Risk Aversion and the Incumbency Advantage

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Abstract

Explanations for the incumbency advantage in American elections have typically pointed to the institutional advantages that incumbents enjoy over challengers. In this paper, we propose an individual-level explanation for this advantage. Specifically, we develop a model that predicts that voters who are less tolerant of risk will be more likely to support the incumbent, even if the incumbent is further from the voter’s preferred position than the challenger. Using a module to the 2008 CCES survey which provides us with an individual-level measure risk tolerance, we find support for these expectations. We show that not only are risk averse voters more likely to vote for incumbents, but that as risk aversion increases, voters are more tolerant of an incumbent positioning himself further from the voter’s preferred position than the challenger.
Incumbents running for re-election in the United States consistently perform better than they would if they did not presently hold the position they were attempting to keep. A substantial body of research has developed to help explain why this incumbency advantage exists; in general, these explanations are elite-centered. For example, some scholars have argued that congressional incumbents are successful at winning re-election because they work hard to satisfy their constituents while in office (Fenno (1977); Fenno (1978); Cain, Ferejohn, and Fiorina (1987)). Others have noted that the calculations of strategic politicians determining when to run for a seat also contribute to this advantage (Jacobson and Kernell (1983b)). Still others have pointed to the ability of incumbents to raise more money than would-be opponents (Jacobson and Kernell (1983b); Abramowitz (1991)).

While elite-centered explanations for the incumbency advantage are more common than voter-based explanations, there is reason to think that the latter may play an important role as well. Ansolabehere, Snyder Jr., and Stewart (2000) use the redistricting process as a quasi-experiment to find that approximately half of the incumbency advantage can be explained by a personal vote cultivated by the incumbent member. While the personal vote does not account for all elite-based theories, this finding does suggest that at least part of the incumbency advantage may come from characteristics of voters rather than the behavior of elites. This notion is further buttressed by the fact that an incumbency advantage is observed for many different types of offices (e.g. Ansolabehere and Snyder (2002)).

In this paper, we analyze one potential voter-based explanation for the incumbency advantage. Specifically, we examine whether widespread risk aversion among the American public allows incumbents to receive more support from voters than they might otherwise (Quattrone and Tversky (1988)). Using survey data from the 2008 Cooperative Congressional Election Study (CCES), we show that voters who are more apt to act risk averse will over-value their incumbent relative to the challenger, even when they perceive the challenger to be closer to them ideologically. In fact, we find that the most risk averse voters are over
15 points more likely to vote for their incumbent relative to voters who are risk neutral. Furthermore, we demonstrate that a challenger must have a sizeable ideological advantage over the challenger to win over risk averse voters.

**Risk Aversion and Support for Incumbents**

Since Robert Erikson’s seminal article in 1971, political scientists have amassed a substantial body of research studying the incumbency advantage (see Carson and Roberts (Forthcoming) for a review). Early explanations of the incumbency advantage focused on the incumbent’s use of office to maximize the likelihood of re-election through assisting constituents (i.e. pork barrel politics), generating increased general visibility, and better fundraising opportunities (Erikson (1971)). Further, Erikson (1971) points out that the incumbent, by definition, is likely to be a high quality candidate, and therefore more likely to be re-elected. Since Erikson (1971), numerous scholars have considered these rationales, and have put forth alternative explanations for the incumbency advantage. Hood and McKee (2010) provide a useful summary of these explanations:

> There are numerous (often complementary) explanations for the incumbency advantage: credit claiming, position taking, and advertising (Mayhew (1974)), constituency service (Fiorina (1977)), declining party attachments (Ferejohn (1977)), strategic retirements (Cox and Katz (2002)) and strategic challenger entry (Cox and Katz (1996); Jacobson and Kernell (1983b)), and the declining ability of challengers to raise enough money for competitive campaigns (Abramowitz (1991)) (p. 346).

