

Progressive Ambition and Legislative Policy Proposals

Abstract

We study how running for higher office affects legislators' bill introduction activity by exploiting variation in when members of the U.S. House are eligible to seek statewide office. We find that legislators seeking higher office propose more bills on more topics (though they do not pass more bills as a result). Further, legislators are generally responsive to changes in district demographics; increases in a group's size leads legislators to propose more bills on issues relevant to the group. Low-income citizens, however, are a prominent exception; legislators are unresponsive to increases in the number of low-income citizens they represent. We conclude by discussing the implications of these patterns for elections, representation and legislative institutions.

Extensive research documents how legislators' incentive to seek reelection strongly affects their behavior (e.g., Mayhew 1973; Erikson 1990; Adams, Merrill, and Grofman 2005; Kousser, Lewis, and Masket 2007; Harden and Carsey 2012). Reelection, however, is not the only goal that legislators have; many legislators are motivated by a desire to seek higher office (Schlesinger 1966; Maestas, Fulton, Maisel, and Stone 2006). While extensive theoretical and empirical work has studied the factors that lead legislators to seek higher office (e.g., Black 1972; Rohde 1979; Brace 1984; Abramson et al. 1987; Kiewiet and Zeng 1993; Maestas, Fulton, Maisel, and Stone 2006), there has been less attention to understanding how running for higher office affects elected officials' behavior (cf., Hibbing 1986; Maestas 2000; Victor 2011).

We study the effect of seeking higher office on legislators' position-taking behavior. Legislators seeking higher office face the reality that their actions in office become positions on the public record. On one hand this can be a disadvantage. For example, because legislators do not control the legislative agenda, they will be faced with roll call votes that split their constituents. The only way to avoid taking a position in these cases is by abstaining.

On the other hand, legislators have the ability to take prominent public positions on issues that do not threaten their electoral prospects. All candidates can take position on these issues, but incumbents have the advantage of being able to use their policy proposals to engage in position-taking (Mayhew 1973; Koger 2003). Because it takes effort to work on these proposals (Hall 1996; Adler and Wilkinson 2012), such proposals serve as a strong signal to potential supporters about legislators' level of commitment to the position (Sulkin 2011). Further, legislators have the advantage of choosing which bills they introduce, allowing them to avoid working on issues that are likely to split the voters in their district (Burden 2007). For these reasons, we argue that legislators should propose more bills when they seek higher office as a way to reach out to strong interest groups and/or issue public voters. We test this prediction.

In addition, we test whether legislators are responsive to changes in district demo-

graphics and whether, through their legislative proposals, they provide better representation to some groups than to others. Because a legislator must introduce a bill before it can become a law (Wawro 2001), bill introductions are a key determinant of the quality of representation. If legislators do not propose bills in the areas that affect constituents' interests, the quality of representation will suffer as legislators focus on issues less relevant to those voters.

Selection bias is a major obstacle to studying these questions. Research on why elected officials run for higher office shows that there is selection in when ambitious legislators choose to act on their progressive ambition (e.g., Rohde 1979; Maestas, Fulton, Maisel, and Stone 2006). We mitigate concerns about selection bias by using the variation in when legislators are eligible to pursue their progressive ambition to estimate the effect of running for higher office on the number and types of bills that legislators propose.

Our analysis shows that lawmakers propose more bills when they are eligible to run for higher office, and that these bills concern a wider set of issues. We show that these effects decrease in size with increases in the percentage of the statewide district that the legislator already represents. We also demonstrate that progressively ambitious legislators introduce bills that appeal to the voters of their target districts (although not on issues of interest to low-income voters). In the conclusion we discuss the implications of these findings for representation elections, and institutional design.

1 Progressive Ambition and Bill Activity

One reason that legislators might change their bill sponsorship behavior when seeking higher office is that bill introductions represent a chance to engage in position-taking (Mayhew 1973; Koger 2003). Past research about the effect of progressive ambition on position-taking behavior, however, shows seemingly conflicting findings. On one hand, studies have found that legislators are more likely to abstain at higher rates when they seek higher office as a way to avoid taking positions on controversial issues (Rothenberg

and Sanders 2000). Yet a small body of progressive ambition research has found that progressively ambitious lawmakers also introduce more bills and speak more often on the floor when seeking higher office (Herrick and Moore 1993; Victor 2011). We argue that these two findings can be reconciled by understanding the theoretical differences between proactive and reactive actions.

In his book *Personal Roots of Representation*, Barry Burden (2007) draws a distinction between legislative activities that are proactive and those that are reactive. Prominently, roll call votes are a reactive behavior. Individual rank-and-file legislators do not choose which bills make it onto the legislative agenda. Instead legislators must react to the bills they face. In contrast, many other legislative activities, such as introducing bills and giving speeches, are better described as being proactive. Legislators choose what actions to take and are less constrained by a set of predetermined choices. Further, because introducing bills requires effort and time, bill introductions serve as a costly signal of support that legislators can use to garner support.

