A Natural Experiment in Proposal Power and Electoral Success

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Does lawmaker behavior influence electoral outcomes? Observational studies cannot elucidate the effect of legislative proposals on electoral outcomes, since effects are confounded by unobserved differences in legislative and political skill. We take advantage of a unique natural experiment in the Canadian House of Commons that allows us to estimate how proposing legislation affects election outcomes. The right of noncabinet members to propose legislation is assigned by lottery. Comparing outcomes between those who were granted the right to propose and those who were not, we show that incumbents of the governing party enjoy a 2.7 percentage point bonus in vote total in the election following their winning the right to introduce a single piece of legislation, which translates to a 7% increase in the probability of winning. The causal effect results from higher likeability among constituents. These results demonstrate experimentally that what politicians do as lawmakers has a causal effect on electoral outcomes.

Democratic theory is contingent on the notion that representatives should take action on behalf of their constituents and that citizens can use elections to reward or punish legislators for the actions taken on their behalf (Downs 1957; Riker 1982). Yet, measuring the effects of legislator action on subsequent voter behavior has proven to be a thorny problem for legislative scholars.

At the root of this problem is measuring the causal effect of legislative action. Observational studies preclude us from separating the effect of legislating from other characteristics of the individual legislator or political system that may confound the independent effect of introducing legislation. Without being able to separate the independent effect of legislative action from other possible explanations of electoral viability, we cannot be certain of a causal relationship between legislating and winning elections.

Here, we harness a unique natural experiment to understand the influence of legislative activity on electoral outcomes. Since 2004, the right of noncabinet members to introduce a single piece of legislation in the Canadian House of Commons has been randomly assigned through a lottery conducted by the Speaker of the Commons. By comparing electoral outcomes between those who were given the power to propose legislation and those who were not, we can evaluate experimentally whether a real-world democratic institution causes the electorate to reward legislators for their legislative action. We show that the power to propose imparts a significant electoral advantage to members of the governing party, perhaps in part because proposal power is positively associated with...
an increased share of constituents who report a personal preference for the legislator.

Our results suggest that politicians take advantage of legislative opportunities and that voters reward them for doing so, even in parliamentary systems that de-emphasize the role of the individual legislator and emphasize party loyalty over constituency service (Lee 2005). Democratic theory hinges on a tight and reciprocal relationship between constituents and their representatives; that voters support candidates who are more actively involved in the legislative process is a sign that this relationship matters in practice in contemporary representative democracies.

**Literature Review**

A vast literature in economics, sociology, psychology, game theory, and political science is aimed at understanding the effect of voters on legislator behavior and vice versa (Fowler and Smirnov 2007; Stimson, Mackuen, and Erikson 1995). Theory and empirical analysis demonstrate that representatives are attuned to the needs and wants of their constituents: Mayhew’s articulation of the “electoral connection” (1974) suggests that legislators advertise, claim credit, and take positions in order to signal to their constituents their quality as representatives, and evidence from both the U.S. House and Senate supports this notion (Griffin and Newman 2005; Miller and Stokes 1963). A variety of studies have sought to leverage quasi-experiments to parse out the effect of these intertwined explanations. However, these approaches—such as studying differences in roll-call voting in lame duck sessions of Congress (Jenkins and Nokken 2008)—have generally been more successful in isolating the effects of party influence as opposed to isolating the effects of constituency preferences (Binder, Lawrence, and Maltzman 1999; Cox and Poole 2002; Jenkins, Crespin, and Carson 2005; McCarty, Poole, and Rosenthal 2001; Snyder and Groseclose 2000).

The evidence is more mixed as to whether voters respond to legislative performance. Voters may be insufficiently informed to respond to legislative action, and most voters do not follow the details of legislators’ actions or individual policy stances (Campbell et al. 1960; Converse 1964; Zaller 1992), even if they are able to come to political decisions via low-information rationality (Lupia and McCubbins 1998; Popkin 1994). As a consequence, “constituency control” is a “myth” (Arnold 1993); only the most attentive voters are aware of representatives’ efforts to bring benefits to constituents (Stein and Bickers 1994).

Conversely, others have provided evidence that voters do respond to the behavior of governments (Dahlberg and Johansson 2002), parties (Stimson, Mackuen, and Erikson 1995), and individual legislators (Canes-Wrone, Brady, and Cogan 2002; Mayhew 1974), and that legislators are able to cultivate a “personal vote” through their actions (Cain, Ferejohn, and Fiorina 1987; Ferejohn and Gaines 1991). A handful of articles employ creative research designs to further test the accountability of representatives to constituent preferences: using historical variation in the incumbency advantage to measure voter responsiveness to candidate preferences (Carson, Engstrom, and Roberts 2007); examining the electoral consequences of legislator support for extreme presidential agendas in moderate congressional districts (Gaines and Nokken 1999); and using roll-call data to study electoral margins (Bovitz and Carson 2006).

