

# Pure Position-Taking in the U.S. House of Representatives\*

Eleanor Neff Powell †

December 15, 2015

## Abstract

Congressional roll call voting data and the metrics derived from it are central to the study of legislative politics and frequently interpreted as sincere measures of a member's ideology. One often-overlooked assumption is the problem of missing roll call data (abstentions). With few exceptions, missing voting data is treated as if it is missing at random and dropped or ignored in subsequent analyses. Using new Personal Explanation and Leave of Absence data, I provide answers to three questions: 1) Which members abstain and under what circumstances? 2) How pure position-taking differs from actual voting behavior? 3) What bias is introduced to traditional roll call based ideology measures from strategic abstention, insincere voting, and party pressure? Taken together, the answers to these questions shed new light on existing ideology metrics, provide a new method of identifying the effect of party pressure, and help us to better understand biases in congressional representation.

---

\*Thanks to Annie Wang, Adam Gerard, Anand Gupta and Brian Hamel for exceptional research assistance in the assembly of these two new datasets: Personal Explanation Data and Leave of Absence Data.

†Department of Political Science, University of Wisconsin-Madison, ([eleanor.powell@wisc.edu](mailto:eleanor.powell@wisc.edu), <http://eleanorneffpowell.com>).

# 1 Introduction

Congressional roll call voting data and the metrics derived from it are at the heart of the modern study of legislative politics. The ubiquity of roll call voting data in the field of Congress has given rise to a general complacency regarding the quality of these measures. Recent years, however, have seen scholars increasingly scrutinizing the assumptions and hidden details too often overlooked in such widely used data (Roberts, 2007; Clinton, 2012; Noel, 2014; Caughey and Schickler, 2014; Bateman, Clinton and Lapinski, 2014). One important and frequently ignored problem that with a handful of exceptions has yet to receive such attention is the problem of missing roll call data in the form of abstentions from voting.

The problem of how to treat this missing data may appear to be a trivial technicality until one considers exactly how widespread and common congressional abstention is. At different periods of congressional history, the missing data problem (in the form of abstention rates) has been as high as 38% and as low as 7% (Poole and Rosenthal, 2007). This means that in some congresses, ideological estimates of members policy positions are based on a non-random selection of 62% of the votes taken. This large and non-randomly introduced missingness has the potential to substantially bias our estimates of members ideological positions, thus calling into question many of our answers to classic questions of congressional representation.

With few exceptions, missing roll call vote data is treated by scholars as if it is “missing at random” (MAR) and dropped or ignored in any subsequent analysis or metrics based on the roll call data Rubin (1976). This assumption may prove problematic if member’s abstentions are non-random, as may be suspected by the classic calculus of voting theory proposed by Downs (1957) and refined by Riker and Ordeshook (1986). While some work has been done to diagnose the potential implications of this problematic assumption (notably Poole and Rosenthal (1997) and Rosas and Shomer (2008); Rosas, Shomer and Haptonstahl (2015)),

to date none have attempted to fill in the missingness with auxiliary information from the Congressional Record. To that end, I have constructed two new datasets: 1) Congressional Leave of Absence Dataset and 2) Personal Explanation Dataset that cover the 101st to 112th Congresses (1989-2012).

I exploit this new data to provide preliminary answers to three questions: 1) Which members strategically abstain and under what circumstances? My preliminary findings suggest that members who are electorally misaligned (Democrats who represent Republican districts and Republicans who represent Democratic districts) and those that are electorally vulnerable miss fewer votes, while those that are distant to Washington miss more votes. Generally members are less likely to miss party votes and more likely to miss lopsided votes. 2) How does pure-position-taking differ from actual voting behavior? My preliminary findings suggest that members who are electorally misaligned claim they would have voted with their district and against their party much more often than they actually do on roll call votes, and this holds even after controlling for ideological extremism. 3) What bias is introduced to traditional roll call based ideology measures from strategic abstention and insincere voting? Members who are misaligned are even more likely to claim to have voted against their party on strategic abstention than they are on excused absences, though this difference is not statistically significant. Taken together, the answer to these questions shed new light on existing ideology metrics and help us to better understand the nuances of congressional representation.

## **2 Scrutinizing Roll Call Voting Data & Metrics**

In recent years, several new studies have challenged the discipline's complacency with regards to the widespread use (and occasional misapplication) of roll call voting data and metrics (Noel, 2014; Caughey and Schickler, 2014; Bateman, Clinton and Lapinski, 2014; Roberts,

2007; Clinton and Lapinski, 2008; Jessee and Theriault, 2014; Crisp and Driscoll, 2012).<sup>1</sup> Despite this recent burst of additional scrutiny, the problem of missing votes and abstention has been notably absent. In the following section, I review the extant research on abstention and the missing vote problem, before discussing the new Personal Explanation Data and Leave of Absence Data that I use to augment the existing roll call voting data record.

## 2.1 Missing Data Problem: How to Handle Abstention in Roll Call Voting Data

The classic calculus of voting theory proposed by Downs (1957) and refined by Riker and Ordeshook (1986) explicitly addresses the fundamental participatory question of whether or not it is rational to vote. Although most often applied to citizens' participatory decisions, similar logic applies to that of legislators:

$$EU(Voting) = pB - C + D \tag{1}$$

Where the expected utility of voting equals the probability of a vote impacting the outcome ( $p$ ) times the utility benefit (difference in utility between candidates), minus the cost of voting ( $C$ ), plus the democratic duty (goodwill feeling,  $D$ ) of voting. This calculus of voting becomes somewhat more complicated when we adapt it to legislators voting on roll call votes, when they may care about their personal policy preferences, the electoral ramifications of their constituents' preferences, the preferences and potential rewards/punishments handed out by party leaders, and finally the potential electoral costs of frequent shirking, in addition to the traditional cost benefit calculus items.

This classic calculus of voting, so often applied to turnout decision of voters, is frequently

---

<sup>1</sup>An important and related line of research involves the question of ideal point estimation and modeling (Clinton and Jackman, 2009; Clinton, Jackman and Rivers, 2004; Clinton, 2012, 2007; Clinton and Meirowitz, 2003).

ignored by legislative scholars. There are sound reasons why academics have chosen to ignore this problem. Foremost among them, is the pragmatic need for data, need for ideological measures, and the non-trivial problem of the lack of any solution about how to address the problem. But there are also other, more substantive reasons for ignoring the problem. In his seminal work, *The Logic of Congressional Action*, Arnold (1990, pg, 62-63) alludes only briefly to the possibility of abstention on roll call votes by noting the irrationality of strategic abstention. He argued that media attention (often highlighted by congressional challengers) was so focused on participation rates that it “rarely makes political sense.” Further, he argued that interest groups view those who do not vote with them, as having voted against them, such that members abstaining would take a double political hit to both their participation rate and loss of favor with the interest group.

