

# 1 Overview

Last week we decided to do the following:

1. Define which differences between tables are related to reelection and which of the non-election differences make sense
2. Discuss the inclusion of the formal model
3. Continue editing the paper

## 2 Differences Between House/Senate Results

Those which concern the electoral connection:

- Senate retirees are more responsive to party calls not significant for Democrats; no measure of this in current paper on House, mixed results in 2013 paper
- Republicans with higher vote share in the Senate are significantly more likely to vote in favor of party call, insignificant (same sign) in House; positive significant for Senate minority, negative significant for House minority; negative significant for Dems in both chambers

Things which are unsurprising/expected:

- Most responsive extremists in House are Democrats/Minority Party and in Senate are Republicans/Minority Party (greater share of Southern Dems and “Gingrich” legislators could explain it)
- Party leader variable not significant for Senate Republicans, but positive coefficient for all
- Latino Senators’ increased responsiveness not statistically significant in Senate for Democrats and minority party, is in House
- Power committee measure positive significant in all House subsets, negative insignificant in all Senate subsets
- In the Senate, responsiveness for committee chairs not increased as much as in House with some insignificant (positive and negative)
- Strength of prediction of baseline party vote rate differs by party in the House and is weaker than the Senate generally (though positive and significant for all)

Things which are surprising/unexpected:

- Female legislators are more responsive to party calls in the Senate than the House

- African American Republican Senators are much less likely to follow party calls, positive and insignificant relationship in House; significantly more likely for all in House to follow call, negative insignificant in Senate; significantly less likely in House majority to follow party call, positive significant in Senate
- Increasing seniority of Republicans in House significantly negatively impacts responsiveness, positive insignificant effect in Senate; Senate results closer to 2013 paper
- Being on a better committee in the House has a significant negative impact on party call responsiveness, has a positive impact that only achieves significance for minority party in Senate; Senate results closer to 2013 paper

### 3 Formal Model

The model as it exists now is entirely descriptive, rather than predictive, of what we are finding. In doing so, I fear that it will do more to raise questions than answer them as it stands. For instance, why should we expect in the Congress which members are up for reelection as a whole that members are taking constituents desires into account? Why do we think that they expect voters to remember a vote they made over a year before the date of reelection much more clearly than those they made a bit over two or three years before it, other than the fact that we have already found indications of this?

Further, the model requires an assumption that voters are paying more attention to the party call votes than the noncall votes, but we have not investigated which bills in our data are party calls and which are not. This is something that could also be brought up with the arguments we develop in the main paper, and I worry that it would increase their chances of getting raised. Further, we don't have much of an explanation for which votes this should take effect on and why in the way that we have a measure for what constitutes a party call.

For these reasons, I would not want to include the formal model in the paper, though if desired we could include it in an appendix.

## 4 Paper, Draft 5

### How Do Senators Vote When the Party Calls?

*Abstract:* In this paper, we replicate the findings of Minozzi & Volden (2013) with some modifications of their methodology. We show that their hypotheses regarding party unity coming through the party working to unite more extreme (rather than more moderate) members holds not only in the House, but also the Senate. Further, we show the usefulness of separating votes by party influence as useful for demonstrating areas that affect the strength of party influence (but not ideology) by considering proximity to reelection in the Senate.

#### 4.1 Introduction

Minozzi & Volden (2013) developed the notion of the “party call” vote as one in which the party is clearly present alongside ideology. Party call votes were hypothesized by the authors to produce party unity, not through pressuring of moderates, but calling on members to support the position of the party. This hypothesis - the “responsive extremists hypothesis” - held that members on the tails would see the benefit of aiding the party brand and thus would more often get in line with these votes than would moderates.

This paper is written with the intention of replicating Minozzi & Volden’s party call analysis with extensions into later Congresses and the Senate. We do this because we view the party call as a potentially helpful tool in explaining the behavior of members of Congress. We recognize the dangers of attributing member behavior either to party or ideology given the high correlation between these characteristics (Krehbiel, 1993; Lee, 2009). The Senate has typically been viewed as a less partisan chamber, but partisanship is presently on an upward trend within it (Theriault, 2013; Smith, 2014). For this reason, we expect to find party calls in the Senate, particularly in later Congresses, and for the findings of Minozzi & Volden to hold when applied to it.

In addition, we explore the nature of something which has been shown to influence responsiveness to party but not ideology: proximity reelection in the Senate (Levitt, 1996). Members’ primary goal is to be reelected (Mayhew, 1974). Legislators who are out of line

with their district or who seem to be blindly following the party in an unprincipled manner will be electorally punished (Canes-Wrone, Brady & Cogan, 2002; Carson et al., 2010). If the party call is truly explaining the role of the party alongside ideology then it is on these votes, and these votes alone, that we should see member behavior differ when they are in a Congress which they are up for reelection.

