

# Do Quality Candidates and Incumbents Still Matter in the Partisan World? Comparing Trends & Relationship Between Candidate Differentials and Congressional Election Outcomes, 1900-2022\*

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## Abstract

The increase in elite-level polarization and changing partisan nature of elections to the U.S. House led scholars to posit that candidate characteristics are minor considerations in determining these election outcomes. However, it is not clear if these trends extend to the U.S. Senate or if candidate considerations have lost the relatively minor predictive power they exhibited during the 2010s, particularly as partisanship continued to rise as a predictor of election outcomes. Using historical data on elections to the U.S. House and Senate from 1900 to the recent 2022 midterm elections, we test whether the incumbency advantage and candidate quality differentials are still salient predictors of congressional elections. We find that the incumbency advantage largely disappeared as a salient component of election outcomes for both chambers as partisanship increasingly shapes these outcomes. By contrast, we find that candidate quality differentials, while waning, still can play a considerable role in shaping congressional election outcomes, particularly in the Senate. We conclude by showing that the declining emergence of quality candidates may have played a pivotal role during the 2022 election cycle by costing Republicans control of the U.S. Senate.

**Key words:** congressional elections, U.S. Senate elections, incumbency advantage, candidate quality differentials, 2022 U.S. elections

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# 1 Electoral Context: McConnell's Majority 2022 Dreams Dashed?

*"I think there's probably a greater likelihood the House flips than the Senate. Senate races are just different — they're statewide, candidate quality has a lot to do with the outcome."*

- U.S. Senate Minority Leader Mitch McConnell (R-KY), August 18, 2022<sup>1</sup>

Heading into the homestretch of the 2022 midterm elections and in a rare public expression of campaign skepticism, U.S. Senate Minority Leader Mitch McConnell (R-KY) shared candid thoughts on the likelihood that Senate Republicans would emerge victorious during a public August event with the Northern Kentucky Chamber of Commerce. Despite needing to flip just one Democratic seat to win control of the United States Senate, Sen. McConnell expressed greater optimism that "House flips than the Senate", implicitly citing concerns over candidate recruitment relative to his co-partisan colleagues in the House, stating that "candidate quality has a lot to do with the outcome" of the Senate elections relative to those for the House. Indeed, at the root of Sen. McConnell's skepticism was the inability by the National Republican Senatorial Campaign Committee (NRSC) to fulfill its mandate to recruit enough high quality candidates to both defeat enough vulnerable Democratic Senators to win back a majority while holding potentially vulnerable seats left open by retiring Republican Senators. This skepticism drew a rare intraparty rebuke from the then-NRSC Chairman Sen. Rick Scott (R-FL), with Scott publicly stating in an interview that "Sen. McConnell and I clearly have a strategic disagreement here. . . we have great candidates."<sup>2</sup>. In the end, Sen. McConnell's skepticism, perhaps informed by his own experience as a former NRSC Chairman during the 1990's, appears to have won out over the optimism expressed by NRSC Chair Rick Scott, with Republicans failing to defeat any of the vulnerable Democratic Senators targeted and even losing the open seat of retiring Pennsylvania Republican Senator Pat Toomey.<sup>3</sup>

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<sup>1</sup>NBC News (8/18/2022): McConnell says Republicans may not win Senate control, citing 'candidate quality'

<sup>2</sup>Politico (9/1/2022): Defiant Rick Scott explains 'strategic disagreement' with McConnell over battle for Senate

<sup>3</sup>To that point, Sen. McConnell unsuccessfully served as NRSC Chair during the 1998 and 2000 election cycles,

However, in contrast to Sen. McConnell's assertion that candidate quality may be of consequence in determining election outcomes, contemporary scholars of congressional elections doubt that candidate-characteristics may be salient in determining electoral outcomes during the contemporary partisan era. To that point, [Jacobson \(2015\)](#) argues that the incumbency advantage may be declining as a salient factor in determining the outcome of U.S. House elections, with the traditional power of incumbency waning in recent election cycles as fit between candidate partisanship and constituency partisanship becomes the chief predictor of outcomes. Accounting for candidate quality and extending the seminal analysis by [Cox & Katz \(1996\)](#) into the 21<sup>st</sup> century, [Carson, Sievert & Williamson \(2020\)](#) find the "indirect" effect of candidate quality to be waning as U.S. House elections become more nationalized and partisan. While missing corresponding analysis in the U.S. Senate context, recent work suggests that Senate elections have nationalized to a very similar degree as those for the House ([Algara, 2019](#); [Amlani & Algara, 2021](#); [Sievert & McKee, 2019](#)). Indeed, given the similarities in nationalization and polarization of these two types of congressional elections (see [Algara & Johnston, 2021](#); [Algara, Hale & Struthers, 2022](#), for a direct comparison), the literature suggests that Sen. McConnell's assertion that candidate quality could be of consequence in the Republican pursuit for a majority could be overstated given the era of hyper-partisan and nationalized elections.

In this paper, we directly test the proposition of whether the candidate-based differentials of incumbency and candidate quality are declining in salience as factors in determining election outcomes in *both* the U.S. House and U.S. Senate, with a particular focus on the recent 2022 midterm elections as a comparison point. Using comprehensive data on U.S. House elections from 1900-2022 and novel data encompassing the entirety of the direct-election electoral period in the U.S. Senate from 1914-2022, we evaluate the relationship between electoral outcomes and our candidate-based differentials over time. We find strong support across two baseline model specifications for the intuitive proposition that incumbency and candidate quality advantages are declining as salient factors in elections for the House and Senate. While declining and

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with Senate Republicans failing to make any gains during the 1998 cycle (i.e., no party gained seats) and losing four seats during the 2000 cycle.

trending towards insignificance, we do find that candidate quality differentials still modestly shaped electoral outcomes in the U.S. Senate and may have cost Republicans the majority during the 2022 congressional midterms. However, we find that candidate-centered considerations are clearly declining as salient variables motivating electoral incomes in the face of rising salience of partisanship complimenting recent work by directly showing that elections for *both* chambers are exhibiting similar levels of nationalization even after accounting for incumbency and candidate quality into a model.

