Grinding to a Halt: Micro- and Macro-Evidence of the Negative Effects of Gridlock on Citizens' Evaluations of Political Parties

Abstract

Tensions between the Democratic and Republican Parties in Congress in recent years have periodically resulted in many important issues going unaddressed. How does gridlock in the legislative process shape people's attitudes toward the parties—their own as well as the opposition? This paper argues that the members of the mass public attribute blame to both the in- and out-parties for failing to act on pressing issues, and tests this expectation at the micro- and macro-levels. At the micro-level, I use text analysis to show that ANES respondents who mention gridlock as one of the 'most important problems' are less favorable toward the out-party, as well as their own. Then, I use time-series analyses and original data on party favorability to show that gridlock also harms party favorability at the macro-level, but only toward the out-party. These findings may help explain why members of the parties in Congress take principled, ideological stances at the risk of failing to address important legislative issues.

Keywords: gridlock, public opinion, time-series, text analysis

Word Count: X,XXX

[1]The author declares no conflict of interests.

[2]Replication materials are available upon request.

In recent decades, divisions between the Democratic and Republican Parties in Congress have periodically left many of the nation's most important issues unaddressed (Binder 2015). Scholars are just beginning to understand the public's reactions to disorder in the legislative process, finding, for instance, that people are averse to the uncivil behavior that occurs between partisan elites (Ramirez 2009; Skytte 2021). However, what remains unclear is whether the mass public recognizes the parties, in particular, as responsible for the gridlock that frequently characterizes the legislative branch, and if so, how this might shape people's attitudes toward the parties—their own party, as well as the opposition.

In this paper, I argue that members of the American public are conscious of, and concerned about, gridlock in the legislative process, and that they identify the parties as responsible for this outcome. I argue this because most Americans are not driven by deeply-held ideological beliefs, and instead simply desire that the legislative branch find solutions to pressing issues (Wolak 2020; Egan 2014). Therefore, to degree that Congress is characterized by gridlock, I expect the mass public to respond by lowering their evaluations of both their own party and the out-party. I test my argument with observational data at both the micro- and macro-levels. I begin at the micro-level where I use open-ended responses to the American National Election Studies' (1984-2020) "most important problem" question to show that some members of the mass public indeed recognize Congressional gridlock as an issue, and that the degree to which one sees gridlock as an issue is negatively related to both in- and out-party favorability. Then, I combine Binder's (2018) measure of Congressional gridlock and original measures of party favorability to perform a time-series analysis, which shows that gridlock is also detrimental to party favorability in the aggregate, though only as it relates to the out-party. The public, it appears, is more hesitant to blame their own party for the shortcomings of Congress.

This paper contributes to the public opinion, party politics, and legislative politics literatures in two clear ways. First, I provide empirical evidence demonstrating that gridlock in Congress is a conscious (albeit small) consideration in the minds of the American people,

and that the two major parties are seen as the primary actors responsible for the institution's failure to address pressing issues. Recent literature has shown that Congress' favorability as a whole is harmed when failing to compromise (Flynn and Harbridge 2016), but whether this punishment extends to the parties has thus far remained unknown. A second and related contribution is to show that, for the most part, punishment for gridlock is attributed specifically against the out-party. Precisely how representatives navigate the difficult waters of taking principled stands while also considering the electoral impact of failing to pass legislation has been the subject of recent scholarly work (e.g., Harbridge and Malhotra 2011). My findings speak to this literature in showing that political parties as a whole receive little to no blowback from their members in the mass public when gridlock increases, helping to further explain to why representatives may take such uncompromising positions.

Public Opinion and the Ailing Legislative Process

Scholars of political behavior have long argued that peoples' many political attitudes and behaviors are driven, in part, by their desire to see important political issues be addressed. The primary way in which representatives can address the issues that concern the public is to draft and pass legislation, however, tensions between the Democratic and Republican Parties in the legislative branch have periodically complicated this task. Evidence indicates that there is a growing degree of inter-party polarization, as well as intra-party solidarity, in Congress (e.g., McCarty, Poole, and Rosenthal 2016). Members of Congress also appear rather polarized and hostile in their online communications (Heseltine and Dorsey 2022), in their campaigning (Fowler, Franz, and Ridout 2021), and in their interpersonal interactions on the floor (Dietrich 2021). But perhaps more importantly, evidence suggests that, at times, the contentiousness between the parties can result in rather high levels legislative gridlock. Binder (2018, 523) defines gridlock as "the relative ability of the political system to reach legislative compromises that alter the status quo," and shows that the level of gridlock has even reached as high as 75% in some years. The reason this is important is that the amount of gridlock in the legislative process is among the most relevant indicators

of the performance and overall health of legislature as an institution, and may signal to the public the the parties and their members in Congress failed to deliver on the promises they made in the last election cycle. How the public's attitudes towards the parties might respond to such perturbations is a question of central importance in this paper.

Recently, scholars have begun to shed light on how the hostility and disorder that often characterizes Congress shapes the attitudes and behaviors of members of the mass public. The polarization of partisan elites, for instance, has helped the mass public recognize the differences between the two parties, thereby strengthening peoples' attachment to their own party and their deference to the opposing party (Hetherington 2001; Banda and Cluverius 2018). Clear divisions between the parties in Congress also appear related to lower approval of the legislative branch as a whole (Ramirez 2009), though not necessarily related to approval of individual members (Harbridge and Malhotra 2011). Finally, Skytte (2021) goes a step further to show that uncivil behavior between Congressional elites (e.g., bickering, name-calling, tribalism) can reduce trust in Congress even when accounting for elites' level of issue polarization.