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1 Erikson (1971) was not the first study to show an incumbency advantage. Erikson, himself, points to Cummings (1966), Stokes and Miller (1962), and Jones (1966) as early research, either directly or indirectly, examining the incumbency advantage issue.
In addition to candidate-specific explanations, several “systematic” explanations have been offered for the incumbency advantage. McKelvey and Riezman (1992) suggest that the incumbency advantage is an artifact of the seniority systems employed in legislatures. Recently, general changes in long-term (Ansolabehere, Snyder Jr., and Stewart (2000)) and short-term (Ansolabehere and Snyder (2002); Desposato and Petrocik (2003)) conditions (e.g. economic events) and redistricting (Cox and Katz (2002); Hood and McKee (2010)) have been examined as components of the incumbency advantage.

Largely missing from the study of the incumbency advantage are individual-level (or voter-level) explanations. In particular, there has been relatively little work seeking to understand the psychology of the decision to vote for an incumbent rather than a challenger (though see Quattrone and Tversky (1988)). One possible mass-based explanation for the incumbency advantage is risk aversion—the tendency of individuals to prefer certain outcomes to uncertain alternatives (Kahneman and Tversky (1979)). The act of voting in an election where there is an incumbent places the voter in such a situation as she compares a representative she already has (the incumbent) to one she might gain instead (the challenger). Notably, risk aversion has been promoted as an explanation for an “incumbency advantage” in non-political realms. For example, Muthukrishnan (1995) conducted a series of experiments to determine the factors that led people to choose a new consumer product over the one they were currently using. The author found that nearly 40% of subjects who stayed with their incumbent brand did so despite reporting that they thought the challenging brand was superior. The author cites risk aversion as the likely reason that subjects would maintain loyalty to their brand despite recognizing that there appeared to be a better alternative.

Of course, not all individuals are equally averse to risks. Indeed, a growing body of research recognizes that some people are more tolerant of risks than others and attempts to measure these differences. As Ehrlich and Maestas (Forthcoming) point out, “orientation towards risk is, at least in part, an underlying trait rather than wholly dependent upon
context or framing” (see also Filbeck, Hatfield, and Horvath (2005); Kowert and Hermann (1997); Cesarini, Dawes, Johannesson, Lichtenstein, and Wallace (2009); Nicholson, Soane, Fenton-O’Creevy, and Willman (2005)). These differences in risk orientation appear to have consequences for whether citizens participate in politics by voting (Berinsky (2000)) and the positions that they take on political issues (Ehrlich and Maestas (Forthcoming); Kam and Simas (2010)). The fact that not all individuals are equally susceptible to risk is significant for two reasons. First, if risk aversion is an important determinant of incumbent support, then most existing individual-level vote choice models are under-specified. Second, the fact that orientation toward risk varies across individuals provides us with the ability to examine the extent to which risk aversion is a factor in the incumbency advantage through the comparison of risk averse voters with those who are risk neutral. We elaborate on how we measure risk orientation after outlining our model and expectations.

Model and Expectations

We expect that risk aversion will influence an individual’s propensity to vote for an incumbent in at least two ways. First, voters are generally more certain about where the incumbent stands ideologically while they may be less sure about where a challenger stands. This added uncertainty would cause a voter to discount the possible gains that could be made by electing a challenger, even one that was promoting issues positions closer to the voter’s own views. Indeed, some scholars have found that voters are less willing to cast their ballots for a candidate whose policy positions they are uncertain about (Bartels (1986); Brady and Ansolabehere (1989); Alvarez (1998)), while more recent research has challenged that finding (Tomz and Van Houweling (2008); Berinsky and Lewis (2007)). Particularly notable among these recent studies is the finding by Tomz and Van Houweling (2008) that an individual’s

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2In the dataset we analyze for this project, respondents were almost twice as likely to place the incumbent on the ideological scale as they were to place the challenger, providing support for the notion that they were generally less certain about where the challenger stood.
orientation to risk conditions their tolerance for candidates taking ambiguous positions.

Second, risk aversion may lead citizens to prefer their incumbent even when they are confident that the challenger offers a preferred set of issue positions. After all, a challenger may clearly lay out a package of policies that he will support once in office, but there is still some risk that he will not carry through on those promises once elected. Since a voter has already had experience with the incumbent, they will likely feel more confident about projecting what that candidate will actually do if she is re-elected.

Thus, we hypothesize that individuals who are more risk averse will be more likely to support the incumbent. Furthermore, as we demonstrate below, this expectation holds even when citizens are confident about the ideological position of each candidate. Here we formalize these expectations.