The difficulty of adjudicating between competing findings is made more difficult by the fact that these empirical tests of democratic theory—even those that leverage historical change or institutional quasi-experiments to strengthen a causal argument—have been based on observational studies (Besley and Case 2003; Kitschelt 2000; Lewis-Beck and Stegmaier 2000). In systems where legislators have significant independence to introduce legislation, such as the United States, an association between passing laws and electoral success may result from a spurious relationship where legislators who pass laws are also skilled politicians, good at raising money for their campaigns (Gerber 1998), and adept at claiming credit for legislative initiatives and turning their performance into electoral advantage. Other single-member district legislatures, such as the British or Canadian parliamentary systems, empower executive leaders to introduce legislation, thereby constraining the ability of representatives to act directly on behalf of their constituents (Kam 2009). While intuitively it seems plausible that what politicians do as lawmakers has a causal effect on the behavior of their constituents, and a strong circumstantial case for this in the literature has become the generally accepted view among legislative scholars, the fact remains that this has not been clearly demonstrated in extant studies.

This article provides novel experimental evidence that the right to propose legislation is valuable for members of Canada’s governing party. Members with the power to propose achieve greater personal popularity with their constituents, increasing the probability that they, rather than their party or its leader, will prove pivotal in the decision of voters. Canadian elections are strongly party-centered rather than candidate-centered, and several studies investigating the existence of a local “personal vote” accordingly find evidence of limited occurrences...
of candidate-centered voting (e.g., Clarke et al. 1979; Cunningham 1971; Ferejohn and Gaines 1991; Irvine 1982). Most recently, Blais et al. (2003) demonstrate that local candidates were a decisive consideration for only 5% of voters in the 2000 general election.

Backbench MPs in the Canadian parliament have little leverage in obtaining concessions for their constituents; moreover, because voters recognize the degree of centralization in the policy process, a legislator has little chance to persuade voters based on a reputation for service or policy initiative (Lee 2005). Thus, any opportunity, albeit small (Cover and Brumberg 1982), for legislators to distinguish themselves may lead to increased name recognition and popularity, two factors positively associated with vote choice (Goldenberg and Traugott 1980; Mann and Wolfinger 1980).

While this article’s finding is consistent with the commonly accepted notion of voter behavior generated by decades of observational work, it is the first article to cleanly test whether this relationship is a causal one. Our results are intuitive but offer a much-needed confirmation of the theory that voters do hold their representatives accountable for legislative action.

Data and Methods

Data in this experiment are derived from the legislative and electoral records of incumbents serving in the 38th (2004–2006) and 39th (2006–2008) Canadian parliaments. The Canadian parliament is similar to other Westminster-derived systems in its makeup (formally consisting of the Monarch, the Senate, and the House of Commons, to which the executive is answerable) and in the importance of constitutional conventions to its operation. The crucial distinction between the Canadian parliament and those of the United Kingdom and other Westminster-derived systems relates to the comparatively strong legislative power of the executive (Malloy 2003). The cabinet dominates the legislative agenda (Kam 2009); members of the Senate are appointed by the prime minister and are bound by constitutional convention to oppose legislative initiatives originating in the House of Commons only in exceptional situations (Russell 2001); and, party discipline is strong, and voting in both the upper and lower houses generally occurs along party lines (Kam 2009). A very small amount of time is set aside for Members of Parliament (MPs) to propose their own legislation. The natural experiment examined in this article was created by a change in the rules of how MPs were eligible to introduce their bills, described below.

Treatment: Power to Propose

Prior to 2004, a parliamentary committee exercised significant control over which members’ proposals would be deemed “votable” and thus eligible for debate, consideration, and passage (Blidook 2010). However, a new system was adopted in the 37th Parliament (2000–2004) in which all eligible members were placed in a lottery that dictated the order in which MPs appeared on the “Order of Precedence,” a document that determines when legislators have the opportunity to bring their legislation to the floor for debate and a vote by the full Parliament. MPs may bring forward either a bill, which binds the government to a specific policy if successful, or a motion, which merely expresses the opinion of the House. This system of assigning the right to propose legislation was in full effect during the 38th (2004–2006) and 39th (2006–2008) parliaments.

