

# Characterizing Chief Executives: Comparing Presidential and Congressional Preferences and Their Effect on Lawmaking, Agency Budgeting, and Unilateral Executive Action, 1874-2010

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## Abstract

Investigating executive and legislative interactions is critical for understanding presidential systems. Doing so requires comparing the preferences of the elites involved, which is challenging because these actors do not take positions on the same issues and are motivated by different strategic considerations. To circumvent these difficulties, we propose a new measure of the presidents ideal point based on vote returns and an assumption about the electoral connection. We illustrate the generalizability of this approach by estimating the preferences of U.S. presidents (and their challengers) from 1874-2010 and California governors from 1994-2010. Additionally, we use our new measure to test the effect of executive-legislative congruence on: legislative productivity (1877-1996), agency budgeting (1933-2006), and the issuance of executive orders (1945-2001). These examples demonstrate the content validity of our measure, as well as how it can be used to refine our substantive understanding of inter-branch relations.

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A vast literature posits a connection between executive-legislative relations and government outputs. In the American politics context, scholars have argued that inter-branch disagreement impedes legislative productivity (e.g., Brady and Volden 1998; Krehbiel 1996,1998; Chiou and Rothenberg 2009), and affects the selection of judges (e.g., Rohde and Shepsle 2007) and bureaucrats (e.g., Nokken and Sala 2000; Snyder and Weingast 2000). Many have also argued that the extent to which the preferences of the executive and legislative branches are aligned can have important implications for judicial (e.g., Clark 2011; Bailey and Maltzman 2012) and bureaucratic (e.g., Epstein and O'Halloran 1999) activity. Moreover, separation of powers issues transcend the American context and apply to other presidential systems and state governments.

To evaluate theories of executive-legislative interactions requires locating the policy preferences of chief executives alongside their legislative counterparts, but this is no easy task. Though we have widely agreed upon measures of legislative preferences (e.g., Poole and Rosenthal 1997; Clinton et al. 2004), scholars have yet to agree on how to best measure the preferences of chief executives. Because of their uniquely prominent and pivotal position in the political system, we cannot simply interpret their actions and statements as indicative of their true preferences. Despite the central importance of comparing the preferences of chief executives and legislators, we often lack the ability to do so.

Partisanship is too coarse to provide much insight into the preferences of executives and legislators; we know presidents from the same party can differ in their views and presidential preferences are sometimes not shared by their co-partisans in the legislature. More nuanced measures relate the public positions presidents take on recorded roll call votes (McCarty and Poole 1995) and outcomes (Treier 2010) to those taken by legislators. While an important approach that helped launch a literature in search of similar ways of “bridging” political elites across institutions, estimates based on public presidential positions may produce misleading estimates of presidential preferences for two reasons. First, the decision of whether and how to take a position on an issue may reflect the executive’s strategic incentives to influence legislators (perhaps because the positions are a result of “going public” (Kernell 1997; Canes-

Wrone 2006)). Second, the fact that chief executives are such public and prominent standard-bearers for their party means that taking a public position may shift the nature of the vote and affect the likelihood of legislators casting a supportive vote on that issue only according to the policies being considered (Kingdon 1989).

These are exceptionally difficult issues to resolve, but they are essential for understanding how to interpret what public actions imply about sincere policy preferences. We propose an alternative measurement strategy that avoids these difficulties and relies instead on assumptions about the electoral motivation of presidents and legislators. Focusing on the United States between 1874 and 2010 and California between 1994 and 2010, we use the electoral connection to estimate executive ideal points alongside legislative ideal points. The resulting measure can vary across and within executive administrations, and our characterization suggests that presidents are far more moderate than we would conclude based on the sparse number of public positions that they choose to take. Despite not using any information about public positions in the estimation of executive ideal points, our measure correctly classifies the public presidential positions we observe nearly as well as the presidential ideal points that are estimated by maximizing the likelihood of observing these votes.

Substantively, our estimates reveal evidence consistent with three core intuitions regarding features of executive-legislative relations whose empirical support has been previously obscured by the limitations of existing measures. We show that divergence in presidential and congressional preferences is correlated with the following government outcomes: (1) decreased legislative productivity between 1877 and 1996; (2) increased differences between presidential budget requests and enacted congressional appropriations between 1933 and 2006; and (3) decreased issuance of executive orders between 1945 and 2001. Contrary to the results obtained using existing measures, testing hypotheses about inter-branch bargaining using our measures of presidential preferences produces results that are both informative and consistent with pervasively held prior beliefs.

Our argument proceeds as follows. In section one, we outline why public presidential positions are likely misleading when used to measure presidential preferences. Section two

leverages an assumption about the nature of the electoral connection to estimate presidential preferences for every Congress between 1874 and 2010 and compares our resulting measures to existing estimates of presidential preferences. Section three uses our measures to explore three prominent areas of executive-legislative interaction within the United States – law-making, budgeting, and unilateral executive action – to show how our measure refines our substantive understanding of each. Section four uses the same approach to estimate the preferences of presidential challengers between 1874 and 2010 and California governors between 1994 and 2010 to highlights its applicability in different political contexts and section five concludes. An appendix demonstrates the robustness of our measure and substantive conclusions to a wide variety of alternative tests and specifications.

## 1 Measuring Presidential Preferences

Understanding the determinants of political outcomes in a system of separated powers requires knowing and comparing the preferences of the pivotal actors in each branch of government. In the American politics literature, much attention has been given to articulating the various methods of using recorded roll calls to estimate the preferences that most likely rationalize the observed voting patterns (e.g., MacRae 1958; Heckman and Snyder 1997; Poole and Rosenthal 1997; Clinton et al. 2004), but comparatively less headway has been made in locating the preferences of actors in different branches of government in a common space (but see, for example, Poole and Daniels 1985; Bailey and Chang 2001; Bailey 2007; Epstein et al. 2007). Without the ability to compare the preferences of different political actors, we cannot test hypotheses about how such preferences affect political outcomes.

The challenge is to place the preferences of the president and Congress on a common scale. Solving this measurement problem is central to testing theories of inter-branch relations and previous scholars have relied upon several different measures in an attempt to do so. The simplest measure equates partisanship and preferences – i.e., if the president and Congressional majority belong to the same party, they are assumed to share common preferences.

While early work treated partisanship and preferences as synonymous, this assumption leads to limited characterizations. Unified government is a description of both ideological and institutional components. Periods of unified government certainly indicate periods of greater ideological comity between the president and Congress (though there is variance in the degree of ideological agreement across different periods of unified government), but there is also an institutional feature: when the president’s co-partisans control the legislature, he will be more willing to count on leaders of Congress to use their institutional rights (e.g., agenda-setting – see Cox and McCubbins 2005) to support his preferences. When using unified government to proxy for inter-branch ideological proximity, we cannot disentangle the ideological mechanism we are interested in from the confounding and observationally equivalent institutional mechanism. Controlling for the size of the president’s party may provide some differentiation, but neither party control nor the size of the president’s party necessarily indicates anything about the policy preferences of the political elites involved.

An alternative approach is to use expert surveys to identify the president’s preferences in relation to Congress’s. This technique has been used by Wiesehomeier and Benoit (2009) in the study of comparative politics, and Segal et al. (2000) in the context of the United States, but inferences about the location of different actors in government that come from survey data are limited for most substantive questions because they require strong assumptions about the experts’ historical knowledge when used to try to place political elites over more than a hundred years.

Many use voting data of elected officials to estimate the “ideal point” that rationalizes the set of votes that are observed given a behavioral voting model and its statistical implementation. Ideal points are often implicitly assumed to reflect either the personal preferences of the elected official or else the preferences that are induced by the constituency. Given well-defined roll-call based measures for legislators, some simply assert a relationship between legislative ideal points and the ideal point of the chief executive. For example, Berry et al. (1998, 2010, 2011) assume that the governor’s ideal point in the U.S. states is the mean ideal point of each state’s congressional delegation belonging to the same party. For studies

focusing on the U.S. national government, scholars sometimes assert that the president is always either interior (Krehbiel 1998) or exterior (Howell et al. 2013; Brady and Volden 1998) to the key pivots in the legislature. Such assertions may not produce noticeable differences in predictions regarding lawmaking, but whether the president is interior or exterior to key legislative pivots may affect what we would expect about unilateral executive action and presidential appointments. Equating executive and legislative preferences by assumption makes it difficult to disentangle the influence of executive-legislative interactions from intra-legislative interactions because the same measure will describe both by construction.

Rather than simply assume a position vis-à-vis the legislature, others have sought a more nuanced measure of the president’s ideal point based on his public positions. For these estimates of the president’s ideal point to be comparable to those of legislators, we must observe actors in both branches taking positions on the same issues (see, for example, Bailey 2007; Jessee 2009; Bertelli and Grose 2011; Clark and Lauderdale 2010; Bafumi and Herron 2010; Clinton et al. 2012).<sup>1</sup> Leveraging this approach, McCarty and Poole (1995) assume that public presidential positions are equivalent to recorded roll call votes. To do so, the president is treated as a legislator that misses most of the votes. The number of missing votes is extreme: for example, President Obama took only 29 positions on the 1649 recorded roll calls in the 111th Congress. Data on public presidential positions come from *Congressional Quarterly* for the post-1948 period and from historical sources in earlier times.<sup>2</sup> Treier (2010) supplements the set of analyzed public positions for a few Congresses by also including presidential support on final passage votes for bills that are enacted into law. Treating the president as a legislator who is frequently absent allows the president’s ideal point to be estimated alongside those of legislators using a statistical roll call model.

The results of scaling presidential positions have been employed in a variety of analyses (McCarty and Poole 1995; McCarty and Razaghian 1999), but they depend on at least two questionable assumptions. First, it is implausible that the president’s public positions reflect a random sample of his policy preferences. Many scholars (e.g., Canes-Wrone 2006; Kernell 1997) argue that the decision to take a public position and possibly even to “go public” can

by motivated by factors other than policy preferences. The president may take a position to bolster approval for struggling bills that he supports, or he may take a public stance on a particular piece of legislation for the purpose of claiming credit for a popular bill that is likely to pass. Anecdotal evidence supports these claims. In discussing the positions taken by President Bush in 2004, for example, the *Congressional Quarterly* noted, “Perhaps as significant, however is the relative dearth of votes taken in 2004, and the low number of issues where Bush took a stand” (2004, B-4). In reporting why so few positions were taken, CQ cited then-Representative Rob Portman [R-OH] who noted that Bush saves his energy for issues he finds “important enough to expend time, energy and capital on”, and that “He uses his direct influence selectively. I think that’s important – you can wear out your welcome in the Hill” (2004, B-6). If presidential position-taking is strategically motivated in these ways, it is unlikely that the president’s positions represent a random – and therefore unbiased – sample of positions; a presidential pronouncement is not simply an expression of support or opposition, but is also a statement made in a larger strategic context that is presumably intended to shape the political debate.

Consistent with this possibility, there are qualitative differences in the nature of the votes on which presidents do and do not take a public position. Table 1 compares these votes for the 107th - 111th Congresses and reveals that not only do presidents take very few positions – indeed, in the average session, the president expressed a public position about 6.6% of the time – but the votes on which he takes a position differ substantively from those on which he does not. Votes with presidential positions are more likely to pass and they are also more likely to be contentious – the rates of both majority and minority rolls double, and the average percentage of bipartisan votes decreases from 46% to 24%.

Table 1 illustrates that a president’s strategic decision about whether or not to “vote” on a bill is markedly different from that of a legislator’s. This raises important questions about whether presidents’ public positions are indeed analogous to legislators’ roll call votes (see Carrubba et al. 2006; Carruba et al. 2008; Clinton and Jackman 2009; Ho and Quinn 2010). The typical solution to such a “selection problem” is to adopt an instrumental variables

Table 1: Presidential “Votes,” 107th - 111th Congresses

	President took position	President did not take position
Number of votes	90.8	1297.2
Rate of passage	0.78	0.74
Percentage of “aye” votes	0.62	0.69
Majority roll rate	0.07	0.03
Minority roll rate	0.46	0.25
Rate of bipartisan votes	0.24	0.46

strategy or find a “natural” experiment that provides an exogenous shock to the positions being taken. However, it is unclear how such a solution would work in this context. There is no obvious instrument for presidential position-taking – i.e., a variable that is correlated with the act of taking a public position but which is not related to the president’s preferences and the underlying strategic environment; nor is there an exogenous event that occurs frequently enough to allow us to measure presidential preferences across time.