These differences explain why a progressively ambitious lawmaker might simultaneously abstain more and introduce more bills. If the lawmaker feels that the constrained set of choices imposed by the roll-call vote process do not provide her with a way to gain an electoral advantage, she will be more likely to abstain. By abstaining the legislator can avoid alienating the side she would otherwise vote against. However, because legislators are unconstrained in what bills they introduce, they can avoid controversial positions and focus on the issues from which they stand to gain electorally.

How might introducing bills help legislators win higher office? We argue that they can use bill introductions to reach out to two important (and often overlapping) groups: issue public voters and interest groups.

Legislators can introduce bills to appeal to issue public voters because these voters pay close attention to their preferred issue (Converse 1964; Krosnick 1990) and so are more likely to know whether a legislator is introducing bills relevant to them. And because these voters are also more likely to evaluate candidates on the basis of their issue (Iyengar,

Hahn, Krosnick, and Walker 2008), candidates have incentives to champion their cause.

Legislators may also introduce bills to reach out to interest groups. Interest groups donate money to legislators who work in areas that they care about (Grier and Munger 1993; Dow, Endersby, and Menifield 1998). Running for higher office typically requires more money, and so legislators seeking higher office may use bill introductions to court money from interest groups or to keep the group from donating to their opponent (Fox and Rothenberg 2011).

These findings can be easily applied to the realm of progressive ambition. With few exceptions, progressively ambitious lawmakers seek to represent areas that are larger and more populous than their current districts. The seats they seek, therefore, contain issue publics and interest groups they do not currently represent. In the lead up to a bid for higher office, therefore, we predict that progressively ambitious lawmakers will introduce bills that will attract those groups' support. Bill introductions can thus serve as campaign promises (see Sulkin 2011); they are, in effect, auditions for how lawmakers will act if elected to higher office.

This theoretical framework engenders several hypotheses. First, we suggest that progressively ambitious lawmakers will introduce more bills when they consider seeking higher office. As noted above, legislators use these bills to reach out to issue public voters and interest groups.

Second, legislators' portfolio of legislation should cover more issue areas. Our argument is that legislators are using legislation to audition to new issue publics and interest groups. If the legislator is reaching out to new issue publics and interest groups, she will be covering new ground. Thus legislators seeking higher office should propose bills that cover a wider range of topics when they seek higher office.

Third, legislators who currently represent a larger share of the statewide district they seek to represent should change their behavior less when they run for higher office. The argument is that legislators are proposing more bills to reach out to the new interest groups and issue publics in the statewide district. Legislators who already represent a

large portion of those voters and groups will have to do less to reach out to them - they are already doing so. Because we are looking at U.S. congressmen, this claim implies that representatives from less populous states will change their behavior less when they run for higher office.

This hypothesis carries added importance because it provides evidence against the alternative explanation that the change in legislative behavior is driven by legislators seeking media attention to increase their name recognition (Panagopoulos and Green 2008). If media attention is the primary driver of legislators' behavior, then the size of the legislator's district relative to the size of their state should not affect their behavior as all legislators want media attention.

2 Research Design

Identifying the effect of running for higher office is difficult because research shows that running for higher office is not determined randomly (e.g., Rohde 1979; Black 1984; Kiewiet and Zeng 1993; Maestas, Fulton, Maisel, and Stone 2006). Selection bias thus arises because legislators' decision about when to run for higher office is correlated with the outcome of interest. For example, if an issue that a legislator has focused on during her career becomes more prominent in the media she might propose more bills (because the issue is more salient) and also be more likely to run for higher office (because of increased media coverage on the topic she has championed).

We use a research design that leverages the election cycle in the United States to mitigate this concern about selection bias in the timing of seeking higher office. The strength of our design is that members of the House cannot determine which years there is an election for a statewide office. Because Gubernatorial elections typically only occur every other election cycle and Senate elections only 2 out of every 3 election cycles, members are not always eligible to seek higher office. Our design compares how they behave when they can seek statewide office versus how they behave when they cannot.

We estimate models that use the cross-sectional variation in the data and also estimate models that include fixed-effects for individual legislators. These fixed effect models use the within-individual variance to estimate the effect of eligibility. These models rule out the possibility that any difference is being driven by differences in the attitudes of who runs (Maestas, Fulton, Maisel, and Stone 2006). For these models, we are using the legislator as their own counterfactual.

2.1 Variation in Eligibility to Seek Higher Office

Members of the U.S. House most often manifest progressive ambition by running for either the U.S. Senate or for the governorship of their home states. Elections to those statewide offices run on staggered cycles: Senate elections are held two out of every three election cycles, and most states elect governors every other cycle. This variation in election cycles is useful for our purposes because it creates variation in when House members are able to seek higher, statewide office. In 2008, for example, neither New York’s Senate seats nor its governorship were scheduled for election, meaning that House members in New York were unable to run for one of these statewide offices.