Using the framework of Enelow and Hinich (1981), we will consider candidate Theta to be an incumbent, whose position is quantified as the random variable $\tilde{\theta}$. In a general standard spatial voting model (Berinsky and Lewis (2007)), the voter will be assumed to maximize a symmetric utility function, which is a function of his preferred policy outcome, $x_i$. Specifically, voter $i$’s utility for incumbent candidate $\theta$ is given as:

$$U_i = c_i - |\tilde{\theta} - x_i|^{\gamma_i + \delta_{\theta}}$$

where $c_i > 0$ is a constant representing the maximum utility of voter $i$, $\gamma_i$ is voter $i$’s general risk aversion parameter and $\delta_{\theta}$ represents an addition to voter $i$’s risk aversion based on candidate $\theta$. $\gamma_i$ can be thought of as an individual-specific risk aversion parameter (how risk averse the voter is) and $\delta_{\theta}$ can be thought of as a candidate-specific risk aversion parameter (how risky the candidate is). The expected utility of the voter is therefore:

$$E[u_i(\tilde{\theta})] = c_i - E[|\theta - x_i|^{\gamma_i + \delta_{\theta}}].$$ (1)
Assuming the distribution of $\theta$ is given by pdf $f(\theta)$ and cdf $F(\theta)$, (1) can be written as:

$$E[u_i(\tilde{\theta})] = c_i - \int_{-\infty}^{\infty} |\theta - x_i|^{\gamma_i + \delta_\theta} dF(\theta).$$

Subject to the assumption discussed below, the expected utility of the voter can be shown to be:

$$E[u_i(\tilde{\theta})] = c_i - |\theta - x_i|^{\gamma_i + \delta_\theta}. \quad (2)$$

(2) is true subject to the assumption that there is no uncertainty regarding each candidate’s positioning. This is an important caveat, because a significant body of political science research has demonstrated that voters are often uncertain about the position of candidates and that this uncertainty has consequences for how those voters cast their ballots ([Bartels (1986), Alvarez (1998); Brady and Ansolabehere (1989)]). Nonetheless, we include this restriction in our model because it allows us to determine whether there would be an incumbency advantage even if voters are certain about where both candidates stand ideologically. Thus, though $\gamma_i$ does account for a voter’s general risk profile, we will assume that the voter can unambiguously determine candidate Theta’s position.

Now, let us consider a second (challenger) candidate Psi. Voter $i$’s utility for Psi is similar to Theta, except the candidate-specific risk aversion parameter $\delta$ will be denoted $\delta_\psi$ and will be allowed to differ from $\delta_\theta$. Therefore, for candidate $\psi$, voter $i$’s utility is now written as:

$$U_i = c_i - |\tilde{\psi} - x_i|^{\gamma_i + \delta_\psi}.$$ 

Similar to the case with candidate $\theta$, voter $i$’s expected utility for $\psi$ can be shown to be:

$$E[u_i(\tilde{\psi})] = c_i - |\psi - x_i|^{\gamma_i + \delta_\psi}.$$
Now voter $i$ prefers incumbent candidate $\theta$ to opposing candidate $\psi$ if the expected utility from $\theta$ ($E[u_i(\theta)]$) is greater than the expected utility from $\psi$ ($E[u_i(\psi)]$). $E[u_i(\theta)] > E[u_i(\psi)]$ if:

$$\frac{\ln(|\theta - x_i|)}{\ln(|\psi - x_i|)} < \frac{\gamma_i + \delta_\psi}{\gamma_i + \delta_\theta}.$$  \hspace{1cm} (3)

Equation (3) shows an important result. The left hand side of equation (3) is the ratio of the natural log of the absolute difference of candidate $\theta$ and $\psi$ from voter $i$’s preference. This ratio increases as the incumbent moves away from voter $i$’s preferred position and/or as the challenger moves towards voter $i$. If the candidates are equidistant from voter $i$, this ratio is one. If we assume that the risk aversion associated with the challenger is higher than that of the incumbent (i.e. $\delta_\psi > \delta_\theta$), the right hand side of (3) is larger than one. Therefore, and starting at a position where the candidates are equidistant from voter $i$, there is room in which the incumbent can move further away from the voter and still be preferred by the voter. Conversely, in order to win, the challenger cannot simply move slightly closer to voter $i$ than the incumbent, rather, he must move close enough to make the left hand side of equation (3) greater than the right hand side. As $\delta_\psi$ increases, the ideological space over which the voter prefers the incumbent candidate increases as well.