We find that our hypotheses about the presence of party calls in the Senate holds. Further, we are able to show rigorously that it is on these votes (but not other vote types) which we see changes to member behavior as reelection approaches. As expected, Senators are less responsive to party call votes (but not party free votes) when they are up for reelection at the end of the Senate. We take this as strong evidence that the party call vote is explaining the place of the party in Congressional roll call behavior. In the next section we show the results of our replication with the section following it dedicated to additional tests concerning reelection.

## 4.2 Replication

In this section we provide the results of the replication with extension to the Senate and into Congresses 93-112. This analysis involved the use of an algorithm which sorted votes into party calls and party free votes based on whether vote choice was significantly predicted by party status. Member ideology is based on the party free votes and the ideal points calculated by one iteration is used to also predict vote choice in the next. Our model is a modified version of the one described in Minozzi & Volden (2013). Ideological extremism is member party free ideal point, with sign reversed for Democrats (so that it is higher for members of each party as they become more extreme).<sup>1</sup>

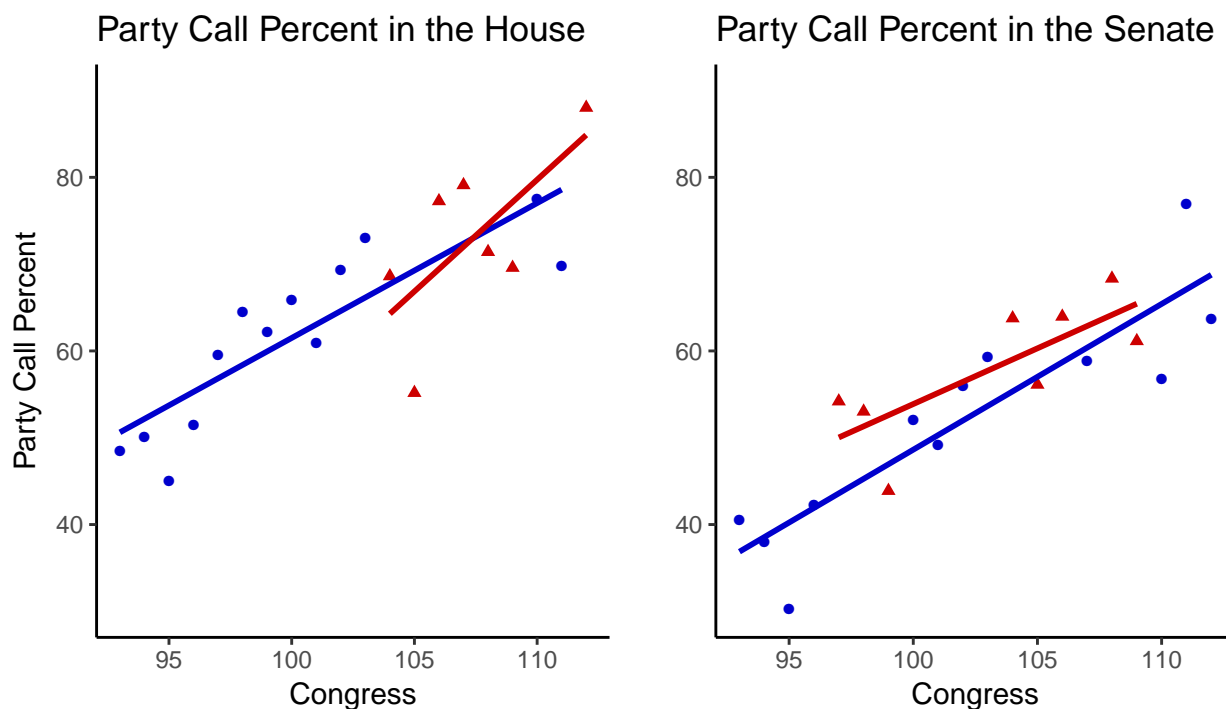
We find that party calls are more present in the House, but that they appear in the Senate as well. Additionally, we find that in both chambers their incidence has been on an upward trend during our period of analysis. We believe this trend merits further investigation, but

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<sup>1</sup>A more thorough overview of the methodology is detailed in an appendix.

initially take it as evidence of increased partisanship in recent decades, in line with others' findings (Lee, 2009; Theriault, 2013; Smith, 2014).

Figure 1: Party Calls as a Percentage of Votes, Congresses 93-112



*Note:* Blue circles denote Democrat majority Congresses while Red triangles denote Republican majority Congresses. Trend lines fit with OLS.

Regression analysis, with all member pooled or separated by party and majority status broadly show the responsive extremists hypothesis to hold. In both chambers we find that increased ideological extremism leads to increased responsiveness on party call votes. We find that Southern Democrats are less responsive to the party than are other Democrats, unsurprising since they have typically been near the chamber median. We also note that the power committee variable we constructed for the Senate (based on membership in a top 4 committee) carries little predictive power, either in terms of substantive power or statistical significance. This is not entirely unexpected, since this is a variable we included less because we believed it had meaning to Senators and more for model comparability. We also note that in both chambers increased same party presidential vote share within one's

constituency makes Democrats more likely to respond to a party call but reduces the chances of a Republican doing so.