The literature described above has clearly shown that evaluations of the legislative branch, as a whole, are influenced by the performance of the institution and the behavior of its member. However, what remains to be explained is whether the public associates the two major parties, in particular, with gridlock in the legislative process, and if they do, whether gridlock can harm the public's favorability toward the parties. Members of the mass public do not identify with or cast vote for Congress as an institution, but they do identify with parties and vote for their members. This makes it crucial for scholars of public opinion to understand how the public evaluates the parties in light of their (in)ability to work together to solve legislative issues. In the next section, I propose a novel argument regarding the relationship between gridlock in the American legislative process and party favorability.

Gridlock and Party Attitudes at the Micro- and Macro-Levels

Does the American public recognize Congressional gridlock as a problem, and if so, how does this shape the public's attitudes toward the responsible actors, mainly the two major political parties? Here I argue that the public is indeed concerned about gridlock in the legislative process, and because the Democratic and Republican Parties in Congress are seen as responsible for creating solutions to the nation's problems, their failures to do so will be met with disapproval by the American public. To support my argument, I point to evidence of the public's flexibility in the policies they would find preferable to gridlock, and also evidence that the failure of Congress to address important policies can be reputationally or electorally harmful for the institution and its members.

One of the primary reasons that gridlock may harm party favorability is that, although partisanship remains an influential driver of some attitudes and behaviors, most people are not deeply ideologically committed across the spectrum of issues, and thus find a wage range of policy alternatives to be acceptable to gridlock. Even in this polarized era, many in the mass public consider themselves near the ideological 'middle of the road' (Kinder and Kalmoe 2017), and do not use ideological terms when verbally conceptualizing their partisanship (Allamong et al. 2022). Individuals have also been known to easily shift their issue attitudes in response to rather mild stimuli, such as media frames (Chong and Druckman 2007) and cues from political elites (Druckman, Peterson, and Slothuus 2013; Levendusky 2010), even when those elite cues point in an ideological direction that is contrary to the party's typical leanings (e.g., Republicans led to support liberal policies, Barber and Pope 2019). Many are even said to have "double-peaked preferences" (particularly on consensus issues), in the sense that they prefer the policy proposals from both the left *and* the right to the status quo. This is to say that, for the most part, the public is not rigid in their preferences, and in fact, are quite willing to concede some political points so long as important issues get addressed.

The flexibility of the public in their ideological beliefs, and their openness to a range of policy alternatives, suggests that the public may specifically desire that Congress and its actors (i.e., the political parties) seek compromise, and may punish them when they fail to do so. Evidence for this expectation can easily be found in public opinion polls, which shows that the public is largely favorable toward compromise and are concerned about the political battles that are seemingly dividing the nation (Tyson 2019; Bailey and Elbeshbishi 2021). Academic work finds similar patterns, with the large swaths of the public desiring compromise even from their own party (Wolak 2020). It has even been shown that many individuals would prefer the out-party's policy over gridlock on consensus issues (Flynn and Harbridge 2016). Thus it appears that the public desires that their representatives pass legislation on important issues, and that they are willing to punish Congress when they fail to live up to expectations.

The reasons presented above lead naturally to my argument that gridlock will be negatively related to both in- and out-party favorability. The Democratic and Republican Parties have controlled Congress for more than a hundred and fifty years, and many in the public consider themselves a member of one party or the other, so it is reasonable to believe that the public recognizes the parties as an integral part of the legislative process. As scholars have noted Binder (e.g., 2015), the outcome of that process in recent decades has often been a substantial degree of gridlock, stemming in part from hostile relations between the two parties. Given the public's largely non-ideological beliefs, their voiced support for actors that seek compromise, and the salience of the parties in Congress, my primary expectation is that gridlock is broadly harmful to party favorability, reducing people's evaluations of the out-party, as well as their own.

A central contribution of this paper is to explore the relationships between gridlock and party favorability at both the micro- and macro-levels of analysis. At the micro-level, it is reasonable to expect variation in the degree to which individuals are concerned with gridlock—some people simply care more about it than others. But to the extent that one *is*

concerned about gridlock, and recognizes the parties as responsible that outcome, I expect this to correspond to less favorable evaluations of the in- and the out-party. Establishing these micro-foundations, showing that the public conscious considers gridlock and relates it to the parties, is vital before moving to the macro-level of analysis. At this level, the first consideration is the nature of the relationship between gridlock and party attitudes, as this theoretic relationship will inform the empirical model that I estimate. Theoretically speaking, then, my expectation is that increases in gridlock lead to negative changes in both in- and out-party favorability, and that these changes to party favorability will be short-lived. The rationale here is that the public is likely not sufficiently attuned to the affairs of Congress to be able to detect the precise level of gridlock, and is instead responding to relative *changes* in gridlock—that is, when Congress' ability to address important issues worsens across terms (positive change in gridlock), evaluations of the parties will temporarily fall (negative change in party favorability). However, as a new Congress takes office, party leadership is reshuffled, and issues rise and fall off the national agenda, I expect both gridlock and party favorability to quickly return to their respective equilibria. This implies that a first differences model is most appropriate (discussed in greater detail in the 'Macro-Level Analysis' section).