In addition to the possible non-random selection of issues that are taken by executives, a second problematic feature of public presidential positions is that the act of taking a position may affect legislators’ preferences and behavior (Kingdon 1989). Presidents (and other chief executives) occupy a unique position in a separation of powers system: not only do they possess a veto over much that is done, but they are also often the standard-bearer for their party. The fact that they are such a prominent partisan may provide some reason to doubt whether the behavioral model assumed by current roll call estimation techniques is appropriate. The behavioral models in roll call estimation assume that the probability of a legislator voting “yea” depends only on the distance between that legislator’s ideal point and the ideological location of the policy being voted upon. However, by taking a position on an issue, the president may cause that issue to be evaluated on partisan terms – not just on the basis of spatial proximity to legislators’ ideal points. Illustrating this point, in a frank admission to the *National Journal*, Senate Majority Leader Mitch McConnell (R-KY) stated, “the single most important thing we want to achieve is for President Obama to be a one-term president” (see Kessler 2012). If so, presidential position taking may change the



nature of the voting calculus used by legislators: those from the president’s party may be more likely to support the bill, while those from the opposite party become more opposed to the bill, regardless of the ideological location of the bill itself.

In short, using public positions to estimate presidential preferences is problematic because presidents take positions on roll-call votes for different reasons than do legislators, and the act of taking a position may affect the utility of legislators in ways that are inconsistent with the behavioral model assumed by existing roll call models. Solving these issues in isolation is difficult, and the fact that both likely occur makes it very hard to imagine how ideal point estimates based on public positions provide a sensible characterization of presidential preferences. And, in fact, the presidential ideal points generated using this technique place the president in the extremes of the policy space (Treier 2010), a result that is seemingly inconsistent with the fact that he represents a national constituency. In light of the difficulties with using the president’s public positions and actions to make inferences about his underlying preferences, we argue that placing presidential and legislative preferences on the same scale requires a different approach.

## **2 Leveraging the Electoral Connection**

We propose an alternative measurement strategy for locating the president vis-à-vis Congress that circumvents the problems noted above. Using Achen’s (1977) notion of responsiveness, our key assumption is that members of Congress are as responsive to the preferences of citizens in their districts as presidents are to the nation as a whole. In terms of representation, then, the primary distinction between the two branches of government is that members of Congress serve smaller constituencies – districts or states – while presidents must serve the entire nation (Lewis and Moe 2009; Howell et al. 2013). If so, the same function that maps constituent preferences at the district level onto that district’s legislator’s ideal point should also map constituent preferences at the national level onto the president’s ideal point. We illustrate the approach for presidential preferences, and discuss how to adapt it to measure

governor ideal points when we present the results for California in section 4.

Our empirical strategy consists of two stages. In the first stage, we predict each legislator’s ideal point using her constituents’ preferences and her political party. Doing so requires assuming that legislators’ preferences are informed by those of their constituents. This assumption is well validated in the literature – legislators have long been postulated to represent their constituents’ preferences in an effort to maximize their odds of reelection (e.g., Mayhew 1974; Fiorina 1974). For reasons of comparability, we use the ideal points of members of Congress generated using DW-NOMINATE (Poole and Rosenthal 1997). To proxy for citizens’ preferences, we follow the lead of many other scholars (e.g., Schwarz and Fenmore 1977; Erikson and Wright 1980; Downs 1957; Ansolabehere et al. 2001; Canes-Wrone et al. 2002; Carson et al. 2010; Masket 2007; Mayhew 2011) and use presidential vote share from the previous election. Presidential vote share is perhaps the most visible and widely available measure of constituency opinion to scholars and elected officials alike.<sup>3</sup> Our analysis covers the 44th through 111th Congresses (1874-2010). For presidential elections from 1872 through 1948, we rely on the district-level estimates of presidential votes derived from county-level election returns used by Snyder et al. (2001).<sup>4</sup>

The relationship between district presidential vote share and DW-NOMINATE scores may vary over time. To prevent this variation from compromising the validity of our estimates, for each Congress  $t$  we estimate the following equation for the best linear predictor:<sup>5</sup>

$$\text{DW-NOMINATE}_{it} = \alpha_t + \beta_{1t}\text{District Pres. Vote}_{it} + \beta_{2t}\text{Party}_{it} + \epsilon_{it} \quad (1)$$

where  $\text{DW-NOMINATE}_{it}$  is the DW-NOMINATE score for the representative elected in year  $t$  in district  $i$ ,  $\epsilon_{it}$  is a stochastic disturbance term, and  $\alpha_t$ ,  $\beta_{1t}$  and  $\beta_{2t}$  are Congress-specific parameters to be estimated.<sup>6</sup> Substantively,  $\alpha_t$  normalizes the average district presidential vote to have the same mean as the DW-NOMINATE score for the House elected in year  $t$ ,  $\beta_{1t}$  describes how a change in presidential vote share relates to a change in a DW-NOMINATE score in year  $t$ , and  $\beta_{2t}$  describes how a change in political party relates to a change in a DW-

NOMINATE score in year  $t$ . To be clear, we do not give equation (1) a causal interpretation; we are simply using it as the best linear predictor to model the variation in DW-NOMINATE and district presidential voting behavior.<sup>7</sup>

In the second stage of our empirical strategy, we use the 68 sets of regression coefficients produced by equation (1) to project the national two-party popular vote in a presidential election and the president’s political party into DW-NOMINATE space in a corresponding Congress using the relationship:

$$\text{Predicted Pres. DW-NOMINATE}_t = \hat{\alpha}_t + \hat{\beta}_{1t}\text{National Pres. Vote}_t + \hat{\beta}_{2t}\text{Party}_t \quad (2)$$

where  $\hat{\alpha}_t$ ,  $\hat{\beta}_{1t}$  and  $\hat{\beta}_{2t}$  are the estimates of parameters  $\alpha_t$ ,  $\beta_{1t}$  and  $\beta_{2t}$  for Congress  $t$  in equation (1).<sup>8</sup> By imposing that  $\hat{\alpha}_t$ ,  $\hat{\beta}_{1t}$  and  $\hat{\beta}_{2t}$  take the same values for presidents as for members of Congress, we are implicitly assuming that presidents feel an equivalent electorally-motivated compulsion to represent their constituents as do their congressional counterparts (the only difference being the relevant constituents to whom they must appeal). This claim, too, has broad support in the literature. Mayhew’s proposition that politicians are primarily driven by the goal of reelection applies to all popularly elected actors in government, not just to legislators; he writes electoral success “has to be the proximate goal of everyone, the goal that must be achieved over and over if other ends are to be entertained” (1974: 16). Presidential scholars provide support for this broad theory of the president as reelection seeking, finding that the president must expend much time, energy and resources during his first term in office in order to secure a second (Light 1999; Shaw 2006; Tenpas 2000). Moreover, this electoral incentive carries over to the second term, even if the president cannot himself seek reelection, as his interests shift from personal to party-centered (Hudak 2012).<sup>9</sup>

The relationship assumed by equation (2) can also be thought of as a model for why the president is likely located near the party mean in the legislature (e.g., Berry et al. 1998, 2010, 2011). Our approach is obviously slightly more flexible, however, because equation (2) allows for the president’s ideal point to diverge from the party mean depending on the nature

of the relationship between district and legislator voting behavior estimated by equation (1). So long as: 1) there is a relationship between legislator and district voting behavior and, 2) the executive's vote share is near the average vote share of the median legislator, the executive will be predicted to be relatively moderate.

Equation (1) estimates the president's ideal point as a function of *all* legislators' ideal points, but a president that is appealing to the nation as a whole may have little incentive to represent extreme members of the electorate, making the ideal point of legislators from extreme districts irrelevant for the projection of the president's preferences. To account for this possibility, we estimate a second measure of the president's ideal point using only those legislators who match two characteristics of the president. Specifically, we isolate those districts that elected a legislator belonging to the president's party and whose presidential vote share was within one percentage point of the national presidential vote share; we estimate the president's ideal point as the average DW-NOMINATE score of those legislators in this subset of districts.<sup>10</sup> For a third measure, we repeat this analysis using Common Space scores in place of DW-NOMINATE scores.

Figure 2 presents the time-series of our three estimates of the president's preferences alongside the estimates that McCarty and Poole (1995) generate using public presidential positions. *Linearly Projected* refers to the estimate of the president's ideal point calculated using equations (1) and (2). *Matched DW-NOMINATE* and *Matched Common Space* are the estimates of presidential preferences obtained from our matching estimators using DW-NOMINATE scores and Common Space scores, respectively. Finally, *McCarty-Poole* shows the president's ideal point derived from his public positions on roll-call votes.

Several interesting patterns emerge when comparing the four measures. First, our estimates are strikingly similar to one another. *Linearly Projected* and *Matched DW-NOMINATE* align throughout the entire time series and correlate at 0.989. *Common Space* is only available starting in 1936, but this measure, too, correlates highly with our other two measures in excess of 0.97. The only visible discrepancy between *Common Space* and our other measures is during the George W. Bush administration, and even this distinction is minor, as these

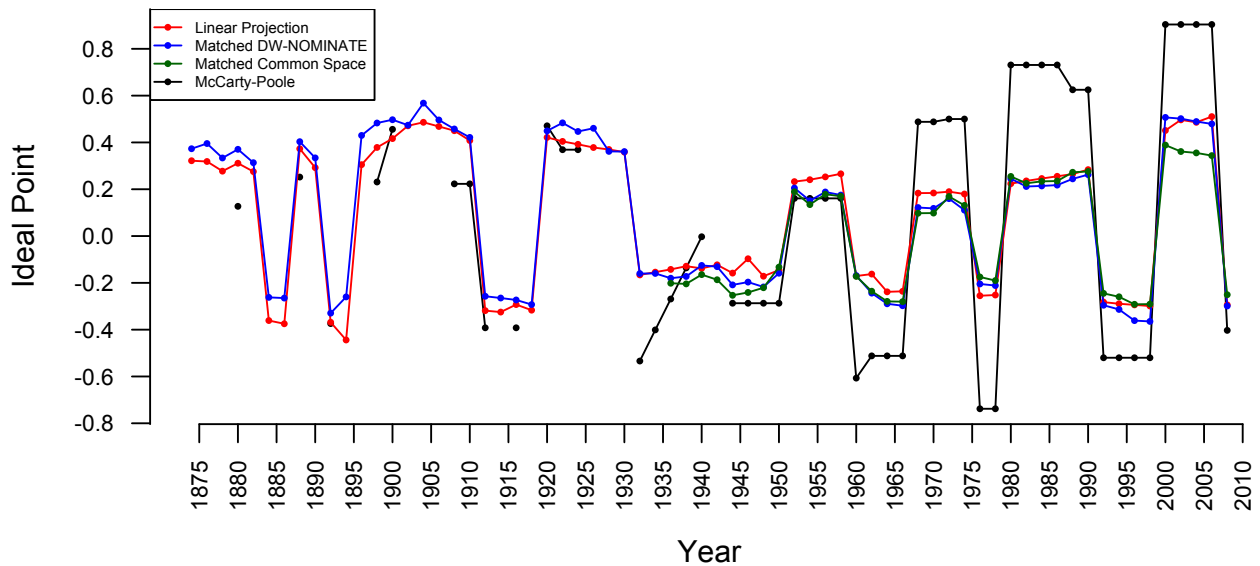


Figure 1: PLACING THE PRESIDENT, 1874-2010

estimates differ by approximately 0.1. The choice of whether to predict presidential ideal points using equation (2) or a matching estimator is therefore largely inconsequential.

In contrast, and despite a healthy correlation of at least 0.94 with the measures we propose, *McCarty-Poole* differs from all three of our estimates in several notable ways. The *McCarty-Poole* measure is best understood as two partitions. From 1874-1948, data on presidential positions were collected from various historical sources. While the estimates generated from these data match ours reasonably well, there are many years for which data is unavailable. Moreover, this measure fluctuates greatly, most notably from 1932 to 1940, during which time Franklin D. Roosevelt is shown as shifting from being a left wing extremist to a slightly right leaning centrist. Due to missing data and volatile estimates, it is hard to know how to interpret the data collected for the first partition of the measure. From 1949-2010 the measure is based on data gathered by *Congressional Quarterly*. Throughout most of these years (1960-2010), the president is identified as an extremist relative to Congress. Moreover, presidential ideal points are relatively constant within administrations,

meaning that theories of intra-administrative change cannot be tested. The lack of within-administration variation stands in contrast to the variation evident within administrations among those presidents whose ideal points were estimated using different data. Finally, because of the paucity of presidential positions, there is considerable missing data – presidential ideal points cannot be estimated in 18 of the 68 Congresses.

