that some partisans claim to be independent to avoid the social costs of publicly disclosing one's partisan identity (Klar and Krupnikov 2016).

Table 1: Surveys Used to Generate In- and Out-Party Favorability

Survey Firm	# of Surveys	Loadings (In-Party/Out-Party)
ANES	16	.970/.990
Gallup	10	.963/.980
Gallup2	5	.543/.871
CBS	4	.606/.784
CBS/New York Times	8	.871/.852
PSRA	3	.668/.232

4.1 Measuring Party Favorability

One of the most commonly used data sources on party favorability is the American National Election Studies (ANES). Beginning in 1978, the ANES has asked respondents to rate the Democratic and Republican Parties using 101-point feeling thermometers, with 0 being the most negative attitude toward the party, 100 being the most positive attitudes, and 50 being neutral. In-party and out-party favorability is then calculated as the difference between individuals' ratings of their own party and the other party. Unfortunately, this measure is not available from the ANES in midterm years post-2000, meaning that the ANES data alone are insufficient to generate the necessary biennial measures of in-party and out-party favorability that are needed in this analysis.

To account for the inconsistencies in the ANES party favorability data, I utilize Stimson's (2018) dyad ratios algorithm which allows the researcher to combine measures from different survey outlets — all of which are assumed to tap into the same latent attitude — into a continuous time-series measure.[7] The latent attitude that I am obviously interested in is partisans' attitudes towards their own party and the other party. Therefore, I rely upon the Roper Center's 'iPoll' database to gather survey items that I believe are tapping into this latent attitude. I searched the database using words such as 'favorable, 'favorability,'

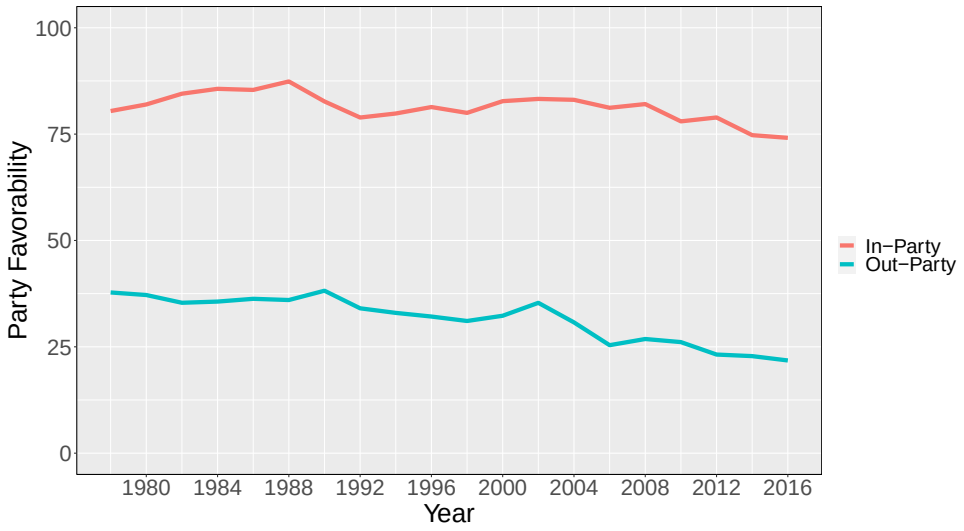
[7]Scholars have previously applied this algorithm to generate various measures of political concepts such as policy mood (Erikson, MacKuen, and Stimson 2002; Enns and Kellstedt 2008) and macro-interest (Peterson et al. 2016).

and 'party,' restricting my search to surveys where the full survey dataset was available.[8]

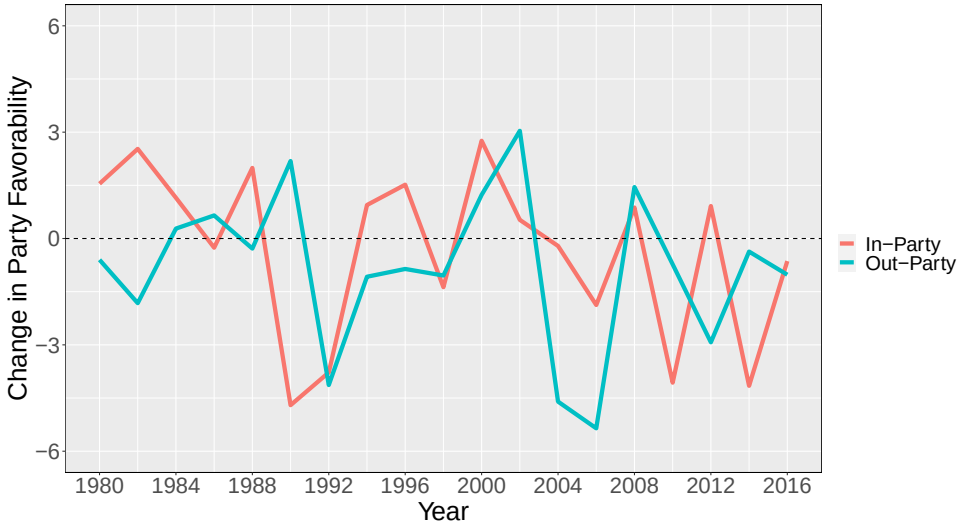
Table 1 provides information on the survey items that were used in the algorithm, including the survey firm that conducted the survey, the number of surveys used from each firm, and the respective loadings on the in-party and out-party favorability measures. Question wording for each of the items that went into the algorithm can be found in Table 4 of Appendix A. The loadings from the generated in- and out-party favorability series given in Table 1 represent the "product moment correlations between the latent dimension estimates and the raw indicators," (Stimson 2018, 210). Positive loadings indicate that the surveys from a particular firm move in the same direction as the latent series, while negative loadings indicate that surveys from a firm move in the opposite direction. This implies that the latent series produced from the algorithm more closely follow those surveys with the highest, positive loadings. The loadings of the ANES and Gallup series, for instance, are well above 0.9, indicating that they are highly influential in the construction of the latent series. On the other hand, the PSRA surveys do tend to move in the same direction as the latent series as indicated by its positive loadings, but the relatively small size of the loading indicates that the latent series does not follow the PSRA series as neatly. With this one exception, most series demonstrate fairly high and positive loadings, giving me confidence that the items I've collected are consistently tapping into the same latent attitudes — in-party and out-party favorability — and that their inclusion in the algorithm is appropriate.