My next step is to apply a mixed-method empirical approach to assess my theoretic expectations at both the micro- and macro-levels. I begin by describing the ANES data and text analytical tools that I apply at the micro-level, and present findings that unpack how individuals think about and respond to Congressional gridlock. Then, I follow a similar procedure at the macro-level, describing my data source (original party favorability data) and empirical approach (time-series analysis) before showing showing that Congressional gridlock affects party attitudes in the aggregate.

Micro-Level Analysis: ANES Open-Ended Responses

My first empirical exercise occurs at the micro-level, and relies upon decades of data from the American National Election Studies (1984-2020). Here I combine open-ended responses about the 'most important problems' in the country ($N = 17,493$) with closed-ended

responses about attitudes towards the parties to show that people who identify gridlock as an issue tend to have lower evaluations of both their own party, as well as the out-party. I will first describe my data, empirical approach, and expectations in greater detail before presenting my findings.

Data and Approach

The open-ended question that I am particularly interested in asks, "what do you think are the most important problems facing this country?" and allows respondents to provide up to three 'mentions.'[1] The responses to this question are a valuable resource to scholars of public opinion in that they allow us to see where the concerns of the public may lie, free from the constraints of closed-ended questions which necessarily limit the range of issues that the public can identify as important. While researchers at the ANES have manually coded these responses into set categories in the past, responses from the 2012 survey onward have not been coded in this same way. Fortunately, newly-developed tools of text analysis have greatly assisted researchers in categorizing large numbers of such responses. I apply one such tool which has previously been shown as effective at categorizing ANES responses—the Structural Topic Model or STM (Roberts et al. 2014).[2] Beyond its ability to identify interesting conceptual categories in open-ended responses, the STM is valuable in that it generates document-level topic proportions for each topic in the model, which can then be compared numerically to other variables. My intention with the STM, then, is to model the open-ended 'most important problem' responses, to identify the degree to which Congressional gridlock is a concern to the public, and to assess whether greater concern about gridlock is related to lower in- and out-party favorability at the individual level.[3]

To measure evaluations of the in- and out-party, I rely upon the ANES feeling thermometers, which are scales ranging from 0-100 on which respondents rate the Democratic

[1]For the purpose of these analyses, all mentions provided by a respondent are merged into a single 'cell' (i.e., observation).

[2]Roberts et al. (2014) specifically demonstrates the efficacy of the STM on the 'most important problem' responses, and shows that the models categorization is equally accurate compared to human coders.

[3]For brevity, the discussion of model construction and evaluation has been moved to Appendix B.1.

and Republican Parties. My measures of in-party and out-party favorability (respectively) are specifically created by measuring how favorable Republicans (Democrats) are toward the Republican (Democratic) Party, and how favorable Republicans (Democrats) are toward the Democratic (Republican) Party.[4] Descriptive statistics for these and other ANES measures are available in Appendix B.

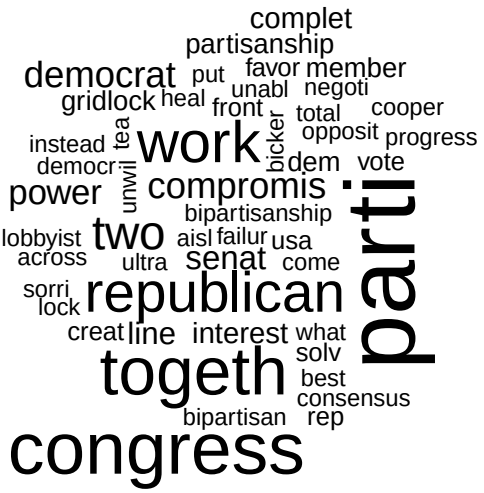
With these ANES data I am able to empirically evaluate my primary theoretic expectation at the micro-level, which is that individuals that identify legislative gridlock as a pressing issue will hold both parties responsible, resulting in lower favorability ratings of one's own party as well as the opposition. More formally, this is done by comparing the proportion of one's 'most important problem' response dedicated to the 'gridlock' topic from the STM to their evaluations of the in- and out-party using the ANES feeling thermometers, with the expectation that the relationship should be negative (Hypothesis 1). This hypothesis rests on the expectation that the public will indeed recognize gridlock as one of the many issues facing the nation, and although there is no corresponding statistical test, I will support this expectation with descriptive evidence.

H1: *Greater use of the 'gridlock' topic will have a negative relationship with both in- and out-party feeling thermometers*

Findings

Does the American public identify legislative gridlock as an important issue facing the nation? After estimating the topic model, I manually inspect the topics that are generated (full results in Figure 5, Appendix B). Although certain issues such as the economy and healthcare are mentioned in the greatest proportions (5.9% across all documents), I do find that there is a somewhat less prevalent topic (1.3% across all documents) that appears related to gridlock in Congress (Topic 47, marked in red in Figure 5). To get a sense of the

[4]Leaners have been coded as partisans. Pure independents included in the generation of the STM as their responses provide useful, additional information to the model to help sharpen the topics that are found. Pure independents do not have measures of in- and out-party favorability, however, so they are excluded from the regression analyses of party favorability.



(a) Word Cloud

Grid lock in congress
Infurstructure colapse Parties
inabilty to work together to
solve serious problems

Getting the Dems and
Republicans getting together
to work across the aisle
for the good of the country
Getting the country to work
together We're so divided,
so polarized, work for the
betterment

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congress not working together
snd pushing their own agendas
instead of what is best for
our country −9 −1

(b) Example Documents

Figure 1: Exploring the 'Gridlock' Topic

content of the gridlock topic, Figure 1 provides a word cloud showing words that are highly representative of the topic (1a), with each word's size being proportionate to its probability of appearing in the gridlock topic, as well as three exemplary documents that dedicate a large proportion of their content to the topic (1b).