Thus the literature provides theoretical explanations both for and against strategic abstention (shirking).<sup>2</sup> The empirical literature on the subject is likewise mixed. Cohen and Noll (1991) took an early innovative approach to studying abstention by exploring repeated House roll call votes over a number of years regarding appropriations for a nuclear reactor during the 1970s and 1980s. They provide a formal model and estimated a binary logistic regression conditional on voting and found that supporters of a bill are more likely to abstain than opponents, conflicted legislators are more likely to vote on the losing side, but will abstain on close votes, and indifferent legislators will abstain on lopsided votes and trade their votes otherwise. Turning to abstention and roll call voting more broadly, In Chapter 10 of their seminal *Ideology & Congress* book, Poole and Rosenthal (1997, 2007) briefly explore the question of abstention and find evidence that abstentions are correlated with the cost of voting, the vote margin, and ideological indifference on the subject of the vote.

Most of what we know on the topic of strategic abstention and legislative roll call voting

---

<sup>2</sup>A related strain of literature examines the last period problem of how retiring legislators who no longer face re-election constraints behave both in terms of abstention and substantive voting. See Lott (1987, 1990); Zupan (1990); Bender and Lott (1996); Rothenberg and Sanders (2000*b*); Nokken (2013).

comes from a series of papers by Rothenberg and Sanders (Rothenberg and Sanders, 1999, 2000*a*, 2002). They find that many of the classic calculus of voting factors that might influence the probability of being pivotal (closeness of the vote, and the polarization of the vote) have no impact, rather they emphasize the relationship between the day of the week of the vote and potential electioneering tradeoffs faced by members. Their findings contradict those of Forgette and Sala (1999)'s study of the U.S. Senate which finds (consistent with Conditional Party Government theory) that abstention rates lower on party votes. Most recently, Cohen (2012) demonstrated a relationship between temperature (heat) in Washington DC and abstention, and Brown and Goodliffe (2013) explored abstention in state legislatures finding state legislative shirking on both close votes and important (major) votes, in addition to variation in legislative professionalism and salary impacting absenteeism. Perhaps of greatest relevance for future work on this project, Rosas and Shomer (2008) and Rosas, Shomer and Haptonstahl (2015) examine non-random abstention cross-nationally, documenting its existence, and build a "competing principals" model for estimating ideal points with strategic abstention.

While all of these studies shed light on the scope and nature of the problem of abstention and missing data, they are limited in what they can do to address problems of missing data and abstention without additional information to augment the voting matrix. In the following sections I introduce this new personal explanation data and leave of absence data, explain how they can augment and address our understanding of roll call voting data and abstention, and conclude with some preliminary explorations of three questions that can be answered with this data.

### 3 Introducing Personal Explanation Data

The first, and simplest step, we can take toward combatting the problem of missing roll call vote data is to complete the data wherever possible. Namely, if we knew how members would have voted had they been present, then using that vote intention would be (likely) be preferable to dropping the vote entirely. Fortunately, the House of Representatives has a commonly used procedure by which members can do exactly that. Members who miss a vote for any reason (with a formal Leave of Absence or without one), may insert a “Personal Explanation” into the *Congressional Record*, in which members note how they claim they would have voted on the issue had they been present for the vote (Koempel, Straus and Schneider, 2008).<sup>34</sup> Figure 1 below shows the Personal Explanation of Rep. Adam Smith (D-WA) and is typical of how most personal explanations appear in the Congressional Record.

— Figure 1 here —

The term “Personal Explanation” is a bit of a misnomer, and imprecise to say the least, in that members provide no explanation for either their absence or the direction of their vote. Rather, it is simply a record of what they claim they would have done had they been present to do so.<sup>5</sup> As Koempel, Straus and Schneider (2008) explain in their *Congressional Research Service* report this practice dates to at least the 29th Congress (1845-1847), and is purely symbolic having no impact on the outcome of the vote.

---

<sup>3</sup>The verbatim rules regarding a “Personal Explanation” are included in the Appendix A, Figure 3, last paragraph.

<sup>4</sup>Since the advent of electronic voting in the 93rd congress, members may use the same procedure if they believe their vote was incorrectly recorded, though the Congressional Research Service estimates that incorrectly recorded electronic votes has had no impact on the outcome of any roll call votes (Koempel, Straus and Schneider, 2008). In their survey of 30 years of electronic voting issues in personal explanations, Koempel, Straus and Schneider (2008) find electronic voting errors comprise less than 1% (0.62% to be precise).

<sup>5</sup>In using the term “claim” to describe the members’ stated voted intention, I cast no aspersions on the veracity of the stated vote intention, but rather am attempting to distinguish between actual votes with legislative consequences and stated vote intention with no binding legislative consequences (in essence a pure position-taking exercise).

To the best of my knowledge, aside from the examination of electronic voting errors by the *Congressional Research Service* the only previous attempt to collect this data was by Congressional Quarterly (Annual). In their annual almanacs, they printed these personal explanations and used the data to create a summary “On the Record Score” of each member’s participation –namely the fraction of votes on which he or she publicly declared a position either by voting, issuing a personal explanation in the congressional record, or responding to a Congressional Quarterly Poll asking how they would have voted. It was this summary “On the Record Participation” metric that Fiorina used in his work on abstention in the 85th, 88th and 91st Congresses in *Representatives, Roll Calls, and Constituencies*(Fiorina, 1974). Fiorina (1974)’s study is the only academic work I have found to examine personal explanation data (it looked at how personal explanation data impacted aggregate abstention (participation) metrics). Thus, we know very little about how the inclusion of personal explanation data may, or may not, impact our roll call based metrics of legislative behavior.