## 2 Candidate-based Differentials, Partisanship, and Congressional Elections

### 2.1 The Traditional Candidate-Based Models of Congressional Elections

Early studies of congressional elections in the U.S. noted that there was an electoral utility that a party gets by fielding an incumbent over a non-incumbent candidate, which is conceptualized as "inc incumbency advantage" (Key, 1955; Stokes & Miller, 1962; Price, 1965; Jones, 1965; Cummings Jr, 1966; Erikson, 1971, 1972; Mayhew, 1974*b,a*). Incumbents provide a party with greater electoral utility because they have access to resources and opportunities provided by their electoral office such as congressional frank, staffs, office allowances, constituency services, committee positions, and higher visibility (Mayhew, 1974*a*; Mann & Wolfinger, 1980; Cover & Brumberg, 1982). Early scholars also noticed that the incumbency advantage increased since the 1960s (Erikson, 1972; Mayhew, 1974*b*). Most notably, Mayhew (1974*b*) documented that the marginal or competitive congressional districts disappeared in the 1960s, calling this phenomenon the "vanishing marginals." This discovery spurred scholars to seek the factors responsible for this phenomenon, finding that the growing incumbency advantage is mainly attributed to growing resources and constituency services available to incumbents (Mayhew, 1974*a*; Fiorina, 1977; Mann &

Wolfinger, 1980; Cover & Brumberg, 1982; Serra & Cover, 1992) and increasing candidate-oriented voters (Cover, 1992; Ferejohn, 1977; Feno, 1975, 1977, 1978; Cain, Ferejohn & Fiorina, 1987).

Another body of research on congressional elections focuses on quality of the candidate. By quality candidate, we mean a candidate who has "the characteristics, abilities, and traits such as integrity and skills in governing that voters value intrinsically in their elected officeholders" (Buttice & Stone, 2012). Quality candidates provide a party with greater utility relative to amateur candidates because they have good reputation and campaign skills such as fundraising advantage over amateur candidates and experience running winning campaigns, and voters value personal quality in candidates as one of "valence issues" (Stokes, 1963; Buttice & Stone, 2012). We define "candidate quality advantage" as the electoral utility that a party gets by fielding a quality candidate over an amateur candidate (Cox & Katz, 1996).

Previous research shows that quality candidate matters in congressional elections. Jacobson (1989) shows that strategic high-quality candidates—candidates who have held elected office—mattered in House elections and its importance increased during the postwar era (see also Jacobson & Kernell, 1983), although there were partisan differences in experienced candidates' behavior, with experienced Republicans running for safer open seats, as compared to experienced Democrats (Bond, Fleisher & Talbert, 1997). Decomposing the incumbency advantage into direct effect, scare-off effect, and quality effect, Cox & Katz (1996) demonstrate that the growth of incumbency advantage results from the increase in the quality effect measuring how much candidates previously holding elective office affects the vote for House elections. This quality effect was important in House elections even prior to the advent of the Australian ballot, which weakened political parties by allowing candidates to appear on the ballot as individuals rather than presenting voters with a collective partisan choice (Engstrom & Kernell, 2005; Carson, Engstrom & Roberts, 2007). Furthermore, scholars show that quality of the candidate defined as integrity and skill also matters in congressional elections (Squire, 1992; McCurley & Mondak, 1995; Mondak, 1995; Kulisheck & Mondak, 1996; Stone, Maisel & Maestas, 2004; Buttice & Stone, 2012). Stone, Maisel & Maestas (2004) also find that high-quality incumbents deter potential candidates because challengers know

that voters value incumbents with high quality. Taken together, previous research suggests that candidate-based factors—incumbency and candidate quality—well explain congressional election outcomes especially in candidate-centered elections.

## 2.2 The Rising Role of Partisanship in Congressional Elections

There is good reason to expect that the traditional models of congressional elections may be less relevant today than they once were. Since the 1970s, congressional elections have been nationalized (Brady, D’Onofrio & Fiorina, 2000; Hopkins, 2018; Amlani & Algara, 2021), with partisanship playing an important role in these elections (Hetherington, 2001; Jacobson, 2019, 2020). Stone (2017) contends that nationalization of elections and strong partisanship are byproducts of increased polarization in Congress. The changing political environment asks for revision of the traditional models on congressional elections. Analyzing U.S. Senators’ behavior, Kaslovsky (2022) shows that Senators suffer from local visits and staff allocations at their home districts rather than benefit from them, suggesting that Feno’s (1978) theory of home style is no longer relevant in a polarized era. Bae & Algara (2022) also show that Feno’s (1975) paradox becomes weaker as Congress is increasingly polarized because incumbents lose support from opposing-partisans in a polarized age.

A growing body of research reports that the incumbency advantage has been in decline as partisanship becomes salient in voter decision making (Jacobson, 2015; LeVeck & Nail, 2016; Abramowitz & Webster, 2016; Sievert & McKee, 2019). Notably, Jacobson (2015) shows that the incumbency advantage decreases since the 1980s in conjunction with a growing party loyalty, declining ticket splitting, nationalization of elections, and other manifestations of strong partisanship of the electorate. Incumbents find it more difficult to be reelected in districts that lean toward the opposite party because voters increasingly vote a straight ticket (Abramowitz & Webster, 2016). Recent research also reports that the importance of candidate quality in congressional elections wanes (Carson, Sievert & Williamson, 2020). These studies show that partisanship becomes an important factor in determining congressional elections, while candidate-specific factors lose

their predictive powers.