Figure 1 plots the measures of in-party and out-party favorability that I have generated with the dyad ratios algorithm (levels in 1a, changes in 1b). Given the rather high loadings from the ANES and Gallup surveys as indicated in Table 1, it is unsurprising that my generated measures of in-party and out-party favorability closely reflect the patterns found in the ANES and Gallup series (see Figure 5 in Appendix C). It is easy to see from Figure 1a

[8]Survey top-lines on party favorability are easily accessible from the Roper Center's iPoll database, but measuring in-party and out-party favorability requires that I know the party identification of each survey respondent. Therefore, for each survey containing a question on party favorability, I downloaded the entire dataset and parsed Republican (Democratic) attitudes towards the Republican (Democratic) and Republican (Democratic) attitudes towards the Democratic (Republican) Party.



(a) Levels of In-Party and Out-Party Favorability, 1978-2016



(b) Change in In-Party and Out-Party Favorability, 1980-2016

Figure 1: Plots of In-Party and Out-Party Favorability

that out-party favorability (blue line) has trended downward from roughly 38 (on a 0-100 scale) in 1978 to roughly 22 in 2016. In-party favorability (red line), on the other hand, hovers near 80 in the early years of the series, but begins to creep downward over time, reaching a low of 74 in 2016. Both in-party and out-party favorability are slightly higher during years with presidential elections as compared to years with midterm elections, with in-party favorability being 0.4 points higher and out-party favorability being 0.1 points higher.

4.2 Measuring Congressional Gridlock

The measure of Congressional gridlock that I will use in my analyses comes from Binder (1999), who defines gridlock as "the relative ability of the political system to reach legislative compromises that alter the status quo," (Binder 1999, 523). More substantively, Congress is considered to be gridlocked to the extent that it could have, but fails to, address politically important issues. Binder's (1999) contribution is to propose a method of identifying the issues of national importance from unsigned editorials in the *New York Times*, and then examining if Congress has passed legislation on those issues or not. Figure 2 plots the amount of gridlock over time, with the level of gridlock shown in 2a and Congress-to-Congress changes in gridlock shown in 2b.

The justification for using unsigned editorials from the *Times* as that the paper has long been considered the nation's "paper of record," and thus any political issues raised in the editorials is an indication that the issue has reached some minimal threshold of public salience. While some may be concerned that the issues addressed in the unsigned editorials of the *New York Times* may reflect the ideological biases of the paper's editorial team, Binder (1999) attempts to quell these concerns by noting that her measure of gridlock considers not only those editorials that support a given piece of legislation, but also those that show opposition. Nevertheless, editorial teams of large newspaper such as the *Times* are sensitive to the tastes of their readership, which means that certain issues may be purposefully omitted from the unsigned editorials. In future iterations of this project, I am thinking of constructing

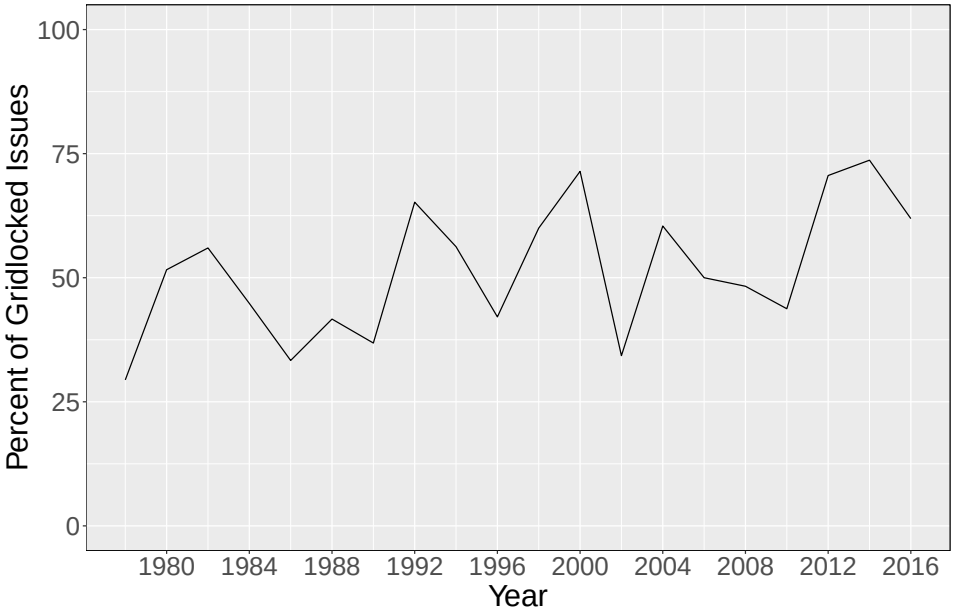
a new measure of gridlock that does not rely upon media coverage to identify the issues of national importance. One possibility is to consider Congress' ability to address the issues that voters see as the 'most important problems' in our Country, as identified from survey responses based on nationally representative samples (Heffington, Park, and Williams 2019).