Our three measures initially appear to offer a more plausible representation of presidential preferences over time for several reasons. First, comparing the ideal points of the various presidents reveals plausible ideological distinctions between them – for example, George W. Bush is shown to be more extreme than Ronald Reagan. Second, whereas the McCarty-Poole measure has either high within-administration ideological variance (from 1874-1948) or no variance (from 1949-2010) depending on the source of the data being analyzed, our measures consistently split the difference and portray presidents as being largely ideologically stable over the course of their administrations while also allowing for some within-administration ideological drift. Finally, whereas measures of presidential preferences based on public positions suggest that presidents are ideologically extreme relative to Congress, our measures identify presidents as much more moderate. Given the national constituency and the fact that presidents are the public face of their party, this moderation better fits our prior beliefs about presidential locations.

## **2.1 Predicting Presidential Positions**

To further evaluate the plausibility of our estimates, we can examine the extent to which they correctly predict the public presidential positions we observe. Because each roll call has an estimated cutpoint in DW-NOMINATE space that can be used to predict whether an individual with a given ideal point votes “yea” or “nay” on the bill, we can use the estimated cutpoints on the votes on which a president took a position to assess how well our estimates predict the president’s observed public positions. We are particularly interested in evaluating how well our estimates perform relative to the estimates produced by McCarty and Poole that are constructed to minimize classification error.

Figure 2 plots the distribution of classification rates across the 68 Congresses for our estimator (top) and presidential DW-NOMINATE scores (bottom). The percent of presidential positions in a Congress that are correctly predicted averages 81.6% for DW-NOMINATE and 76.8% for our measure. This difference is statistically indistinguishable at conventional levels. Again, the high classification rate for presidential DW-NOMINATE scores is unsurprising because they are estimated so as to maximize the likelihood of observing these votes. It is reassuring, though, that our measure reveals a similarly high level of classification success despite being estimated without regard to these public positions. Our measure can therefore account for the public positions that the president chooses to take almost as well as DW-NOMINATE scores even though such positions were not used in its construction.

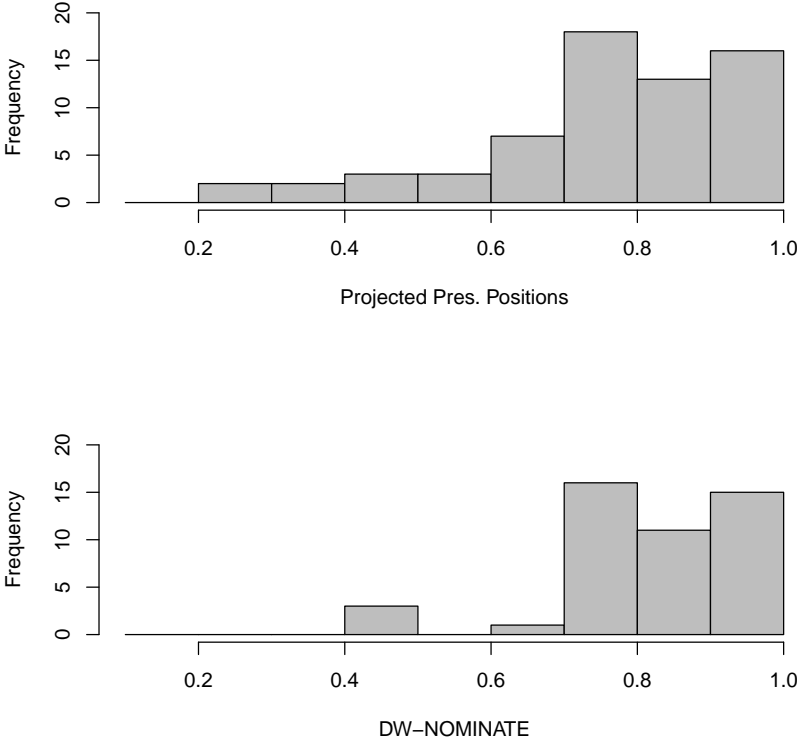


Figure 2: COMPARING CLASSIFICATION SUCCESS ON PRESIDENTIAL POSITIONS TAKEN IN A CONGRESS, 1874-2010: The top graph presents the distribution of classification success in predicting presidential positions taken in the 68 Congresses we examine using the presidential ideal point based on the linear projection we propose. The bottom figure presents the distribution of classification success using presidential DW-NOMINATE estimates when it exists.

Despite statistically indistinguishable differences in the ability to classify the public positions we observe presidents taking, the paucity of presidential positions in some Congresses means there is far more missing data when using DW-NOMINATE estimates. In fact, of the 68 Congresses we examine, DW-NOMINATE cannot estimate presidential ideal points in 18 of them because of insufficient votes.<sup>11</sup> Thus, while Figure 2 reveals that there are some Congresses with relatively low classification success when using our measure, missing data entirely precludes the ability to estimate presidential DW-NOMINATE scores for some of these years. Moreover, we are not only able to predict presidential positions for these years, but we are able to do it relatively well: the average classification rate of our measure is 79% when applied to those Congresses in which a DW-NOMINATE estimate for presidential positions exists, and 70% for the Congresses in which it does not.

### **3 Presidential and Congressional Interactions in Three Arenas**

While our ideal point estimates conform to our expectations when it comes to placing the president in the policy space and they can predict the public positions that we observe presidents taking, we have yet to demonstrate that they can be profitably used to test theories of inter-branch relations. In particular, we have not yet shown that our measure has more predictive power than the one based on public presidential positions or even than an indicator of the president's political party. This section posits three intuitive hypotheses of inter-branch relations for which we have very strong prior expectations, and tests them using our estimates of the president's ideal point as an explanatory variable. Because we rely on variation in the president's ideal point *within* administrations, these examples provide hard tests for the predictive validity of our measure. In each case, when calculating our explanatory variables with our new measure of the president's ideal point, we obtain estimates that are consistent with our hypotheses. Moreover, these relationships are often more precisely estimated than when existing measures of presidential preferences are used.

That our measure produces uncontroversial conclusions when used to examine three crit-



ical aspects related to executive-legislative relations – lawmaking, budgeting and unilateral executive action – supports its validity. The fact that our measure is able to produce these conclusions when existing measures are not highlights the substantive importance of the measure for the study of executive and legislative relations, and the potential for further insights when applied to other important questions.<sup>12</sup>

### 3.1 Legislative Productivity, 1877-1994

As a starting point, we use the ideological distance between the president and Congress to predict the volume of legislation produced by the government. Many argue that as the preferences of the president and the median member of Congress diverge, the number of policies on which they agree will decrease, resulting in increased gridlock (e.g., Brady and Volden 1998; Krehbiel 1998; Binder 2003). By extension, as the distance between these actors' preferences decreases, more legislation should get passed. This basic logic predicts:

*Hypothesis 1: As the ideological distance between the president and Congress decreases, there will be greater legislative productivity.*

Testing this hypothesis requires measures of legislative productivity, as well as the ideological position of the president and Congress. To measure the former, we use Clinton and Lapinski's (2006) data on the enactment of significant domestic legislation. For each Congress from 1877 to 1996, they estimate the significance of every enacted bill. We focus on domestic legislation, since disagreements in this domain must be predominantly resolved in the legislative arena.<sup>13</sup> Our measure of lawmaking activity is simply the total number of domestic policy bills passed during each Congressional session weighted by the significance of each bill. Hence, a low value should accurately measure governmental gridlock, while a high value conveys the absence of gridlock.

Perhaps the most straightforward way to conceptualize inter-branch alignment is the ideological proximity of the president to the median legislator in Congress. Setting aside the potential for vetoes and filibusters, enacting a new law requires the approval of the

president and at least a majority of each chamber. With this in mind, we measure inter-branch ideological disagreement as the absolute value of the difference between the median legislator’s ideal point in the House, and that belonging to the president. The median legislator’s ideal point is calculated using DW-NOMINATE. The president’s ideal point is measured using: (1) our linearly projected measure, (2) our matched estimate based on DW-NOMINATE, and (3) McCarty and Poole’s ideal point based on public positions.

To mitigate concerns of omitted variable bias, we include a number of additional controls. First, we control for unified government, since, as previously discussed, it may affect legislative output above and beyond the effect of ideological disagreement between the two branches. Polarization in the House is also included to explore if preference divergence within the chamber – rather than between the House and the president – is a significant determinant of legislative gridlock. We control for war, as the volume of domestic legislation often declines when the government is pre-occupied with military conflict. Finally, because presidential administrations may differ in their propensity for legislative productivity, we include presidential fixed effects.<sup>14</sup> The models we estimate are ordinary least squares, with standard errors clustered by presidency.

The results are shown in Table 2. When using our two measures of presidential ideal points to calculate the distance between the president and median legislator, we find support for *Hypothesis 1*. Columns (1) and (2) reveal a negative, statistically significant relationship between the ideological distance between the two branches and the amount of significant legislation produced by Congress. That is, when using our ideal point measures, we find support for the common-sense proposition that increased ideological alignment between the president and Congress results in a more productive Congress; conversely, when the two branches diverge more in their preferences, Congress enacts fewer significant domestic bills.

In contrast, the relationship between the divergence in congressional and presidential preferences and legislative enactments cannot be precisely estimated using McCarty and Poole’s estimates of presidential preferences.<sup>15</sup> The coefficient on the distance variable in column (3) is negatively signed and similar in magnitude to the coefficients reported in

	(1)	(2)	(3)
Distance btwn pres. and med. leg.			
Linearly projected	-238.699*		
	(112.083)		
Matched (DW-NOMINATE)		-225.068 <sup>†</sup>	
		(125.524)	
McCarty-Poole			-272.769
			(243.387)
Unified government	-66.039 <sup>†</sup>	-60.842	-72.993
	(36.425)	(38.483)	(58.658)
House polarization	1273.281	1132.618	1293.329
	(761.237)	(719.687)	(1142.907)
War	-58.012**	-58.386**	-63.109
	(19.408)	(20.579)	(43.616)
Constant	-731.915	-619.879	121.312
	(560.202)	(527.404)	(518.265)
$R^2$	0.923	0.921	0.910
Observations	59	59	42

Table 2: PREDICTING SIGNIFICANT LEGISLATION, 1877-1994: The dependent variable is the number of public laws dealing with domestic politics weighted by their significance using the scores of Clinton and Lapinski (2006). OLS regressions include presidential fixed effects and robust standard errors clustered by presidential administration. Two-tailed significance levels: <sup>†</sup> $p < 0.10$ ; \* $p < 0.05$ ; \*\* $p < 0.01$ .

columns (1) and (2), but the relationship is very imprecise and indistinguishable from zero.

Figure 1 reveals the reason for the imprecision when using a measure of presidential preferences based on public positions – there is almost no within presidential administration variation since 1944 according to the McCarty-Poole measure. Therefore, in addition to typically placing the president more extremely than our proposed measures, this extant measure also cannot explain variation within presidential administrations.<sup>16</sup> Consequently, at least in this case, our measures are more useful for testing models of inter-branch relations than are measures based on presidential position taking.<sup>17</sup>

### 3.2 Agency Budgeting, 1933-2006

Ideological disagreement between the president and Congress may lead to less overall legislation, but does this disagreement also affect the substance of enacted policies when the two branches have no choice but to legislate? To answer this question, we test how preference divergence between the president and Congress affects appropriations. Since the Budget

and Accounting Act of 1921, the president has been required to submit an annual budget proposal to Congress, which while not legally binding, serves as guidelines for Congress to determine final appropriations (Schick 2007). Moreover, if Congress wishes to avoid a government shutdown, it must pass a budget each year. As such, the distance between the dollars requested by the president and the dollars allotted by Congress arguably provides a clean, continuous measure of the level of agreement between the two branches that is comparable across years and agencies.

Intuitively, a number of scholars suggest that if the president and Congress are ideologically aligned, then proposed and allocated appropriations will converge (Canes-Wrone 2006; Howell et al. 2013; Kiewiet and McCubbins 1991). This leads to our second prediction:

*Hypothesis 2: As the ideological distance between the president and Congress increases, so too will the gap between the president's appropriations requests and Congress's enacted budget.*

To test this prediction, we measure budgetary proposals and allotments using Howell et al.'s (2013) data on presidential budget estimates and final appropriations for 77 agencies and programs from 1933 to 2006. In total, we have data for 3201 agency years.<sup>18</sup> The dependent variable is the discrepancy between the president's proposed budget and the enacted appropriations for each agency in each year. To correct for the right skew of this variable, we take its natural log, so that the final variable is  $\ln(|Proposed_{it} - Appropriated_{it}| + 1)$ , where  $i$  indexes the agency and  $t$  the year.