Table 1: House Responsiveness to Party Calls

	All	Democrats	Republicans	Majority	Minority
Ideological Extremism	7.728*** (0.129)	8.320*** (0.168)	5.752*** (0.205)	6.605*** (0.155)	8.572*** (0.201)
Baseline Rate of Voting with Party	0.569*** (0.012)	0.636*** (0.015)	0.397*** (0.020)	0.528*** (0.014)	0.599*** (0.019)
Vote Share	-0.015 (0.009)	-0.051*** (0.009)	0.026 (0.016)	-0.119*** (0.010)	-0.050*** (0.015)
Pres Vote Share	0.034*** (0.009)	0.096*** (0.011)	-0.098*** (0.019)	0.208*** (0.011)	0.164*** (0.017)
South	-0.928*** (0.203)	-2.496*** (0.274)	3.554*** (0.327)	-1.687*** (0.242)	-0.575 (0.311)
Female	1.226*** (0.318)	0.682* (0.347)	-0.080 (0.570)	0.137 (0.394)	2.170*** (0.442)
African American	1.915*** (0.421)	-0.270 (0.433)	5.212 (2.986)	-2.637*** (0.524)	3.149*** (0.603)
Latino	3.236*** (0.500)	1.881*** (0.505)	2.178 (1.150)	2.706*** (0.612)	3.248*** (0.701)
Seniority	-0.050 (0.028)	0.059 (0.031)	-0.337*** (0.050)	0.039 (0.034)	-0.007 (0.041)
Freshman	0.601* (0.288)	-0.057 (0.343)	0.914* (0.450)	0.197 (0.334)	-0.358 (0.435)
Best Committee	-0.162*** (0.015)	-0.037* (0.018)	-0.233*** (0.025)	-0.166*** (0.018)	-0.171*** (0.022)
Party leader	1.800*** (0.495)	1.926** (0.593)	2.838*** (0.761)	2.421*** (0.633)	1.863** (0.662)
Power Committee	2.773*** (0.233)	1.902*** (0.274)	2.814*** (0.371)	3.005*** (0.265)	1.143** (0.361)
Committee Chair	5.008*** (0.454)	2.430*** (0.497)	9.714*** (0.798)	1.821*** (0.439)	
(Intercept)	31.980*** (1.269)	24.690*** (1.580)	53.184*** (2.159)	36.980*** (1.484)	20.097*** (2.014)
R <sup>2</sup>	0.460	0.635	0.295	0.573	0.465
Adj. R <sup>2</sup>	0.459	0.634	0.292	0.572	0.464
Num. obs.	8785	4886	3899	5043	3742
RMSE	8.486	7.395	8.910	7.540	8.132

\*\*\* $p < 0.001$ , \*\* $p < 0.01$ , \* $p < 0.05$

Results are produced by OLS regressions for all Democrats and Republicans as well as all members of the Majority and Minority party in Congresses 93-112 in the House of Representatives. Most variables provided by the Legislative Effectiveness Project.