4.3 Measuring Elite Polarization

To measure elite polarization, I rely upon DW-NOMINATE scores from VoteView (Lewis et al. 2018). DW-NOMINATE assigns an ideological score to each legislator in the United States Congress based on their roll-call voting history, with negative scores representing more liberal positions and positive scores representing more conservative positions. I operationalize elite polarization as the absolute difference between the median Republican and Democratic legislators, calculated separately for the House of Representatives and Senate. Calculating elite polarization using DW-NOMINATE scores is common practice in the American politics literature (e.g., Banda and Cluverius 2018; Hetherington 2001). Note that the elite polarization scores have no inherent meaning, so in my interpretation of the models presented in the following section, I provide substantive interpretation of effect sizes where appropriate. Plots of my measure of elite polarization are provided in Figure 3 (levels in 3a, changes in 3b). The degree of polarization increases steadily in both the House of Representatives (red line) and the Senate (blue line), though the House of Representatives tends to be the most polarized chamber of Congress.

4.4 Controls

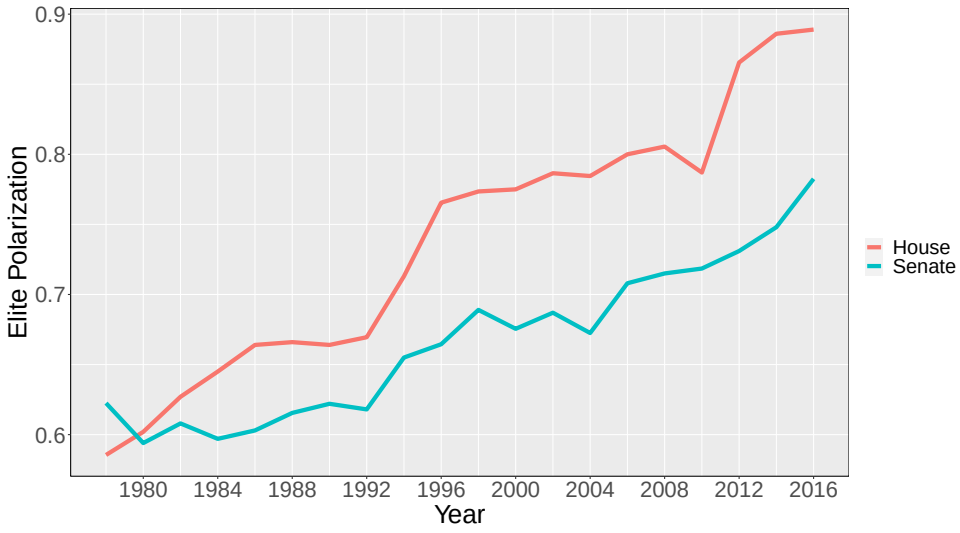
With only 20 observations (19 when using differenced variables), I am unfortunately unable to include an extensive battery of control variables. Nevertheless, I do consider three variables that may confound the relationship between either of my primary explanatory variables (i.e., elite polarization and gridlock) and my measures of in- and out-party favorability. First, I include an indicator for divided government, as Congress' ability to pass legislation



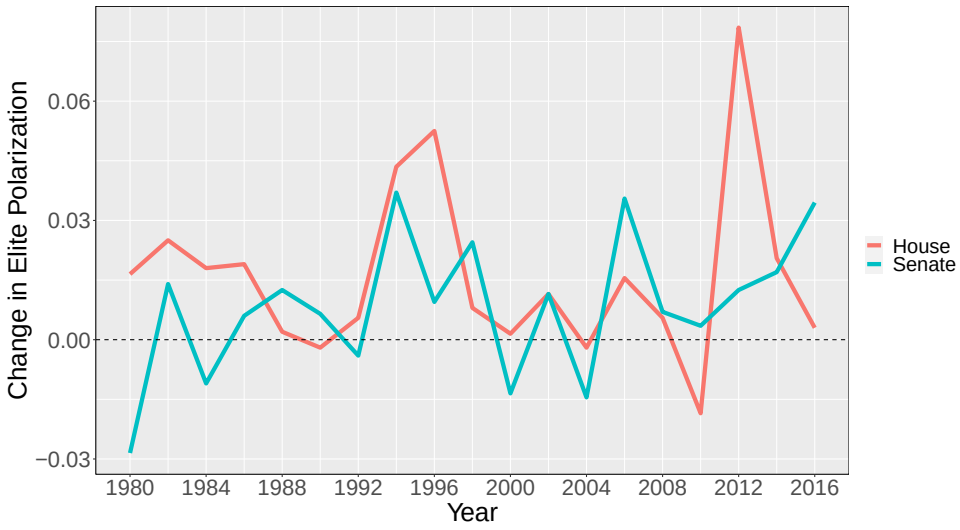
(a) Levels of Gridlock, 1978-2016

(b) Change in Pct. of Issues Gridlocked, 1980-2016

Figure 2: Plots of Congressional Gridlock



(a) Levels of Elite Polarization, 1978-2016



(b) Change in Elite Polarization, 1980-2016

Figure 3: Plots of Elite Polarization

may be hampered (facilitated) by a divided (unified) government. Second, I include the change in the percent of strong partisans, as partisans in Congress may alter their calculus of electoral risk when they observe mass partisans becoming increasingly dedicated to their party (Harbridge and Malhotra 2011). Finally, I consider the effects of GDP growth, as more positive (negative) changes in growth may lead partisans to reward (punish) either or both parties. However, I find that including the change in GDP variable in the full models has little impact on the conclusions that I draw, so the full models that I present in the Results section only include controls for divided government and the change in the percent of strong partisans. Models that include GDP growth are presented in Tables 5 and 6 in Appendix B.