We note that our model also yields the basic result of voter $i$ preferring whichever candidate is closer to voter $i$’s beliefs in two cases: 1) with a risk neutral voter, or 2) when the relative risk aversion between the incumbent and challenger are equal. Specifically, when allowing either 1) $\gamma_i + \delta_\theta = \gamma_i + \delta_\psi = 1$, or 2) $\delta_\theta = \delta_\psi$, Theta is preferred to Psi only when:

$$|\theta - x_i| < |\psi - x_i|.$$  \hspace{1cm} (4)

Equation (4) indicates that in either of these two cases, the voter will choose whichever candidate is closer to her own ideological position. In other words, even if we assume that
the challenger is a riskier choice than the incumbent, risk neutral voters will still chose the candidate whose policy positions are closest to their own preferences. However, more risk averse voters will become more likely to prefer the incumbent candidate, even in some cases when the challenger is located closer to them ideologically. The more risk averse the voter, the larger space over which the incumbent will be preferred, which means that a challenger will have to be substantially closer (or the incumbent substantially further) to the voter to overcome the voter’s aversion to risk.

Figure 1 provides a visual representation of the model’s predictions. The challenger-specific risk aversion parameter, $\delta_\psi$, is plotted on the $x$-axis, and the right hand side of equation (3) is on the $y$-axis. Higher values on the $y$-axis represents a larger space over which the incumbent must operate to win. As risk aversion, $\gamma$, increases, the slope gets steeper, increasing the probability that the incumbent wins. Further, as the candidate specific risk aversion parameter increases, the probability that the candidate wins increases. The examples shown in Figure 1 illustrates this idea. The solid, dashed, and dotted lines at $\delta_\psi^{10\%}$ represent the right hand side of equation (3) for increasing levels of risk aversion ($\gamma$), but with a constant $\delta_\psi$. As the risk aversion increases, so does the right hand side of equation (3), and thus the probability which the incumbent wins.

The solid lines at $\delta_\psi^{10\%}$ and $\delta_\psi^{30\%}$ show a similar result when increasing $\delta_\psi$, but holding $\gamma$ constant. This example represents situations in which the challenger is inherently riskier than the incumbent. This is typical of the situation when an incumbent is running for re-election since the fact that the incumbent has been in office (while the challenger has not) makes the challenger at least somewhat more risky. Of course, the extent to which a challenger is perceived to be risky may be a function of that challenger’s experience. Thus, a challenger may be viewed as only 10% riskier than the incumbent when that challenger has previously held elected office (Jacobson and Kernell (1983b)), but may be 30% riskier when he has no such experience. In either case, note that even if a challenger is riskier than the
Figure 1: Model Predictions for How Risk Aversion Advantages Incumbents

Note: y-axis represents the space over which the incumbent candidate must operate to win. x-axis represents how much riskier the challenger is relative to the incumbent. The diagonal lines represent different levels of risk aversion for a hypothetical voter.
incumbent, an individual’s own risk orientation also affects the outcome. This effect is more pronounced for challengers that are inherently riskier (e.g. those without previous electoral experience).

To summarize, considering risk aversion in the standard spatial voting model provides the opportunity for incumbents to gain a natural advantage over challengers. Our model predicts that risk neutral voters will simply prefer whichever candidate is most proximate to their own ideology; however, as risk aversion increases (whether it is from individual risk aversion or candidate-specific risk aversion), voters become increasingly likely to prefer the incumbent, even if the challenger is more proximate to their own ideological beliefs. In the following section, we test these expectations.