2.2 Estimating the Effect of Running for Higher Office

We use the variation in when members of the U.S. House are eligible to run in order to mitigate concerns regarding selection bias and estimate the bounds of the effect of running for higher office. Equations 1 and 2 give the empirical models that predict how legislators behave when they are, respectively, ineligible and eligible to run for higher office. In these equations the matrix X represents the relevant control variables in the model. Because these models both predict the same outcome, γ is assumed to be the same.

$$\text{Ineligible: } y_i^I = \gamma X_i + u_i \tag{1}$$

$$\text{Eligible: } y_i^E = \gamma X_i + (\beta_1 \text{Run}_i + \beta_2 \text{Consider}_i) + u_i \quad (2)$$

As laid out in the introduction and theory sections, we want to learn about β_1 - the effect of running for higher office. We are able to do so because β_1 only enters the equation when legislators are eligible to seek higher office. The assumption that the variables *Run* (an indicator variable for when the legislator runs for higher office) and *Consider* (an indicator variable for when the legislator considers running for higher office in the upcoming election but does not) only enter the equation for the legislators who are eligible to run for higher office is a key assumption of the research design. We argue that these are reasonable assumptions because these factors should not influence legislators who are ineligible to run for higher office - the rules bar them from taking this action. Using Equations 1 and 2, we get the following relationships:

$$\text{Ineligible: } \bar{y}_i^I = \hat{\gamma} \bar{X}_i \quad (3)$$

$$\text{Eligible: } \bar{y}_i^E = \hat{\gamma} \bar{X}_i + (\hat{\beta}_1 \bar{\text{Run}} + \hat{\beta}_2 \bar{\text{Consider}}) \quad (4)$$

From Equations 3 and 4 we get the result in Equation 5:

$$\bar{y}^E - \bar{y}^I = \hat{\beta}_1 \bar{\text{Run}} + \hat{\beta}_2 \bar{\text{Consider}} \quad (5)$$

Equation 5 shows that the difference in how legislators behave when they are eligible relative to how they behave when they are ineligible is a function of whether they consider running for higher office (β_2) and/or whether they actually run for higher office (β_1). Further, under two basic and realistic assumptions about β_1 and β_2 we can estimate the upper and lower bounds for our quantity of interest: how legislators behave when they run for higher office (i.e., β_1). First, we assume that both β_1 and β_2 are non-negative. In the previous section we discussed why the effect of running for higher office (i.e., β_1)

should be positive (legislators want to propose more bills to reach out to new audiences such as issue publics, the news media, and/or interest groups). This assumption simply states that if considering running for higher office (i.e., β_2) has an effect it should work in the same direction. Second, we assume that the effect of considering running for higher office is not larger than the effect of actually running for higher office. Equation 6 formally states these two assumptions.

$$\text{Theoretical Assumptions: } \beta_1 \geq \beta_2 \geq 0 \quad (6)$$

We use Equations 5 and 6 to derive the upper and lower bounds for β_1 . The upper bound occurs when the difference between the behavior of eligible and ineligible legislators (i.e., $\bar{y}^E - \bar{y}^I$) is attributable to those who run for higher office (i.e., when $\hat{\beta}_2 \bar{Consider} = 0$). Equation 5 then simplifies to Equation 7:

$$\bar{y}^E - \bar{y}^I = \hat{\beta}_1 \bar{Run} \quad (7)$$

Solving Equation 7 for $\hat{\beta}_1$ gives Equation 8, which represents the upper bound:

$$\hat{\beta}_1 = \frac{\bar{y}^E - \bar{y}^I}{\bar{Run}} \quad (8)$$

Equation 8 is also equivalent to the instrumental variable estimator for the effect of running for higher office, were *eligibility* is used as an instrument for running for higher office. This can also be thought of in terms of an experiment using an encouragement design. When legislators are eligible to seek higher office, they are 'encouraged' to run for higher office and thus, to recover the estimate of running for higher office, we need to divide the difference between how legislators act when they are eligible versus ineligible by the percent of legislators who actually do seek higher office.

Using Equations 5 and 6 we can also derive the lower bound for β_1 . The lower bound occurs when everyone either runs for higher office or considers doing so and the effect of considering seeking higher office is equal to the effect of doing so. In other words,

the lower bound occurs when both $\beta_1 = \beta_2$ and $\bar{Run} + \bar{Consider} = 1$. In this situation, Equation 5 simplifies to Equation 9, which directly gives the estimate for the lower bound of β_1 . Equation 9 is also equivalent to the reduced form regression when using *eligibility* as an instrumental variable for running for higher office.

$$\bar{y}^E - \bar{y}^I = \hat{\beta}_1 \quad (9)$$

For the analysis, we present the lower bound estimates of the effects. If even the lower bound estimate is significant, then running for higher office is an important factor to understanding legislators' behavior.

Finally, it is worth reiterating that we are estimating the effect of running for higher office, not the effect of having progressively ambitious attitudes. We are able to separate the effect of running from being the type of person who holds progressively ambitious attitudes because we have a control group who is legally barred from running. The levels of progressive ambition should be the same in the two groups. We can thus attribute the differences in behavior to the decision to run and not to differences in attitudes.

3 Data

The independent variable of interest in the analysis is legislators' eligibility to seek higher office (the U.S. Senate and governorships). Using data from the CQ Votings and Elections Collection for the period 1946-2008, we created the indicator variable *eligible*, which takes a value of 1 if the state had a Senate or gubernatorial seat up for election in the next cycle, and a value of 0 otherwise. During this time period, X observations (legislator-congresses), or X%, were eligible to run for higher office while Y observations (Y%) were ineligible.