Despite the compelling evidence of party-centered account of congressional elections, however, it remains unclear whether this tendency continues in the 2022 midterm elections. It is also unclear if the high-profile Senate undergoes the same process as the House does. Given the continued conditions of increasing polarization in Congress, nationalized elections, and growing party loyalty and straight ticket voting among citizens, we hypothesize that partisanship is a salient predictor for the 2022 elections with candidate-centered characteristics lowering their predictive powers. Furthermore, given the pronounced increase in ideological polarization in both chambers ([Algara & Johnston, 2021](#)) and recent works suggesting that Senate elections are also nationalized ([Algara, 2019](#); [Amlani & Algara, 2021](#); [Sievert & McKee, 2019](#); [Sievert & Williamson, 2022](#)), we expect similar patterns in the House and Senate in 2022. Although candidate-based differentials become less important in contemporary elections, nominating amateur candidates for Senate races can still be disadvantageous than nominating quality candidates. We expect that the failure of the Republican party to control the Senate, to some extent, results from nominating amateur candidates for Senate races. Taken together, our theoretical expectations can be more formally expressed as follows:

- ★  **$H_1$** : The incumbency advantage continues to disappear as a salient component of election outcomes for both chambers as partisanship increasingly shapes these outcomes.
- ★  **$H_2$** : Candidate quality advantage continues to disappear as a salient component of election outcomes for both chambers as partisanship increasingly shapes these outcomes.
- ★  **$H_3$** : The lack of quality candidates in key U.S. Senate races cost the Republicans the majority in the 2022 midterm elections.

### 3 Specifying Unified Models of Congressional Outcomes

#### 3.1 Bicameral Congressional Election & Candidate Data, 1900-2022

To test the theoretical focus of this manuscript assessing how candidate-based differentials and constituency partisanship correlate with congressional outcomes over time, we turn to two comprehensive datasets containing over a century of election results for both the U.S. House and Senate. The first dataset, building on data collected by [Carson, Sievert & Williamson \(2020\)](#) and [Jacobson \(2015\)](#), contains contextual and outcome data for all U.S. House elections from 1900 to 2022. We use data from [Carson, Sievert & Williamson \(2020\)](#) for elections during the pre-war period prior to 1946 and data from [Jacobson \(2015\)](#) for elections during the post-war period from 1946 to 2020. For the recent 2022 election cycle, we collect state-certified election outcome data compiled by *Reuters* and supplement this data with original data collection on candidate quality for this election cycle. To that end, we rely on campaign websites, news reports, *Ballotpedia*, and *OurCampaigns* to code the previous elected experience for both the Democratic and Republican general election candidates. Consistent with [Jacobson \(2015\)](#), we code general election candidates with previous elected experience as quality candidates and those without as amateur candidates. Given that the 2022 election cycle was a decennial redistricting cycle with districts potentially altered since 2020, we rely on updated partisanship data from *DailyKos Elections* containing the percentage of the vote won by Democrat Joe Biden and Republican Donald Trump under the new 2022 congressional district lines.<sup>4</sup> The *DailyKos Elections* data also contains incumbency data for each of the 2022 congressional election districts by coding where incumbents sought reelection during the 2022 redistricting year and which party controlled the seat heading into the 2022 general elections. We construct our 2022 House election results in a manner consistent with [Carson, Sievert & Williamson \(2020\)](#) and [Jacobson \(2015\)](#), allowing us to append our 2022 House

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<sup>4</sup>We also use these data to match the 2022 congressional districts to their 2020 geographic predecessors and also use these data to identify where House incumbents sought re-election. For example, this procedure allows us to code West Virginia's 1<sup>st</sup> congressional district as the geographic successor of West Virginia's 3<sup>rd</sup> congressional district since the state went from having three districts to one. There are a total of 94 congressional districts for the 2022 election cycle that had different district numbers than their geographic predecessors.

election dataset to create a comprehensive, and consistent, dataset of U.S. House elections from 1900 to 2022.

The second dataset tests how candidate-centered characteristics and partisan dynamics vary over time in predicting congressional election outcomes. This dataset focuses on U.S. Senate elections from 1914 to 2020. We build off Senate election data provided by [Algara \(2019\)](#) by collecting additional for the 2022 election cycle. Notably, [Algara \(2019\)](#) provides state-level U.S. Senate election outcome and candidate quality data from the beginning of the direct-election era in 1914 to the 2020 cycle.<sup>5</sup> To supplement this comprehensive dataset on Senate elections, we collect state-certified outcome data compiled by *Reuters* and candidate quality data from the previously mentioned sources of campaign websites, news reports, *Ballotpedia*, and *OurCampaigns*. Consistent with the U.S. House election data, we code whether non-incumbent Democratic and Republican general election candidates contained previous elected office when contesting an open seat or challenging an incumbent U.S. Senator for the 2022 election cycle. After constructing our 2022 Senate election dataset in a manner consistent with [Algara \(2019\)](#), we append our 2022 Senate election dataset to create a comprehensive, and consistent, dataset of all U.S. Senate elections from the first direct-election cycle provided by the ratification of the 17<sup>th</sup> amendment in 1914 to the recent 2022 election cycle.