**Data and Methodology**

The data we analyze comes from a module to the 2008 CCES. The CCES is a cooperative survey project that allows teams to purchase individual module surveys of 1,000 respondents. The survey was conducted via the Internet by YouGov/Polimetrix using a matched random sample design. A subset of respondents recruited for online surveys were selected by matching them on a set of demographic characteristics to a randomly selected set of individuals from the population of American adults. Propensity score weights for the samples were developed so as to ensure that the sample represents the demographic characteristics of the adult population as reflected in the 2004 and 2008 Current Population Survey. The 2008 CCES was conducted from October 8th to November 3rd for the pre-election survey and November 5th to December 1st for the post-election battery. Additional information about the sampling methodology and the total survey error for vote and other objective indicators is presented in the guides to each of the surveys, posted at [http://dvn.iq.harvard.edu/dvn/dv/cces](http://dvn.iq.harvard.edu/dvn/dv/cces).

Our analysis is limited to a subset of 670 respondents living in districts where their
incumbent House member was facing a major-party challenger. The dependent variable in our analysis is simply whether the respondent voted for the incumbent (1 if they voted for the incumbent, 0 if they voted for a challenger). We control for a number of factors that are likely to influence an individual’s vote for their incumbent. We include in the model a variable indicating whether the respondent shares the incumbent’s party affiliation (coded 1), is an Independent (0), or belongs to the opposite party from the incumbent (-1). We expect that partisans are much more likely to vote for an incumbent from their own party and substantially less likely to vote for an incumbent from the other party. In addition to this variable, we also include a dummy variable indicating whether the respondent’s incumbent House member is a Republican, to account for the fact that 2008 was a particularly difficult year for Republican candidates.

Also included in the model are controls for the respondent’s evaluation of the national economy and of his or her incumbent House member. The economic evaluation variable is a retrospective measure capturing whether the respondent thinks the economy has “gotten much worse” (coded 1) to “gotten much better” (coded 5). Voters may be less supportive of incumbents when they view the economy as performing relatively poorly. The incumbent approval variable takes on four values, ranging from “strongly disapprove” (coded 1) to “strongly approve” (coded 4). We expect that respondents who approve more strongly of their incumbent will be significantly more likely to vote for him or her. The final control variable in the model accounts for how closely the respondent follows politics. This variable takes on three values: “very much interested,” “somewhat interested,” and “not much interested.” We expect that respondents who are less interested in politics may be more reliant on the incumbency heuristic when casting their ballots for Congress.

The variable we are primarily interested in is our measure of risk aversion. A number of different survey instruments have been created by political and social scientists to measure an individual’s tolerance for risk (see Kam and Simas (2010) for a useful review of these
In general, measures of risk tolerance take one of two approaches. The first approach is to rely on respondents to rate themselves with regard to how comfortable they are taking risks. For example, Ehrlich and Maestas (Forthcoming) ask respondents to place themselves on a scale that ranges from “extremely comfortable taking risks” to “extremely uncomfortable taking risks.” Kam and Simas (2010) use an index of questions asking whether they agree with statements such as “I would like to explore strange places” or “I like new and exciting experiences, even if I have to break the rules.”

Since respondents are sometimes unwilling or unable to provide accurate responses to such self-evaluative queries, we rely on the second approach, which captures a respondent’s orientation to risk by asking him/her to participate in a hypothetical situation where he/she chooses between a probabilistic outcome and one that is certain. The two-question battery we use was pioneered by Barsky, Juster, Kimball, and Shapiro (1997), and a similar question was asked on the 1996 Panel Study of Income Dynamics. Figure 2 presents the questions used to determine each respondent’s level of risk tolerance.

As the figure indicates, the two question survey instrument generates a four point scale of
risk tolerance ranging from 0 (low tolerance for risk) to 3 (high tolerance for risk). While the
distribution of responses to our question is very similar to that reported by Barsky, Juster, Kimball, and Shapiro (1997), our respondents appear to be slightly more tolerant of risk. Barsky et al. report that 65% of their respondents fell in the most risk averse category, while we find that 53% of our respondents fall into that group. Barsky et al. find 13% of their respondents falling into the risk neutral grouping, whereas 17% of our sample falls into that
category.