We denote members as being in the treatment group if they had the power to propose and adequate time for their legislation—whether bills or motions—to be considered for second reading, the stage at which debate over legislation takes place. This threshold is determined by the position of the MP lowest in the Order of Precedence who was successful in introducing his or her legislation for second reading. In our data, this resulted in MPs who received one of the top N spots on the Order of Precedence.1 By this measure, we have 79 members in treatment and 127 in control in the 38th parliament and 86 members in treatment and 112 in control in the 39th parliament.2

To ensure the randomization of the lottery, we have compared members who did and did not receive the power to propose across several metrics. We find that government members are not more likely than opposition members to receive the power to propose (Table S11 in the supporting information). Second, those in treatment and control do not differ in the average number of years served in parliament, in the likelihood of having held a cabinet post, or by gender (Table S12). Furthermore, χ² tests suggest no differences in treatment rates

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1 We note one nonrandom element of the Order of Precedence. Members who introduce legislation initiated in the Senate are able to introduce legislation in the House of Commons independent of their place on the Order of Precedence. We identify five members who were below the threshold on the Order of Precedence and introduced legislation through this channel. These members are left in the control condition. As shown in our supporting information (Table S10), our main results are essentially unchanged when these observations are excluded.

2 At the suggestion of a reviewer, an alternative specification of the treatment variable is presented in the supporting information (Table S18). The results from this specification closely reflect those presented in our main findings.
by province in the 38th parliament ($\chi^2 = 7.10, p = 0.72$), the 39th parliament ($\chi^2 = 15.29, p = 0.12$), or both parliaments combined ($\chi^2 = 10.02, p = 0.44$). Finally, there is no difference in decisions to retire among those in treatment and control, suggesting that members do not retire at a greater rate when not granted the power to propose (Tables SI3 and SI4). These checks ensure that there are no significant differences between our treatment and control groups.

Not all members take up the opportunity to propose legislation. In 2006, of the 79 incumbents who would run for reelection and who were granted the power to propose, 13 chose not to do so. In 2008, out of 86 incumbents, only three chose not to propose. We include members who choose not to propose in our treatment group because we wish to measure the pure causal effect of the institution on the outcome. If we exclude those who chose not to introduce, we may create a confound in the analysis, since the decision not to introduce may result from self-evaluation of MPs’ ability to succeed in converting an opportunity to propose into electoral advantage. Accordingly, the effects we present are equivalent to “intent to treat” effects (Sheiner and Rubin 1995).3

Model and Hypotheses

We take advantage of randomization in the Order of Precedence to measure the causal effect of proposing legislation on vote share in the following election. Our analysis considers all incumbents who ran for reelection in 2006 and/or 2008 (so that we can measure vote share) and who were eligible for inclusion on the Order of Precedence via their draw in the lottery. Members of the cabinet are ineligible.

Our key explanatory variables are vote share in the previous election, membership in the government party, the randomly assigned opportunity to propose legislation, and an interaction between membership in the governing party and the power to propose. The linear combination of this interaction term and the variable for the power to propose captures our key finding, namely that government candidates receive an electoral boost from the chance to propose and debate legislation but opposition members do not. We expect government members alone to realize an electoral advantage from the proposal of legislation for two reasons. First, as the government dominates the legislative business of the Canadian parliament, voters are likely to perceive opposition members as less effective legislators than government members. Opposition members should thus face difficulty in convincing voters of the merits of their legislative actions. Second, because the government controls the largest bloc of votes in the parliament, it is comparatively difficult for opposition members to pass their legislation. In 2006, 12% of those with the power to propose were able to pass their legislation through all stages in the House of Commons. In 2008, the share was 41%. Across both parliaments, government members have a significantly higher rate of passage (42% vs. 22%, $\chi^2 = 5.48, p = 0.019$). Finally, we note that our study covers parliaments in which the Liberal party was in government (2004–2005) and when the Conservative party was in government (2006–2008). Accordingly, our results are not confounded by the partisanship of the government.

Results

We first conduct basic $t$-tests that compare the vote share of those with the power to propose (the treatment) to those without (the control). We then conduct a regression analysis of vote share. Both sets of results validate our main hypothesis.

Principal Effects

Figure 1 demonstrates the effects of the power to propose for government and nongovernment members in 2006 and 2008. The opportunity to introduce legislation increases the vote share of government candidates by 5.26 percentage points ($p = 0.01$, two-tailed). It has no effect for opposition members ($p = 0.57$, two-tailed). (See Table SI1 in the supporting information for treatment rates and Table SI5 for additional $t$-tests.)