In Figure 1a we see that Congress and the Democrat and Republican Parties are mentioned often in the context of the gridlock topic. Importantly, the surrounding terms make clear that respondents are specifically concerned with the parties' ability to work together, as indicated by words such as 'compromise,' 'bipartisanship,' and even the term 'gridlock' itself. Figure 1b then demonstrates how such words are used in context, with respondents stating their concern with the "parties inability to work together to solve serious problems," and emphasizing that "the good of the country" must be placed ahead of the parties' "own agendas." This is precisely the type of language that we might expect to see

Table 1: Effect of Use of 'Gridlock' Topic on In- and Out-Party Feeling Thermometers, ANES, 1984-2020

	In-Party Therm.	Out-Party Therm.
MIP: Gridlock	-11.160^{**}	-14.204^{**}
	(5.079)	(5.963)
Party Strength	26.382^{***}	-12.457^{***}
	(0.491)	(0.577)
Ideological Strength	3.041^{***}	-16.060^{***}
	(0.428)	(0.502)
Political Interest	4.818^{***}	-7.132^{***}
	(0.548)	(0.644)
Female	2.826^{***}	1.734^{***}
	(0.260)	(0.305)
Age	3.418^{***}	1.502^{***}
	(0.733)	(0.861)
Constant	48.496^{***}	64.033^{***}
	(0.735)	(0.864)
Year Fixed Effects?	*Yes*	*Yes*
Observations	17,493	17,493
R^2	0.196	0.277
Adjusted R^2	0.196	0.277

*p<0.1; **p<0.05; ***p<0.01; one-tailed tests
Data from all presidential years between 1984–2020 excluding 2004 (data were unavailable for that year)

used in the context of Congressional gridlock, and importantly, its evident that the two parties are often associated with the issue. Moving forward, I will refer to this as the 'gridlock' topic.

I now proceed to the more pressing task at hand, which is to examine whether concern over gridlock is related to lower evaluations of the parties (i.e., the in- and out-party). I test

this hypothesis in Table 1, with OLS models regressing the in-party ($M = 70.5, SD = 19.0$; Column 1) and out-party ($M = 28.5, SD = 23.6$; Column 2) feeling thermometer ratings on the proportion of one's 'most important problem' response dedicated to the 'gridlock topic' ($M = 0.013, SD = 0.026$). These models also control for a number of potential confounders, including the strength of one's partisan and ideological identities, political interest, sex, age, and year fixed-effects.[5]

Looking first at Column 1, we see that increased use of the gridlock topic is negative and significantly related to in-party feeling thermometer evaluations ($\beta = -11.160, p < 0.05$), as expected. In more substantive terms, a one standard deviation increase in the proportion of one's 'most important problem' response dedicated to the gridlock topic translate to a 0.30 point decrease on the in-party feeling thermometer. Column 2 shows that use of the gridlock topic is also negative and significantly related to the out-party favorability ($\beta = -14.204, p < 0.05$), with a one standard deviation increase in the gridlock topic producing a 0.37 point decrease on the out-party feeling thermometer. This exercise suggests that concern about gridlock in Congress is related to one's attitudes towards the parties (i.e., both the in- and out-parties), though in absolute terms, the size of these relationships appears somewhat small. It is also important to consider that the distribution of the the proportion use of the gridlock topic is heavily right-skewed (see Figure 6, Appendix B), with a few people dedicating a large part of their response to this topic, but most speaking on this topic relatively little. Nevertheless, in support of Hypothesis 1, concern over gridlock does appear related to lower evaluations of the in- and out-parties.

Macro-Level Analysis: Time-Series

Having demonstrated that gridlock is a conscious consideration at the micro-level, and that concerns about gridlock are negatively related to party attitudes, my next task is to show that a relationship exists between gridlock and party attitudes *in the aggregate*. I do so using a time-series analysis ($N = 20$) that combines Binder's (2018) measure of legislative

[5]Summary statistics available in Table 5 in Appendix B.

gridlock with a novel measure of party favorability. Here I describe both data sources, as well as my approach to modeling them, before presenting empirical results testing my theory at the macro-level.

Data and Approach

The measure of Congressional gridlock in my analyses comes from Binder (2018), who considers the institution to be gridlocked to the extent that it could have, but fails to address important issues on the national agenda. Binder's (2018) 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. The justification for using unsigned editorials from the *Times* is 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 (2018) 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.

This measure of gridlock covers the 95$^{\text{th}}$ (1977-1979) through the 114$^{\text{th}}$ Congress (2015-2017).[6] I am theoretically interested in the session-to-session changes in the percent of issues gridlocked, so I plot these changes in Figure 2. This figure shows clearly that the level of gridlock is not constant through time, nor is it simply increasing every period—sometimes gridlock increases from Congress-to-Congress and sometimes it falls. It is these changes in Congress' ability to address important issues that I believe the public is responding to. We see, for instance, that there was a sizable positive change ($\sim$26%) in the percent of gridlocked issues between the 104$^{\text{th}}$ (1995-1997) and the 105$^{\text{th}}$ (1997-1999) Congress' (as indicated by the positive value in 1998). During this same time period, both in- and out-party favorability

[6] In my analyses, each Congress is assigned to the year that corresponds to the last full-year of their term. For example, the 95$^{\text{th}}$ Congress was in session between January 4, 1977 and December 15, 1977 (first session), and between January 19, 1978 and October 15, 1978 (second session), so the 95$^{\text{th}}$ Congress corresponds to 1998 in the data.