### 3.2 Two Substantive Models of Congressional Election Outcomes

Now that we constructed a comprehensive dataset of congressional election outcomes, we turn to specifying our baseline models predicting congressional election outcomes at the levels of the (1) U.S. House and (2) U.S. Senate, respectively. As mentioned in our review of the standing literature on congressional elections, we focus on the salient predictors of election outcomes such as constituency partisanship (e.g., [Jacobson, 2015](#); [Algara, 2019](#)), the incumbency advantage (e.g.,

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<sup>5</sup>Note that the U.S. Senate election data compiled by [Algara \(2019\)](#) election outcomes from the beginning of the direct-election era in 1914 to the 2016 election cycle was updated to by [Algara, Hale & Struthers \(2022\)](#) to include results for the 2018 and 2020 election cycles. For county-level U.S. Senate election results covering the same time-period of 1914 to 2020, see [Amlani & Algara \(2021\)](#).

Gelman & King, 1990; Cox & Katz, 1996), and candidate quality differentials (e.g., Jacobson, 1989; Lublin, 1994). Our baseline models help assess the average relationship between the election outcomes and salient predictors of interest from 1900 to 2022 for the U.S. House context and 1914 to 2022 for the U.S. Senate context.<sup>6</sup>

$$Dem\ Margin_{it} = \alpha + \beta_1 \cdot IA_{it} + \beta_2 \cdot QA_{it} + \beta_3 \cdot CP_{it} + \beta_4 \cdot SP_{it} + \sigma t + \epsilon_t \quad (1)$$

$$Incumbent\ Party\ Margin_{it} = \alpha + \beta_1 \cdot IA_{it} + \beta_2 \cdot QA_{it} + \beta_3 \cdot CP_{it} + \beta_4 \cdot SP_{it} + \sigma t + \epsilon_t \quad (2)$$

To that end, we specify our baseline models using the following two equations. In equation 1, we construct a revised version of Jacobson's (2015) model of House elections with the outcome variable  $Dem\ Margin_{it}$  measuring the two-party margin between the Democratic and Republican candidate in constituency  $i$  (i.e., congressional district or state) at election  $t$ .<sup>7</sup> Positive values of this outcome variable indicate a Democratic victory while negative values indicate a Republican victory. To measure the incumbency advantage  $IA_{it}$  in equation 1, we rely on the incumbency measure provided by Gelman & King (1990) by coding incumbency as a trichotomous variable, coded -1 if a Republican incumbent was nominated for re-election, 0 for an open seat, and 1 if a Democratic incumbent was nominated for re-election in constituency  $i$  at election  $t$ .

With respect to the other candidate-centered predictor of election outcomes, we code the candidate quality differential  $QA_{it}$  in a manner consistent with Cox & Katz (1996) coded as -1 if the Republicans enjoyed a candidate quality advantage, 0 if neither party enjoyed a quality advantage, and 1 if the Democrats enjoyed a quality advantage in constituency  $i$  at election  $t$ . We consider a quality advantage for either party to be the case in which a given party's candidate is running against a political amateur. For example, we code this variable -1 (1) when a Republican

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<sup>6</sup>By considering candidate quality differentials as a salient predictor of congressional election outcomes, all forthcoming models only consider election contests contested by *both* major political parties. Indeed, 10.76% (2,869 cases) of House elections from 1900-2022 and 7.56% (145 cases) of Senate elections from 1914-2022 are uncontested by one of the major two-parties. There are a total of 26,672 House elections and 1,919 Senate elections during our time periods of interest.

<sup>7</sup>Jacobson's (2015) model serves to estimate the incumbency advantage in U.S. House elections and is a modified version of the Gelman & King (1990) model estimating the incumbency advantage in the U.S. House over time.

(Democratic) incumbent draws an amateur Democratic (Republican) challenger without prior elected experience. In the context of open seats, we code this variable in a similar fashion, with the candidate quality differential taking the form of -1 (1) when a Republican (Democratic) non-incumbent quality candidate draws an amateur Democratic (Republican) candidate.

Our last theoretical variable measuring the partisanship of a given constituency  $CP_{it}$  in congressional district or state  $i$  at election  $t$  takes the form of the two-party margin between the Democratic and Republican candidate in the preceding presidential election, which is consistent with [Jacobson \(2015\)](#). For example, during the 2022 and 2020 election cycle this value of constituency partisanship  $CP_{it}$  takes the form of the two-party margin between then-Former Democratic Vice President Joe Biden and then-Republican President Donald Trump during the 2020 presidential election, with positive values indicating a Democratic-leaning constituency and negative values indicating a Republican-leaning constituency.<sup>8</sup> Consistent with [Jacobson's \(2015\)](#) model of U.S. House elections, this approach of measuring constituency partisanship with presidential partisan performance allows us to pool all of our observations and draw interelection comparisons between districts, including years ending in "2" which follow the decennial reapportionment and redistricting. Moreover, this measure of constituency partisanship  $CP_{it}$  allows us to conceptualize the relative *partisan advantage* for a given party in constituency  $i$  at election  $t$ , with higher positive values indicating a greater Democratic advantage in the constituency and lower negative values indicating a greater Republican advantage in the constituency.<sup>9</sup>

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<sup>8</sup>Note that this 2022 value of  $CP_{it}$ , in the context of the U.S. House, takes the form of the two-party margin in the 2020 presidential election calculated under the *new* district lines used for the redistricting 2022 election cycle. For example, the 2022 and 2020 election year values of  $CP_{it}$  for New Mexico's 2<sup>nd</sup> congressional district is  $\approx 6.00$  and  $-12.04$ , reflecting that in 2020 NM-2 was a Republican-leaning district prior to being redistricted to be a Democratic-leaning district by coordination of the Democratic legislature and Democratic Governor. Indeed, New Mexico Democrats successfully redrew NM-2 to be such a Democratic-leaning district that the incumbent Republican Rep. Yvette Herrell was unseated during the 2022 election cycle, giving Democrats control of all three congressional districts and—coupled with being represented by two Democratic Senators—a completely Democratic congressional delegation in Washington.