## 4 Introducing Leave of Absence Data

Once member’s stated vote intention is incorporated into the roll call voting data, one natural next step is to harness additional information to assess whether an abstention is deliberate or missing at random. Here again we can turn to a commonly used but rarely studied procedure whereby members who miss a roll call vote for any non-political reason may request a “Leave of Absence” from the House of Representatives. This “Leave of Absence” procedure is analogous to an excused absence from high school in which a parent or guardian writes a note vouching for the appropriateness of the absence. In this case, it is a member’s Party Leader inserting a note into the Congressional Record on the member’s behalf vouching that it is a non-political absence. Figure 2 below shows a typical Leave of Absence notation in the Congressional Record.

— Figure 2 here —

The leaves of absence noted in the Congressional Record above (from May 6, 2014) are fairly typical. Most of the time, though not always, members will offer a brief explanation for why the member was requesting a leave of absence. In this example, three members requested a leave for a single day due to recent tornado activity in their home states (Alabama, Arkansas, and Mississippi), and the final member (Rep. Holt) requested leave because he was “attending to a family matter.” Typically, the excuses offered fall in one of eight categories: personal illness/medical, official business, personal reasons/business, travel, funeral, family reasons, emergency, and primary elections. I’ve coded the excuses offered into these eight categories, and in future research, I plan to further explore this auxiliary information.

One complicating feature of the leave of absence notes in the Congressional Record is that they typically specify a day, or certain hours during the day, but do not mention specific roll call votes. In collecting and entering the leave of absence notes into a roll call dataset, one of the most time consuming tasks was to hand code the day and partial day descriptions into specific roll call votes. For the purposes of this paper, the leave of absence data is analyzed at the vote rather than the date level.

Although it has gone largely unnoticed by political scientists, this Leave of Absence practice dates back to at least the 53rd Congress (1893-1895) when missing votes was so widespread and problematic for the functioning of the House that members without a Leave of Absence were fined for missing votes (Hinds, 1907, Section 3011).<sup>6</sup> By using this Leave of Absence data, we can attempt to distinguish between strategic (political) and non-strategic (apolitical) abstention. This is not to say that the Leave of Absence procedure is fully immune from political manipulation. To carry the academic excuse analogy one step further, college professors are well-aware of the perils of exam time for the health of grand-parents

---

<sup>6</sup>Recently, Rep. Charles Boustany (R-LA) has attempted to revive the practice of fining members for missing roll call votes by sponsoring H.R. 6085 “No Show, No Pay Act.”

(or at least the frequency of excuses received). While there may be some manipulation of the Leave of Absence procedure, on average, absences excused by “Leaves of Absence” should be less strategic (political) than absences not excused.

## 5 The Fundamentals: Leave of Absence and Personal Explanation Descriptive Data

For pragmatic reasons, I have collected the data from the 101st to 112th Congresses. While earlier periods of congressional history which featured even higher levels of abstention might be more interesting and important for a variety of substantive reasons, pragmatically, the fact that the Congressional Record is not text searchable until the 101st Congress means that the earlier Congresses are much more time-consuming and difficult to collect.

Table 1 below shows the overall count of roll call vote responses and incorporating: actual roll call votes, leave of absence information, and personal explanation information. While I collected the leave of absence data and the personal explanation data from the Congressional Record, I should note that the original roll call data matrices here come from the `voteview.com` website.<sup>7</sup>

— Table 1 here —

For the most part the descriptions are self-explanatory, but there are some surprising results. There are instances in the data in which a member had a leave of absence but voted anyway, and there are also instances in the data in which a member voted one way, and then offered an explanation that they wanted to vote the other way. These instances are fairly

---

<sup>7</sup>The 101st roll call data and codebook was originally created by the ICPSR and was modified and cleaned by Keith Poole. The 102nd-108th congresses were compiled by Keith Poole and Nolan McCarty. The 109th-112th congresses were compiled by Jeff Lewis and Keith Poole.

rare given the approximately 6.7 million cases in the data. Given the volume of hand-coding involved, there may be errors that remain in the data, but I've done a substantial amount to eliminate coding error. Each vote was coded by two separate RAs, and any discrepancies were cross-checked by a third RA. I've further hand-checked some of the usual cases, and they do indeed exist.

The coverage of the leave of absence data and personal explanation data is fairly widespread. Table 2 below shows the coverage of personal explanation and leave of absence data in the two most recent congresses (111th and 112th).

— Table 2 here —

As seen in Table 2 above, the overwhelming majority of members (78%) entered at least one leave of absence or personal explanation over the two most recent congresses (111th and 112th). An additional 2% of members (17 people) had no reason to enter either a leave of absence nor a personal explanation, because they did not miss a single vote during this four year period.

## 6 Who Shirks and When?

The first question we want to explore is the question of who shirks (abstains) and under what circumstances? And in particular, we're interested in which abstentions are strategic abstentions. To answer this question, I begin with the classic calculus of voting theory proposed by Downs (1957) and refined by Riker and Ordeshook (1986).

$$EU(Voting) = pB - C + D \tag{2}$$

Where the expected utility of voting equals the probability of a vote impacting the outcome ( $p$ ) times the utility benefit (difference in utility between candidates), minus the

cost of voting (C), plus the democratic duty (goodwill feeling, D) of voting. This calculus of voting becomes somewhat more complicated when we adapt it to legislators voting on roll call votes, when they may care about their personal policy preferences, the electoral ramifications of their constituents' preferences, the preferences and potential rewards/punishments handed out by party leaders, and finally the potential electoral costs of frequent shirking, in addition to the traditional cost benefit calculus items.

As a preliminary step toward understanding this complicated decision facing legislators, I've assembled a dataset in which each row represents a given member's voting record on a given bill. For this preliminary analysis, I've included five explanatory variables that speak to an adapted legislator calculus of voting: Electorally Vulnerable, Electoral Misalignment, Distance to Washington, Party Vote Indicator and Roll Call Vote Margin.

Both electorally vulnerable members<sup>8</sup> and members who are electorally misaligned (Democrats who represent Republican districts and Republicans who represent Democratic districts) have reasons to fear the electoral and/or partisan ramifications of voting thus potentially making them more likely to shirk, but they also face the countervailing electoral pressure of potential costs of frequent shirking as a campaign issue.

To measure misalignment, I've created a dichotomous variable that is coded 1 under two circumstances: 1) when a district is represented by a Democratic member of Congress, and in the most recent presidential election the Democratic presidential candidate received less than 50% of the vote in that district,<sup>9</sup> 2) when a district is represented by a Republican member of Congress and in the most recent presidential election the Democratic presidential candidate received more than 50% of the vote in that district. In all other circumstances, members are coded as properly aligned (0).