4.5 Modeling Strategy

In the following section, I estimate and present the results from a series of seemingly unrelated regressions (SUR). The SUR approach is beneficial in that it accounts for the possibility of correlation in error terms across regression models. Given that people's attitudes towards the in- and out-parties may be jointly determined, the SUR is the optimal modeling strategy.

When modeling time-series data, researchers often begin by testing for stationarity in their variables. With only 20 observations, however, unit-root tests such as the augmented Dickey-Fuller or Phillips-Perron will be underpowered (Pickup 2014). To account for the possibility of non-stationarity, I first difference my dependent variables (in-party/out-party favorability), my primary explanatory variables (elite polarization and Congressional gridlock), as well as the controls for GDP and the percent of strong partisans. The indicator for divided government remains in its original form. The model that I then estimate to test my Elite Polarization and Gridlock Hypotheses is shown in Equation 1:

$$\Delta Y_{i,t} = \beta_{i,0} + \beta_{i,1}\Delta ElitePol._{i,t} + \beta_{i,2}\Delta Cong.Gridlock_{i,t} + \beta_{i,j}\mathbf{X}_{i,t,j} + \epsilon_t \qquad (1)$$

with $i \in \{1, 2\}$ indexing the individual regressions that comprise the SUR and t indexing time; $\Delta Y_{i,t}$ representing the differenced measure of in-party ($i = 1$) and out-party ($i = 2$) favorability; $\beta_{i,1}$ representing the effects of a Congress-to-Congress change in elite polarization in each of the i regressions of the SUR; $\beta_{i,2}$ representing the effect of the change in Congressional gridlock; and $\beta_{i,j}$ representing the effects of each of the $j \in \{3, \ldots, k\}$ control, with k being the total number of control variables. The Elite Polarization and Gridlock Hypotheses can be tested by assessing the statistical and substantive significance of $\beta_{i,1}$ and $\beta_{i,2}$, respectively.[9]

Testing my Partisan Gridlock Hypothesis requires the addition of an interaction term ($\beta_{i,3}$) to my model, so that I can determine if the negative effects of gridlock on in-party and out-party favorability are stronger when elites become more polarized. This corresponds to an examination of the marginal effects of gridlock on in- and out-party favorability at various levels of polarization ($\beta_{i,2} + \beta_{i,3} \times \Delta EllitePol.$). The model with the included interaction term is given in Equation 2:

$$\begin{aligned} \Delta Y_{i,t} =& \beta_{i,0} + \beta_{i,1}\Delta ElitePol._{i,t} + \beta_{i,2}\Delta Cong.Gridlock_{i,t} \\ &+ \beta_{i,3}\Delta ElitePol._{i,t} \times \Delta Cong.Gridlock_{i,t} + \beta_{i,j}\mathbf{X}_{i,t,j} + \epsilon_t \end{aligned} \tag{2}$$

Given that I have separate measures of polarization in the House of Representatives and Senate, I begin by estimating the SURs with the House measure of polarization and then follow up with an SUR using the Senate measure. I do not have *a priori* expectations about the effects of polarization in the House as compared to the Senate, but given that polarization has progressed at a faster pace (Figure 3a) and appears more volatile in the House

[9]Given the mixed evidence that elite polarization and gridlock may be related (Binder 1999), there may be concerns that elite polarization and gridlock show a high degree of multicollinearity, inflating the standard errors of my models. While polarization in the House and Senate are moderately correlated with gridlock in levels ($R \approx 0.5$), I use the first difference of my primary variables in empirical analysis, which produces only a small correlation between House polarization and gridlock ($R = 0.5$), and a negative but moderately sized correlation between Senate polarization and gridlock ($R = 0.41$). This might suggest some inflationary effect on the standard errors in the Senate models, but not so much in the House models.

of Representatives (Figure 3b), it is possible that public is more responsive to polarization in the House.

Before proceeding to the results of my empirical analysis, it is important to be transparent about the potential limitations of my methodological approach. The most obvious limitation is that I am confined to a rather small number of observations and, as a result, including a broad ranges of controls in my models will quickly expend their explanatory power. Therefore, I first present a simple model with only the elite polarization and Congressional gridlock measures as explanatory variables, and subsequently present models that include the full set of controls and the interaction term. An additional limitation is that using Congress-to-Congress changes in elite polarization and gridlock may not map perfectly onto my theory. Individuals' attitudes towards the in- and out-party are likely to fluctuate at a shorter time-scale than the biennial level, and may demonstrate both short and long term reactions to elite polarization and gridlock.[10] Nevertheless, the data that are available for the present analysis allow me to take the initial step of establishing some connection between gridlock, elite polarization, and attitudes about the parties.

5 Results

I begin by examining the effects of elite polarization on in- and out-party favorability (the Elite Polarization Hypothesis). Tables 2 and 3 both show three sets of seemingly unrelated regressions, with a simple model estimated in Columns 1-2, a more extensive additive model that includes the full set of controls shown in Columns 3-4, and model with includes the controls and an interaction between elite polarization and gridlock shown in Columns 5-6. Table 2 uses the House of Representatives measure of elite polarization while Table 3 uses the Senate measure. Given that the variables are measured on different scales, readers should be cautious to not judge effect sizes from the coefficients in the regression tables; substantive

[10]This seems to suggest that an Error Correction Model with quarterly or annual data would be the most ideal modeling strategy given my theory. The data that I am in the process of collecting will allow me to perform these analyses.

interpretation of effects sizes is given in-text where applicable. I use one-tailed hypothesis tests to determine statistical significance as my Elite Polarization and Gridlock hypotheses are directional in their expectations.