On one hand, the question we use in this paper avoids potential complications related to asking respondents for a self-assessment of their orientations toward risk. On the other hand, there may be a concern that we are only measuring one’s orientation to taking financial risks while people may be more or less tolerant when it comes to other types of risks. While we cannot fully address that possibility in this paper, we can address whether our measure has properties that are generally consistent with other measures that have been used in previous research. Kam and Simas (2010) find that measures of risk tolerance are usually negatively correlated with age and positively correlated with education and income. They also find that women are less tolerant of risk than men and respondents who are married are less tolerant than those who are not married. With the exception of income, our measure of risk tolerance is consistent with these patterns. Notably, income was uncorrelated with our risk tolerance scale, indicating that responses to the question about taking a financial risk were not influenced by the respondent’s current financial situation.

Results

Table 1 presents the results from our incumbent vote choice model. The model correctly predicts 88% of the cases and the adjusted count $R^2$ of .66 indicates that it also offers a substantial improvement over a naive prediction of incumbent support. As expected, a
respondent’s party affiliation and approval of the member of Congress both have a strong role in determining their probability of voting for the incumbent. Holding all the other variables in the model at their means, a respondent who strongly approved of his or her House member was almost certain to vote for that incumbent (predicted probability of .96) while a respondent who strongly disapproved of their legislator had only a probability of .2 of supporting the incumbent. Partisanship also had a sizeable affect on support for the incumbent. When the voter affiliated with the same party as the incumbent, he or she had a predicted probability of .95 of voting for that incumbent. However, when a respondent affiliated with the opposing party, the probability of voting for the incumbent dropped to .27. The coefficients for the remaining control variables in the model (the respondent’s economic perceptions, attention to politics, and the party of the incumbent) failed to attain conventional levels statistical significance.

<table>
<thead>
<tr>
<th>Variable</th>
<th>Coeff.</th>
<th>Std. Err.</th>
<th>P-value</th>
</tr>
</thead>
<tbody>
<tr>
<td>R’s Approval of MC</td>
<td>1.519</td>
<td>0.184</td>
<td>&lt;0.001</td>
</tr>
<tr>
<td>Republican MC</td>
<td>-0.154</td>
<td>0.344</td>
<td>0.655</td>
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<tr>
<td>R’s Attention to Politics</td>
<td>0.446</td>
<td>0.311</td>
<td>0.152</td>
</tr>
<tr>
<td>R’s Assessment of Economy</td>
<td>-0.294</td>
<td>0.241</td>
<td>0.223</td>
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<tr>
<td>Partisan Match</td>
<td>1.921</td>
<td>0.237</td>
<td>&lt;0.001</td>
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<tr>
<td>Risk Aversion</td>
<td>0.283</td>
<td>0.146</td>
<td>0.052</td>
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<tr>
<td>Intercept</td>
<td>5.417</td>
<td>1.365</td>
<td>&lt;0.001</td>
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Note: N = 533. Adjusted Count $R^2 = .665$.

Most pertinent to our analysis is the effect of the risk aversion scale. The coefficient for this variable is statistically significant (p=0.052) and in the expected direction, indicating that respondents registering higher levels of risk aversion are more likely to vote for the incumbent, even after controlling for other factors. We should note that this finding persists even after controlling for the demographic factors that are correlated with risk aversion (e.g. gender, income, gender, marital status, and age).[^3]

[^3]: We exclude these variables from the final model because they are not significant in the model and their...
According to the predicted probabilities, an individual’s risk aversion had a relatively strong impact on their support for the incumbent. Holding all other variables in the model at their means, a risk neutral voter had a predicted probability of .66 of voting for the incumbent House member while the predicted probability for the most risk averse respondent was .82. Thus, risk neutral voters were about 16 points less supportive of their House incumbent relative to the most risk averse voters, a finding that provides initial support for the notion that risk aversion among American voters can help to explain at least part of the incumbency advantage.

**Analysis of Risk Aversion and Spatial Voting**

The results presented in Table 1 demonstrate the importance of individual-level risk aversion for determining incumbent support. Even after controlling for partisanship, approval, and several other factors that would be expected to condition an individual’s propensity to vote for the incumbent, risk aversion still played a statistically and substantively significant role. However, Table 1 does not include a direct test of our model since it does not incorporate a respondent’s ideological position relative to the perceived ideological position of the incumbent and challenger. In other words, our model predicts that risk averse respondents will actually prefer the incumbent over a challenger, even when the respondent perceives the challenger as being closer to them ideologically.