---

<sup>8</sup>Measured as a four point scale using Congressional Quarterly's Race Ratings of the member's re-election prospects. The scale ranges from 0=Safe to 3=Highly Vulnerable, and is a transformation of CQ's 7 point scale that ranges from Safe Democrat to Safe Republican.

<sup>9</sup>I gratefully acknowledge Gary Jacobson for sharing his presidential election voteshare data by congressional district.

To capture the cost of voting (C), I've included the natural log of the distance to Washington, DC from the member's home state. This distance is measured in miles, using the air travel (as the bird flies) distance between the middle of the state and Washington, DC.<sup>10</sup> This logged distance in miles from the home state is a rough approximately intended to capture the travel difficulty (cost) faced by the member.

Finally, I've included two vote-specific measures. The roll call vote margin attempts to capture how likely it is that the member's vote would be pivotal in determining the outcome (p). As the margin increases, members are less likely to be pivotal, and thus more likely to miss a vote. The party vote variable uses the standard Poole Rosenthal definition of a party vote in which at least 50% of the Democrats voted against at least 50% of the Republicans. Party votes are simultaneously closer (less lopsided) due to the definition of a party vote, and they often indicated a polarized issue that is of substantive import to both parties.

Table 3 below shows the results of four logistic regressions to understand who shirks and under what circumstances. The first two models on the left predict whether or not the member missed the vote (failed to cast a roll call vote in favor or against the bill). Model 1 is a reduced form model that simply looks at the bivariate relationship between electoral misalignment and missing votes. Here we see that members who are misaligned are substantially and statistically less likely to miss roll call votes, thus suggesting that members who are misaligned fear the electoral ramifications of being tagged as shirking on their legislative responsibilities than they are of the potential electoral ramifications of contradicting their constituents or party's wishes. These results are echoed in the more fully specified Model 2, also predicting missed votes, and finding again that members who are misaligned as well as members who are electorally vulnerable are less likely to miss votes. Members who face higher costs of voting in the form of travel distance from their home state

---

<sup>10</sup>I calculated this distance using the <http://www.distancefromto.net/us-state/District+of+Columbia> website for every state, except Washington state, which the website incorrectly coded as being Washington, DC., such that I used the google map distance instead.

to Washington are more likely to miss votes as well. Then when we consider what types of votes members are most likely to miss, we see that lopsided votes (votes with a higher roll call vote differential when members are highly unlikely to be pivotal) are more likely to be missed, and they are less likely to miss party votes (votes in which at least 50% of the Democrats vote against at least 50% of the Republicans, that are both more likely to be pivotal and more likely to retribution from party leaders for missing the vote).

— Table 3 here —

Thus far we have explored simple missingness, and have not yet explored the new leave of absence data. Models 3 and 4 look at the subsample of votes that were missing, and predicts whether or not the member received a leave of absence (excused absence, nonstrategic abstention). Here we find that members who are misaligned and members who are electorally vulnerable are more likely to have a leave of absence for their missing votes. In addition, much of this leave of absence missingness seems to be due to the logistical costs of voting in the form of travel distance to Washington. There is no relationship between leave of absence and whether or not it was a party vote, and it appears that members are less likely to obtain a leave of absence for lopsided votes.

## **7 How does pure position-taking differ from actual voting record?**

To explore the question of how pure position-taking differs from actual roll call voting, I began by looking at how party voting differs across these two contexts. Of particular interest is how misaligned members (what Grimmer (2013) calls “marginal” representatives—Democrats who represent Republican districts and Republicans who represent Democratic

districts—differ when they are engaging in purely symbolic position-taking and when they are engaging in consequential “real” voting behavior.

For this preliminary analysis, I have included two explanatory variables: member misalignment, and ideological extremism. Theoretically, we would expect members who are misaligned to behave quite differently across these two different contexts. In the traditional roll call voting context, members who are misaligned often face difficult voting decisions, particularly so on party votes in which there is clear disagreement between the parties on the desired outcome. Consider, for example, a Democrat who represents a Republican district. On a party vote, they face a difficult decision between siding with their party and siding with their district. In these consequential voting situations their party will often pressure them to vote with their party and against their district, while their constituents and re-election motivated members will want them to vote against their party. By contrast in the pure position-taking context of the personal explanations, we would imagine the parties to exert substantially less influence as this is an effectively costless way for the member to ingratiate him or herself to the district.

To measure misalignment, I’ve created a dichotomous variable that is coded 1 under two circumstances: 1) when a district is represented by a Democratic member of Congress, and in the most recent presidential election the Democratic presidential candidate received less than 50% of the vote<sup>11</sup> in that district, 2) when a district is represented by a Republican member of Congress and in the most recent presidential election the Democratic presidential candidate received more than 50% of the vote in that district. In all other circumstances, members are coded as properly aligned (0).

The second variable I control for is a roll call voting based measure of ideological extremism, which is measured as the absolute value of the 1st Dimension DW-Nominate score. Almost by definition (in fact, mechanically so), members who receive ideologically extreme

---

<sup>11</sup>I am grateful to Gary Jacobson for sharing his presidential election voteshare data.

roll call voting scores should be substantially more likely to vote with their party in both contexts.

I follow Poole and Rosenthal’s definition of a party unity vote as a vote in which at least 50% of the Democrats vote against at least 50% of the Republicans. This analysis is run on the subset of party votes, and the dependent variable is a dichotomous variable in which voting with your party is coded as a 1, and voting against your party is coded as 0. Table 4 below shows the results of this analysis. Models 1 and 2 use only pure position-taking votes derived from my new Personal Explanation Data. These votes have no legislative influence on the outcome of the vote, but merely are the member’s claim about he or she would have voted had he or she been present to vote. Models 3 and 4 use only actual roll call votes, that is votes with binding legislative impact on the outcome and are those that have been traditionally studied by legislative scholars.

— Table 4 here —

The results are largely in line with our theoretical expectations. When we look at the pure position-taking measures gathered from the personal explanation data, it is clear that members who are misaligned are substantially less likely to vote with their party. This is true when we just look at the simple bivariate model of misalignment and position taking, and this is still true after controlling for ideological extremism. Misaligned members are substantially less likely than their better aligned peers to vote with the party on a pure position-taking exercise. Indeed, if we calculate the first differences from the fully specified model #2, setting ideological extremism at its mean, and calculate the change in predicted probability in voting with the party when one changes from an aligned district to a misaligned district, we see a mean difference of -2.9% (95% confidence interval: -1.4% to -4.6%).<sup>12</sup> Essentially, a member

---

<sup>12</sup>These models and estimates were calculated using R Version 3.1.2, and Zelig’s logit model (Imai, King and Lau, 2015).

moves from being likely to vote with their party with probability 91.9% to just 89%.