Table 2: Senate Responsiveness to Party Calls

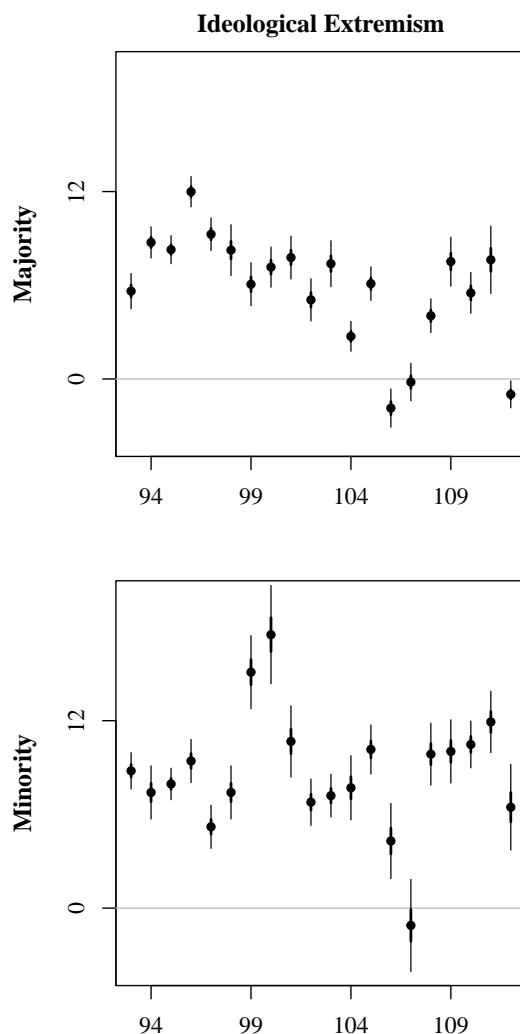
	All	Democrats	Republicans	Majority	Minority
Ideological Extremism	6.239*** (0.252)	3.136*** (0.409)	7.792*** (0.357)	4.708*** (0.315)	7.949*** (0.400)
Committee Chair	2.105*** (0.452)	0.852 (0.543)	3.626*** (0.700)	-0.017 (0.517)	
Baseline Rate of Voting with Party	0.737*** (0.021)	0.759*** (0.030)	0.742*** (0.031)	0.702*** (0.025)	0.702*** (0.035)
Presidential Vote Share	0.097*** (0.018)	0.234*** (0.024)	-0.134*** (0.031)	0.182*** (0.020)	0.006 (0.032)
South	0.613 (0.362)	-1.690** (0.557)	0.872 (0.578)	0.054 (0.427)	1.085 (0.622)
Power Committee	-0.684 (0.620)	-0.855 (0.772)	-0.325 (0.924)	-0.052 (0.719)	-1.468 (1.064)
Vote Share	0.029 (0.018)	-0.053* (0.022)	0.149*** (0.028)	-0.012 (0.021)	0.076* (0.030)
Female	2.041** (0.638)	1.690* (0.730)	0.451 (1.132)	0.532 (0.758)	4.256*** (1.113)
African American	-4.769 (2.486)	-1.164 (2.789)	-10.789* (4.278)	1.531 (4.184)	-5.519 (3.219)
Latino	5.717** (1.816)	1.814 (2.198)	7.264** (2.779)	4.781* (1.878)	6.253 (3.506)
Up For Reelection	-0.908* (0.353)	-0.630 (0.426)	-1.436** (0.538)	-0.951* (0.411)	-1.204* (0.603)
Seniority	0.002 (0.044)	0.041 (0.052)	-0.024 (0.072)	0.077 (0.060)	0.118 (0.070)
Freshman	0.859 (0.566)	0.769 (0.708)	0.358 (0.842)	0.600 (0.631)	0.996 (1.032)
Retiree	2.103** (0.693)	1.599 (0.897)	2.290* (0.997)	1.816* (0.850)	2.575* (1.110)
Best Committee	0.163 (0.101)	0.237 (0.124)	0.008 (0.154)	0.027 (0.118)	0.373* (0.174)
Party Leader	1.604** (0.539)	2.218** (0.712)	0.910 (0.776)	1.441* (0.661)	1.940* (0.899)
(Intercept)	11.611*** (2.274)	9.447** (2.906)	18.182*** (3.489)	16.365*** (2.644)	10.799** (4.009)
R <sup>2</sup>	0.632	0.689	0.641	0.684	0.615
Adj. R <sup>2</sup>	0.629	0.684	0.635	0.679	0.608
Num. obs.	1993	1042	951	1052	843
RMSE	6.967	6.118	7.255	5.865	7.749

\*\*\* $p < 0.001$ , \*\* $p < 0.01$ , \* $p < 0.05$ 

Results are produced by OLS regressions for all Democrats and Republicans as well as all members of the Majority and Minority party in Congresses 93-112 in the House of Representatives. Most variables provided by the Legislative Effectiveness Project, with supplementary data for committees from Charles Stewart's Congressional data and retirement data from the Congressional Bioguides.

In Table 2, we see strong evidence of the predicted differences between members up for reelection and others. Across all subgroups this coefficient is negative, and the effect viewed is negative for all other than Democrats. Finally, we show coefficient plots for ideological extremism in the House and Senate.

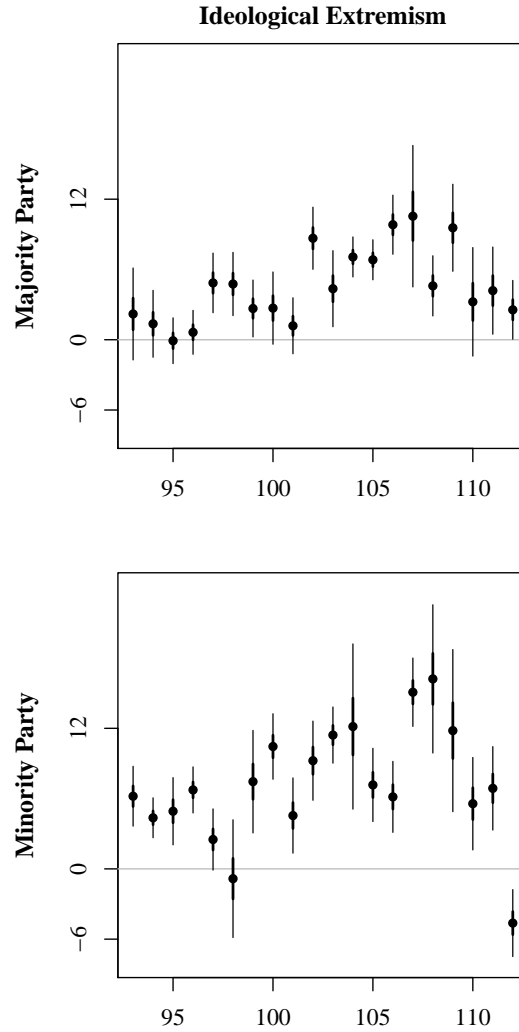
Figure 2: House Ideological Extremism Coefficient Plot



This coefficient plot is produced by the same formula shown in the House regression table with results decomposed by individual Congresses for the Majority and Minority parties. Coefficients shown are for the effect of ideological extremism on party free votes in relation to party call votes. 50% and 95% confidence intervals are shown from the points.