<sup>9</sup>Another advantage of using the presidential vote to construct a measure of constituency partisanship is that we hold the candidates constant across all districts since both the Republican and Democratic presidential candidates appear on the ballot in all congressional districts and states. As opposed to constructing the measure from the lagged vote won by the Democratic House or Senate candidate in the preceding election (the approach used by [Gelman & King, 1990](#)), our measure allows for cross-constituency comparison in partisan preference since each the choice between two presidential candidates does not vary across districts in a given presidential election cycle and the measure is immune from other non-partisan considerations in its construction, such as the influence of a popular

In addition to this model, we specify a similar model of congressional election outcomes with a differing coding in equation 2. Rather than coding our outcome variable and covariates in a partisan direction, we code all variables in the direction of the *incumbent party* controlling the seat. As such, the outcome variable measures two-party margin between the incumbent party holding the legislative seat directly prior to the election and the challenging out-party in constituency  $i$  (i.e., congressional district or state) at election  $t$ . Positive values indicate a victory for the incumbent party in constituency  $i$  in election time  $t$  while negative values indicate a loss for the incumbent party. For example, this outcome variable takes the form of -2.12% during the 2022 open-seat election in Oregon's 5<sup>th</sup> congressional district, reflecting a narrow Democratic loss of a seat they held since 1996. By contrast, this value takes the form of 45.36% in the 2022 election for Oregon's 3<sup>rd</sup> congressional district, reflecting a robust victory for the incumbent party (i.e., Democrats) in the liberal Portland-based district they have held since 1954.<sup>10</sup>

We code the incumbency advantage ( $IA_{it}$ ) in equation 2 as a simple binary variable coded 1 if the incumbent party's incumbent was nominated for re-election or 0 if not. Similarly, we code the quality advantage ( $QA_{it}$ ) as a binary indicator coded 1 if the incumbent party holds a quality advantage over the opposing party (i.e., a quality non-incumbent candidate or incumbent candidate facing off against an amateur candidate in a general election) or 0 if the incumbent party does not have a quality advantage over the opposing party. Lastly, we specify a measure of constituency partisanship ( $CP_{it}$ ) in a similar manner as equation 1, with this measure capturing the two-party margin between the incumbent party holding the legislative seat and the opposing party such that positive values indicate that the incumbent party's presidential nominee carried the constituency (i.e., congressional district or state) during the prior presidential election and negative values indicate a loss for the incumbent party's presidential nominee in the constituency. Similar to equation 1, positive values indicate a *partisan advantage* for the incumbent party holding the seat and negative values indicate a *partisan disadvantage* for the incumbent party holding the

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local incumbent that sought office in the constituency in the previous lagged election.

<sup>10</sup>By contrast with equation 1, this specification in equation 2 omits newly created congressional districts resulting from reapportionment since no party controls a newly created congressional district.

seat.<sup>11</sup>

For both of our pooled baseline models articulated in equations 1 and 2, we include yearly fixed-effects  $\sigma t$  to account for time-varying heterogeneity in state or congressional district  $i$  units over time. Specification of our models with yearly fixed-effects  $\sigma t$  allows us to estimate a baseline relationship between election outcomes and each of our covariates of interest (i.e., incumbency, candidate quality differential, and constituency partisanship) *across* congressional districts for the U.S. House and states for the U.S. Senate. We also include a control seat partisanship variable  $SP_{it}$  accounting for which party controls the seat heading into the election at time  $t$ .<sup>12</sup> Lastly, we cluster our standard errors by election year to account for the fact that our pooled baseline models leverage individual congressional elections in constituency  $i$  nested within a specific election cycle  $t$ .

$$\begin{aligned} Dem\ Margin_{it} = & \alpha + \beta_1 \cdot IA_{it} + \beta_2 \cdot QA_{it} + \beta_3 \cdot CP_{it} + \beta_4 \cdot SP_{it} \\ & + \beta_5 \cdot (IA_{it} \times \sigma t) + \beta_6 \cdot (QA_{it} \times \sigma t) + \beta_7 \cdot (CP_{it} \times \sigma t) + \epsilon_t \quad (3) \end{aligned}$$

$$\begin{aligned} Incumbent\ Party\ Margin_{it} = & \alpha + \beta_1 \cdot IA_{it} + \beta_2 \cdot QA_{it} + \beta_3 \cdot CP_{it} + \beta_4 \cdot SP_{it} \\ & + \beta_5 \cdot (IA_{it} \times \sigma t) + \beta_6 \cdot (QA_{it} \times \sigma t) + \beta_7 \cdot (CP_{it} \times \sigma t) + \epsilon_t \quad (4) \end{aligned}$$

Given our interest in assessing how constituency partisanship, the incumbency advantage, and the candidate quality advantage shape congressional elections over time in both the House and Senate, we modify our pooled baseline models in equations 1 and 2 to include an interaction

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<sup>11</sup>For example, during Democratic U.S. Senator Joe Manchin's 2018 re-election bid in West Virginia, this value of constituency partisanship takes the form of -44.27%, indicating a stark *partisan disadvantage* for Senate Democrats as they sought to defend a vulnerable incumbent in what has become a very Republican state. By contrast, this value takes the form of 51.39% during Republican U.S. Senator John Barrasso's 2018 re-election bid in Wyoming, indicating a stark *partisan advantage* for Senate Republicans defending a seat in perhaps the most Republican-leaning state in the nation.