We use the number of bill introductions and the number of topics covered in those bills as our dependent variables to test whether members propose more bills that cover a wider range of topics in years that they are eligible to seek higher office. We used

data from Adler and Wilkerson’s Congressional Bills Project, which codes the sponsor and topic¹ of each bill introduced in Congress to measure how many bills each member proposed and the number of topics for which they proposed at least one bill. One concern is that we are looking at all bills, including some which are not very important. As a proxy for significance, we used the number of cosponsors on each bill (as measured by Adler and Wilkerson). Because rules on cosponsorship have changed over time, we look at the relative number of cosponsors within each Congress. In addition, we look at the number of bills introduced by each member that were in the top quartile that Congress in terms of the number of bill cosponsors.

4 Our Empirical Models and the Results

Empirically, we compare how legislators behave when they are eligible to run for higher office relative to ineligible lawmakers by regressing the outcomes on the variable *eligible*. We also estimate separate models that includes fixed effects for states and the individual legislators. One concern is that the legislators who run for higher office may be different than those who do not (Maestas, Fulton, Maisel, and Stone 2006). The individual fixed-effects rule out this concern by using individuals as their own counterfactual.

For the main results we also present models in the Supplementary Appendix that control for the legislators’ partisanship, whether their party is in the majority, how long they have served, and several variables to measure legislators’ leadership and committee assignments. Because our main dependent variables (*total introductions*, *introductions - top bills*, and the *number of topics covered*) are count variables, we use negative binomial regression to estimate these models (the Supplementary Appendix presents the results using OLS regression models).

¹The topics cover 19 issues that correspond to the 19 major policy areas used in the Policy Agendas Project.

4.1 The Number of Introductions and the Range of Topics

We begin by testing the hypotheses that legislators propose more bills on a wider range of topics when they run for higher office. In Table 1, we present the results looking at *total introductions* and *introductions - top bills*. For each analysis we present the coefficient from the negative binomial regression and the corresponding incidence rate ratio (IRR). Because *eligible* is a binary variable, the IRR for Table 1 indicates the relative number of bills that a legislator introduces in the year they are eligible relative to the number they introduce when they are ineligible. Thus the estimated IRR of 1.222 in column 1 indicates that U.S. House members are estimated to propose a total of 22 percent more bills when they are eligible to run.

(Table 1 About Here)

The models in Table 1 show that members of the U.S. House are estimated to introduce 6 percent to 20 percent more total bills when they are eligible to seek higher office. The results for top bills (i.e., those in the top quartile for each Congress in terms of the number of cosponsors) show that members introduce 7 percent to 30 percent more high-profile bills when eligible to seek higher office. Remember that this is the lower bound of the estimate of the effect of running for higher office; even a 6 percent increase is substantively significant. Legislators are more active in legislating when they are eligible to seek higher office.

In Table 2 we test whether MCs are introducing bills on more topics when they are eligible to seek higher office. We argue that we should see legislators working on more topics (and not simply more bills on the same topics) because they want to reach out to new audiences (either issue publics and/or interest groups). Table 2 presents the results from regressing the number of topics that U.S. House members covered in their bills on whether they were *eligible*. The IRR shows that eligible legislators' bills covered between 2 percent and 6 percent more topics. These results confirm our first two hypotheses. Seeking higher office causes legislators to introduce more bills on a wider range of topics.

(Table 2 About Here)

4.2 The Moderating Influence of District Size

We have argued that running for higher office gives legislators incentives to reach out to issue public voters and interest groups by proposing more bills on more topics (predictions confirmed by the results in Tables 1 and 2). We now test the hypothesis that legislators who will see the largest population increase in their district when running for higher office will be most likely to increase the number of bills they propose.

The population of the target district (relative to the population of their current district) matters because a larger district means that there should be more issues and thus more issue publics and interest groups that could be courted. Both the issue public and interest group arguments suggest that we should expect legislators to propose more bills when their target district is relatively larger in size.

We test whether the size of the higher office's district relative to the size of their current district moderates legislators' behavior when they are eligible to seek higher office. We measure the increase in the size of the higher office district relative to their current district by including the variable *Percent of State in District* that captures the percent of the state that lives in the congressperson's current district. We then code this variable on a scale from 0 to 1. For states with only 1 member in the U.S. House, this variable takes a value of 1, the maximum value, because the House member currently represents 100 percent of the district. For a state where there are 10 equally sized House district, this variable takes the value of 0.10 because 10 percent of the state lives in each House district. Our empirical models, presented in Table 3, include whether the members are *eligible*, the *percent of state in district*, and an interaction between these two variables (*eligible*percent in district*). If the effect of eligibility is smaller in states where the House member already represents a larger portion of the state, the coefficient on the interaction term should be negative.