Much like in the significant legislation application of the previous subsection, we include additional control variables in our statistical models to minimize the risk of omitted variable bias. First, we again condition our estimates on the presence or absence of unified government. Second, we control for the amount of money that the president requests for a given agency or program. Scholars note that, regardless of his ideal point, the president generally wants to give more money to agencies than do legislators (Fenno 1966; Schick 2007). When the president requests a smaller budget for a particular agency, there is less available bud-

get for Congress to cut, producing an artificial appearance of budgetary agreement, when in fact, the agency just requires a smaller operating budget. As a result, we expect that the difference between proposed and adopted appropriations will be smaller if the president requests less funds at the outset. Since the president's proposed appropriations are right skewed, we take the natural log of this variable and include it in all model specifications.

Third, we account for economic performance with the expectation that a poor economy may generate less support for the president's budget in Congress. In particular, we include three indicators of the economy in each model specification: the average logged unemployment rate during the year when appropriations are proposed and set; the national growth rate since the previous year; and the total budget deficit from the previous year. To account for unobserved heterogeneity across presidential administrations and agencies, we include both president and agency fixed effects in all of our models. Identification, therefore, comes from changes in proposed and adopted appropriations within a particular agency during a single presidential administration. We estimate the models using ordinary least squares; to account for serial correlation, we present standard errors that are clustered on agencies.

In Table 3, we estimate the effect of ideological disagreement between the president and median House legislator on Congress's willingness to adopt the president's proposed budget. Each model uses a different estimate of the president's ideal point to calculate his distance from the median legislator. The first two columns use our two measures of the president's ideal point – column (1) uses our linearly projected measure, and column (2) uses our non-parametric matched estimate. Meanwhile, column (3) uses the McCarty and Poole measure to calculate the gap between the two branches.

Across all three models in Table 3, the control variables behave as expected. Even once we have controlled for the distance between the president and the median legislator, we find a negative, highly significant effect of unified government. This suggests that alignment with the majority party in the House and Senate has value for the president above and beyond decreasing his distance from the pivotal legislator in Congress. Additionally, we find that Congress is more likely to acquiesce to smaller budgetary requests than to larger

	(1)	(2)	(3)
Distance b/w pres. and med. leg.			
Linearly projected	1.307 <sup>†</sup>		
	(0.734)		
Matched (DW-NOMINATE)		1.784*	
		(0.708)	
McCarty-Poole			0.885
			(0.594)
Unified government	-0.536**	-0.437**	-0.560**
	(0.150)	(0.155)	(0.150)
ln(Proposal)	1.056**	1.053**	1.062**
	(0.104)	(0.103)	(0.107)
ln(Unemployment)	-0.263*	-0.247*	-0.396**
	(0.111)	(0.107)	(0.144)
Real deficit	0.146*	0.165*	0.143*
	(0.066)	(0.068)	(0.067)
Real GDP growth	-2.396*	-2.004 <sup>†</sup>	-2.298*
	(1.023)	(1.030)	(1.104)
Constant	-4.626**	-4.917**	-4.455**
	(1.423)	(1.435)	(1.608)
Observations	3201	3201	3121
$R^2$	0.748	0.748	0.746

Table 3: PREDICTING PRESIDENTIAL BUDGETARY SUCCESS, 1933-2006: The dependent variable is  $\ln(|Proposed_{it} - Appropriated_{it}| + 1)$ . OLS regressions include agency and presidential fixed effects and robust stand errors clustered by agency. Two-tailed significance levels. <sup>†</sup> $p < 0.10$ ; \* $p < 0.05$ ; \*\* $p < 0.01$ .

ones, an effect that is large and highly significant. Congress is more likely to accommodate the president’s request when national growth rates are high, and less likely to do so when available revenue (measured as the real deficit and unemployment) is scarce.

Turning now to our main variable of theoretical interest, in columns (1) and (2), we estimate a positive, statistically significant effect on our ideological distance variables. Consistent with *Hypothesis 2*, we find that an increase in the ideological gap between the president and median legislator corresponds to a greater discrepancy between proposed and final appropriations. By contrast, the McCarty-Poole measure of distance between the president and Congress does not affect budgetary agreement between the two branches, as shown in column (3). Though the coefficient is correctly signed, we cannot estimate it precisely perhaps due to the lack of within-presidency variation in the McCarty-Poole ideal points. As a consequence, we register a null result. Generating theoretically coherent empirical regularities about the relationship between inter-branch preferences and budgetary outcomes,

then, requires a more nuanced measure of the president’s ideal point. Our new estimates of presidential ideal points provide such a measure and, as we have demonstrated, allow us to obtain findings that comport with intuition and theory.

### 3.3 Executive Orders

The previous two examples focus on how the ideological divergence of the president and Congress affect the policies that the legislature adopts. However, Congress does not have a monopoly over policy change. The president, too, can move policy outcomes through unilateral actions. Now, we turn to how the preferences of the president vis-à-vis Congress affects his proclivity to act unilaterally.

Just as Congress can pass legislation to change the status quo policy, the president can issue executive orders to achieve the same effect. Much in the same way that it is harder for Congress to pass legislation without the president’s approval, so too is it harder for the president to issue executive orders without the support of Congress (Howell 2003). As such, the number of executive orders issued should be decreasing as the ideological distance between the president and Congress grows:

*Hypothesis 3: As the ideological distance between the president and Congress increases, the president will issue fewer significant executive orders.*

To test this hypothesis, Howell (2003, 2005) uses an indicator for divided government as a proxy for inter-branch ideological disagreement.<sup>19</sup> We replicate his model in column (1) of Table 4, where we use a negative binomial regression to predict the quarterly number of significant executive orders issued by the president from 1945-2001 (Howell 2005, 432). In addition to divided government, we follow Howell in using three control variables. Majority party size is included in the model, since a more coherent congressional majority should be able to pass more legislation, thus decreasing the need for executive orders. In addition, Howell controls for the linear and quadratic measurements of the average number of articles mentioning non-ceremonial executive orders on the front page of the *New York Times*. The

model includes fixed effects for the president, term, and quarter, and clusters standard errors within presidential administrations.

	(1)	(2)	(3)	(4)
Divided government	-0.643 <sup>†</sup> (0.458)	-0.144 (0.262)	-0.171 (0.323)	-0.172 (0.316)
Distance b/w Pres. and Med. Leg.				
Linearly projected		-4.018** (0.473)		
Matched (DW-NOMINATE)			-3.121** (0.703)	
McCarty-Poole				-3.704** (0.986)
Majority size	-3.926** (1.628)	-2.374 (2.267)	-3.146* (1.896)	-4.131* (2.401)
<i>New York Times</i> size	-4.392 <sup>†</sup> (3.239)	-4.081 <sup>†</sup> (3.122)	-4.302 <sup>†</sup> (3.158)	-4.407 <sup>†</sup> (3.116)
( <i>New York Times</i> size) <sup>2</sup>	0.182 <sup>†</sup> (0.134)	0.161 (0.128)	0.170 <sup>†</sup> (0.128)	0.179 <sup>†</sup> (0.128)
Constant	29.042 <sup>†</sup> (19.582)	28.697 <sup>†</sup> (19.217)	30.383 <sup>†</sup> (19.681)	31.338 <sup>†</sup> (19.263)
ln(alpha)	-1.187** (0.367)	-1.322** (0.380)	-1.260** (0.380)	-1.264** (0.357)
Observations	228	228	228	228

Table 4: PREDICTING THE ISSUANCE OF “SIGNIFICANT” EXECUTIVE ORDERS, 1945-2001: The dependent variable consists of the total number of non-ceremonial executive orders that are mentioned on the front page of the *New York Times* between 1945 and 2001. Negative binomial regressions include president, term, and quarter fixed effects and robust standard errors clustered by presidential administration. Two-tailed significant tests. tests are one-tailed. <sup>†</sup> $p < 0.10$ ; \* $p < 0.05$ ; \*\* $p < 0.01$ .

As predicted by Howell and *Hypothesis 3*, we estimate a negative, statistically significant effect of divided government, indicating that the issuance of significant executive orders decreases when the branches of government are held by different parties. The estimated effects on the control variables are as expected.

With our new measure of presidential ideal points, we need not proxy for inter-branch ideological disagreement with divided government – rather, we can measure it explicitly. In columns (2) and (3), we re-estimate Howell’s model, now using our estimates of the president’s ideal point to measure the preference divergence between the president and median legislator in the House. Column (2) uses the linear projection of the president’s ideal point, while column (3) uses the non-parametric matched estimate. In both cases, we recover a



negative, highly statistically significant relationship between inter-branch ideological disparity and the issuance of executive orders. This means that, as the two branches' preferences grow farther apart, we see fewer significant executive orders issued by the president. These results strengthen support for Howell's theory, as the coefficients on our measures are far more precisely estimated than that on divided government in the first column. Importantly, by including a direct measure of the preferences of the two branches, we nullify the effect of the proxy indicator variable of divided government.

In column (4), we repeat the analysis once more, this time using the McCarty-Poole estimate of the president's ideal point to measure the distance between the president and Congress. Unlike in the previous two applications, we obtain similar results when using McCarty-Poole's measure as we do when using our newly proposed ones: we find that, as inter-branch preference disagreement increases, fewer executive orders are issued. Moreover, when including an explicit measure of the gap between the president and Congress in the model, the effect of divided government is once again washed out. In testing the effect of inter-branch disagreement on the issuance of significant executive orders, all three measures outperform an indicator variable for divided government.

In sum, we have presented three tests of straightforward hypotheses relating the ideological distance between the president and Congress to important government outputs – including legislative productivity, budgeting, and executive orders. In all three cases, when using our measures of the president's ideal point, we obtain estimates that comport with our theoretical expectations. On the other hand, when the models are estimated with previous measures of presidential preferences – including unified government and presidential ideal points based on public position taking – they do not consistently yield the same intuitive results. Thus, our measure of presidential ideal points refines our understanding of the relationship between inter-branch preference congruence and government activity.

## 4 Locating Other Chief Executives

So far, we have focused on estimating the preferences of one chief executive – the president of the United States. However, our method can be generalized to estimate the preferences of other political actors who previously have been difficult to place in the policy space. For example, we can measure the preferences of defeated presidential candidates so that they can be compared to those of the elected president as well as members of Congress. Doing so simply requires that we reestimate equations (1) and (2), substituting the challenger’s political party and vote share for the president’s.

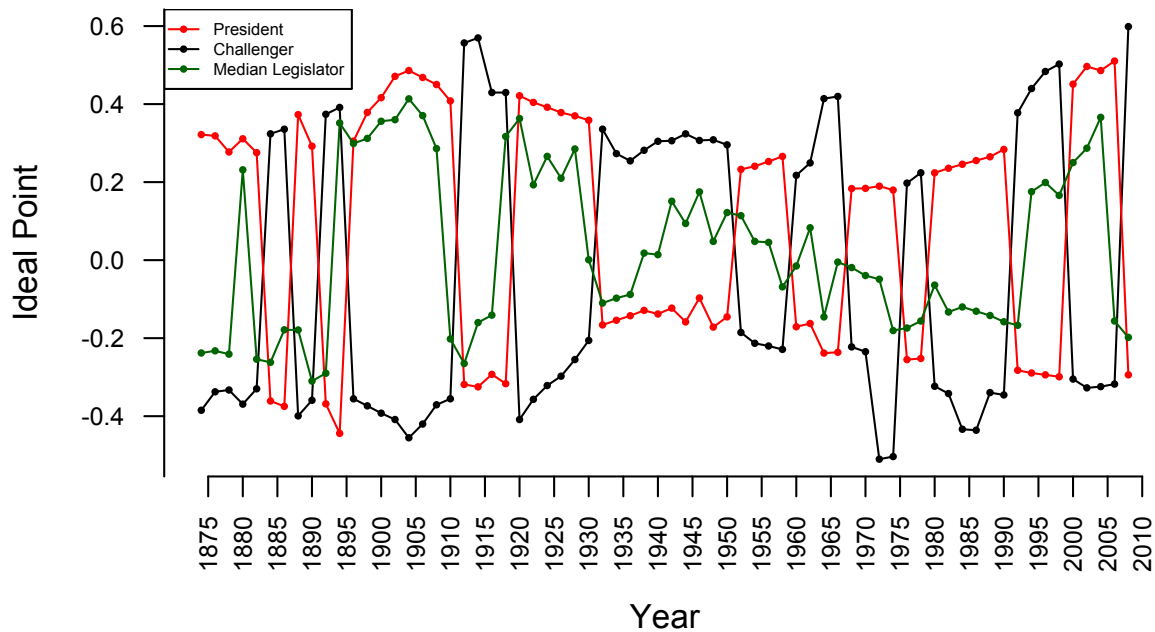


Figure 3: PLACING THE PRESIDENT, THE CHALLENGER, AND THE MEDIAN LEGISLATOR, 1876-2010

Figure 3 plots the location of presidential candidates and median House members for each presidential election from 1876-2008. With these new data, several intuitive patterns are apparent regarding the relationship between the winning presidential candidate, the

losing one, and the median legislator. Insofar as the location of the median House member provides a sensible measure of what it means to be moderate, in forty of sixty-eight election years, the president's ideal point is estimated to be closer to the median legislator's than is the challenger's. For instance, in 1988, George H.W. Bush was more moderate than his competitor, Michael Dukakis, and he did, in fact, win; then, four years later, Clinton proved to be closer to center, and he was able to unseat Bush. Indeed, in two-thirds of elections, the elected president is the more moderate of the two candidates. Moreover, the positions of individual candidates appear reasonable – the location of Richard Nixon as a challenger in his unsuccessful campaign for president in 1960 is nearly identical to the ideal point that is estimated when he was elected in 1968.