<sup>12</sup>For House elections, this is coded as a trichotomous variable indicating -1 if controlled by the Republicans, 0 if a new seat due to reapportionment, and 1 if controlled by the Democrats. For the U.S. Senate, this variable takes a simple binary, coded 0 for a Republican seat and 1 for a Democratic seat. For the purposes of our analysis and given explicit support by the Democratic Senatorial Campaign Committee (DSCC) in each of their Senate bids, we consider the independent candidacies of Angus King (ME) and Bernie Sanders (VT) as Democratic candidacies. Moreover, we consider the independent challenge of Evan McMullin to Republican U.S. Senator Mike Lee in the 2022 Utah Senate race to be a Democratic candidacy given the explicit endorsement of McMullin by the Utah Democratic Party and the lack of a Democratic candidate in that race.

between each of our covariates of interest and our time fixed-effect parameters  $\sigma_t$ . Seen in equations 3 and 4, this approach allows for estimation of each covariate's marginal effect on election outcomes each given election year  $t$ . Indeed, this respecification of our baseline models in equations 3 and 4 allows us to estimate the marginal effects of incumbency, candidate quality, and constituency partisanship on election outcomes for the recent 2022 cycle and all preceding election cycles (i.e., 1900-2020 for the U.S. House and 1914-2020 for the U.S. Senate). This approach allows us to assess temporal variation in how incumbency, candidate quality, and constituency partisanship shape congressional election outcomes over time. As we highlight in the preceding theoretical discussion, we expect the recent 2022 election cycle to feature a pronounced decline in incumbency and candidate quality advantages relative to earlier election cycles as congressional election outcomes are increasingly decided by constituency partisanship ([Jacobson, 2015](#)). Given the pronounced increase in partisan ideological polarization between both congressional parties independent of chamber ([Algara & Johnston, 2021](#)) and the resurgence of partisan voting in the electoral behavior of the mass public ([Hetherington, 2001; Jacobson, 2015](#)), we expect the rise of constituency partisanship as a salient predictor of congressional election outcomes to come at the expense of the salience of candidate-centered differentials (i.e., incumbency and candidate quality) as determinants of these election outcomes.

## 4 Results: The Rise of Partisanship at the Expense of Candidate Differentials

### 4.1 Baseline & Temporal Variation in Determinants of Congressional Elections

[Figure 1](#) conveys the results of our pooled models establishing the baseline correlation between congressional election outcomes and our three covariates of interest.<sup>13</sup> As mentioned earlier, we

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<sup>13</sup>In the appendix, we include a series of robustness checks that take into account uncontested races rather than the subset of congressional elections contested by both major parties reported in the manuscript. These robustness

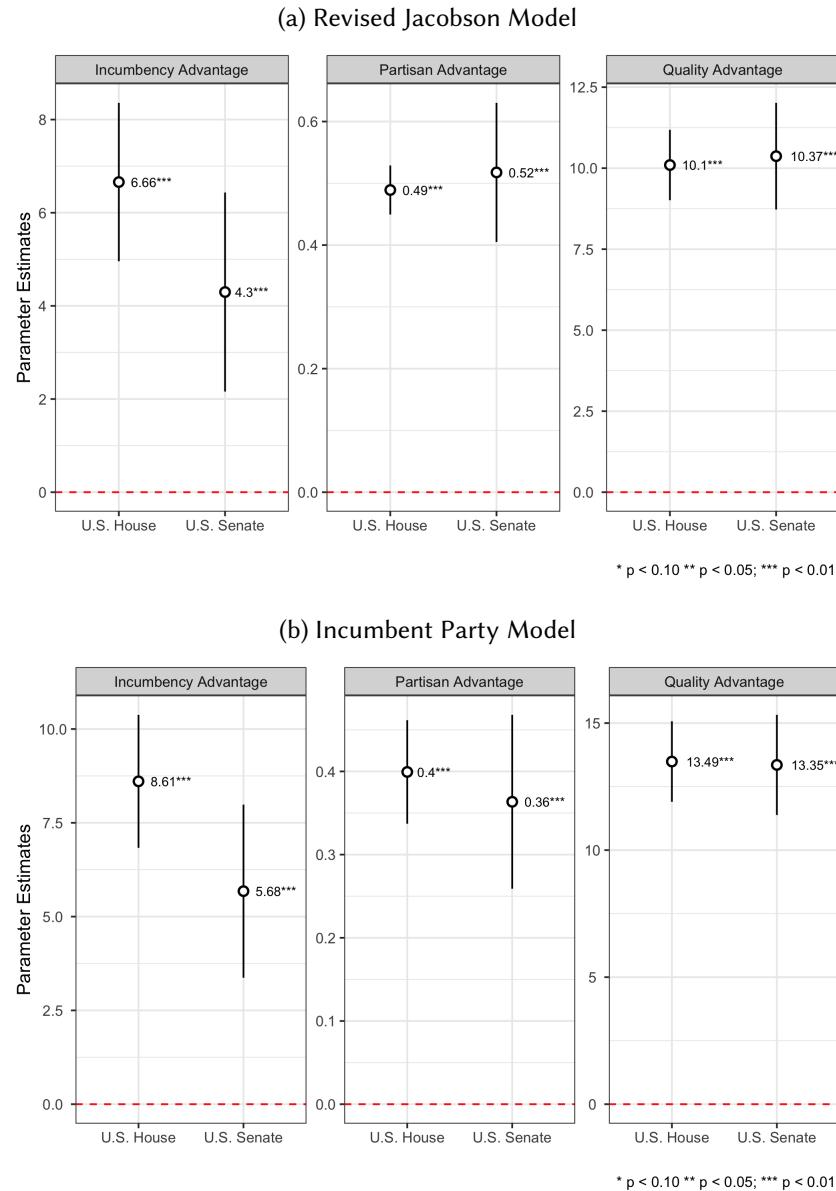
estimate each of our models separately for both levels of congressional election competition found in the House and Senate, respectively. We also estimate two differing model specifications of congressional election outcomes which vary in our measurement of key variables. [Figure 1A](#) presents the baseline results for equation 1, which we call the revised Jacobson model given our modification of [Jacobson's \(2015\)](#) model of congressional elections. [Figure 1B](#) presents the baseline results for equation 2, which we call the incumbent party model. As [Figure 1](#) shows, there is a pronounced incumbency advantage in modern congressional elections. Indeed, [Figure 1A \(B\)](#) shows that a party renominating an incumbent for a general election contest amounts to a 6.7% (8.61%) advantage in U.S. House elections while accounting for a smaller 4.3% (5.68%) in U.S. Senate elections. Consistent with this notion that elections for the United States Senate are more competitive due to drawing a greater attention profile and more expenditures of campaign resources (see [Gronke, 2001](#), for a comprehensive comparison between the campaign dynamics separating House and Senate elections), the incumbency advantage is lower in the higher-profile Senate relative to the lower-profile House.