Figure 3: Senate Ideological Extremism Coefficient Plot



This coefficient plot is produced by the same formula shown in the Senate regression table with results decomposed by individual Congresses for the Majority and Minority parties. Coefficients shown are for the effect of ideological extremism on party free votes in relation to party call votes. 50% and 95% confidence intervals are shown from the points.

We note that though ideological extremism is a significant predictor in the regression analyses which rely on all Congresses, it fails to achieve significance for all Congresses taken separately in the Senate. We are unsurprised by this since each party in a given Senate has far fewer members than does a party in the House. So, we remain confident that party calls are present in both chambers and behave in broadly similar ways. Having established this, we turn to the case of reelection in the Senate, which we see as a useful area to consider

how members balance ideology and party preferences. The use of party call responsiveness provides results in line with our expectations for member behavior when approaching reelection.

### 4.3 Reelection in the Senate

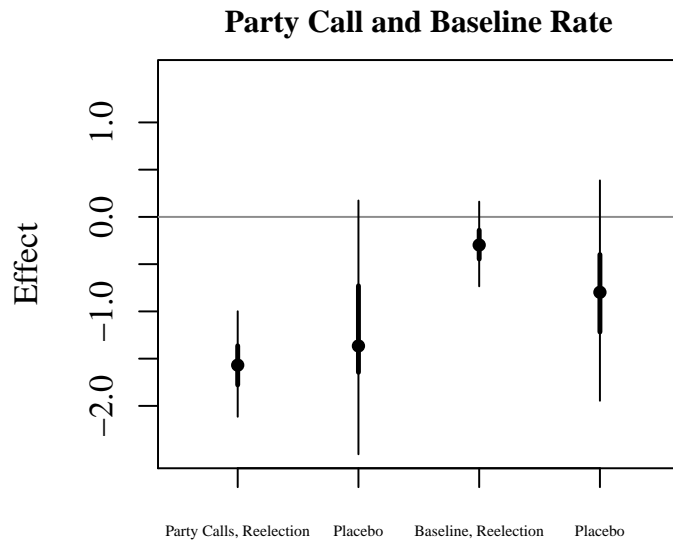
In this section we test specifically for differences in member responsiveness by proximity to reelection. In order to do this, we estimate models which rely on same-state Senator pairs when one of them is up for reelection at the end of the Congress. These pairings are ideal since an expectation is that members will respond according to their voters and same-state Senators are elected by the same voters. So, we are confident in assuming that these pairs will change their behavior in comparable ways as reelection approaches.

The fact that same-state Senators are not up for reelection at the same time allows us to estimate a generalization of a difference-in-differences design on pairs in Congresses which one is up for reelection. We use this to compare member responsiveness to the party on party calls, the baseline rate of voting with the party, and the difference between these two quantities between the member up for reelection and the member in the beginning or middle of their term. For each of these, a placebo test with randomly assigned treatment is also shown.<sup>2</sup> Cases which have more than two Senators from a state during a single Congress (due to deaths and retirements) are dropped from the analysis.

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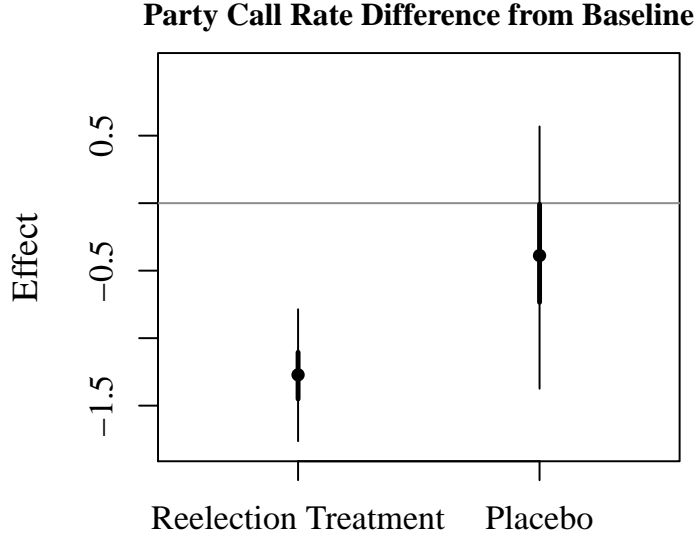
<sup>2</sup>Reported 50% and 95% confidence intervals are developed by a bootstrap sample. More details about this and other areas of the methodology can be found in an appendix.