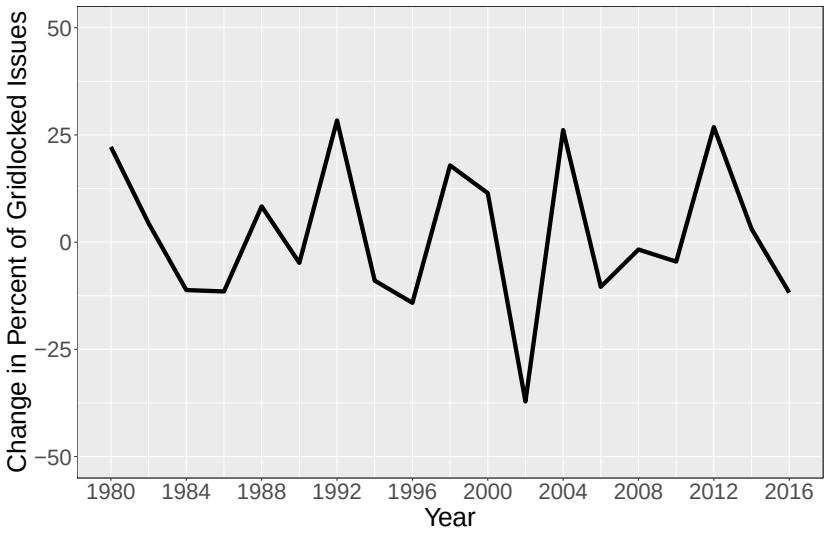

Figure 2: Changes (First Difference) in Gridlock, 95th (1977-1979) - 114th Congress (2015-2017)

saw changes in the negative direction (1.4 point and 1.0 point negative changes, respectively). Across the entire series the average change is 1.71, the median absolute change is 11.43, and the standard deviation is 17.3.

My measures of in- and out-party favorability are original to this paper, and are created using Stimson's (2018) dyad ratios algorithm. This algorithm allows researchers 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 interested in is partisans' attitudes towards their own party and the opposition. 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. 2020).

Table 2: 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

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

Table 2 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 2 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

[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.

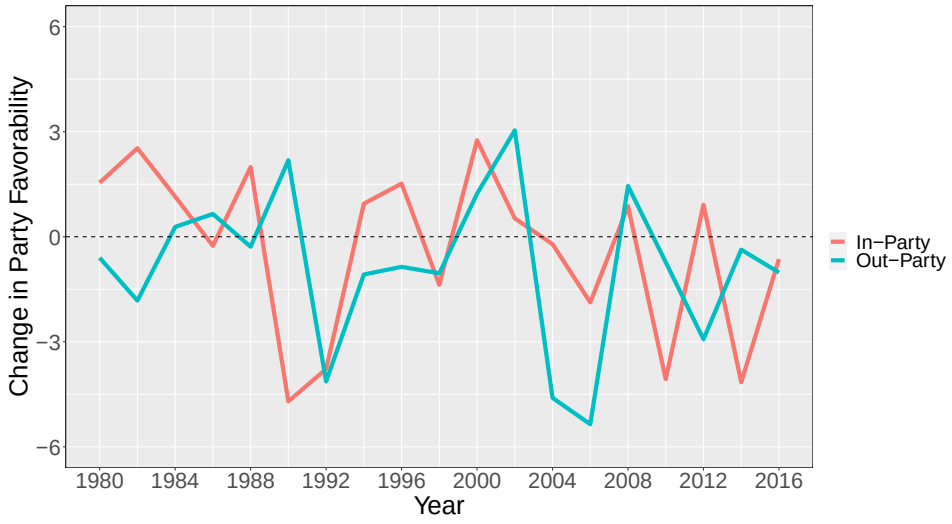

Figure 3: Change (First Difference) in In- and Out-Party Favorability

favorability—and that their inclusion in the algorithm is appropriate.

My theoretic interest here is the changes in party favorability (as opposed to their levels), so in Figure 3 I plot these changes for both the in-party (red) and out-party (blue) series. This figure shows, for instance, that between 1978 and 1980 in-party favorability underwent a 1.5 point change in the positive direction while out-party favorability underwent a 1.8 point change in the negative direction. The average change in in-party favorability was -0.3 points ($SD = 2.4$) with a median absolute change of 1.5, while the average change in out-party favorability was -0.8 point ($SD = 2.2$) with a median absolute change of 1.1.

With these data I am able to empirically evaluate my primary theoretic expectation at the macro-level, which is that positive changes in the amount of Congressional gridlock will be related to negative changes in in- and out-party favorability. This represents my second hypothesis (H2 below), and is tested by estimating the first difference models in Equations 1 and 2 and examining the size and significance of β_1.

$$\Delta InPartyFav_t = \beta_0 + \beta_1 \Delta Gridlock_t + \epsilon_t \quad (1)$$

$$\Delta OutPartyFav_t = \beta_0 + \beta_1 \Delta Gridlock_t + \epsilon_t \quad (2)$$