We can further extend our empirical strategy to estimate the ideal points of chief executives outside the context of the U.S. federal government. One such extension is to the U.S. states, where we can estimate the ideal points of governors. To wit, we calculate the ideal point of California governors from 1995-2010. To calculate equation (1), we use the `WNOMINATE` ideal points of members of the California State Assembly, their political party affiliations, and the two party gubernatorial vote share in their district. For each Assembly, we use the governor's statewide vote share and the resulting parameter estimates to project the governor's ideal point into that space.<sup>20</sup> One obvious limitation of this application is that because we use the `WNOMINATE` package for R, the resulting estimates are comparable within a State Assembly, but not across time.

Figure 4 plots the location of three California governors relative to the sitting legislators in the State Assembly (the ideal points for all governors from 1995-2010 are presented in the appendix). In the top panel, Republican Governor Pete Wilson is placed to the right of center during the 1995-1996 Assembly, but is predicted to be more moderate than most of his congressional co-partisans. The 2003-2004 legislative session presents an interesting case. In October 2003, Governor Gray Davis was recalled and subsequently replaced by Arnold Schwarzenegger. To estimate the ideal points of each Governor, we create two subsets of roll call data from that legislative session, one for votes taken pre-November 17, 2003 (the day

Schwarzenegger was sworn in), and one for votes taken after this date. Then, we use the first subset to estimate Davis's ideal point, and the second to calculate Schwarzenegger's. The results are shown in the lower two panels of Figure 4. In 2003, Davis's ideal point is almost exactly the same as that of the median member of his party, which is very extreme in the highly polarized California Assembly. By contrast, and perhaps consistent with his status as a political outsider, Schwarzenegger's ideal point is estimated to be a good deal more moderate than the median Republican member of the Assembly in 2004.

These extensions demonstrate the versatility of our method for measuring the preferences of chief executives (and aspiring chief executives) in a variety of contexts. Similar strategies could be used to estimate the ideal points of governors in additional states, or chief executives in other presidential governments worldwide in order to test theories of inter-branch relations both cross-nationally and sub-nationally.

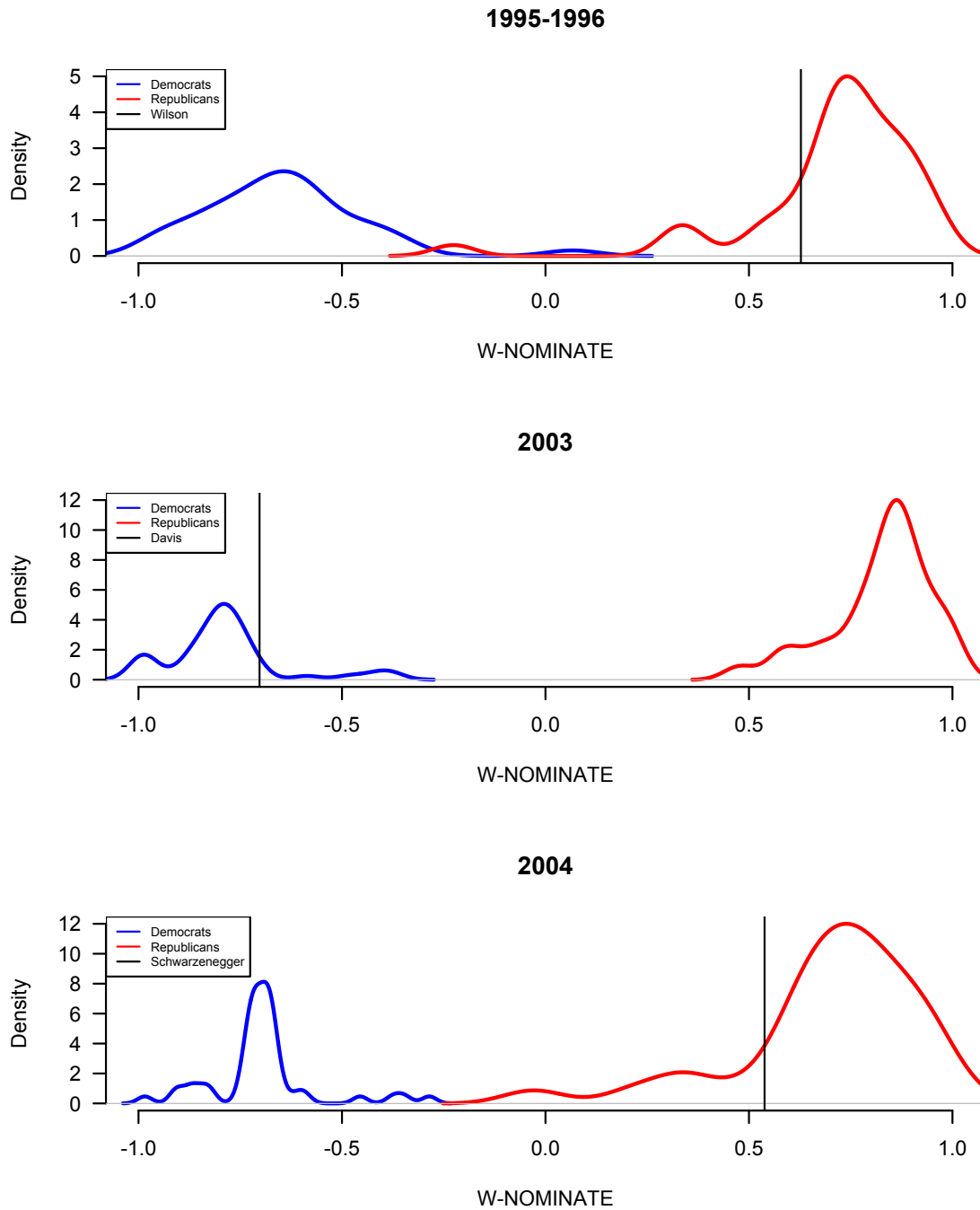


Figure 4: PLACING THE CALIFORNIA GOVERNOR

## 5 Conclusion & Implications

The task of measurement is absolutely critical to social science; in order to explore fundamental political questions, we must first characterize the relevant inputs and outputs. When

it comes to measuring the preferences of political elites, much progress has been made in the task of translating the observed behavior of legislators into estimates of the preferences that are likely responsible for those actions, but we are far less certain of our ability to do so for chief executives. This is extremely problematic given the prominence of chief executives in the political system and the influence that they wield over policy outcomes. Moreover, it is a problem without a clear solution. Chief executives occupy a very different position in the political system than an individual legislator – a legislator is rarely pivotal for government action, but the chief executive is almost always so. As a result, the behavioral assumptions we typically make about legislative voting behavior may not be as appropriate for presidential position taking because executives may be more strategic in the decision of whether to take a position or not, and the act of taking a position may change the nature of the issue being voted on from an issue driven by policy considerations to an issue driven by party-based electoral considerations.

Scholars of American politics have suggested a variety of approaches to measuring the preferences of the president vis-à-vis Congress, but none are without shortcomings: party affiliation is too coarse, simply asserting a relationship between the president and Congress is theoretically unsatisfying, and behavioral models based on public positions taken by the president likely encounter problems of selection bias. Given the difficulties of trying to use observed behavior to estimate the preferences of such a prominent and uniquely situated elected official, we argue for an alternative approach. Assuming that presidents and representatives are equally responsive to their constituents, we use election returns to estimate presidential ideal points between 1874 and 2010 to find the best linear predictor between the voting behavior of voters and elected officials. The resulting estimates possess strong face validity – unlike previous measures that depict an ideologically extreme president (McCarty and Poole 1995), ours show the president to be moderate relative to his core congressional delegation. In addition, they correctly predict the positions we observe presidents taking.

To evaluate the content validity of our measure, we explore three arenas in which congressional and presidential interactions loom large – lawmaking, agency budgeting, and the

decision of an executive to act unilaterally. When using our measures of presidential preferences, we confirm strong theoretical expectations about the nature of these relationships that are obscured by the limitations of existing measures. We also show how the strategy can be used to estimate the location of previously hard-to-measure elites such as presidential candidates and governors.

Given the centrality of preferences for assessing the nature of executive-legislative relations, the characterizations and conclusions we provide suggest that testing *any* theory of inter-branch relations may depend on the measure of executive preferences that is used. In this way, having a valid measure of presidential preferences is consequential for answering a vast array of questions relevant to scholars of politics at the national level within the United States – e.g., testing theories of lawmaking in which the president is a relevant actor; tests of the separation-of-powers model that orients court, congressional and executive preferences; tests of agency policy-making; and the politics of appointments and nominations. Moreover, these concerns are not unique to estimates of the chief executive – they likely also apply to the estimation of any non-random position-taking by prominent elites in the political system (e.g., the Solicitor General, the Speaker of the House). Whenever participation is voluntary, relying on statistical roll call models that focus only on the decision of *how* to vote – and not the decision of *whether* to vote – is likely to yield problematic results.

## References

- Achen, Christopher H. 1977. “Measuring Representation: Perils of the Correlation Coefficient.” *American Journal of Political Science* 21(4):805–15.
- Ansolabehere, Stephen, James M. Snyder Jr. and Charles Stewart III. 2001. “Candidate Positioning in U.S. House Elections.” *American Journal of Political Science* 45:136–59.
- Bafumi, Joseph and Michael Herron. 2010. “Leapfrog Representation and Extremism: A Study of American Voters and Their Members of Congress.” *American Political Science Review* 104:519–42.
- Bailey, Michael. 2007. “Comparable Preference Estimates across Time and Institutions for the Court, Congress.” *American Journal of Political Science* 51(3):433–448.
- Bailey, Michael and Forrest Maltzman. 2012. *The Constrained Court: Law, Politics, and the Decisions Justices Make*. Princeton, New Jersey: Princeton University Press.

- Bailey, Michael and Kelly Chang. 2001. "Comparing Presidents, Senators, and Justices: Inter-institutional Preference Estimation." *Journal of Law, Economics, and Organization* 17(2):477–506.
- Berry, William D., Evan J. Ringquist, Richard C. Fording, Russell L. Hanson and Carl E. Klarne. 2010. "Measuring Citizen and Government Ideology in the U.S. States: A Reappraisal." *State Politics and Policy Quarterly* 10:117–35.
- Berry, William D., Evan J. Ringquist, Richard C. Fording, Russell L. Hanson and Carl E. Klarne. 2011. "A New Measure of State Government Ideology, and New Evidence that an Old Measure Performs Well."
- Berry, William D., Evan J. Ringquist, Russell L. Hanson Richard C. Fording and Carl E. Klarne. 1998. "Measuring Citizen and Government Ideology in the American States, 1960-93." *American Journal of Political Science* 41(1):327–48.
- Bertelli, Anthony M. and Christian R. Grose. 2011. "The Lengthened Shadow of Another Institution: The Ideological Preferences of the Executive Branch and Congress." *American Journal of Political Science* 55(4):767–781.
- Binder, Sarah A. 2003. *Stalemate: Causes and Consequences of Legislative Gridlock*. Washington DC: Brookings Institution Press.
- Brady, David W. and Craig Volden. 1998. *Revolving Gridlock*. Boulder, CO: Westview Press.
- Canes-Wrone, Brandice. 2006. *Who Leads Whom? Presidents, Policy, and the Public*. Chicago, Illinois: University of Chicago Press.
- Canes-Wrone, Brandice, David W. Brady and John F. Cogan. 2002. "Out of Step, Out of Office: Electoral Accountability and House Members' Voting." *American Political Science Review* 96(1):127–140.
- Carrubba, Cliff, Matthew Gabel and Simon Hug. 2008. "Legislative Voting Behavior, Seen and Unseen: A Theory of Roll-Call Vote Selection." *Legislative Studies Quarterly* 33(4):543–572.
- Carrubba, Clifford J., Matthew Gabel, Lacey Murrah, Ryan Clough, Elizabeth Montgomery and Rebecca Schambach. 2006. "Off the Record: Unrecorded Legislative Votes, Selection Bias and Roll-Call Analysis." *British Journal of Political Science* 36(11):691–704.
- Carson, Jamie L., Gregory Koger, Matthew J. Lebo and Everett Young. 2010. "The Electoral Costs of Party Loyalty in Congress." *American Journal of Political Science* 54(3):598–616.
- Chiou, Fang-Yi and Larry S. Rothenberg. 2009. "A Unified Theory of US Lawmaking: Preferences, Institutions, and Party Discipline." *The Journal of Politics* 71(04):1257–1272.
- Clark, Tom S. 2011. *The Limits of Judicial Independence*. New York, New York: Cambridge University Press.
- Clark, Tom S. and Benjamin Lauderdale. 2010. "Locating Supreme Court Opinions in Doctrine Space." *American Journal of Political Science* 54(4):871–90.