Table 2 presents the results after adding a variable for ideological positioning to the model. The 2008 CCES asked respondents to place themselves as well as both major party House candidates on a 0 to 100 ideological scale. On average, CCES respondents perceived incumbents to be 29 points away from their own ideological position; though this ranged from 0 to 98. The average perceived distance of a House challenger was 34 points, with the values ranging from 0 to 100. Using this information, we created a new variable that inclusion does not alter our results in any meaningful way. When each of these demographic controls is included, the coefficient for the risk aversion measure is 0.309 and the p-value is 0.054.
captures how much closer (positive values) or farther (negative values) to their own position the respondent perceives the incumbent or challenger to be. For example, if a voter was located at 50 on the 100 point ideological scale and he or she placed the incumbent at 60 and the challenger at 40, then the ideological placement measure would equal 0 (since the candidates are equidistance from the voter). If the same voter perceived the incumbent to be located at 55 and the challenger to be located at 40, then the variable would equal 5 (since the incumbent is perceived to be 5 points closer than the challenger). And if the same voter perceived the incumbent to be at 65 and the challenger to be at 40, then the variable would be coded as -5 to indicate that the incumbent is perceived to be 5 points further away from the voter relative to the challenger. On average, respondents placed incumbents 1 point closer to themselves than challengers; however, the variable ranges from -95 to 96, indicating that respondents viewed incumbents as being anywhere between 95 points farther away than the challenger to 96 points closer than the challenger.

<table>
<thead>
<tr>
<th>Variable</th>
<th>Coeff.</th>
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<th>P-value</th>
</tr>
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<td>R’s Approval of MC</td>
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<td>0.308</td>
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<td>Republican MC</td>
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<td>R’s Attention to Politics</td>
<td>-0.500</td>
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<td>0.407</td>
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<td>R’s Assessment of Economy</td>
<td>-0.851</td>
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<td>0.016</td>
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<td>Partisan Match</td>
<td>1.311</td>
<td>0.389</td>
<td>0.001</td>
</tr>
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<td>Relative Proximity to Incumbent/Challenger</td>
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<td>0.010</td>
<td>0.006</td>
</tr>
<tr>
<td>Risk Aversion</td>
<td>0.322</td>
<td>0.178</td>
<td>0.070</td>
</tr>
<tr>
<td>Intercept</td>
<td>6.242</td>
<td>2.159</td>
<td>0.004</td>
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Note: N = 244. Adjusted Count R²=.793.

Before we discuss the findings in Table 2, it is important to note that fewer than 30% of respondents placed themselves, their incumbent, and the challenger on the ideological scale. Generally, these were respondents who reported paying more attention to politics, had higher levels of income, and who identified as partisans. In other words, the respondents included in the analysis in Table 2 are a more politically astute subset of the respondents included in
the first analysis. Thus, we might expect risk aversion to play less of a role for these more politically engaged citizens.

Despite the addition of the ideological placement measure and the reduced sample size, the findings in Table 2 are quite similar to those in Table 1. Approval and partisanship continue to be important predictors of whether a respondent voted for the incumbent. Not surprisingly, the ideological placement measure is also statistically significant and in the expected direction. As voters perceive the incumbent as increasingly closer to their ideological position than the challenger, they become more likely to vote for the incumbent; as they perceive the challenger as being increasingly closer than the incumbent, they become less likely to support the incumbent.

Even with the addition of the ideological placement measure, the variable for risk aversion is still statistically significant (p=0.07) and in the expected direction. Holding everything else in the model constant, risk neutral voters were more likely to vote for the challenger than risk averse voters. To demonstrate how risk aversion influences the tendency of voters to chose the most proximate candidate, we present predicted probabilities in Figure 3. The x-axis in the figure is the extent to which the incumbent is closer to or farther from the voter than the challenger (based on the voter’s perceptions) and we generated predicted probability lines for each of the four categories of risk aversion our variable captured.