Looking first at the simple models in Columns 1 and 2 of Tables 2, we see that the coefficient on change in polarization in the U.S. House of Representatives has a positive effect on in-party favorability ($\hat{\beta} = 40.275$, $p < 0.10$) and a negative effect on out-party favorability ($\hat{\beta} = -16.522$, $p = 0.22$) as anticipated by the Elite Polarization Hypothesis. However, this effect is only statistically significant in the in-party model. When controls are added (Columns 3 and 4), the signs of the coefficient on House polarization remain in their expected direction for both the in-party ($\hat{\beta} = 7.675$) and out-party ($\hat{\beta} = -40.622$) models, but the effect of polarization on the in-party has lost its statistical significance, while the out-party measure has now reached significance at $p < 0.05$. To get an idea of the substantive significance of the House polarization variable, consider that a typical change in House polarization – defined here as the mean of the absolute value of ΔHouse Polarization – is 0.018 units.[11] This is roughly the size of the change in polarization experienced by the House of Representatives between the 97$^{\text{th}}$ (1981-1983) and 98$^{\text{th}}$ (1983-1985) Congresses. A change in House polarization of this size is expected to produce a 0.739 unit positive change ($\approx$ 0.31 std. deviations) in in-party favorability from the simple model, and a 0.745 unit negative change ($\approx$ 0.34 std. deviations) in out-party favorability from the full model. Given that the typical change in in-party favorability is roughly 1.88 units, and the typical change in out-party favorability is 1.77 units, this implies that a typical change in House polarization accounts for roughly 40% and 42% of the typical change in in- and out-party favorability, respectively.

The effects of elite polarization in the Senate (Table 3) tell a slightly different story. Both the simple (Column 1) and full (Column 3) models show elite polarization having an

[11]Here and throughout the Results section, I use the mean absolute value to represent a 'typical' change. Given that I use the first difference for most of my variables of interest, the mean absolute value gives the magnitude of the average change, be it positive or negative.

Table 2: Effects of House Polarization and Gridlock on Party Favorability

	SUR		SUR		SUR	
	In-Party	Out-Party	In-Party	Out-Party	In-Party	Out-Party
ΔHouse Polarization	40.275*	-16.522	7.675	-40.622**	21.874	-43.129**
	(24.760)	(20.975)	(22.068)	(18.599)	(22.770)	(20.903)
ΔGridlock	-0.005	-0.066**	-0.032	-0.075***	-0.000	-0.081***
	(0.032)	(0.027)	(0.031)	(0.027)	(0.032)	(0.030)
ΔGridlock × ΔHouse Polarization					-1.734*	0.306
					(1.089)	(1.000)
Divided Government			-0.484	1.693**	-0.318	1.663**
			(1.005)	(0.847)	(0.959)	(0.881)
ΔPct. Strong Partisans			0.645***	0.363**	0.685***	0.356**
			(0.193)	(0.163)	(0.185)	(0.170)
Constant	-0.967*	-0.465	-0.555	-1.600*	-0.915	-1.536*
	(0.665)	(0.563)	(0.880)	(0.742)	(0.866)	(0.795)
Observations	19	19	19	19	19	19
Adj. R^2	0.03	0.21	0.39	0.51	0.45	0.47

*p<0.1; **p<0.05; ***p<0.01; one-tailed tests
Standard errors in parentheses

Table 3: Effects of Senate Polarization and Gridlock on Party Favorability

	SUR		SUR		SUR	
	In-Party	Out-Party	In-Party	Out-Party	In-Party	Out-Party
ΔSenate Polarization	-28.880	-52.605**	-17.806	-50.697**	-18.042	-57.112**
	(36.079)	(26.326)	(26.995)	(22.933)	(29.659)	(24.607)
ΔGridlock	0.015	-0.090***	-0.040*	-0.090***	-0.040	-0.102***
	(0.037)	(0.027)	(0.028)	(0.024)	(0.034)	(0.028)
ΔGridlock × ΔHouse Polarization					0.056	1.520
					(2.307)	(1.914)
Divided Government			-0.442	1.724*	-0.463	1.159
			(0.994)	(0.845)	(1.342)	(1.114)
ΔPct. Strong Partisans			0.662***	0.174	0.662***	0.199
			(0.172)	(0.147)	(0.183)	(0.152)
Constant	-0.064	-0.245	-0.314	-1.669*	-0.291	-1.041
	(0.656)	(0.479)	(0.860)	(0.730)	(1.305)	(1.083)
Observations	19	19	19	19	19	19
Adj. R^2	-0.08	0.35	0.40	0.51	0.36	0.50

*p<0.1; **p<0.05; ***p<0.01; one-tailed tests
Standard errors in parentheses

unexpected negative effect on in-party favorability, though neither of these estimates is statistically distinguishable from zero. The simple (Column 2) and full (Column 4) models of out-party favorability, on the other hand, perform closer to my expectations, with Senate polarization having a negative effect and statistically significant effect on out-party favorability in both the simple ($\hat{\beta} = -52.605$, $p < 0.05$) and full ($\hat{\beta} = -50.697$, $p < 0.05$) models in Columns 2 and 4, respectively. To put this into context, under the full model specification, a typical change in Senate polarization of 0.0159 units – roughly the change in polarization observed in the Senate between the 112$^{\text{th}}$ (2011-2013) and 113$^{\text{th}}$ (2013-2015) Congresses – produces a 0.808 unit negative change in out-party favorability ($\approx$ 0.36 std. deviations). Given that the typical change in out-party favorability is 1.77 units in magnitude, this implies that a typical change in Senate polarization can account for roughly 46% of the typical change in out-party favorability.