- Clinton, Joshua D., Anthony Bertelli, Lewis David E. Grose, Christian R. and David C. Nixon. 2012. "Separated Powers in the United States: The Ideology of Agencies, Presidents, and Congress." *American Journal of Political Science* 56(2):341–54.
- 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 Legislative Behavior: A Unified Approach." *American Political Science Review* 98(2):355–70.
- Cox, Gary W. and Mathew D. McCubbins. 2005. *Setting the Agenda: Responsible Party Government in the US House of Representatives*. New York, New York: Cambridge University Press.
- CQ Almanac. 2004. "Bush Finds Way to Win." pp. B-3 – B-19.
- Downs, Anthony. 1957. *An Economic Theory of Democracy*. New York, New York: Harper & Row.
- Epstein, David and Sharyn O'Halloran. 1999. *Delegating Powers: A Transaction Cost Politics Approach to Policy Making under Separate Powers*. New York, New York: Cambridge University Press.
- Epstein, Lee, Andrew W. Martin Jeffrey A. Segal and Chad Westerland. 2007. "The Judicial Common Space." *Journal of Law, Economics and Organization* 23:303–325.
- Erikson, Robert S. and Gerald C. Wright. 1980. "Policy Representation and Constituency Interests." *Political Behavior* 2(Summer):91–106.
- Fenno, Richard F., Jr. 1978. *Home Style: House Members and Their Districts*. Boston, Massachusetts: Little, Brown.
- Fiorina, Morris P. 1974. *Representatives, Roll Calls and Constituencies*. Lexington, Massachusetts: DC Heath.
- Heckman, James J. and James M. Snyder Jr. 1997. "Linear Probability Models of the Demand for Attributes with an Empirical Application to Estimating the Preferences of Legislators." *RAND Journal of Economics* 28(0):S142–89.
- Ho, Daniel E. and Kevin M. Quinn. 2010. "Did a Switch in Time Save Nine?" *Journal of Legal Analysis* 2(1):69–113.
- Howell, William G. 2003. *Power Without Persuasion: The Politics of Direct Presidential Action*. Princeton, New Jersey: Princeton University Press.
- Howell, William G. 2005. "Unilateral Powers: A Brief Overview." *Presidential Studies Quarterly* 35(3):417–39.

- Howell, William G., Saul P. Jackman and Jon C. Rogowski. 2013. *The Wartime President*. Chicago, Illinois: University of Chicago Press.
- Howell, William G., Scott Adler, Charles Cameron and Charles Riemann. 2000. "Divided Government and the Legislative Productivity of Congress, 1945-94." *Legislative Studies Quarterly* 25(2):285-312.
- Hudak, John J. 2012. *The Politics of Federal Grants: Presidential Influence over the Distribution of Federal Funds* PhD thesis Vanderbilt University.
- Jessee, Stephen A. 2009. "Spatial Voting in the 2004 Presidential Election." *American Political Science Review* 103(1):59-81.
- Kernell, Samuel. 1997. *Going Public: New Strategies of Presidential Leadership*. Washington, DC: CQ Press.
- Kessler, Glenn. 2012. "When did McConnell say he wanted to make Obama a one-term president?" *The Washington Post*. September 25.
- Kiewiet, D. Roderick and Mathew D. McCubbins. 1991. *The Logic of Delegation: Congressional Parties and the Appropriations Process*. Chicago, Illinois: University of Chicago Press.
- Kingdon, John W. 1989. *Congressmen's Voting Decisions*. Ann Arbor, Michigan: University of Michigan Press.
- Krehbiel, Keith. 1996. "Institutional and Partisan Sources of Gridlock: A Theory of Divided and Unified Government." *Journal of Theoretical Politics* 8:7-40.
- Krehbiel, Keith. 1998. *Pivotal Politics: A Theory of U.S. Lawmaking*. Chicago, Illinois: University of Chicago.
- Lewis, David E. and Terry M. Moe. 2009. *The Presidency and the Political System*. 9th ed. Washington DC: CQ Press chapter Struggling Over Bureaucracy: The Levers of Control, pp. 367-400.
- Light, Paul C. 1999. *The Presidents Agenda: Domestic Policy Choice from Kennedy to Clinton, Third Edition*. Baltimore, Maryland: Johns Hopkins University Press.
- MacRae, Duncan. 1958. *Dimensions of Congressional Voting*. Berkeley, California: University of California Press.
- Masket, Seth E. 2007. "It takes an outsider: Extralegislatve organization and partisanship in the California Assembly, 1849-2006." *American Journal of Political Science* 51(3):482-97.
- Mayhew, David R. 1974. *Congress: The electoral connection*. New Haven, Connecticut: Yale University Press.
- McCarty, Nolan and Keith Poole. 1995. "Veto Power and Legislation: An Empirical Analysis of Executive-Legislative Bargaining from 1961-1986." *Journal of Law, Economics, and Organization* 11(2):282-312.

- McCarty, Nolan and Rose Razaghian. 1999. "Advice and Consent: Senate Responses to Executive Branch Nominations 1885-1996." *American Journal of Political Science* 43(4):1122-43.
- Nokken, Timothy and Brian Sala. 2000. "Confirmation Dynamics: Presidential Appointments to Independent Agencies." *Journal of Theoretical Politics* 12(1):91-112.
- Poole, Keith T. 1998. "Recovering a Basic Space From a Set of Issue Scales." *American Journal of Political Science* 42(3):954-993.
- Poole, Keith T. and Howard Rosenthal. 1997. *Congress: A Political-Economic History of Roll Call Voting*. New York, New York: Oxford University Press.
- Poole, Keith T. and R. Steven Daniels. 1985. "Ideology, Party, and Voting in the U.S. Congress, 1959-80." *American Political Science Review* 79:373-99.
- Rohde, David W. and Kenneth A. Shepsle. 2007. "Advising and Consenting in the 60-Vote Senate: Strategic Appointment to the Supreme Court." *Journal of Politics* 69(3):664-677.
- Schick, Allen. 2007. *The Federal Budget: Politics, Policy, Process*. Washington DC: Brookings Institution Press.
- Schwarz, John E. and Barton Fenmore. 1977. "Presidential Election Results and Congressional Roll Call Behavior: The Cases of 1964, 1968, and 1972." *Legislative Studies Quarterly* 2:409-22.
- Segal, Jeffrey, Richard J. Timpone and Robert M. Howard. 2000. "Buyer Beware? Presidential Success through Supreme Court Appointments." *Political Research Quarterly* 53(3):557-95.
- Shaw, Daron R. and Brian Roberts. 2000. "Campaign Events, the Media and the Prospects of Victory: The 1992 and 1996 US Presidential Elections." *British Journal of Political Science* 30(2):259-89.
- Shor, Boris, Christopher Berry and Nolan McCarty. 2010. "A Bridge to Somewhere: Mapping State and Congressional Ideology on a Cross-institutional Common Space." *Legislative Studies Quarterly* 35(3):417-48.
- Snyder, Susan K. and Barry R. Weingast. 2000. "Common Agency in the American System of Shared Powers: The President, Congress, and the NLRB." *Journal of Law, Economics, and Organization* 16(2):269-305.
- Tenpas, Kathryn Dunn. 2000. *The Permanent Campaign and Its Future*. Washington DC: The Brookings Institution chapter The American Presidency: Surviving and Thriving amidst the Permanent Campaign.
- Treier, Shawn. 2010. "Where Does the President Stand? Measuring Presidential Ideology." *Political Analysis* 18(1):124-136.
- Wiesehomeier, Nina and Kenneth Benoit. 2009. "Presidents, Parties and Policy Competition." *Journal of Politics* 71(4):1435-47.

## Notes

<sup>1</sup>Alternatively, scholars have used the fact that the same actors often serve in different institutions (for instance, a single legislator might serve in the U.S. House and Senate) to bridge across institutions and over time (e.g., Shor and McCarty 2011; Shor et al. 2010; Poole 1998).

<sup>2</sup>In explaining the construction and limitations of the presidential support scores based upon these data, the *Congressional Quarterly* writes: “Congressional Quarterly’s calculation of presidential success measures only how often the House or Senate acts the way the president wanted. CQ looks at every House and Senate floor vote, determines whether the president took a clear position before the vote and notes the outcome. Naturally, the CQ study has limitations. It gives equal weight to all floor votes on which the president took a stand. It does not count voice votes. And it does not reflect whether the president’s proposals or legislation that he supported were enacted into law” (2004: B-3)

<sup>3</sup>While presidential vote share may itself be an imperfect measure of constituent preferences, it is consistent across all geographic constituencies and all that we require is that the mapping for legislators and presidents are similar even if the measure itself is flawed.

<sup>4</sup>These data are incomplete due to difficulties in matching county-level election returns with congressional districts; 18% of districts are missing, primarily in large cities and the Northeast. In addition, we omit the 88th Congress (1963-1964) due to missing data stemming from congressional redistricting in the early 1960s.

<sup>5</sup>Section A of the appendix re-estimates these equations excluding southern states and shows that the presidential estimates do not depend on whether the south is included or excluded from equation (1).

<sup>6</sup>Throughout the time series, we estimate high  $R^2$  values, indicating that these models fit

the data well. For further details, see the appendix.

<sup>7</sup>Exploring other functional forms and including higher-order polynomials does not appreciably change the resulting measure. Section B of the appendix reports the model fit for the 68 regressions.

<sup>8</sup>In *theory*, it is possible to estimate these regressions alongside ideal points in a hierarchical model – i.e., use equations 1 and 2 to define an informative prior for presidential ideal points (and possibly also legislator ideal points). Doing so would allow us to combine electoral information and public positions into a single model. However, such an analysis would not solve any of the issues involving presidential positions noted above and it is not a terribly *practical* solution given the enormous number of parameters that would need to be computed. Moreover, so long as we place an informative prior on presidential ideal points using equation (1), it also seems unlikely that this would greatly affect our results.

<sup>9</sup>The question of whether electoral incentives fade for presidents in their second terms can be tested with our new measures. We explore this possibility in the appendix.

<sup>10</sup>The estimate of the president’s ideal point is not sensitive to this one percentage point cut-off. Section C in the appendix reveals that when we instead subset on districts whose presidential vote shares were within one-half, two, three, five, ten, and 16.3 (one standard deviation) percentage points of the national presidential vote share, the results are substantively unchanged.

<sup>11</sup>Common Space scores are able to avoid some of this by pooling across time.

<sup>12</sup>Less important, but still noteworthy, is the fact that we are also able to explore some of the assumptions inherent to the approach we take in section three. For example, if the electoral connection is relevant only in the first term of a presidency, there should be more error in the ideal points of second-term presidents. If so, the relationships we estimate using our measure should be more precise for first-term presidents than for second-term presidents.

In the appendix, we find preliminary support for this conjecture, though the inference we are able to draw is limited due to the small number of second-term presidents for whom term limits were a constitutional constraint.

<sup>13</sup>By contrast, it is less clear what effect the ideological distance between the two branches should have on the volume of foreign policy legislation. In the domain of foreign policy, inter-branch disagreements can be more easily resolved through extra-legislative processes, such as unilateral action by the president. Therefore, a low raw count of significant foreign policy bills passed by Congress may not be indicative of government gridlock on foreign policy.

<sup>14</sup>We have estimated the model including additional controls – such as the percentage of Democrats in the House and an indicator for election years – and the results are unchanged. Moreover, in the appendix, we show that the results do not depend on whether we include presidential fixed effects in the specification.

<sup>15</sup>The number of observations drops from 59 when using each of our two measures (columns (1) and (2)) to 42 when using the McCarty-Poole measure. This is due to frequent missing data on the McCarty-Poole measure prior to the 1930s.

<sup>16</sup>Section D of the appendix analyzes the time series separately for the pre and post 1948 period and reveals that whereas our measure produces a consistent negative relationship, the relationship predicted using the McCarty and Poole measure greatly varies across the two time periods.