By contrast, the impact of misalignment on actual roll call voting is substantially smaller. If we calculate the first differences from the fully specified model #4, setting ideological extremism at its mean, and calculate the change in predicted probability in voting with the party when one changes from an aligned district to a misaligned district, we see a mean difference of 0.2% (95% confidence interval: 0.1% to 0.3 %). Essentially, a member moves from being likely to vote with their party with probability 91.6% to 91.8%, a very small increase in the probability of voting with their party, and an order of magnitude smaller an effect than what we saw in the pure position-taking.

These results are suggestive of the idea both that representatives from districts that are misaligned are less likely to represent their constituents' opinions on meaningful roll call votes than they are on symbolic position-taking exercises; instead they appear to be caving to party pressure substantially more often. Further, and perhaps, of greatest importance for those seeking to use roll call voting based ideology metrics, it is suggestive that these metrics may be distorted by party pressure, and do not capture a member's true ideological preferences. Indeed, if we extrapolate beyond just the individual metrics, they may be exaggerating the true degree of ideological polarization in the chamber.

## 8 Results: Explanation And Leave Data Combined

Finally, we want to synthesize both the leave of absence data and personal explanation data to understand differences in member behavior across three different contexts: actual roll call votes, how legislators claim they would have voted on vote they missed for a non-political reason, and how legislators claim they would have voted on a strategic abstention (when they did not obtain a leave of absence). In the previous section (results summarized in Table 4 above), we found that members who are misaligned are substantially more likely to

have claimed to vote with their district and against their party on symbolic position-taking statements in the Congressional Record, than they are on binding legislative roll call votes. In fact, once controlling for ideological extremism, members who are misaligned are slightly more likely to vote with their party than their properly aligned peers.<sup>13</sup>

The advantage of comparing pure position-taking claims across different types of abstention (leave of absence and abstention without a leave of absence) is that on average, we would expect leave of absence to be more randomly distributed and less deliberately chosen as a vote the member wanted to avoid. As discussed previously, the chamber and party rules regarding Leave of Absence dictate that they only be given for non-political reasons (See Figure 4) in Appendix A for the detailed guidelines), so that we would expect on average abstentions covered by a Leave of Absence to be less strategic than other abstentions.

As we found in Section 6, members who are misaligned are less likely to miss votes overall than their better aligned peers, and they are slightly more likely to obtain a leave of absence. Given the potential electoral costs of accruing too many missed votes, and the desirability of obtaining a leave of absence when they can do so, we would imagine misaligned members might be most likely to shirk on votes that put them in the most difficult position between party and electoral pressure. Therefore, as we compare a member's decision to vote with his or her party across these two different types of pure position-taking exercises, we would expect members who are misaligned to be less likely to vote with their party in either case, but particularly in cases of strategic abstention.

Taking a similar approach as the previous section by examining how misaligned members behave on party votes and controlling for ideological extremism, I ran three separate logistic regressions. Table 5 below displays the results of these regressions.

— Table 5 here —

---

<sup>13</sup>Though it should be noted that the magnitude of this effect is quite small.

In Table 5, Model 1 (far left column) represents Pure Position-Taking personal explanations given by members who received a leave of absence, and the dependent variable is whether or not the explanation was in the direction of voting with the member's party. This analysis is run on the subset of party votes, so that the party's preferred vote direction is clear, and the subset of cases in which a member received a leave of absence and offered a personal explanation on a party vote. Model 2 (middle column) represents Pure Position-Taking personal explanations given by members who did not receive a leave of absence (presumed strategic abstention), and the dependent variable is whether or not the explanation was in the direction of voting with the member's party. This analysis is run on the subset of party votes, so that the party's preferred vote direction is clear, and the subset of cases in which a member did not receive a leave of absence and offered a personal explanation on a party vote. Model 3 (far right column) represents voting behavior on actual roll call votes and is identical to Model 4 in Table 4 above. To ease the interpretation of the effect of being from a misaligned district in these different voting contexts, Figure 3 below shows the first differences.

— Figure 3 here —

On actual roll call votes, members who are misaligned vote no differently than other party members. To be precise, they vote fractionally more often with their party than their properly aligned peers do, though the difference is not statistically significant. When as political scientists we rely upon traditional roll call voting measures, or ideology estimates derived from these traditional roll call votes, this is the behavior we observe and how we measure representational outcomes.

In both the leave of absence context and the strategic abstention context, members who are misaligned are substantially less likely to say they would vote with their party than

they do on actual roll call votes. If we compare the relationship between party voting and misalignment across the excused absence and strategic abstention context, we see a stronger relationship where members who are miss aligned are even less likely to vote with their party in the context of strategic abstentions (-3.6% mean first difference) than they are on excused absences (-2.3% mean first difference). It should be noted that the 95% confidence intervals on the first differences (impact of moving from aligned to not aligned) for Excused Absences and Strategic Abstention overlap, though consistent with our expectations the effects for strategic abstention are larger.

This difference between how members vote on actual roll call votes and how they claim they would have voted during a strategic abstention provides a new method of precisely identifying the effect of party pressure for these members. When party pressure is removed, and members are engaging in pure position-taking for their constituents, they are more likely to rebel against their party's wishes. Thus we can identify the effect of party pressure on misaligned members to be approximately 4%.

## 9 Conclusion

In this paper, I introduced two new datasets: leave of absence data and personal explanation data, and suggested they can help augment existing roll call voting data by addressing problems of missing votes and strategic abstention. I exploited this new data to provide preliminary answers to three questions. First, which members strategically abstain and under what circumstances? My preliminary findings suggest that members who are electorally misaligned (Democrats who represent Republican districts and Republicans who represent Democratic districts) and those that are electorally vulnerable miss fewer votes, while those that are distant to Washington miss more votes. Generally speaking, members are less likely to miss party votes and more likely to miss lopsided votes.