(Table 3 About Here)

The top two sections of Table 3 present the negative binomial regression results for the number of total introductions and introductions of top bills and shows that the coefficient on the interaction term is negative while the coefficient on *percent of state in district* is positive. The positive coefficient on *percent of state in district* indicates that members of Congress who represent a large portion of the state (because they are from a less populous state with fewer MCs) are generally introducing more bills. Because many bills affect citizens in the whole state, representatives from the states with fewer representatives do not have the advantage of dividing up the labor of working on the legislation affecting statewide issues; they must work on all of these issues themselves. In contrast, members from more populous states can more easily share this workload.

Of course, when legislators seek higher office, they need to show that they can directly appeal to a diverse statewide district. If legislators have been introducing more bills because they are from a less populous state, then they have fewer bills that they have to produce to make up the difference (hence the negative coefficient on the interaction term).

The bottom half of Table 3 presents the results for the *number of topics covered* by the bills legislators introduce and shows the same pattern: a positive coefficient on the *percent of state in district* and a negative coefficient on the interaction term. The size of the legislator's district relative to the size of the statewide electorate moderates the effect of eligibility: legislators from smaller states who represent a larger share of the statewide electorate see a smaller change in the number of issues they have to work on when they seek higher office.

4.3 Is the Increased Activity Related to Constituents' Characteristics?

We have shown that when legislators run for higher office they introduce more bills on a wider range of topics. If legislators are introducing these bills to appeal to issue publics

for votes and/or interest groups for campaign donations, this leads to the expectation that legislators will focus more efforts on more organized groups. We test how responsive legislators are to different groups by seeing whether the increased bill introduction activity reflects the difference in constituents' characteristics between their current district and their state as a whole.

We are able to perform the analysis because the Congressional Bills Project (Adler and Wilkerson n.d.) coded the major topic covered by each bill. We used this coding to break down the number of bills that legislators propose during each Congress in the following issue areas: defense, education, agriculture, labor, welfare, and finance. We focus on these areas because we are able to measure aspects of about constituents' characteristics in these areas using the Scott Adler's (n.d.) congressional district data.

Adler's congressional district data provided information about the following demographic characteristics in each congressional district (and by extension the state as a whole): the number of military installations, the size of the military population, the number of individuals enrolled in school, the number of farmers, the number of blue-collar workers, the number of unemployed, and the number of finance sector employees. For each of these demographic measures we created a variable that measured the difference between the statewide measure and the measure for the House member's current district. These variables reflect the observed increase when moving from the legislator's House district to the statewide district. For all variables except military installations the increase was measured in units of 10,000. Thus, for example, the variable *increase in unemployed* indicates how many more tens-of-thousands of people are unemployed at the statewide level compared to the legislator's House district.

(Table 4 About Here)

For the issue areas where we could measure both legislators' activity and a relevant demographic characteristic, we ran an analysis that regressed the number of bills that the legislator introduced for that topic on the variable *eligible*, the variable measuring the

increase for the associated demographic characteristic, and an interaction between these two variables. For example, our first regression, which is given in the top part of Column 1 of Table 4, regressed the number of defense bills that the House member introduced on *eligible*, *increase in military installations*, and *eligible*increase in military installations*. The interaction term tests whether the effect of running for higher office on the number of defense bills introduced is moderated by the size of the increase in the number of military installations at the state level relative to the legislator's House district. If legislators put their effort into bills that will appeal to statewide voters, we expect the coefficient on the interaction term to be positive.

The results in Column 1 show that the interaction term is positive and statistically significant. Of the seven regression models in Table 4, the coefficient on the interaction term is positive and statistically significant at conventional levels in five cases. In general, then, the topics on which progressively ambitious legislators introduce bills align with the interests of their target districts.

The two exceptions where the estimate fails to achieve statistical significance are welfare and agriculture. In the case of welfare bills, the lack of responsiveness to the number of unemployed in the district is consistent with previous results that legislators are less responsive to low-income constituents (Schattschneider 1960; Bartels 2008; Gilens 2012). The null finding for agriculture issues is more surprising. One potential explanation is that the decreasing size of the farm lobby during this period led to less legislative attention (Hansen 1991). Together these two null findings, combined with the results for the other issue areas, seem most in line with the possibility that legislators are using bill introductions to reach out to interest groups.

If this conclusion is correct, the results further suggest that groups that do not have strong organized interest groups (e.g., the poor) will be underrepresented at this stage of the process (Schattschneider 1960). Of course, for issue areas where there are strong interest groups, legislators' increased activity is related to constituents' characteristics. Thus, although legislators seem to be proposing more bills in an effort to appeal to

interest groups, they are choosing to focus on issues that relate to constituents' interests (at least when there are strong interest groups working in the area to encourage this behavior). As we discuss more in the conclusion this result is somewhat mixed regarding bias in representation. The actions legislators do take represent constituents' interests, but there may be bias in when legislators act.

4.4 Do Legislators Pass More Bills when Seeking Higher Office?

One motivation for this research is to help evaluate the costs and benefits of institutions that affect legislators' likelihood of seeking higher office. We have shown that legislators propose more bills when they seek higher office and that these bills reflect constituents' interests. However, if legislators are not actually passing more bills, then this type of legislative behavior may be little more than position taking.

Table 5 presents the regression results that look at whether legislators pass more bills when they are eligible to seek higher office. The dependent variable for the analysis is the number of bills that passed the House and the model is estimated using a negative binomial regression.