Unsurprisingly, we also find a significant relationship between constituency partisanship and congressional election outcomes in both chambers. As [Figure 1A \(B\)](#) shows, the constituency partisan advantage coefficient is 0.49% (0.40%) in the House Jacobson (incumbent party) model while this constituency partisanship coefficient takes the form of 0.52% (0.36%) for the Senate Jacobson (incumbent party) model. To interpret the magnitude of this relationship between consider the example of a constituency with a 4% Democratic partisan advantage (i.e., a constituency with a 52% Democratic preference and 48% Republican preference). In this example and using the results of the revised Jacobson model, Democrats would enjoy roughly a 1.96% ( $4 \times 0.49$ ) *partisan* advantage in House elections and a similar 2.08% ( $4 \times 0.52$ ) advantage in Senate elections.

Lastly, we assess the relationship between a candidate quality advantage and congressional election outcomes. As [Figure 1A \(B\)](#) shows, the candidate quality advantage coefficient is similar for both types of elections, with this advantage representing a boost of 10.10% (13.49%) in the checks including the uncontested cases confirm all forthcoming results reported in the manuscript.

House Jacobson (incumbent party) model while this constituency partisanship coefficient takes the form of 10.37% (13.35%) for the Senate Jacobson (incumbent party) model. Over our pooled election years, this represents a stark advantage for a given party if they are able to recruit and nominate quality candidates in races where the opposing party nominates an amateur candidate lacking prior elected experience.

Figure 1: Pooled Baseline Incumbency Advantage, Quality Advantage, & State Partisanship Dynamics in U.S. House & Senate Elections



Now that we established a baseline relationship between our covariates of interest and congressional election outcomes, we turn to evaluating how the incumbency advantage, quality candidate, and constituent partisanship dynamics vary over time. As mentioned previously in the discussion of equations 3 and 4, we interact our yearly fixed-effects with each of our covariates of interest to assess variation over time in how incumbency, candidate quality, and partisanship influence election outcomes for the U.S. House and Senate. The panels of [Figure 2](#) shows, descriptively, how the (1) incumbency advantage, (2) quality advantage, and (3) constituency partisanship (i.e., partisan advantage) vary over time as predictors of congressional elections in both U.S. House and Senate elections according to our Jacobson and incumbent party model specifications in the form of ordinary least squares (OLS) regression point-estimates and estimated 95% confidence intervals clustered by election cycle.

Turning to assessing the incumbency advantage over time, [Figure 2A](#) and [Figure 2B](#) present a clear picture showing that independent of model specification, the incumbency advantage reaches its high watermark around the 1980s. In [Figure 2A](#) (B), we find that the incumbency advantage is -0.95 (3.06) for the U.S. House and insignificant (2.52) for the U.S. Senate during the 2022 congressional election cycle. We note that we get inconsistent results as to what the substantive incumbency advantage amounted to during the 2022 U.S. House elections, with the revised Jacobson model reporting a -0.95% incumbency advantage and the incumbent party model presenting a 3.06% incumbency advantage. Likewise, the revised Jacobson model shows an insignificant estimate for the Senate incumbency advantage during the 2022 election cycle while the incumbent party model shows a 2.52% incumbency advantage during this same cycle. Independent of which model is used to draw inferences about the incumbency advantage, our analysis presents two clear conclusions: (1) the 2022 incumbency advantages for both the House and the Senate are far below the baseline incumbency advantage since 1900 estimated in [Figure 1](#); and (2) complimenting the work by [Jacobson \(2015\)](#) and [Algara \(2019\)](#), the incumbency advantage continues to decline well into the contemporary period, thus increasingly becoming a non-significant factor in both House and Senate elections.

Turning to [Figure 2C](#) and [Figure 2D](#), we find similar evidence as previously reported that candidate-centered characteristics are declining as substantive determinants of House and Senate elections over time. In [Figure 2C](#) (D), we find that the advantage presented to a party for nominating a quality candidate over an amateur candidate amounted to 0.58% and 7.48% (2.02% and 2.40%) in the 2022 House and Senate elections according to the revised Jacobson model (incumbent party model), respectively. Again, these 2022 cycle estimates for the candidate quality advantage are far below the baseline estimates of 10.1% (13.49%) and 10.37% (13.35%) we find for the House and Senate contexts in our pooled revised Jacobson model (incumbent party model) estimates derived from equation 1 (equation 2). Moreover, as the loess curve shows in [Figure 2C](#) and [Figure 2D](#), we find that the advantage enjoyed by a given party for nominating a quality candidate over an amateur candidate is quickly approaching the 0% line during the contemporary period of congressional elections, with the high-water mark for a quality advantage emerging around the 1920's for the U.S. House and the 1980's for the U.S. Senate. *Coupled together with our results for the incumbency advantage, we find further evidence that candidate-centered differentials are declining over time and are far below the baseline estimates found in modern congressional elections since 1900 independent of how we choose to measure these differentials.*<sup>14</sup>.