Second, I explored how pure position-taking differs from actual voting behavior? My preliminary findings suggest that members who are electorally misaligned claim they would have voted with their district and against their party much more often than they actually do on roll call votes, and this holds even after controlling for ideological extremism. These results are suggestive of the idea both that representatives from districts that are misaligned are less likely to represent their constituents' opinions on meaningful roll call votes than they are on symbolic position-taking exercises; instead they appear to be caving to party pressure substantially more often. Further, and perhaps, of greatest importance for those seeking to use roll call voting based ideology metrics, it is suggestive that these metrics may be distorted by party pressure, and do not capture a member's true ideological preferences. Indeed, if we extrapolate beyond just the individual metrics, they may be exaggerating the true degree of ideological polarization in the chamber.

Third, I examined, what bias is introduced to traditional roll call based ideology measures from strategic abstention and insincere voting? Again, my early results suggested that members who are misaligned are even more likely to claim to have voted against their party on strategic abstention than they are on excused absences, though this difference is not statistically significant. Taken together, the answer to these questions shed new light on existing ideology metrics and help us to better understand the nuances of congressional representation.

In sum, leave of absence and personal explanation data can be used for a variety of purposes—as a solution to missing data problems, to identify the effect of party pressure, and to assess the quality of congressional representation. These results provide preliminary evidence in support of biases in representation. Representatives from misaligned districts are less likely to represent their constituents' opinions on meaningful roll call votes than they are on symbolic position-taking exercises. Instead they seem to be caving to party pressure substantially more often on actual roll call votes.

The new data and results presented here suggest a variety of avenues for future research. By augmenting the roll call voting data, new ideal point estimates can be created that can be used to overcome problems of missing data and that capture different aspects of congressional representation—both how a member presents himself to his constituents (pure position-taking) and how a member votes on consequential legislation. In addition, by expanding the data collection to earlier periods of congressional history, we can explore variation in the effect of party pressure, and address troubling missing data problems when abstention levels approached 40%.

## References

- Arnold, R. Douglas. 1990. *The Logic of Congressional Action*. Yale University Press.
- Bateman, David, Josh Clinton and John Lapinski. 2014. “A House Divided?: Policy Differences and Polarization.” Presented at the Conference on Congress & History at the University of Maryland, College Park.
- Bender, Bruce and John Lott. 1996. “Legislator Voting and Shirking: A Critical Review of the Literature.” *Public Choice* 87(2):67–100.
- Brown, Adam R. and Jay Goodliffe. 2013. “Why do Legislators Skip Votes.” Working Paper.
- Caughey, Devin and Eric Schickler. 2014. “Structure and Change in Congressional Ideology: NOMINATE and its Alternatives.” Presented at the Conference on Congress & History at the University of Maryland, College Park.
- Clinton, Joshua D. 2007. “Lawmaking and Roll Calls.” *Journal of Politics* 69(2):457–469.
- Clinton, Joshua D. 2012. “Using Roll Call Estimates to Test Models of Politics.” *Annual Review of Political Science* 15:79–99.
- Clinton, Joshua D. and Adam Meirowitz. 2003. “Integrating Voting Theory and Roll Call Analysis: A Framework.” *Political Analysis* 11:381–396.
- Clinton, Joshua D. and John Lapinski. 2008. “Laws and Roll Calls in the U.S. Congress, 1891-1994.” *Legislative Studies Quarterly* 33(4):511–541.
- Clinton, Joshua D. and Simon Jackman. 2009. “To Simulate or NOMINATE?” *Legislative Studies Quarterly* 34(4):593–621.
- Clinton, Joshua D., Simon Jackman and Douglas Rivers. 2004. “The Statistical Analysis of Roll Call Data.” *American Political Science Review* 98(02):355–370.

- Cohen, Alexander. 2012. "Sweating the Vote: Heat and Abstention in the US House of Representatives." *PS: Political Science & Politics* 45(1):74–77.
- Cohen, Linda and Roger Noll. 1991. "How to Vote, Whether to Vote: Strategies for Voting and Abstaining on Congressional Roll Calls." *Political Behavior* 13(2):97–127.
- Congressional Quarterly. Annual. *Congressional Quarterly Almanac*. Washington, DC: Congressional Quarterly.
- Crisp, Brian F. and Amanda Driscoll. 2012. "The Strategic Use of Legislative Voting Procedures." *Legislative Studies Quarterly* 37(1):67–97.
- Downs, Anthony. 1957. *An Economic Theory of Democracy*. Harper.
- Fiorina, Morris. 1974. *Representatives, Roll Calls and Constituencies*. Lexington, Kentucky: Lexington Books.
- Forgette, Richard and Brian R. Sala. 1999. "Conditional Party Government and Member Turnout on Senate Recorded Votes, 1873-1935." *Journal of Politics* 61(2):467–84.
- Grimmer, Justin. 2013. "Appropriators Not Position Takers: The Distorting Effects of Electoral Incentives on Congressional Representation." *American Journal of Political Science* 57(3):624–642.
- Hinds, Asher C. 1907. *Hinds' Precedents of the House of Representatives of the United States: Including References to Provisions of the Constitution, The Laws and Decisions of The United States Senate*. Vol. IV Government Printing Office.
- Imai, Kosuke, Gary King and Olivia Lau. 2015. "logit: Logistic Regression for Dichotomous Dependent Variables." in Kosuke Imai, Gary King, and Olivia Lau, "Zelig: Everyone's Statistical Software," <http://gking.harvard.edu/zelig> .

- Jessee, Stephen A. and Sean M. Theriault. 2014. "The two faces of congressional roll-call voting." *Party Politics* 20(6):863–848.
- Koempel, Michael L., Jacob R. Straus and Judy Schneider. 2008. "Record Voting in the House of Representatives: Issues and Options." *CRS Report for Congress* Order Code: RL34570.
- Lott, Jr., John R. 1987. "Political Cheating." *Public Choice* 52:169–186.
- Lott, Jr., John R. 1990. "Attendance Rates, Political Shirking, and the Effect of Post-Elective Office Employment." *Economic Inquiry* 28:133–150.
- Noel, Hans. 2014. "Separating Ideology from Party in Roll Call Data: Why NOMINATE Doesn't Measure Ideology But Can Be Used to Measure Polarization." Presented at the Conference on Congress & History at the University of Maryland, College Park.
- Nokken, Timothy P. 2013. "Uncertainty and Roll-Call Voting in Lame-Duck Sessions of the U.S. House, 1969-2010." *Legislative Studies Quarterly* 38(4):571–591.
- Poole, Keith and Howard Rosenthal. 1997. *Congress: A Political-Economic History of Roll Call Voting*. Oxford University Press.
- Poole, Keith and Howard Rosenthal. 2007. *Ideology & Congress*. 2nd, revised edition of *Congress: A Political and Economic History of Roll Call Voting* ed. New Brunswick: Transaction Publishers.
- Riker, William H. and Peter C. Ordeshook. 1986. "A Theory of the Calculus of Voting." *The American Political Science Review* 62(1):25–42.
- Roberts, Jason M. 2007. "The Statistical Analysis of Roll-Call Data: A Cautionary Tale." *Legislative Studies Quarterly* 32(3):341–360.