(Table 5 about here)

In both models, the coefficient on *eligible* fails to achieve statistical significance. Even though legislators are proposing more bills when they run for higher office, they are not passing more (in fact, the point estimate is negative in many of the models - see also Herrick and Moore, 1993). Theoretically this result is not entirely surprising. We have argued that legislators are using these bill introductions to engage in position-taking and so may not need to pass these bills in order to accomplish that goal. Further, because they are using these bills as a way to reach out to new audiences, they may not have expertise on the topic and so may simply have a harder time passing the legislation (they may not, for example, sit on relevant committees).

Whatever the reasons, this result is important because it suggests that institutions that provide incentives for progressive ambition may lead to more bill introductions, but not more passed legislation.

4.5 Progressive Ambition and Abstention Rates

As noted in our discussion on proactive and reactive behaviors, research suggests that increased abstention rates on roll-call votes is a negative consequence of legislators seeking higher office (Rothenberg and Sanders 2000). This argument is important both in terms of evaluating the impact of institutions that affect progressive ambition and in terms of understanding the theoretical differences between proactive and reactive behaviors. A key basis for the argument behind increased abstention rates is the fact that roll-call votes represent a reactive behavior. Because these legislators cannot choose which issues are voted on they will face controversial issues that split voters.

In contrast, legislators can choose which bills they introduce and can pick topics where they stand to gain the most support. We argue that this key theoretical difference² explains why legislators introduce more bills even at the same time that they seek to avoid taking positions on more roll call votes. However, one potential counterargument is that the results on abstention rates and bill introductions are simply an artifact of the different research designs used. The studies showing that legislators abstain more when they seek higher office do not leverage the variation in legislators' eligibility (Rothenberg and Sanders 2000; Jones 2003).

In this section we test whether we can replicate the results from previous studies on progressive ambition and abstention rates when using the same research design we have employed here. For the data from 1972-2010, we measured each U.S. House member's *abstention rate* by using data from voteview.com to calculate the percent of the non-unanimous votes where the legislator did not vote. We then regressed this outcome, using an OLS model (*abstention rate* is a continuous variable) on whether the U.S. House

²For a more complete discussion of this issue see Burden (2007).

member is *eligible* for higher office. We again estimated three models: one with no fixed effects, one with fixed effects for states, and one with fixed effects for individual legislators.

(Table 6 About Here)

Table 6 presents the regression models and confirms the findings from previous studies. The 0.009 coefficient on *eligible* suggests that legislators abstain from voting on roughly 1 percentage point more bills in years they are eligible to run for a statewide office than in years they are not. Given that the average abstention rate during this period was less than 7 percentage points, the effect of running for higher office represents a close to 15 percent increase in how often legislators abstain.

The finding that legislators decrease how often they vote on roll calls at the same time that they introduce more bills underscores the need to look beyond roll-call votes when studying legislators' behavior. The incentives and features surrounding reactive behavior are different than the incentives and features surrounding proactive behavior. We must investigate bill introductions, floor speeches, and other proactive behaviors separately from roll-call votes.

4.6 Additional Robustness Checks

In the supplementary appendix we present three additional robustness checks. First, we first present the results when limiting the data to the final quarter of the congressional session. The logic behind this test is that during the final quarter of each Congress, the deadline to declare one's candidacy for higher office has already passed, so any effect should be driven by legislators who are actually running for higher office (Rothenberg and Sanders 2000). Second, we test whether the main results hold up when including control variables for the legislators' partisanship, whether their party is in the majority, how long they have served, and several variables to measure legislators' leadership and committee assignments. Finally, we estimate the models using OLS instead of negative binomial regressions. The main conclusions are robust to these various tests. In most

cases there are only small changes in the coefficients, and sometimes the results are stronger.

4.7 Estimating the Effect of Seeking Higher Office

In the research design section we discussed how to estimate both the upper and lower bounds of the effect of progressive ambition on legislators' behavior.

For our analysis, we have presented the lower bound estimates. To evaluate the substantive significance of our findings, however, we can consider what the true effect likely is. We can get a better estimate of the true effect by relaxing the assumption that all legislators consider running for higher office (we continue to use the conservative assumption that the effect of considering seeking higher office is equal to the effect of doing so). Under those assumptions, Equation 5 simplifies to Equation 10.

$$\bar{y}^E - \bar{y}^I = \hat{\beta}_1(\bar{R}un + \bar{C}onsider) \quad (10)$$

Solving for β_1 gives Equation 11.

$$\hat{\beta}_1 = \frac{\bar{y}^E - \bar{y}^I}{\bar{R}un + \bar{C}onsider} \quad (11)$$

The coefficients on *eligible* that we have presented give the estimate of β_1 when assuming that $\bar{R}un + \bar{C}onsider = 1$. In any given year, however, only a portion of legislators consider seeking higher office. If we estimate how many legislators have progressive ambition in any given year, we can use Equation 11 to revise our estimate of β_1 .