To ensure that these results are not driven by random imbalance in other factors that influence vote totals, we conduct a linear regression analysis (Table 1) that controls for election year and candidate vote share in the previous election. These results confirm that the power to propose legislation significantly increases the vote share of those in the governing party. The linear combination of the coefficient on the interaction term and the main effect for power to propose suggest that government incumbents experience a 2.73 percentage point increase (95% CI 0.29, 5.17) in vote share if they have the right to

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3 At the suggestion of a reviewer, in our supporting information we present estimations of causal effects when those who chose not to propose legislation are excluded from the analysis (Table SI9). The results suggest an effect statistically indistinguishable from that presented in our main findings.
Figure 1 Comparison of Electoral Vote Share by Government Membership and Whether a Member of Parliament Was Randomly Assigned the Right to Propose Legislation.

Table 1 The Power to Propose Legislation Increases Vote Share for Members of the Government

<table>
<thead>
<tr>
<th>Variable</th>
<th>Coef.</th>
<th>R.S.E.</th>
<th>p</th>
</tr>
</thead>
<tbody>
<tr>
<td>Government * Power to Propose</td>
<td>3.70</td>
<td>1.49</td>
<td>.01</td>
</tr>
<tr>
<td>Government Member</td>
<td>-0.02</td>
<td>0.92</td>
<td>.99</td>
</tr>
<tr>
<td>Power to Propose</td>
<td>-0.98</td>
<td>0.74</td>
<td>.18</td>
</tr>
<tr>
<td>Year = 2006</td>
<td>0.07</td>
<td>0.63</td>
<td>.90</td>
</tr>
<tr>
<td>Previous Vote Share</td>
<td>0.82</td>
<td>0.03</td>
<td>.00</td>
</tr>
<tr>
<td>Constant</td>
<td>7.89</td>
<td>1.92</td>
<td>.00</td>
</tr>
<tr>
<td>N</td>
<td>404</td>
<td></td>
<td></td>
</tr>
<tr>
<td>$R^2$</td>
<td>0.61</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Root MSE</td>
<td>6.30</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Note: Ordinary least squares (OLS) regression of vote share on variables shown. All p-values are two-tailed. Standard errors are clustered on Members of Parliament. The linear combination of Power to Propose and Government * Power to Propose is 2.73 percentage points (95% CI 0.29, 5.17). This shows that members of the government who are randomly granted the right to propose legislation on average earn 2.73 percentage points more vote share than those government members who are not.

Note: The results show that government members who are granted the power to propose earn a significantly greater vote share than others.

Proposers, compared to those government members who do not have the right. These results are robust to different regression specifications (see Tables SI6 and SI7 for robustness checks), to a different operationalization of our treatment (see Table SI8), and to different classifications of members who did not propose legislation (see Table SI9) or who moved upon the Order of Precedence through the introduction of Senate-initiated legislation (Table SI10).

Potential Mediators

We have performed further analysis to explore why government members were able to translate the proposal of legislation into vote increases. We identify four potential factors that may mediate the relationship between the power to propose and an increased vote share in the subsequent election: the media effect, quality opponent, campaign resources, and popularity hypotheses. The first three effects find no support in our results. We measure media coverage as the number of times an MP was mentioned in Canadian newspapers during the Parliament prior to the election. We fail to find evidence of an association between proposal power and the quantity of media mentions in local, regional, and national newspapers ($p = 0.74$, two-tailed $t$-test). We also fail to find an association between proposal power and the presence of “quality” challengers who have previously held provincial or federal office (Jacobson 1989; Van Dunk 1997) ($p = 0.90$, two-tailed $t$-test). We likewise find no relationship between proposal power among government members and campaign resources in the subsequent election. We measure this as the amount that members have received through (1) direct donations and (2) indirect donations made to their district associations and then transferred to their campaigns. Those with proposal power raise no more resources as a share of their spending limit than those without proposal power ($p = 0.43$, two-tailed $t$-test).

We do find, however, that government members who have proposal power are more likely to be individually preferred by their constituents to government members without this power. The 2006 and 2008 Canadian Election Studies asked respondents, “Was there a candidate
in your local riding [i.e., district] you particularly liked?” If respondents answered yes, they were then asked the party of that candidate. If successful legislative activity increases the electoral appeal of individual members, then government incumbents with the power to propose should be named more frequently than those without such power. We do find this relationship (34.1% vs. 24.3%, \( \chi^2 = 10.1, p < 0.002 \)), and Table 2 presents the results.