In summary, I have found that elite polarization increased in-party favorability using the House measure, though the statistical significance of this effect is sensitive to model specification. No such effects on in-party favorability were found using the Senate measure of polarization. As anticipated by the Elite Polarization Hypothesis, I find that polarization consistently leads to a reduction in out-party favorability, regardless of the measurement of polarization that I use. These effects are significant in all but the simple model with the House polarization measure.

My next task is to assess the effects of Congressional gridlock on in-party and out-party favorability. As a reminder, my Gridlock Hypothesis states that gridlock should reduce favorability toward both parties. Also note that my measure of gridlock assesses Congress as a whole, and is thus the exact same variable in Tables 2 and 3, the only difference between the tables being the measure of elite polarization (House or Senate). Looking first at Table 2, we see that the gridlock has a negative effect on both in-party and out-party favorability, whether controls are included (Columns 3-4) or not (Columns 1-2). However, the negative effect of gridlock only reaches statistical significance in the out-party models ($\hat{\beta} = -0.066$,

$p < 0.05$ in the simple model; $\hat{\beta} = -0.075$, $p < 0.01$ in the full model). Substantively, the full model suggests that a typical change in gridlock of 13.94 units – roughly the change in gridlock observed between the 105^{th} (1997-1999) and 106^{th} (1999-2001) Congresses – produces a 1.047 unit negative change in out-party favorability ($\approx$ 0.47 std. deviations). This suggests that at typical change in gridlock can account for 60% of the typical change in out-party favorability. This initial set of models provides suggestive evidence of the negative impacts of gridlock on out-party attitudes, but gridlock's effect on in-party attitudes is not fully substantiated.

Table 3 again tests the effect of gridlock on in- and out-party favorability, but these models include the Senate measure of polarization. In the simple model, we see that gridlock continues have a negative and statistically significant effect on out-party attitudes ($\hat{\beta} = -0.090$, $p < 0.01$) as anticipated by the Gridlock Hypothesis, though the effect size is slightly larger in these models compared to those in Table 2. The effect of gridlock on in-party attitudes in the simple model appears incorrectly signed (positive) but statistically indistinguishable from zero. Moving over to the full model in Columns 3 and 4 of Table 3, however, gridlock now appears to have a negative and statistically significant effect on both in-party ($\hat{\beta} = -0.040$, $p < 0.1$) and out-party ($\hat{\beta} = -0.090$, $p < 0.01$) favorability, though the effect appears to be stronger in the latter case. In substantive terms, we should expect that a typical change in gridlock of 13.94 units would produce a 0.55 unit negative change in in-party favorability ($\approx$ 0.23 std. deviations), and a 1.26 unit negative change in out-party favorability ($\approx$ 0.57 std. deviations).

To summarize my tests of the Gridlock Hypothesis, I have found that the gridlock has a consistent, negative relationship with out-party favorability. The evidence in favor of gridlock's negative impact on in-party favorability is more mixed — the coefficient on gridlock is in the expected direction (negative) in three out of the four sets of seemingly unrelated regressions, but this effect only reaches statistical significance in the model with the full set of controls where the measure of elite polarization comes from the Senate (Columns 3 of

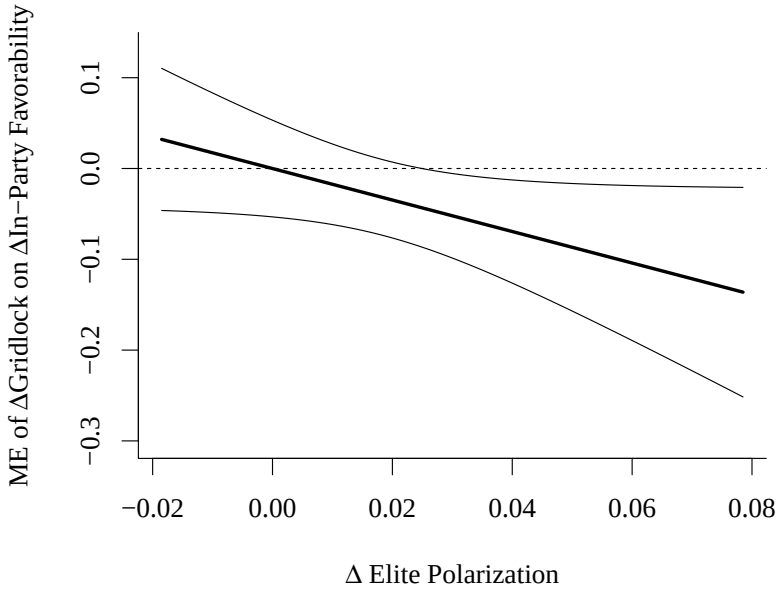


Figure 4: Marginal Effects of ΔGridlock on ΔIn-Party Favorability, as ΔElite Polarization Varies

Note: Estimates from Column 5 of Table 2, 90% Confidence Intervals shown

Table 3). I conclude that I have suggestive (albeit mixed) evidence in favor of the Gridlock Hypothesis.

My final exercise is to examine if the negative effects of increased gridlock are exacerbated when elite polarization has also increased. As noted in the Data and Methods section, this implies that there is an interactive relationship between elite polarization and gridlock. I estimate the interactive model specified in Equation 2, with the results produced in the rightmost columns of Tables 2 and 3. Given my Partisan Gridlock Hypothesis, I expect to see a negative and statistically significant interaction term in both the in- and out-party models.