Figure 4: Senate Rate of Voting With Party by Vote Type



*Note:* This coefficient plot is produced by a paired differences model which uses same-state Senators as a natural pairing. Differences between member responsiveness to party calls are shown by the first two points with the second set representing differences in baseline rate of voting with the party. The first and third columns use proximity to reelection as a treatment which are compared in columns 2 and 4 with a placebo treatment of the Senator with higher seniority in Congresses which neither are up for reelection as a comparison. 50% and 95% confidence intervals are shown.

Figure 5: Senate Rate of Voting With Party by Vote Type



*Note:* This coefficient plot is produced by a paired difference-in-differences model which considers the difference between same-state Senator responsiveness to party calls from their baseline rate of voting with the party. The first column uses proximity to reelection as a treatment while the second uses higher seniority in Congresses which neither is up for reelection as a placebo treatment. 50% and 95% confidence intervals are shown.

The results of these tests clearly show that member responsiveness to party calls declines, on average, about 1.5% when they are up for reelection.<sup>3</sup> This slight change in posture would be enough to allow them to point to multiple additional instances in which they went against the party to their voters and to do so without greatly hindering the party's goals. Member voting behavior on other votes does not exhibit this relationship, likely due to them not being perceived as providing as clear of a signal to voters. Thus, we conclude that member proximity to reelection leads members to place greater weight on seeming different from the party in order to appease voters at key moments.

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<sup>3</sup>Since the average number of party calls in a Congress during the time we analyze is approximately 365, this means that a Senate party can generally expect to count on members up for reelection for a little over 5 votes against the party's position on party call votes.

Given that members are less responsive to party calls when they are approaching reelection, it merits further investigation why we see more party calls in the House than in the Senate, since House members are always up for reelection at the end of a term.

## **4.4 Conclusion**

In this paper, we tested if members respond to party calls in the Senate as they do in the House, using analyses based on those of Minozzi & Volden (2013). This allowed us not only to confirm their results, but also to show the potential advantages of party calls as a method for viewing member behavior related to ideology and partisanship. We showed that reelection modifies member behavior on roll call votes which party is a factor in, but not those which are based primarily on ideology. This is in line with expectations of members working to consider voter preferences more highly as reelection becomes more proximate, though it expands on previous studies by highlighting specific conditions under which member behavior changes and others which it remains constant.

## 5 Appendices

### 5.1 Appendix A: Detailing the New Sorting Algorithm

As was done by Minozzi & Volden (2013) we develop an algorithm to sort votes based on the degree to whether vote choice can be significantly predicted by party or caucus membership after ideology is accounted for. In this algorithm, member ideology in one iteration is calculated on the votes which were not party calls in the previous iteration since party is accounting for some of the weight in decision on the other set. Ideology for the first iteration is calculated on votes which have more than 65% or less than 35% of members of the chamber voting on the same side. The algorithm has a 15 iteration burn in period for each Congress. Once this has concluded, the algorithm continues either until the number of votes switched has hit a minimum and begun to climb or until there are fewer than 5 votes which switch between iterations. Once these conditions are met, it continues for 15 additional iterations, the last 5 of which are used to identify party calls and non calls. Any votes which switched between party calls and non party calls during the final 5 iterations are dropped from our analyses.

One of the key changes was the use of the `binIRT()` R function from the `emIRT` in order to calculate members' party free ideology, replacing `ideal()` which was used by Minozzi & Volden. The `binIRT()` function was developed by Imai, Lo & Olmsted in order to produce estimates analagous to those of `ideal()` with reduced computational taxation. We find both of these aims to be met.

We find that the party call is not merely produced by a tradeoff of party and ideology explaining different votes; they are on the same side approximately two-thirds of the time in the House and three-fifths of the time in the Senate.

Table 3: House Sorting Algorithm Coefficient Signs

	(-) Ideal	(+) Ideal
(-) Party	0.38	0.15
(+) Party	0.17	0.30

The party variable used in this analysis is an indicator for status as a Republican, and thus would be expected to correlate positively with ideal points.

Table 4: Senate Sorting Algorithm Coefficient Signs

	(-) Ideal	(+) Ideal
(-) Party	0.33	0.16
(+) Party	0.23	0.28

The party variable used in this analysis is an indicator for status as a Republican, and thus would be expected to correlate positively with ideal points.

We found that the lowered number of both members and bills in the Senate required a few changes to the vote sorting method, however. Since  $p$ -values will necessarily be lower with fewer observations, we had to change the threshold for party calls to  $p < 0.05$  (from  $p < 0.01$ ). Next, since the ideal point algorithm uses a logistic regression, problems arose in vote sorting when we also tried to use another to sort vote type with this in the Senate. Neither change leads the sorting in the House to differ for the most part. We find that the sorting of close and lopsided votes by this method to be in line with Minozzi & Volden’s findings.