- Rosas, Guillermo and Yael Shomer. 2008. "Models of Nonresponse in Legislative Politics." *Legislative Studies Quarterly* 33(4):573–601.
- Rosas, Guillermo, Yael Shomer and Stephen R. Haptonstahl. 2015. "No News Is News: Nonignorable Nonresponse in Roll-Call Data Analysis." *American Journal of Political Science* 59(2):511–528.
- Rothenberg, Lawrence S. and Mitchell S. Sanders. 1999. "Rational Abstention and the Congressional Vote Choice." *Economics and Politics* 11(3):311–340.
- Rothenberg, Lawrence S. and Mitchell S. Sanders. 2000a. "Legislator turnout and the calculus of voting: The determinants of abstention in the U.S. Congress." *Public Choice* 103:259–270.
- Rothenberg, Lawrence S. and Mitchell S. Sanders. 2000b. "Severing the Electoral Connection: Shirking in the Contemporary Congress." *American Journal of Political Science* 44(2):316–325.
- Rothenberg, Lawrence S. and Mitchell S. Sanders. 2002. "Modeling Legislator Decision Making: A Historical Perspective." *American Politics Research* 30(3):235–264.
- Rubin, Donald B. 1976. "Inference and missing data." *Biometrika* 63(3):581–592.
- The Republican Cloakroom, Speaker of the House John Boehner. 2014. "Services: Leave of Absence." Available: <http://repcloakroom.house.gov/services/>. Accessed: August 15, 2014.
- Zupan, Mark A. 1990. "The last period problem in politics: Do congressional representatives not subject to a reelection constraint alter their voting behavior?" *Public Choice* 65:167–180.

## 10 Tables and Figures

Figure 1: Personal Explanation Example. Extension of Remarks - Congressional Record. January 22, 2013.

---

### PERSONAL EXPLANATION

**HON. ADAM SMITH**

OF WASHINGTON

IN THE HOUSE OF REPRESENTATIVES

*Tuesday, January 22, 2013*

Mr. SMITH of Washington. Mr. Speaker, on Friday, January 4, 2013, I was unable to be present for a recorded vote. Had I been present, I would have voted "yes" on rollcall vote No. 7 (on the motion to suspend the rules and pass H.R. 41).

Figure 2: Leave of Absence Example. Congressional Record. May 6, 2014.

---

LEAVE OF ABSENCE

By unanimous consent, leave of absence was granted to:

Mr. ADERHOLT (at the request of Mr. CANTOR) for today on account of the recent tornadoes in Alabama.

Mr. GRIFFIN of Arkansas (at the request of Mr. CANTOR) for today on account of the recent tornadoes in Arkansas.

Mr. NUNNELEE (at the request of Mr. CANTOR) for today on account of the recent tornadoes in Mississippi.

Mr. RUSH (at the request of Ms. PELOSI) for today on account of attending to a family matter.

---

Table 1: Frequencies: Votes, Leave of Absence and Personal Explanation

Description	Frequency
Not in Congress	92,941
Yea	1,798,500
Paired Yea	290
Announced Yea	40
Announced Nay	39
Paired Nay	273
Nay	1718,957
Present	1,618
Present	266
Not Voting	106,257
Missed + Leave of Absence	16,984
Voted Yea + Leave of Absence	766
Voted Nay + Leave of Absence	689
Paired Yea + Leave of Absence	2
Announced Yea + Leave of Absence	4
Announced Nay + Leave of Absence	0
Paired Nay + Leave of Absence	2
Present + Leave of Absence	1
Not a Member + Leave of Absence	2
Missed + Explan: Yea	5,690
Missed + Explan: Nay	5,212
Missed + Explan: Present	16
Nay + Explan: Yea	241
Yea + Explan: Nay	195
Nay + Explan: Present	1
Yea + Explan: Present	2
Yea + Explan: Yea	418
Nay + Explan: Nay	243
Missed + Leave of Absence + Explan: Yea	2,923
Missed + Leave of Absence + Explan: Present	2,600
Yea + Leave of Absence + Explan: Nay	3
Yea + Leave of Absence + Explan: Yea	16
Nay + Leave of Absence + Explan: Nay	21

Table 2: Data Coverage: 111th and 112th Congresses

	Description	Coverage
	Members without any missing votes	17 members (2%)
	Members entered at least one leave of absence	292 members (33%)
	Members entered at least one personal explanation	629 members (71%)
	Members w/ least one personal explanation and/or leave of absence	692 members (78%)

Table 3: Who shirks and when? Logistic Regression Results

	<i>Dependent variable:</i>			
	Missed Vote		Leave of Absence	
	(1)	(2)	(3)	(4)
Vulnerable		-0.192*** (0.003)		0.017** (0.007)
Misaligned	-0.230*** (0.005)	-0.127*** (0.006)	0.097*** (0.013)	0.067*** (0.015)
Distance to Washington		0.043*** (0.002)		0.140*** (0.006)
Party Vote		-0.167*** (0.009)		-0.002 (0.025)
Roll Call Vote Differential		0.0004*** (0.00003)		-0.0005*** (0.0001)
Constant	-3.060*** (0.002)	-3.237*** (0.018)	-1.740*** (0.006)	-2.495*** (0.050)
Observations	6,701,156	5,149,006	287,583	227,958
Log Likelihood	-1,185,670.000	-927,634.600	-122,335.800	-99,661.040
Akaike Inf. Crit.	2,371,345.000	1,855,281.000	244,675.600	199,334.100

*Note:*

\*p<0.1; \*\*p<0.05; \*\*\*p<0.01

Table 4: How does pure position-taking differ from actual voting? Logistic Regression Results