Assuming that neither the party favorability nor the gridlock series in levels were not integrated to an order greater than one, this suggests that $\Delta InPartyFav$, $\Delta OutPartyFav$, and $\Delta Gridlock$ are all $I(0)$ series, and thus Equations 1 and 2 are considered "$I(0)$ balanced."[9] Pickup and Kellstedt (2022) note that this particular type of equation balance is necessary to ensure that one has a complete theoretic model, and to ensure that the test statistics and standard errors from one's empirical model are reliable. With my model now balanced, I can proceed to estimating the models in lines 1 and 2 and assessing the results in light of my second hypothesis. I start with a bivariate specification before including elite polarization (McCarty, Poole, and Rosenthal 2016) and the percent of strong partisans in the mass public as covariates, both in first differences.[10] Polarization is a potential confounder as it is known to be related to both gridlock (Binder 2018) and party attitudes (Hetherington 2001). The percent of strong partisans is another potential confounder, as representatives may see a growth in strong partisans—who tend to be more favorable toward their party—as a sign that the public is committed to certain policy goals and that the representative should not compromise (Harbridge and Malhotra 2011).

H2: *Positive changes in Congressional gridlock will be related to negative changes in in-party and out-party favorability*

[9] An alternative argument is that gridlock and party favorability are (co-)integrated series, and have both short-term and long-term equilibrium relationships between them. This argument would call for a more general modeling approach such as the general error correction model (GECM). I estimate a GECM in Table 7 in Appendix 3 separately for in- and out-party favorability. The results support my expectation that there are short-term, but no long-term, equilibrium relationships between gridlock and party favorability.

[10] Elite polarization calculated as the absolute difference between the median Republican and the median Democrat in the U.S. House and Senate. Results in Table 3 use the House measure of polarization, but the results do not change in any meaningful way when using the Senate measure (see Table 6 in Appendix C).

Table 3: First Differences Models - Gridlock and Party Favorability

	In-Party	Out-Party	In-Party	Out-Party
	Basic Model		w/ Controls	
ΔGridlock	−0.003	−0.067**	−0.008	−0.064**
	(0.033)	(0.026)	(0.028)	(0.026)
ΔElite Polarization			24.138	−7.731
			(23.181)	(21.524)
ΔPct. Strong Partisan			0.445**	−0.243
			(0.196)	(0.182)
Constant	−0.327	−0.727	−1.058*	−0.415
	(0.561)	(0.449)	(0.594)	(0.551)
Observations	19	19	19	19
Adjusted R^2	−0.058	0.230	0.234	0.249

*p<0.1; **p<0.05; ***p<0.01; one-tailed tests

Findings

The main results are presented in Table 3. Looking first at the bivariate specifications in Column 1 and 2, we see that, as expected, changes in gridlock are significantly related to negative changes in out-party favorability ($\beta = -0.067, p < 0.05$). That is, the public appears slightly less favorable toward the opposing party when Congress fails to address important issues. However, the same reputational damage is not extended to one's own party, as changes in gridlock appear totally unrelated to changes in in-party favorability ($\beta = -0.003, p = 0.47$). This finding is not in line with expectations, but it is somewhat revealing about exactly who the public blames for legislative gridlock—mostly the other team.

The results do not appear to change in any meaningful way when elite polarization and the percent of strong partisans are added as covariates in Columns 3 and 4. The covariates do not appear to have any consistent relationship with party favorability, as only change

in the percent of strong partisans appears to have a significant relationship in the in-party favorability model ($\beta = 0.445, p < 0.05$). Looking at the main variables of interest, however, see that that positive changes in gridlock are once again unrelated to changes in in-party favorability ($\beta = -0.008, p = 0.39$), and positive and significantly related to changes in out-party favorability ($\beta = -0.064, p < 0.05$). Substantively, these results suggest that increase in gridlock of 27 points—as occurred occurred between the 111$^{\text{th}}$ and the 112th$^{\text{th}}$ sessions of Congress in President Obama's first term—is related to a 1.7 point drop in favorability toward the out-party. Considering that the standard deviation of the out-party measure is about 2.2 points, this means an increase of gridlock this size produces a roughly three-quarter standard deviation change in out-party favorability, a relationship which is by no means negligible in size and is perhaps best described as moderate. Overall, these results provide mixed support for my second hypothesis, as increases in gridlock only appear related to decreases in favorability toward the opposition, but not to one's own party.

Conclusion

Perhaps the most rudimentary expectation the public has for their representatives is that those representatives use their legislative powers to address issues of importance. Meeting this expectation in the American two-party system generally requires some degree of cooperation between the Democratic and Republican Parties in Congress, but the tension and animosity exists between them have, at times, produced high degrees of legislative gridlock (Binder 2018). The contribution of this paper is to question how the public responds to such gridlock, and more specifically, to question whether the public attributes blame to the parties for their failures to addressing pressing issues. I have argued that the public attributes blame to their own party, as well as the opposition, when Congress falls into gridlock, the reasons being that many in the public are not deeply committed to ideological positions (Kinder and Kalmoe 2017), and are favorable towards compromise both in principle and in practice (Flynn and Harbridge 2016; Wolak 2020; Egan 2014). Furthermore, I believe evidence of these relationships could be found at both the micro- and macro-levels, with individuals

expressing concern over gridlock holding lower evaluations of the in- and out-parties, and the public as a whole changing it's party evaluations (in the short-term) in response to changes in the amount of Congressional gridlock.