Looking first at the interaction between gridlock and the House measure of polarization shown in Table 2, we see that interactive term is negative and statistically significant in the in-party model ($\hat{\beta} = -1.734$, $p < 0.10$), as expected. In other words, the size of the negative effect of gridlock on in-party favorability depends meaningfully upon the size of the change in elite polarization. Notice, however, that the gridlock constitutive term

– which represents the effect of gridlock when elite polarization does not change (i.e., Δ Elite Polarization = 0) – is negative but statistically insignificant. Therefore, to determine that values of elite polarization at which gridlock induces meaningful negative changes on in-party favorability, I plot the marginal effects of gridlock in Figure 4, along with 90% confidence intervals. From this, we see that when elite polarization undergoes small changes (ΔElite Polarization $\in$[-0.02,0.02]), changes in gridlock have no meaningful effect on in-party favorability. However, when elite polarization undergoes larger changes (ΔElite Polarization > 0.02), changes in gridlock produces statistically significant reductions in-party favorability. Consistent with my Partisan Gridlock Hypothesis, this suggests that the negative effects of gridlock on in-party favorability are more severe when elites in the House of Representatives become increasingly polarized, however, the same does not appear to be true of out-party attitudes.

I move next to examining whether the interactive effects of gridlock and elite polarization persist when polarization is measured in the Senate. These interactive models are shown in the rightmost columns of Table 3. In contrast to the models with the House measure of polarization, the models with the Senate measure show no such interaction between gridlock and elite polarization. The interactive terms in both the in-party and out-party models are incorrectly signed (positive), but statistically indistinguishable from zero. This is to say that the effects of elite polarization and gridlock do not depend meaningfully upon one another when the Senate measure of polarization is employed. It is worth noting that the constitutive term for gridlock – which represents the effect of a change in gridlock when the change in elite polarization is zero – remains negative in both the in-party and out-party models, though it just misses statistical significance in the in-party model. The constitutive term for polarization remains negative and statistically significant in the out-party model. However, given that these models do not reveal a significant interaction between elite polarization and gridlock, the additive models presented in Columns 3 and 4 of Table 3 are likely a more appropriate fit for the data.

Tests of my Partisan Gridlock Hypothesis reveal only partial support. Heightened elite polarization does appear to exacerbate the negative effects of gridlock on in-party favorability, but only when the House measure of polarization is used. No such effects on in-party favorability are found using the Senate measure. With respect to the interactive effects of elite polarization and gridlock on out-party favorability, I find no significant effects regardless of the chamber in which elite polarization is measured. To be fair, I've stretched my data quite far by fitting a model with six explanatory variables (including the constant) but only 19 observations. This is a part of my analysis that will benefit tremendously from the collection of additional data.

6 Conclusion

As partisan elites in Congress have grown apart over the last several decades, the power of partisanship as a predictor of the attitudes and behaviors of partisans in the mass public has grown steadily. At the same time, partisans do not appear to hold their party in higher regard today than they did in less polarized eras of American politics. I have helped to square this seeming contradiction by showing that the relationship between elite polarization and partisans' attitudes toward the parties is more complex than previously believed. Elite polarization appears to be related to both increases in in-party favorability and decreases in out-party favorability, though the in-party effects appear to stem primarily from polarization in the House of Representatives. This suggests that when the differences between the parties at the elite level are clear, partisans know not only who to vote for (Bartels 2000), but they also know who they should like and dislike. At the same time, evaluations of the parties appear to be partially influenced by the degree of gridlock in Congress. As one of the most prominent actors in the legislative branch, parties are looked upon unfavorably by partisans in the mass public when issues of national importance are not addressed. There also appears to be an interactive relationship such that the negative effects of gridlocks on

in-party favorability are further exacerbated when the elites become more polarized. So while elite polarization may help inform voters about either parties issue positions, it also appears to expose the in-party as one of the actors responsible for gridlock.

There are two implications from this analysis that are important to consider. The first implication is that, to the extent that partisan elites remain polarized and Congress remains gridlocked, partisans' will likely continue to hold only mildly favorable opinions of their own party and rather unfavorable opinions of the out-party. It is no doubt easier to feel closer to your party and more distant from the other party when you know what either party represents, but this does not eliminate voters' expectation that their party and its representatives will deliver on their promises. It seems unlikely that elites will be able to maintain their historically high levels of polarization while also finding a way to compromise on the wide range of issues that partisans in the mass public care about. Relatedly, the second implication of my analysis is that parties appear to face conflicting pressures when they try to stake out issue positions and legislate simultaneously. On the one hand, parties must try to distinguish themselves from other parties by making their issue positions known to voters. On the other hand, by publicly taking a side on certain issues, parties may be reluctant to compromise on those issues in fear of voter retaliation (whether that fear is justified or not). Moving forward, it seems to follow that parties would be best served if their elites in Congress would clearly state their issue positions, while also signaling a willingness to compromise – this would keep the information environment clear for voters, while (hopefully) diminishing politicians' beliefs that they need to take principled stands that result in gridlock.

Thinking about the future of this project, the next step is to gather more data to extend the analysis. I made clear the potential limitations of my empirical strategy in the Data and Methods section, but these limitations may be eased with more fine-grained measures of elite polarization, gridlock, and in-party/out-party favorability. Additional data would also allow me to model more complex dynamics and control for a wider range of potential confounders.