	<i>Dependent variable: Vote with Party</i>			
	Pure Position-Taking		Actual Roll Call Voting	
	(1)	(2)	(3)	(4)
Misaligned	-1.262*** (0.063)	-0.339*** (0.084)	-0.885*** (0.004)	0.024*** (0.005)
Ideological Extremism		4.510*** (0.260)		5.258*** (0.015)
Constant	2.619*** (0.033)	0.365*** (0.115)	2.425*** (0.002)	0.192*** (0.006)
Observations	16,416	10,520	3,513,258	2,690,219
Log Likelihood	-4,624.919	-3,236.234	-1,128,067.000	-840,138.100
Akaike Inf. Crit.	9,253.838	6,478.468	2,256,137.000	1,680,282.000

*Note:*

\*p<0.1; \*\*p<0.05; \*\*\*p<0.01

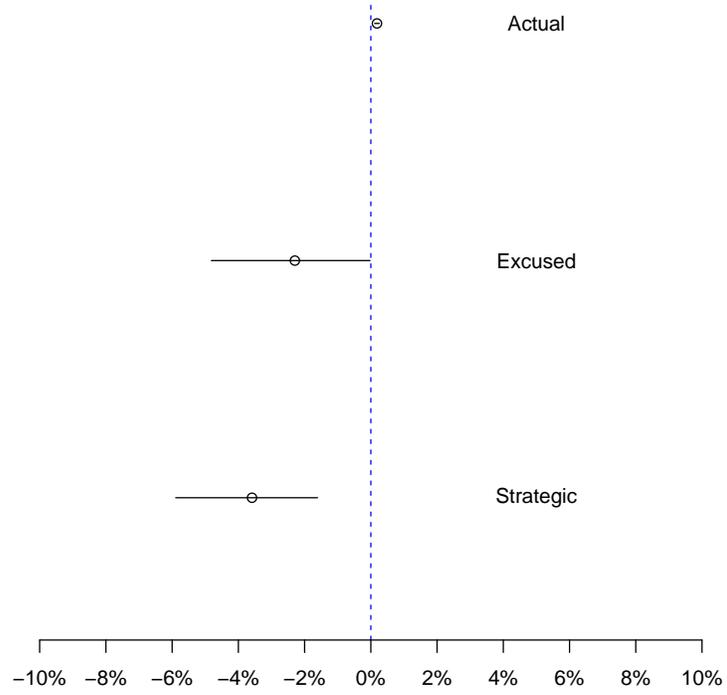
Table 5: Excused Absence Position Taking, Strategic Abstention Position-Taking and Actual Roll Call Votes: Logistic Regression Results

	<i>Dependent variable: Vote With Party</i>		
	Pure Position-Taking Excused Absence (1)	Strategic Abstention (2)	Actual Roll Call Votes (3)
Misaligned	-0.268** (0.136)	-0.406*** (0.108)	0.024*** (0.005)
Ideological Extremism	4.238*** (0.424)	4.705*** (0.330)	5.258*** (0.015)
Constant	0.511*** (0.189)	0.263* (0.145)	0.192*** (0.006)
Observations	4,213	6,307	2,690,219
Log Likelihood	-1,295.575	-1,937.786	-840,138.100
Akaike Inf. Crit.	2,597.149	3,881.572	1,680,282.000

*Note:*

\*p<0.1; \*\*p<0.05; \*\*\*p<0.01

Figure 3: Effect of Party Pressure for Misaligned Members



# Appendix: Leave of Absence Rules and Personal Explanation Procedure

Verbatim rules regarding a “Leave of Absence” and the procedure for entering “Personal Explanations” into the Congressional Record from the Republican Cloakroom website of the Speaker of the House John Boehner (The Republican Cloakroom, Speaker of the House John Boehner, 2014).

Figure 4: Republican Party Rules

## Leave of Absence

If a Member is absent and misses votes for a substantial period of time, the Member or his staff may request a Leave of Absence from the House. Upon request, the Cloakroom staff will complete a Leave of Absence form which states the dates of the Member’s absence and the reason for his/her absence. The form is signed by the Republican Leader and laid before the House at the conclusion of legislative business for the day.

Decades ago, an absent Member was fined by the House. That is no longer the case. But a Leave of Absence is printed in the Congressional Record and announces the reason for one’s absence. Members may choose reasons that are general, such as “official business” or “illness,” or something more specific such as “having my appendix removed” or “inspecting damage in the district from Hurricane Katrina.” Members may not use political reasons for an absence. Members may choose not to request a Leave of Absence if he/she believes it would draw unnecessary attention to his/her absence.

Whether or not one chooses to request a Leave of Absence, a Member may wish to prepare a statement on how he/she would have voted on the votes that were missed. These statements, like any statement for the Congressional Record, must bear an original signature of the Member. If a statement is submitted to the Cloakroom within a few hours of the missed vote, it will be printed in the Record immediately following that vote. A typical statement would be:

**Mr. Speaker, on Roll Call # \_\_\_\_ on the \_\_\_\_\_ amendment on HR 12234, I am not recorded (because I was absent due to illness.) Had I been present, I would have voted (Aye/nay.)**

In addition to the above, Members should notify the Republican Whip of their absence.

## Appendix: Descriptives

Table 6: Summary information

Statistic	N	Mean	St. Dev.	Min	Max
Congress	6,701,156	107.149	3.438	101	112
Party	6,660,872	148.624	50.474	100	328
Vote Intention	6,280,715	0.648	0.478	0	1
Explanation	6,701,156	0.006	0.075	0	1
Leave of Absence	6,701,156	0.007	0.083	0	1
Missing-Any Reason	6,701,156	0.044	0.205	0	1
Missing-No Leave	6,701,156	0.037	0.189	0	1
Actual Roll Call Vote	6,245,177	0.648	0.478	0	1
Pure Position-taking Vote	35,542	0.723	0.447	0	1
Party Vote-Indicator	6,701,156	0.560	0.496	0	1
Roll Call Vote Margin	6,701,156	190.941	150.278	0	432
1st Dimension DW-Nominate	5,200,340	0.023	0.453	-0.922	1.364
Democratic Presidential Vote	6,660,872	52.140	14.065	19.690	96.060
State Distance	6,660,872	941.275	785.702	23	4,770
LNStateDistance	6,660,872	6.440	1.000	3.135	8.470
Vulnerable	5,149,006	0.476	0.938	0	3