After testing my expectations at both the micro- and macro-levels, the results show a tendency of partisans to blame only the out-party for gridlock. At the micro-level, open-ended responses about the country's "most important problems" showed that a small, but noticeable percent of the public is explicitly concerned about gridlock in the legislative process. It was also the case that the more concern one expressed about gridlock, the less favorable one felt toward both the in- and out-parties. However, at the macro-level, a time-series analysis revealed that the public as a whole does not attribute blame for gridlock symmetrically, and instead, punishes only the out-party. The public does not appear to blame their own party for the shortcomings of Congress, nor do they reward them, but the public certainly blames "the other team" for the failures that do occur.

The findings presented in this study led to several important implications worthy of consideration. The first is that partisan elites may not need worry much about legislative debates resulting in stalemate, as any punishment from their partisan supporters will be directed toward the opposition. Members of Congress regularly grandstand on the House or Senate floor in hope of signaling their partisan or ideological commitments to their base, and when these behaviors eventually lead to important issues receiving no legislative solution, any backfire from the public appears to be aimed at the out-party. A second and closely related implication is that any gridlock that does occur in the legislative process can be weaponized against the opposing party. Of course, finger-pointing is not a new tactic in politics, but the results presented here suggest that tactic is truly effective when pointing to the out-party as responsible for gridlock. This may also allow parties and their members in office to divert attention away from their own (perhaps poorly formed) policy solutions, and instead focus on the out-party as the obstructing force in Congress.

Two potential avenues for future research are suggested from this work. The first

avenue is to further explore the process by which individuals learn of Congressional gridlock. I have assumed in this paper that changes in the level of gridlock are detectable, and that the public does indeed detect them, but the precise mechanics of this process remain elusive. One possibility is that most people learn about gridlock from partisan media, which has previously been shown capable of shaping peoples' image of the out-party in a negative way (Levendusky 2013). Those learning of gridlock from partisan media that purposefully paints the out-party as the villain may have fewer opportunities to see their party as responsible for Congress' failures. The second potential avenue for research is to further dissect exactly when, and on what issues, people will deal punishment to the in- and out-parties for legislative gridlock. The measure of gridlock applied in this study aggregates across many issues, but previous studies have shown that the type of issue under consideration (e.g., consensus vs. non-consensus, Egan 2014; Flynn and Harbridge 2016) shapes the range of alternatives that the public is willing to accept. The public may also have different reactions to gridlock under various institutional arrangements, such divided (as opposed to unified) government, or the presence of an in-partisan (as opposed to out-partisan) president. Panel data that traces evaluations of the parties throughout the legislative process—as institutional arrangements change and as various issues receive legislative redress or not—would be particularly useful in disentangling the public's responses to gridlock.

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Grinding to a Halt: Micro- and Macro-Evidence of the Negative Effects of Gridlock on Party Favorability

Online Appendix

Maxwell B. Allamong

Table of Contents

Appendix A Party Favorability Measures

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?

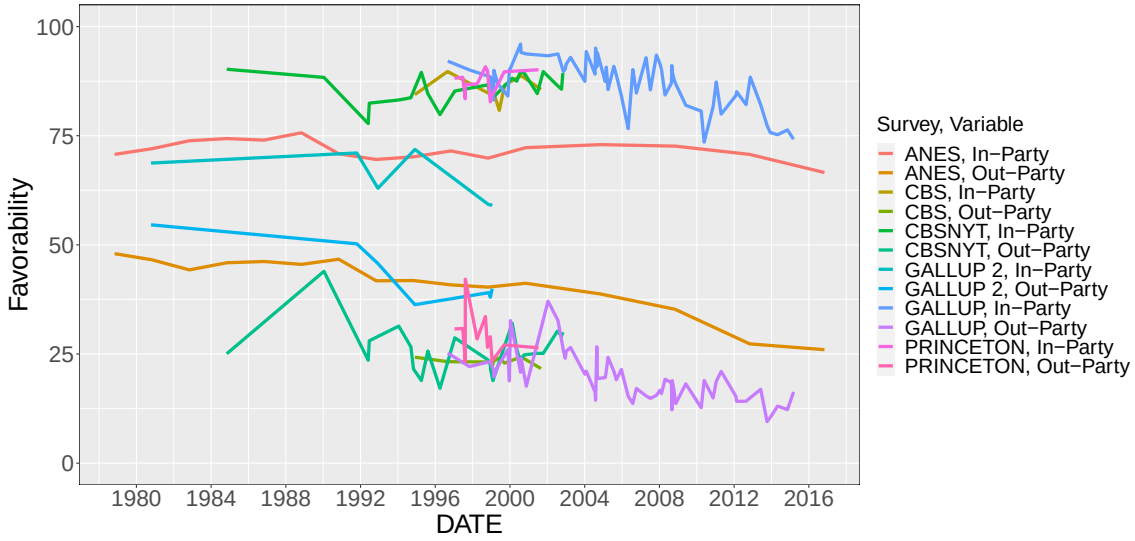

Figure 4: Plot of Survey Marginals Used to Generate In-Party/Out-Party Favorability

Appendix B Supplemental Analyses at the Micro-Level

B.1 Structural Topic Model: Estimation and Evaluation

I select the number of topics using a built-in function from the `stm` package (Roberts, Stewart, and Tingley 2019). This function applies an algorithmic approach from Lee and Mimno (2014) to finding the number of topics, as opposed to the default approach of estimating the model with a researcher-specified number of topics. The algorithm suggested a 64 topics model, and upon inspection, output of the initial model was quite clean (i.e., coherent and cohesive topics). This is approximately the number of topics that the ANES uses to manually code the "most important problem" responses (69 topics), and the number of topics estimated in Roberts et al. (2014) in their analysis the same open-ended responses (60 topics). As Roberts, Stewart, and Tingley (2019, 13) note, there is not necessarily a "correct" number of topics, and the output of the algorithm approach should not be taken as such. However, the 64-topic model I discovered from the algorithm appears to be a an appropriate and suitable model for my purposes, so I choose this model for my primary analyses.