<sup>17</sup>In contrast to our expectations, unified government carries a negative sign in all three models, and is statistically significant in the first one (and close to it in the second). While difficult to reconcile with the previous literature (e.g., Howell et al. 2000; Binder 2003), this may highlight an inherent ambiguity in the meaning of “significant legislation.” Because they rely on journalists and historians to identify important bills, Clinton and Lapinski’s (2006) counts may be affected by changing definitions of what constitutes significant legislation.

For example, in a period of divided government, the passage of any legislation may register as significant, but historians and journalists may only note legislation of great substantive importance during periods of unified government. In the first two models, we also find a statistically significant relationship between war and legislative productivity: as expected, we see fewer bills passed when the nation is engaged in foreign conflict. We fail to estimate a statistically significant relationship between polarization in the House and legislative productivity.

<sup>18</sup>Though our data spans 74 years, we lose some observations since not all agencies exist for the entire time series, and because budgetary data is simply missing for a handful of particular agency years. Additionally, we exclude the first year of each president's first term from the analysis – and thus lose 468 observations – since the official budget in those years reflects the previous president's proposal. In other words, our sample isolates the last three years of each president's first term, and all four years of any subsequent terms.

<sup>19</sup>In the previous applications, we use an indicator that equals one for unified government, while here it equals one for divided government. We accept this inconsistency in order to fully replicate Howell's results in column (1) of Table 4.

<sup>20</sup>This data is provided by Jeff Lewis (see <http://adric.sscnet.ucla.edu/california/>).

## Appendix: “Characterizing Chief Executives”

In this appendix, we present a series of analyses that are described but not presented in the paper. Section A shows that our estimates of presidential positions are not sensitive to whether or not the South is included in the 68 regressions of DW-NOMINATE on two-party presidential vote. Section B reports the model fit of the congressional regressions and shows that the regressions do a good job of accounting for the variation we observe in DW-NOMINATE scores. Section C shows that the matching results do not depend on how similar the matched districts being averaged are in terms of district presidential vote. Section D explores how robust the results of the lawmaking analysis are to dividing the sample into the two different periods corresponding to the different data sources used in the McCarty-Poole estimator. We show that whereas the results from our estimator reveal a consistent negative relationship between congressional and presidential preferences and lawmaking both pre- and post-1948, the results using the McCarty-Poole estimator differ greatly (and nonsensically). Section E allows the relationship to vary for first and second term presidents to examine whether there is any evidence that the lack of an electoral incentive in the second term degrades the reasonability of our measure of presidential preference. Section F plots the ideal points of California governors from 1995-2010 relative to the state assembly.

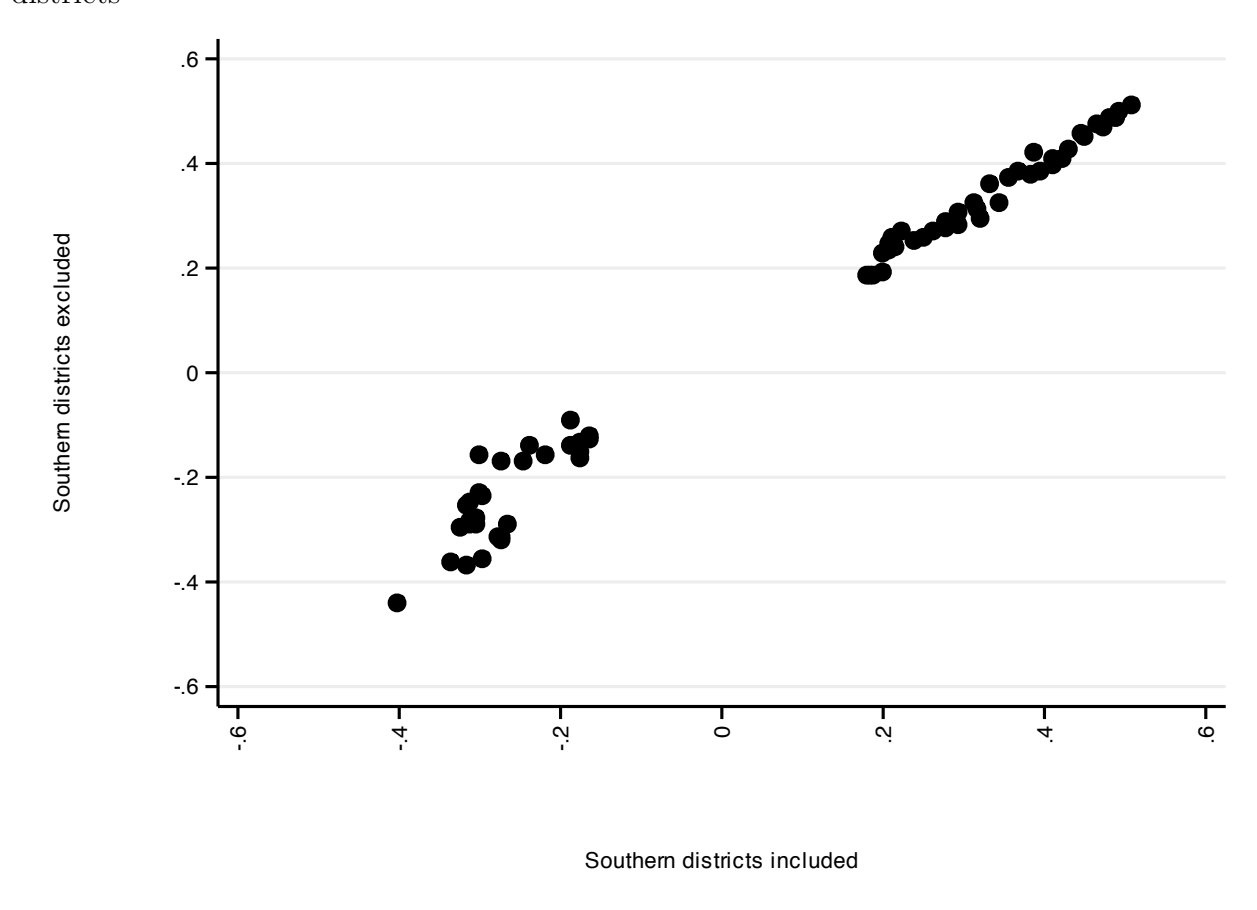
### A The Effect of the South on the BLP

When estimating the president’s ideal point using the linear projection method, we include all districts for which we have presidential voting data in the analysis. However, for most of the time period we examine, there was a lack of two-party competition in the South, perhaps making cross-district variation in presidential votes an unreliable measure of district preferences. When we re-estimate presidential ideal points using this method but excluding Southern districts, the results are largely unchanged. Figure A-1 plots the two sets of estimates against each other, and shows that the only difference between them is a slight shift in the scales. Indeed, the two specifications yield estimates of presidents’ ideal points



that are correlated at the 0.993 level.

Figure A-1: Linearly projected ideal points estimated including and excluding Southern districts

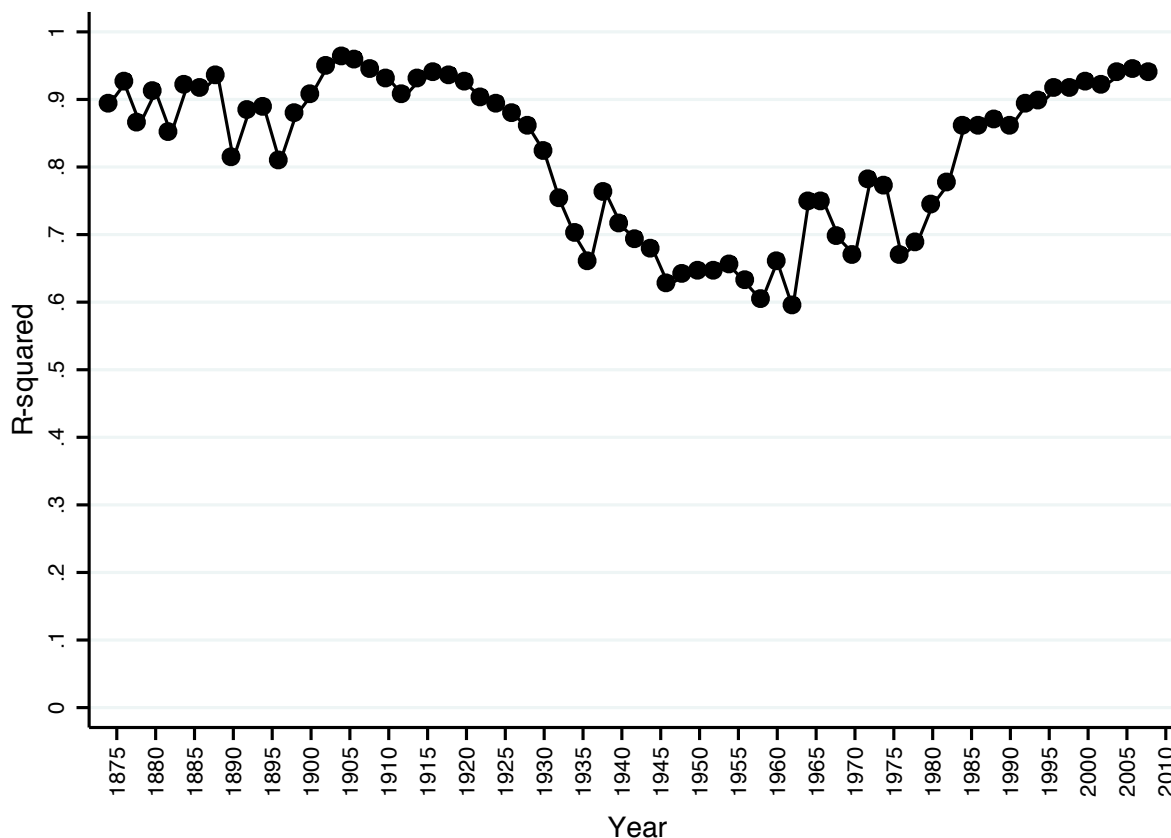


## B Assessing the Fit of the District Regressions

How well does district presidential vote share (plus the political party of the district's representative) map onto the ideal point of that district's representative? In general, the answer is quite well. For each of the years from 1874 to 2010, the  $R^2$  for the model ranges between a low of 0.592 and a high of 0.963; if a single model is estimated that pools all years together, the  $R^2$  is 0.774. Further descriptive details are shown in Figure A-2. We observe a dip in  $R^2$  values during the political realignment of the 1950s and 1960s, during which time the debate over civil rights policy distorted the connection between presidential vote share and ideal points. Note, though, that lower  $R^2$  values do not bias our estimates so long as the

connection between constituents and politicians is equally imprecise for both presidents and members of Congress.

Figure A-2:  $R^2$  for linear projection model by year

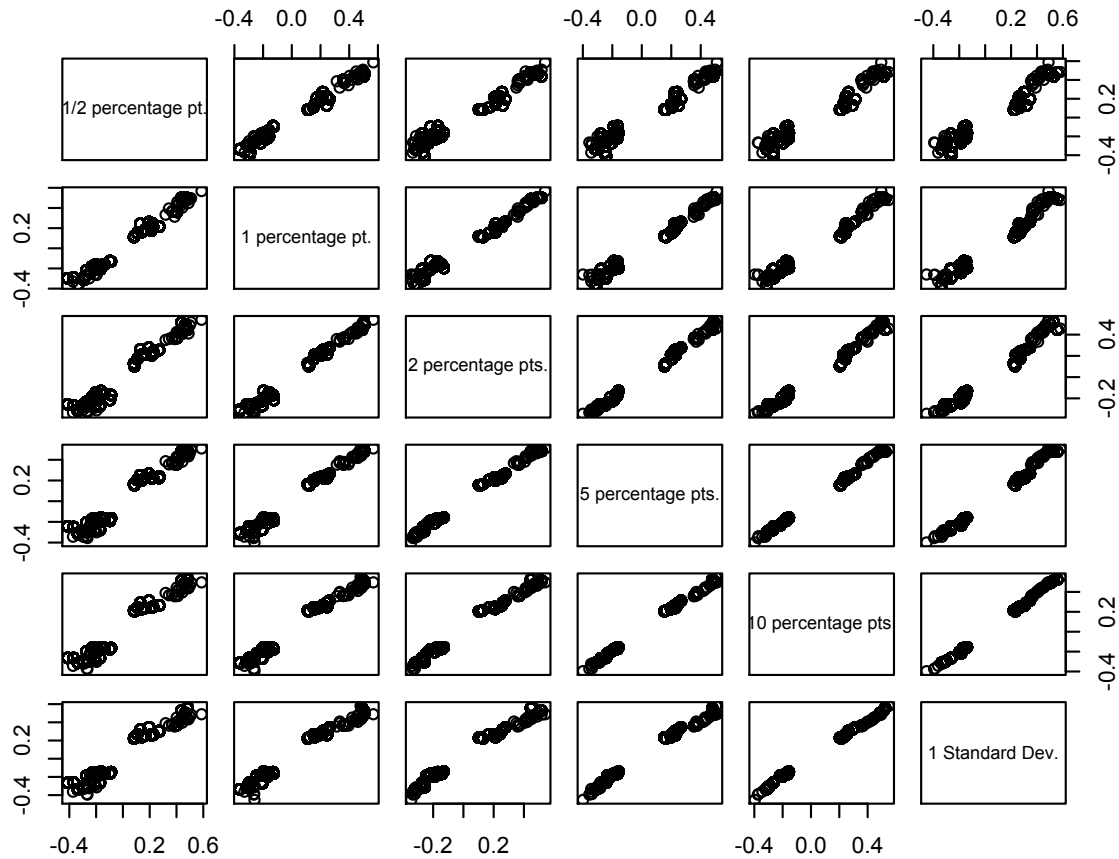


## C Examining Larger Matching Calipers

In the paper, to implement our non-parametric matching method, we subset the data to include just those legislators whose districts' presidential vote share was within one percentage point of the national presidential vote share. However, the criteria that we use to create our subset of districts does not have much of an impact on the estimates we generate. As Figure A-3 shows, the president's ideal point is similar regardless of whether we calculate it as the average ideal point of legislators whose districts were within one half of a percentage point, one percentage point, two percentage points, five percentage points, ten percentage points,

or one standard deviation of the national presidential vote share. The correlation of these measures ranges from 0.969 to 0.999. Thus, the estimated presidential ideal points are not contingent on the caliper we set.