Table 5: House Vote Coding for Close and Lopsided Votes

	Party Call	Noncall
Lopsided	4245	6123
Close	9308	1090

The threshold for a vote to be lopsided was 65% of members (or conversely, 35%) voting on the same side of a roll call vote.

Table 6: Senate Vote Coding for Close and Lopsided Votes

	Party Call	Noncall
Lopsided	2063	4876
Close	5233	1851

The threshold for a vote to be lopsided was 65% of members (or conversely, 35%) voting on the same side of a roll call vote.

## 5.2 Appendix B: Methodology for Senate Reelection Section

In order to better test the role of reelection we use same-state senators as a natural pairing. These results were shown in figures 2 and 3 in the paper. The analyses we performed on these pairs were generalizations of the difference in differences design, in which the member not up for reelection had their response rate subtracted from that of the member who was up for reelection. Figure 2 showed the differences by vote type and figure 3 showed the change between vote types between these pairs. For each of these, we also performed analyses on Congresses which neither was up for reelection as a placebo test, with the “treatment” being based on which member was more senior. Here we show the results in tables, with breakdowns by seat pair type.

Table 7: Reelection and Response to Party Calls, Difference in Differences

Test	DV	Estimate	Lower Bound	Upper Bound
Effect	pirate100	-1.569	-2.139	-1.001
Placebo	pirate100	-0.331	-1.281	1.259
Effect	pfrate100	-0.297	-0.798	0.126
Placebo	pfrate100	-0.644	-1.074	1.143



Table 8: Diff in Diff, Subgroup Condition, Party Influenced Rate

Test	DV	Estimate
2 Maj Dems Effect	pirate100	0.0708958
2 Maj Dems Placebo	pirate100	-0.4769119
2 Min Dems Effect	pirate100	-1.8733904
2 Min Dems Placebo	pirate100	-1.2633351
2 Maj Reps Effect	pirate100	-1.1307379
2 Maj Reps Placebo	pirate100	-2.2707921
2 Min Reps Effect	pirate100	0.3990873
2 Min Reps Placebo	pirate100	-1.9947329
Split, Maj Dem, Dem Effect	pirate100	3.8789004
Split, Maj Dem, Dem Placebo	pirate100	0.7159106
Split, Maj Dem, Rep Effect	pirate100	-8.6767819
Split, Maj Dem, Rep Placebo	pirate100	-1.0729345
Split, Maj Rep, Dem Effect	pirate100	-8.0169523
Split, Maj Rep, Dem Placebo	pirate100	-2.1276690
Split, Maj Rep, Rep Effect	pirate100	0.0096892
Split, Maj Rep, Rep Placebo	pirate100	0.0232939

Table 9: Reelection and Response to Party Calls, Difference in Differences

test	DV	Estimate	Lower Bound	Upper Bound
Effect	pirate100 - pfrate100	-1.272	-1.775	-0.794
Placebo	pirate100 - pfrate100	-0.292	-0.904	0.935

Table 10: Diff in Diff, Subgroup Condition, Party Influenced Rate

Test	DV	Estimate
2 Maj Dems Effect	pirate100 - pfrate100	-0.1191943
2 Maj Dems Placebo	pirate100 - pfrate100	0.5657017
2 Min Dems Effect	pirate100 - pfrate100	-1.8253378
2 Min Dems Placebo	pirate100 - pfrate100	-0.4463733
2 Maj Reps Effect	pirate100 - pfrate100	-2.2112471
2 Maj Reps Placebo	pirate100 - pfrate100	-0.1749949
2 Min Reps Effect	pirate100 - pfrate100	0.7774782
2 Min Reps Placebo	pirate100 - pfrate100	-0.4516436
Split, Maj Dem, Dem Effect	pirate100 - pfrate100	-0.8756821
Split, Maj Dem, Dem Placebo	pirate100 - pfrate100	-1.8454871
Split, Maj Dem, Rep Effect	pirate100 - pfrate100	-1.4582552
Split, Maj Dem, Rep Placebo	pirate100 - pfrate100	0.0117995
Split, Maj Rep, Dem Effect	pirate100 - pfrate100	-7.1166813
Split, Maj Rep, Dem Placebo	pirate100 - pfrate100	-3.4630959
Split, Maj Rep, Rep Effect	pirate100 - pfrate100	0.3772151
Split, Maj Rep, Rep Placebo	pirate100 - pfrate100	0.2964502

As a further test, not shown in the paper, we estimated the effect of reelection and other variables with a fixed effects model. This produces substantively similar effects to those reported in the main paper. Most notable to us is that the effect produced by being up for reelection is in line with findings shown in the main paper.