Figure 3 includes a horizontal line to mark the point at which a voter becomes more likely to vote for or against the incumbent and a vertical line to mark the point at which the voter should be indifferent between the candidates based on their perceived ideological

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4One concern with this analysis would be the possibility of selection bias. We took several steps to ensure that selection bias was not affecting our findings. First, we found that the risk aversion scale did not have a substantively or statistically significant effect on whether a respondent placed both candidates on the ideological scale. Furthermore, we tested a Heckman probit selection model to determine if our findings would change once we accounted for the selection bias introduced by limiting the model to only those respondents who could place themselves and both candidates on the ideological scale (we accounted for risk aversion, partisan affiliation, and attention to politics in the selection stage). Our findings were nearly identical even after accounting for this bias, particularly with regard to the findings for the risk aversion scale.
Figure 3: Predicted Probability of Voting for Incumbent Based on Voter’s Proximity to Incumbent and Risk Aversion
distance. A simple Downsian model would lead us to expect that the predicted probability of voting for the incumbent should cross the horizontal line when the distance between the two candidates is 0, with the probability increasing as the incumbent moves closer to the voter and decreasing as he or she moves farther away. In fact, that is almost precisely what we find for risk neutral voters and those with low levels of risk aversion. The lines for these groups cross the .5 mark on the y-axis very close to the point where the voter perceives the incumbent and challenger to be the same distance from his or her own position. In other words, controlling for other factors, voters who are risk neutral or who have low levels of risk aversion generally appear to be voting for the candidate who is closest to their ideological position.

On the other hand, the lines representing individuals with moderate and high levels of risk aversion move significantly off of the center point of the plot, indicating that they do not closely conform to proximity voting. In fact, the line for voters with moderate levels of risk aversion does not cross the horizontal reference line until -20, which means that a moderately risk averse voter would not be expected to vote against an incumbent until she perceived the challenger to be 20 points closer to her position than the incumbent. The threshold is even greater for a voter with high levels of risk aversion—the predicted probabilities indicate that a highly risk averse voter would not prefer the challenger until he perceived that candidate to be 31 points closer to his own position than the incumbent. This is precisely the result predicted by our theoretical model.

The findings presented here demonstrate the importance of the electorate’s risk aversion in bolstering incumbent candidates. Our simple vote model showed that the most risk averse voters are significantly more likely to vote for the incumbent relative to those who are risk neutral. When we incorporated ideological proximity into the model, we gained additional insight into this effect. On one hand, voters who are risk neutral and have low levels of risk aversion generally appear to prefer the candidate that is closer to them ideologically.
However, these voters make up less than one-third of the electorate. The vast majority of voters are either moderately or highly risk averse, and they tend to prefer the incumbent even when the challenger is substantially closer to them ideologically. In the conclusion, we elaborate on some of the implications of these findings.

**Conclusion and Discussion**

Our theoretical and empirical results show how risk plays into the incumbency advantage. In addition to the elite-centered explanations of the incumbency advantage, we show a voter-centered explanation. Indeed, our model predicts an incumbency advantage in any election with risk averse voters, even in cases where the challenger has an ideological advantage. Using our individual-level estimates we can hazard a rough estimate of how much of the incumbency advantage can be attributed to risk aversion among American voters. Based on our first model, the predicted probability of an average voter supporting the House incumbent in 2008 was .78, while the probability for a risk neutral voter was .66. Thus, our model suggests that if the 2008 electorate included only risk neutral voters, incumbents would have performed approximately 12 points worse. This difference is significant, particularly given that 28 House incumbents won re-election by a margin of less than 12% over their challengers in 2008.

In a recent review of the literature on congressional elections, Carson and Roberts (Forth-coming) note that “the idea that incumbent office-holders have an advantage over their would-be challengers runs afoul of many tenants of democratic theory. [...] If incumbent legislators are gaining an electoral advantage due to the rules of the game being skewed in their favor, then this would be especially problematic and require some form of change.” Indeed, by focusing mostly on elite-centered explanations for the incumbency advantage, the institutional advantages enjoyed by incumbents become a frequent target for reformers.
seeking to make elections more competitive. Specifically, the incumbency advantage has been cited as an impetus for reforms like term limits, public funding of campaigns, and campaign finance regulations. Yet, our findings suggest that even in the absence of institutional advantages, incumbents would still hold an edge in their reelection campaigns. Thus, no menu of institutional reforms can be expected to eliminate the advantage incumbents hold over their challengers and scholars and reformers would do well to recognize that some of the “blame” for this advantage must be placed on a basic and widespread human aversion to risk.
Bibliography


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