Figure 5: Expected Topic Proportions From All Topics - STM

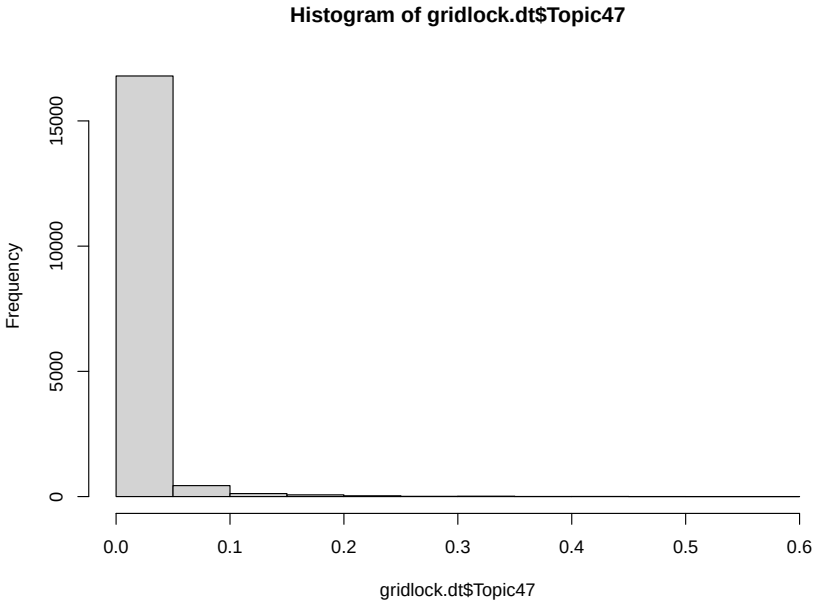

Figure 6: Histogram of Gridlock Topic

Table 5: Summary Statistics: ANES Data (1984-2020)

Statistic	N	Mean	St. Dev.	Min	Pctl(25)	Pctl(75)	Max
MIP: Gridlock	17,493	0.013	0.026	0.0005	0.004	0.012	0.568
In-Party Thermometer	17,493	70.505	19.051	0	60	85	99
Out-Party Thermometer	17,493	28.543	23.584	0	3	50	99
Party Strength	17,493	0.723	0.276	0	0.3	1	1
Ideological Strength	17,493	0.427	0.316	0.000	0.000	0.667	1.000
Political Interest	17,493	0.776	0.265	0.000	0.667	1.000	1.000
Female	17,493	0.521	0.500	0	0	1	1
Age	17,493	0.495	0.182	0.000	0.354	0.636	0.939

Appendix C Supplemental Analyses at the Macro-Level

Table 6: First Differences Models - Gridlock and Party Favorability, with Senate Measure of Elite Polarization

	In-Party	Out-Party	In-Party	Out-Party
	Basic Model		w/ Controls	
ΔGridlock	−0.003	−0.067**	−0.026	−0.084***
	(0.033)	(0.026)	(0.030)	(0.026)
ΔElite Polarization			−45.206	−46.422*
			(29.766)	(26.178)
ΔPct. Strong Partisan			0.558***	−0.211
			(0.183)	(0.161)
Constant	−0.327	−0.727	−0.350	−0.138
	(0.561)	(0.449)	(0.541)	(0.475)
Observations	19	19	19	19
Adjusted R^2	−0.058	0.230	0.288	0.374

*p<0.1; **p<0.05; ***p<0.01; one-tailed tests

Table 7: General Error Correction Models - Gridlock and Party Favorability

	In-Party	Out-Party
In-Party Favorability$_{t-1}$	−0.383	
	(0.303)	
Out-Party Favorability$_{t-1}$		−0.061
		(0.125)
ΔGridlock	−0.059	−0.094**
	(0.063)	(0.041)
Gridlock$_{t-1}$	−0.094	−0.055
	(0.093)	(0.063)
Constant	35.905	4.105
	(28.598)	(6.600)
Observations	19	19
Adjusted R^2	−0.083	0.171

*p<0.1; **p<0.05; ***p<0.01; one-tailed tests

Table 7 provides General Error Correction Models (GECMs) of gridlock and party favorability (in-party in Column 1, out-party in Column 2). In the in-party model, we see that neither the lagged levels of the in-party favorability (In-Party Favorability$_{t-1}$) nor the lagged levels of gridlock (Gridlock$_{t-1}$) are statistically significant, suggesting that there is no long-term equilibrium that exists between them. Similar to the main model presented in the paper, we also see that the short-term change in gridlock (ΔGridlock) also has no relationship to in-party favorability. Moving to out-party model, however, the evidence supports my initial decision to apply a first differences model to the relationship between gridlock and party favorability. As in the main results, there does appear to be a short-term equilibrium relationship between gridlock and out-party favorability, as positive changes in gridlock produce a negative and statistically significant negative chance in out-party favorability ($\beta = -0.094, p < 0.05$). There is no long-run equilibrium relationship between these variables, though, as the lagged levels of out-party favorability and the lagged levels of

gridlock are once again statistically insignificant. Thus it appears that the first differences model—which assumes no long-term equilibrium relationships between variables—was the appropriate modeling decision.

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