In 1995, Carey, Niemi, and Powell (2000) found that just under 35 percent of state legislators were considering running for higher office after finishing their current legislative service. In her survey of state legislators from eight states, Maestas (2003; Table 1) found that about 30 percent of legislators who volunteered future plans were considering seeking higher office. In more professional legislatures, which more closely reflect Congress, the percent planning on seeking higher office was closer to 50 percent.

The actual number of legislators who consider running for higher office in the next election is probably smaller because both surveys asked legislators about their long-term plans, not their specific plan for the next election. However, even if the number is as large as 50 percent, we can revise the estimates for the effect of progressive ambition by dividing the estimates by 0.5. Thus, for example, the effect of progressive ambition on a legislator's abstention rate is probably closer to 2 percentage points (a 30 percent increase). By a similar calculation, running for higher office probably increases the number of bills a legislator proposes by 30 percent (not just 15 percent). The effects of progressive ambition are thus more substantial than we estimate above.

5 Discussion

One of the disadvantages of being an incumbent legislator when seeking higher office is that one takes positions that go on public record. Incumbents are thus sometimes forced to take positions on controversial roll call votes that split the constituents of the district they seek to represent.

In other ways, however, the ability to take prominent public positions on issues can be a major advantage for incumbents seeking higher office. Introducing bills, for example, is a strong way of signaling their support to potential supporters (Sulkin 2011). Further, because legislators control the issues they proactively work on, they are not forced to take positions on issues that will be electorally costly. For these reasons we predicted that legislators would propose more bills when they sought higher office.

By exploiting the variation in when U.S. congressmen can run for higher office, we found that legislators introduce about 15 percent more bills when they are eligible to seek higher office and, at the same time, abstain on more roll call votes. The difference between reactive and proactive actions helps explain the difference in the outcomes. It is because legislators get to choose their agenda by introducing bills that they become more active in this position-taking action. In contrast, legislators must react to whatever

roll calls come their way. Thus, they can only avoid taking a stance on a controversial issue by choosing to abstain.

Most legislative research focuses on legislators' roll-call behavior for a good reason: roll calls matter. While we should continue to study legislators' roll-call behavior, we need to also study their behavior on proactive actions such as campaign visits, floor speeches, and bill introductions (Hall 1996; Burden 2007). The theoretical underpinnings that predict legislators' roll-call votes often do not apply to these proactive behaviors. We need to study these actions directly to learn what influences legislators' proactive behavior.

Our results on bill introductions shows that the increase in the number of bill introductions is related, at least on some issues, to voters' interest in the district of the higher office they seek. Low-income voters are an exception to this pattern; increases in the number of low-income families in the district do not lead to an increase in bills related to welfare issues. One interpretation of this finding is that legislators will only introduce bills if there are strong incentives from an organized interest group (e.g., in the form of money, grass roots campaign, etc.) and the bill is in voters' interest. If this interpretation is correct, then bias in representation arises from what legislators fail to do and not what they do. The bills that legislators propose do line up with voters' interests; however voters that are not well represented by interest groups (e.g., low-income voters) do not receive attention on their issues (Schattschneider 1960). The bias is one of omission, not commission.

Finally, our results speak to institutional design considerations. Term limits (Carey, Niemi and Powell 2000; Moncrief, Niemi, and Powell 2004; Lazarus 2006; Steen 2006), legislative professionalism (Moncrief, Niemi, and Powell 2004; see also Maestas, Fulton, Maisel, and Stone 2006; Carson, Crespin, Eaves, and Wanless 2012), the relative size of the legislative chambers in the state (Rohde 1979; Kiewiet and Zeng 1993; Maestas, Fulton, Maisel, and Stone 2006) are examples of institutions that affect legislators' incentives and opportunities to seek higher office. Our results suggest that the institutions

that encourage progressive ambition have a slightly negative effect overall. Legislators propose more bills when they seek higher office and these bills reflect constituents' interests. However, they are not actually passing more bills. Further they are abstaining more on roll calls. Overall, then, progressive ambition's effects are somewhat mixed. To the extent that we care about whether legislators propose bills that actually pass and show up for roll-call votes, the results suggest that legislative institutions that encourage legislators to invest time and effort in their current position are best.

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Table 1: Effect of *Eligibility* on the Number of Bill Introductions

(A) <i>Total Introductions</i>	No FEs	State FEs	Individual FEs
Eligible - Higher Office	0.201*** (0.029)	0.178*** (0.028)	0.063*** (0.019)
Constant	2.649*** (0.027)		
Incidence Rate Ratio [†] :	1.222*** (0.036)	1.195*** (0.036)	1.065***
Observations	7,326	7,314	7,061
Number of FEs		50	1,262
(B) <i>Introductions - Top Bills</i>	No FEs	State FEs	Individual FEs
Eligible - Higher Office	0.276*** (0.037)	0.214*** (0.028)	0.068** (0.027)
Constant	1.249*** (0.034)		
Incidence Rate Ratio [†] :	1.318*** (0.049)	1.239*** (0.045)	1.069** (0.029)
Observations	7,326	7,315	7,025
Number of FEs		50	1,249

Standard errors in parentheses. [†] $H_0 : \beta_{IRR} = 1$.