### Table 2 The Power to Propose Legislation IncreasesPreferences for Local Candidates of the Government Party

<table>
<thead>
<tr>
<th></th>
<th>No Power to Propose</th>
<th>Power to Propose</th>
</tr>
</thead>
<tbody>
<tr>
<td>No preference for government incumbent</td>
<td>427 (75.7%)</td>
<td>216 (65.9%)</td>
</tr>
<tr>
<td>Preference for government incumbent</td>
<td>137 (24.3%)</td>
<td>112 (34.1%)</td>
</tr>
<tr>
<td>N</td>
<td>564</td>
<td>328</td>
</tr>
<tr>
<td>( \chi^2, p )</td>
<td>10.1, .00</td>
<td></td>
</tr>
</tbody>
</table>

*Note: This table compares the share of respondents in the 2006 and 2008 Canadian Election Studies who identify a government incumbent as the local candidate they prefer. Analysis is limited to constituencies in which an incumbent of the governing party was contesting the seat. Results of a \( \chi^2 \) test of association are presented in the bottom row. The test suggests that government incumbents with proposal power are more likely to be individually preferred by voters than government incumbents without proposal power. We note that \( t \)-tests from each election separately also recover significant differences (2006: \( p = .04 \), 2008: \( p = .01 \)). Logistic regression analyses with clustering of standard errors on electoral district confirm these results.*

Discussion

Our results suggest that incumbents of the governing party are rewarded when they have the opportunity to propose legislation because proposal power increases personal popularity with constituents. It is important to remember that intermediate variables such as voter preferences for local candidates were not randomly assigned. The ability of formal mediation tests to uncover the causal pathway from proposal power to electoral victories is thus limited (Green, Ha, and Bullock 2010). For example, a legislator’s interpersonal skills may influence both the ability to cultivate a personal vote and the ability to propose successful legislation when given the opportunity. But the lack of association with media attention, quality challengers, and campaign resources suggests that we can rule out those explanations for the causal effect of proposal power on electoral outcomes. What remains is a mechanism whereby talented legislators of the governing party may take advantage of the power to propose legislation and turn it into votes by improving their personal popularity with voters.

The power to propose has profound implications for election outcomes. Using the estimates in Table 1, we can identify which elections would have been influenced by our estimated treatment effect. In 2006, no government incumbents who had the chance to propose legislation won by fewer than 2.7 percentage points (though one lost by 2.9). However, two of six government incumbents who did not have the opportunity to propose legislation lost in the election (Marc Godbout, Ottawa Orleans, and Lynn Myers, Kitchener Conestoga). In 2008, no government incumbents who had the chance to propose legislation won by fewer than 10 percentage points. However, among the three government incumbents who lost and did not have the opportunity to propose legislation, one (Rahim Jaffer, Edmonton Strathcona) lost by one percentage point. Taken together, of the 45 incumbents whose fates could have been altered by this lottery, the right to introduce legislation could have been decisive for three, or 7%. In other words, a single piece of legislation appears to have altered the course of about one in 15 elections. The implication is that voters respond to legislative action, often with real consequences for representatives and parties.

This natural experiment provides evidence of the effect of legislative activity in one country, but it also suggests possible effects in other democracies. Compared to its peers, the Canadian legislative system is highly disciplined and dominated by the cabinet (Malloy 2003). Members of Parliament face a high degree of turnover (Blake 1991) and lack legislative specialization (Docherty 1997). By one prominent account, they are legislative “amateurs” (Atkinson and Docherty 1992). That a single legislative action would matter in Canada suggests that similar actions would matter in other democracies such as the United States, where lawmakers have greater freedom to propose legislation (Fowler 2006a, 2006b), electoral outcomes are less dependent on party dynamics, candidates can raise substantially more money from a broader array of sources, and incumbent reelection is more dependent on candidate factors (Wattenberg 1991). In particular, our results provide evidence of the ability of the electorate to reward specific legislators, even in a parliamentary system characterized by strong party discipline (in contrast to previous assertions; Hellwig and Samuels 2007). More broadly, our results highlight the need to search for unique opportunities to exploit randomization in real-world political activity to understand how democratic systems work (Bhavnani 2009).
References


**Supporting Information**

Additional Supporting Information may be found in the online version of this article at the publisher’s website:

- Treatment Balance Tests and Robustness Checks
  - **Table S1**: Treatment rate by Parliament and government/opposition status
  - **Table S2**: Randomization Checks
  - **Table S3**: Place in the order of precedence and incumbent reoffering
  - **Table S4**: Proposal power (dichotomous) and incumbent reoffering
  - **Table S5**: Descriptive Statistics, Current and Previous Vote Share
  - **Table S6**: Huber regression robustness check
  - **Table S7**: Quantile regression robustness check
  - **Table S8**: Place on the order paper robustness check
  - **Table S9**: Non-proposers excluded robustness check
  - **Table S10**: Senate-initiated proposers excluded robustness check