Figure A-3: Comparing matched estimates of the president's ideal point



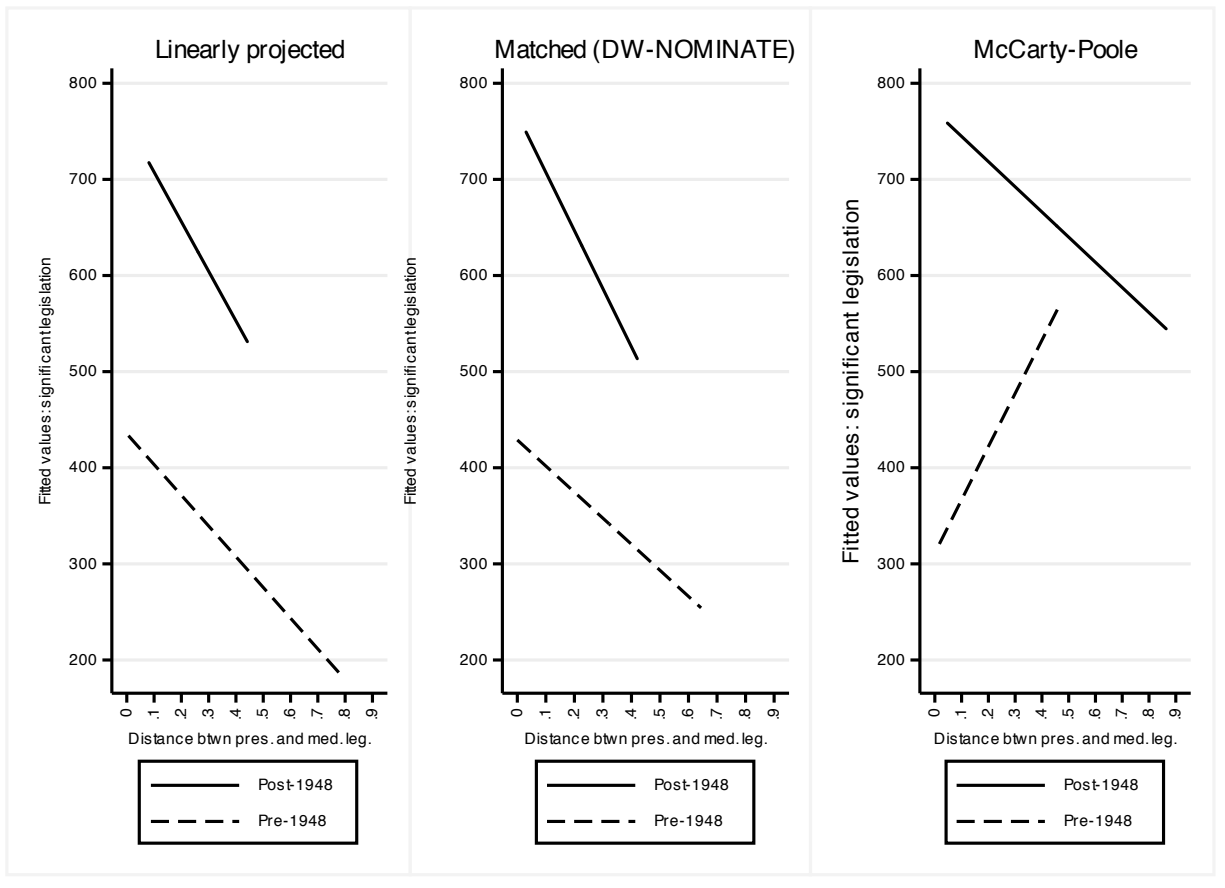
## D The Effect of Changing Data on the Time Series

As mentioned in the paper, McCarty and Poole obtain information of public presidential positions from two different sources over the course of the time series. From 1874 to 1948, the data are gathered from unnamed historical sources, while from 1948-2010, the data come from *Congressional Quarterly*. Looking at the time series, the McCarty-Poole measure seems to qualitatively shift at this 1948 cut point (see Figure 1 in the paper). It therefore stands

to reason that the validity of their measure of presidential ideal points may vary for different portions of the time series.

To test this possibility, we subset the data into two periods – pre- and post-1948 – and again explore the effect of inter-branch ideological distance on the passage of significant domestic legislation. The relationship between these two variables is displayed in Figure A-4. The left and center panels use our two proposed measures of the president – the linear projection and the matched estimate, respectively – to calculate the distance between the two branches. When using our measures of the president’s ideal point, we find a negative relationship between inter-branch disagreement and legislative productivity in each of the two time periods. In the right panel, we use the McCarty-Poole measure of presidential ideal points to calculate the distance between the president and the median legislator. Here, we find that the relationship between the variables of interest is markedly different during the two time periods: In the pre-1948 period (dashed line), inter-branch ideological disagreement leads to the passage of *more* significant domestic bills, a finding that runs contrary to our expectations and to every other model run. In the post-1948 period (solid line), meanwhile, we find that the McCarty-Poole measure produces a negative relationship between inter-branch disagreement and volume of significant domestic legislation. However, note that the post-1948 effect in the right panel is not nearly the same magnitude as the post-1948 effect in the left and center panels. As such, even when the correlation is correctly signed, the magnitude of the coefficient is much lower when using the McCarty-Poole measure, suggesting that the estimated effect is biased downward.

Figure A-4: The effect of inter-branch ideological disagreement on the passage of significant domestic legislation, pre- and post-1948



## E Allowing For First-term and Second-term Differences

One advantage of our measure is that it allows us to estimate the effect of changes in presidential ideal points within administrations. Indeed, all of the models we estimate in the paper include presidential fixed effects, so the results represent within-administration effects. But are the results contingent on the inclusion of president fixed effects in the model specifications? We consider this possibility by re-estimating Table 2 from the paper excluding the president fixed effects and instead including a time trend. The results are shown in Table A-1. The main results in columns (1) and (2) are unchanged: as the two branches disagree more, less significant domestic legislation gets passed. In column (3), we see that the McCarty-Poole measure is now also negative and statistically significant at the ten percent level. However, it is hard to know what to make of this model, given the flipped

sign on the effect of unified government.

Table A-1: Predicting Significant Domestic Legislative Productivity, including a time trend

	(1)	(2)	(3)
Distance b/w pres. and med. leg.			
Linearly projected	-192.377*		
	(95.167)		
Matched (DW-NOMINATE)		-159.557*	
		(86.816)	
McCarty-Poole			-130.631 <sup>†</sup>
			(85.379)
Unified government	17.530	33.365	-15.372
	(35.288)	(31.759)	(33.281)
House polarization	-1201.172**	-1201.435**	-1483.580**
	(151.728)	(152.703)	(163.725)
War	-64.614 <sup>†</sup>	-63.900 <sup>†</sup>	-84.535*
	(40.375)	(40.652)	(41.739)
Time	1.120*	1.100*	0.355
	(0.620)	(0.625)	(0.923)
Constant	-813.431	-790.360	896.518
	(1289.409)	(1300.488)	(1858.571)
$R^2$	0.825	0.823	0.841
Observations	59	59	42

Table A-2: **Predicting Significant Legislation, 1877-1994:** The dependent variable is the number of public laws dealing with domestic politics weighted by their significance using the scores of Clinton and Lapinski (2006). OLS regressions include presidential fixed effects and robust standard errors clustered by presidential administration. Two-tailed significance levels: <sup>†</sup> $p < 0.10$ ; \* $p < 0.05$ ; \*\* $p < 0.01$ .

Last, we evaluate the possibility that presidents will not behave according to electoral incentives when in their second term. This is a contentious point, as some argue that presidents act as though they are seeking reelection for the good of their party, even if they know they cannot be reelected (Hudak 2012). Nonetheless, others show that politicians shirk if they are not seeking reelection, which would imply a weak electoral connection during the president’s second term in office (see Lott 1992). To wit, we re-estimate Table 2, but include an interaction term for inter-branch ideological distance and a variable indicating second-term presidents. Note that we code all presidents that held office prior to the implementation of the 22<sup>nd</sup> amendment in 1951 as first-term presidents, since they could, potentially seek a third term (or, in Roosevelt’s case, a third and fourth term). The results are presented in Table A-2. In columns (1) and (2), we find that inter-branch disagreement has a negative

and statistically significant effect on legislative productivity for first-term presidents. For second-term presidents, the magnitude of the effect increases, but the estimates are no longer distinguishable from zero. One explanation for this null result is that presidents are, in fact, less responsive to their constituents during their second terms. However, more likely is that the inflated standard errors are caused by the small number of two-term presidents in our sample (there are only six). Meanwhile, in column (3), we see no discernible difference between first- and second-term presidents. Thus, when using the McCarty-Poole presidential ideal points, we once again do not find any effect of inter-branch disagreement on legislative productivity, regardless of the president's term in office.

Table A-3: Predicting Significant Domestic Legislative Productivity, considering second term effects

	(1)	(2)	(3)
Distance b/w pres. and med. leg.			
Linearly projected	-237.554*		
	(114.137)		
Matched (DW-NOMINATE)		-224.884*	
		(129.389)	
McCarty-Poole			-273.346
			(246.095)
Distance $\times$ Second term	-129.565	-17.107	89.353
	(408.224)	(314.729)	(97.732)
Second term	23.863	-9.823	-68.155
	(93.401)	(63.313)	(40.375)
Unified government	-67.458 <sup>†</sup>	-62.509 <sup>†</sup>	-82.021
	(39.671)	(41.754)	(64.247)
House polarization	1334.964 <sup>†</sup>	1177.136 <sup>†</sup>	1330.506
	(863.386)	(823.300)	(45.387)
War	-58.727**	-59.326**	-68.646
	(19.486)	(20.726)	(45.387)
Constant	-781.066	-655.019	109.387
	(638.702)	(606.613)	(772.874)
<hr/>			
Aggregate effects			
Distance b/w pres. and med. leg. in second term			
Linearly projected	-343.255		
	(364.970)		
Matched (DW-NOMINATE)		-251.814	
		(329.304)	
McCarty-Poole			-252.148
			(301.949)
$R^2$	0.923	0.922	0.911)
Observations	59	59	42

Table A-4: **Predicting Significant Legislation, 1877-1994:** The dependent variable is the number of public laws dealing with domestic politics weighted by their significance using the scores of Clinton and Lapinski (2006). OLS regressions. Two-tailed significance levels: <sup>†</sup> $p < 0.10$ ; \* $p < 0.05$ ; \*\* $p < 0.01$ .

## F Estimating California Governors' Ideal Points

Using the linear projection approach described in the paper, we estimate the ideal points of all California governors from 1995-2010. Figure A-5 plots those ideal points relative to the sitting legislators in the State Assemblies. This application demonstrates the applicability of our approach to estimating the ideal point of chief executives in any context where roll call data and information on district vote share is available.



Figure A-5: Placing the California Governor, 1995-2010