***p<0.01, **p<0.05, *p<0.1

Table 2: Effect of *Eligibility* on the Number of Topics Covered in the Bills Introduced

	No FEs	State FEs	Individual FEs
Eligible - Higher Office	0.065*** (0.018)	0.053*** (0.018)	0.021 (0.014)
Constant	1.856*** (0.018)		
Incidence Rate Ratio [†] :	1.067*** (0.020)	1.054*** (0.019)	1.021 (0.014)
Observations	7,326	7,314	7,061
Number of FEs		50	1,262

Standard errors in parentheses. [†] $H_0 : \beta_{IRR} = 1$.

***p<0.01, **p<0.05, *p<0.1

Table 3: The Moderating Effect of Higher District Size on Outcomes

(A) <i>Total Introductions</i>	No FEs	State FEs	Individual FEs
Eligible - Higher Office	0.277*** (0.038)	0.244*** (0.038)	0.089*** (0.024)
Percent of State in District	0.661*** (0.187)	0.365 (0.422)	-0.219** (0.109)
Eligible*Percent in District	-0.590*** (0.200)	-0.542*** (0.208)	-0.219** (0.109)
Constant	2.564*** (0.035)		
Observations	7,326	7,314	7,061
Number of FEs		50	1,262
(B) <i>Introductions - Top Bills</i>	No FEs	State FEs	Individual FEs
Eligible - Higher Office	0.362*** (0.048)	0.311*** (0.048)	0.106*** (0.034)
Percent of State in District	0.293 (0.238)	0.123 (0.564)	0.096 (0.265)
Eligible*Percent in District	-0.751*** (0.254)	-0.787*** (0.266)	-0.333* (0.182)
Constant	1.213*** (0.045)		
Observations	7,326	7,315	7,025
Number of FEs		50	1,249
(C) <i>Number of Topics</i>	No FEs	State FEs	Individual FEs
Eligible - Higher Office	0.101*** (0.024)	0.083*** (0.023)	0.040** (0.018)
Percent of State in District	0.348*** (0.113)	-0.110 (0.251)	-0.108 (0.364)
Eligible*Percent in District	-0.276** (0.121)	-0.248** (0.118)	-0.142 (0.089)
Constant	1.814*** (0.022)		
Observations	7,326	7,314	7,061
Number of FEs		50	1,262

Standard errors in parentheses. ***p<0.01, **p<0.05, *p<0.1

Table 4: Is the Increase in Bill Introductions Related to Constituents' Characteristics?

Variables	DV = Number of Bills Proposed on Each Topic			
	Defense	Defense	Education	Agriculture
Eligible - Higher Office	0.085	0.152	0.006	0.341**
	(0.102)	(0.101)	(0.150)	(0.142)
Increase in Military Installations	-0.016			
	(0.010)			
Eligible*Increase in Military Installations	0.033***			
	(0.011)			
Increase in Military Population		-0.013		
		(0.009)		
Eligible*Increase in Military Population		0.022**		
		(0.010)		
Increase in School Enrollees			-0.001	
			(0.001)	
Eligible*Increase in School Enrollees			0.002***	
			(0.001)	
Increase in Farmers				-0.015
				(0.010)
Eligible*Increase in Farmers				-0.014
				(0.011)

Variables	DV = Number of Bills Proposed on Each Topic		
	Labor	Welfare	Finance
Eligible - Higher Office	-0.040	0.183	0.148
	(0.118)	(0.113)	(0.095)
Increase in Blue Collar Employees	0.002		
	(0.001)		
Eligible*Increase in Blue Collar Employees	0.002*		
	(0.001)		
Increase in Unemployed		-0.010***	
		(0.003)	
Eligible*Increase in Unemployed		0.003	
		(0.003)	
Increase in Finance Sector Employees			0.001
			(0.002)
Eligible*Increase in Finance Sector Employees			0.004*
			(0.002)

Standard errors in parentheses. ***p<0.01, **p<0.05, *p<0.1

Table 5: The Effect of Eligibility on the Number of Bills that Passed the Chamber

(A) All Bills	No FEs	State FEs	Individual FEs
Eligible - Higher Office	-0.048 (0.054)	-0.031 (0.054)	-0.047 (0.043)
Constant	0.274*** (0.050)		
Observations	7,326	7,314	6,386
Number of FEs		50	1,062
(B) Top Bills	No FEs	State FEs	Individual FEs
Eligible - Higher Office	0.071 (0.077)	0.048 (0.077)	0.021 (0.067)
Constant	-0.947*** (0.071)		
Observations	7,326	7,315	4,881
Number of FEs		50	750
Standard errors in parentheses. ***p<0.01, **p<0.05, *p<0.1			

Table 6: The Effect of Eligibility on Legislators' *Abstention Rate*

Variables	No FEs	State FEs	Individual FEs
Eligible - Higher Office	0.009*** (0.003)	0.009*** (0.003)	0.004* (0.002)
Constant	0.060*** (0.002)		
Observations	7,467	7,446	7,467
Number of FEs		50	1,541
R-squared	0.002	0.042	0.001

All models estimated via OLS regression.

Standard errors in parentheses. ***p<0.01, **p<0.05, *p<0.1