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Gridlock, Elite Polarization, and Attitudes About the Parties

Online Appendix

Maxwell B. Allamong

Appendix A Party Favorability Survey Questions

Table 4: Party Favorability Sources and Questions

ANES	We'd also like to get your feelings about some groups in American society. When I read the name of a group, we'd like you to rate it with what we call a feeling thermometer. Ratings between 50-100 degrees mean that you feel favorably and warm toward the group; ratings between 0 and 50 degrees mean that you don't feel favorably towards the group and that you don't care too much for that group. If you don't feel particularly warm or cold toward a group you would rate them at 50 degrees. If we come to a group you don't know much about, just tell me and we'll move on to the next one.
Gallup	Next, we'd like to get your overall opinion of some people in the news. As I read each name, please say if you have a favorable or unfavorable opinion of these people – or if you have never heard of them. How about: The Republican (Democratic) Party?
Gallup2	Next, I'd like you to rate the political parties on a scale. If you have a favorable opinion of the party, name a number between plus on and plus five – the higher the number, the more favorable your opinion. If you have an unfavorable opinion of the party, name a number between minus one and minus five – the higher the number the more unfavorable your opinion. First, how would you rate the Republican (Democratic) Party... Next, how would you rate the Democratic (Republican) Party...
CBS	(In general), is your opinion of the Republican (Democratic) Party favorable or not favorable?
CBS/New York Times	(In general), is your opinion of the Republican (Democratic) Party favorable or not favorable?
PSRA	Now I'd like your views on some people and things in the news. As I read from a list, please tell me which category best describes your overall opinion of who or what I name. First, would you say your overall opinion of the Republican (Democratic) Party is very favorable, mostly favorable, mostly unfavorable, or very unfavorable?

Appendix B Models w/ GDP Growth

Table 5: Effects of House Polarization and Gridlock on Party Favorability

	SUR		SUR	
	In-Party	Out-Party	In-Party	Out-Party
ΔHouse Polarization	40.275*	-16.522	34.123	-54.801*
	(24.760)	(20.975)	(33.407)	(33.008)
ΔGridlock	-0.005	-0.066**	-0.126	-0.101***
	(0.032)	(0.027)	(0.029)	(0.029)
Divided Government			0.812	0.676
			(1.223)	(1.208)
ΔPct. Strong Partisans			0.952***	0.226
			(0.254)	(0.251)
ΔGDP			0.003	0.001
			(0.002)	(0.002)
Constant	-0.967*	-0.465	-3.959*	-0.622
	(0.665)	(0.563)	2.496	(2.466)
Observations	19	19	19	19
Adj. R^2	0.035	0.213	0.526	0.491

*p<0.1; **p<0.05; ***p<0.01; one-tailed tests
Standard errors in parentheses

Table 6: Effects of Senate Polarization and Gridlock on Party Favorability

	SUR		SUR	
	In-Party	Out-Party	In-Party	Out-Party
ΔSenate Polarization	-28.880	-52.605**	-10.900	-26.335
	(36.079)	(26.326)	(30.100)	(31.525)
ΔGridlock	0.015	-0.090***	-0.032	-0.086***
	(0.037)	(0.027)	(0.029)	(0.030)
Divided Government			0.455	1.316
			(1.240)	(1.300)
ΔPct. Strong Partisans			0.982***	0.146
			(0.268)	(0.280)
ΔGDP			0.003	0.002
			(0.002)	(0.003)
Constant	-0.064	-0.245	-2.662	-2.588
	(0.656)	(0.479)	(2.300)	(2.409)
Observations	19	19	19	19
Adj. R^2	-0.081	0.346	0.465	0.345

*p<0.1; **p<0.05; ***p<0.01; one-tailed tests
Standard errors in parentheses

Appendix C Plot of all survey marginals

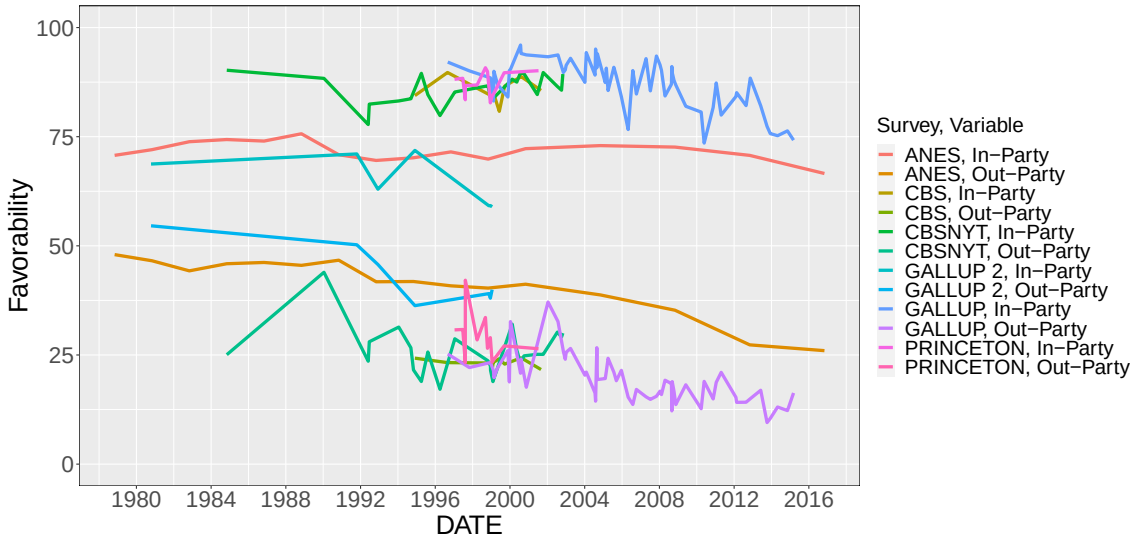

Figure 5: Plot of Survey Marginals Used to Generate In-Party/Out-Party Favorability