Table 11: Senate Fixed Effects Models, Party Call Response Rate

	Democrats	Republicans	Majority	Minority
Ideological Extremism	2.88*** (0.69)	4.00*** (0.75)	1.80** (0.64)	3.93*** (0.97)
Baseline Rate of Voting with Party	0.37*** (0.05)	0.25*** (0.05)	0.37*** (0.05)	0.18* (0.07)
Up For Reelection	-0.55* (0.27)	-1.55*** (0.34)	-1.02*** (0.28)	-1.04** (0.37)
Vote Share	0.03 (0.02)	-0.05 (0.03)	0.02 (0.03)	-0.02 (0.04)
Presidential Vote Share	0.27*** (0.04)	0.09 (0.05)	0.31*** (0.06)	0.14* (0.06)
Freshman	0.71 (0.48)	0.98* (0.46)	0.77 (0.46)	0.78 (0.76)
Retiree	0.25 (0.83)	0.88 (0.83)	0.36 (0.99)	0.75 (0.91)
Best Committee	0.14 (0.12)	0.11 (0.16)	0.29 (0.15)	0.36* (0.18)
Power Committee	-0.48 (0.70)	-0.22 (0.98)	-1.26 (0.89)	-0.45 (1.01)
Leader	0.87 (0.47)	1.46* (0.62)	1.39 (0.78)	1.31 (0.80)
Committee Chair	0.38 (0.64)	0.65 (0.71)	-0.57 (0.56)	
Num. obs.	1042	951	1052	843
R <sup>2</sup>	0.89	0.91	0.92	0.94
Adj. R <sup>2</sup>	0.87	0.88	0.89	0.91

\*\*\* $p < 0.001$ , \*\* $p < 0.01$ , \* $p < 0.05$

### 5.3 Appendix C: Other Tables and Figures from Replication

In Minozzi & Volden (2013), the regression table produced shows results in Congresses 97, 102, and 107 divided by party. Here, we produce the results from our analyses in the House of these chambers for ideological extremism<sup>4</sup>.

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<sup>4</sup>Since distance from floor median was not calculated for or used by any of our analyses, we do not replicate any of their analyses which use it

Table 12: Replication of Minozzi &amp; Volden (2013), Table 3

	Democrats			Republicans		
	97th	102nd	107th	97th	102nd	107th
Ideological Extremism	9.27*** (0.53)	5.07*** (0.69)	-1.11 (1.50)	5.21*** (0.71)	6.78*** (0.76)	-0.20 (0.61)
Baseline Rate of Voting with Party	1.03*** (0.07)	0.67*** (0.08)	1.11** (0.36)	0.50*** (0.08)	0.48*** (0.08)	0.35** (0.11)
Presidential Vote Share	0.15** (0.05)	0.14** (0.05)	0.22*** (0.06)	0.23*** (0.07)	0.21* (0.08)	0.18*** (0.03)
South	-4.20*** (1.02)	-1.31 (0.80)	-3.13* (1.28)	1.53 (1.19)	0.07 (1.22)	1.75*** (0.52)
Vote Percent	-0.08* (0.03)	-0.03 (0.03)	-0.04 (0.05)	0.05 (0.05)	-0.00 (0.03)	-0.03 (0.02)
Female	0.05 (2.06)	-1.58 (1.22)	2.44* (1.21)	-4.21* (2.00)	-1.87 (2.25)	-1.39 (0.83)
African American	-2.56 (2.12)	-1.98 (1.58)	-1.43 (1.73)		3.95 (6.14)	-3.54 (3.57)
Latino	4.02 (2.91)	2.79 (1.90)	0.69 (1.89)	-1.28 (5.75)	3.26 (6.35)	0.79 (1.50)
Seniority	0.08 (0.12)	0.07 (0.10)	-0.11 (0.13)	-0.02 (0.17)	-0.71*** (0.15)	-0.17* (0.08)
Freshman	-1.25 (1.43)	0.01 (1.19)	-0.13 (2.02)	3.45* (1.34)	3.76* (1.77)	0.59 (0.78)
Best Committee	0.09 (0.08)	-0.06 (0.08)	0.25* (0.10)	0.11 (0.09)	0.11 (0.11)	0.17** (0.05)
Party Leader	7.02* (2.87)	2.00 (1.95)	0.56 (2.42)	0.38 (2.42)	4.26 (2.24)	3.17* (1.23)
Power Committee	1.09 (1.02)	1.44 (0.90)	-1.23 (1.31)	-1.37 (1.35)	-0.03 (1.41)	-0.21 (0.63)
Committee Chair	2.61 (1.52)	1.31 (1.35)				1.30 (0.91)
(Intercept)	-18.03** (6.71)	25.29*** (7.32)	-33.70 (35.43)	11.17 (8.06)	23.11** (8.49)	47.81*** (10.27)
R <sup>2</sup>	0.82	0.65	0.36	0.54	0.61	0.52
Adj. R <sup>2</sup>	0.80	0.64	0.31	0.50	0.58	0.49
Num. obs.	233	263	209	187	162	217
RMSE	5.47	4.97	6.39	5.62	5.86	3.26

\*\*\* $p < 0.001$ , \*\* $p < 0.01$ , \* $p < 0.05$