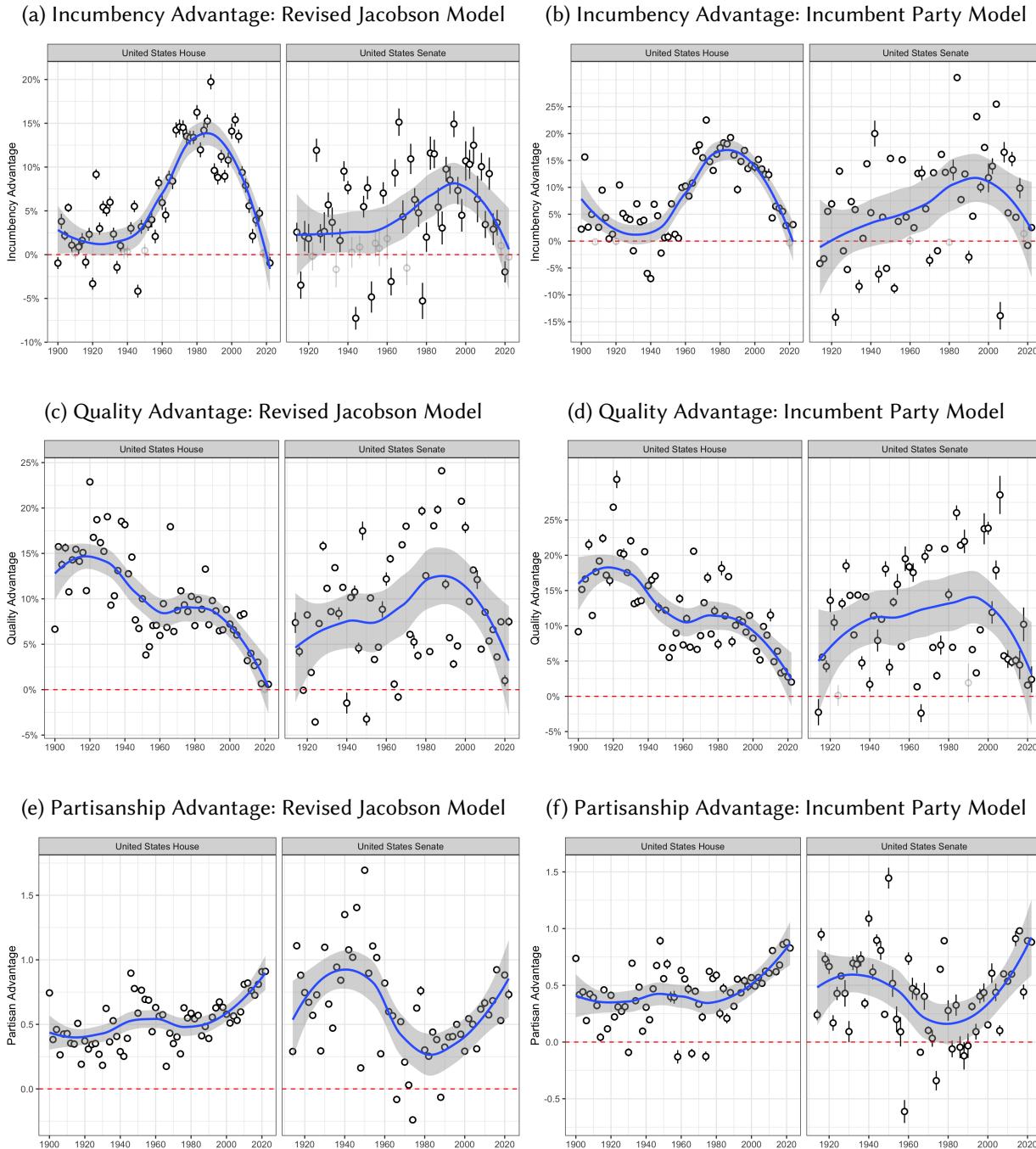
By stark contrast, and unsurprisingly, we find that constituency partisanship increasingly provides a partisan advantage fielding a candidate in a state where a party enjoys broad support. As [Figure 2E](#) (F) shows, the partisan advantage amounted to 0.91% (0.83%) and 0.73% (0.88%) in House and Senate elections, respectively, during the 2022 election cycle. For example an 8% partisan advantage—such as that enjoyed by Ohio Republicans defending an open U.S. Senate seat during the 2022 election in a state carried by Former Republican President Trump by 8% in the previous 2020 presidential election—provided the favored in-party with a 7.28% and 5.84% advantage in the 2022 House and Senate elections, respectively. The loess regression curves presented in [Figure 2E](#) and [Figure 2F](#) display that this partisan advantage is consistently growing since the 1900 U.S.

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<sup>14</sup>Indeed, as the loess regression curves show in [Figure 2](#) Panels A-D, the relationship between candidate-centered differentials are in clear decline if we assess them in the revised Jacobson model or the incumbent party model specifications

House elections and 1914 U.S. Senate elections. *Indeed, this finding complements previous work at multiple levels of electoral competition (see Jacobson, 2015; Hopkins, 2018; Algara, 2019; Amlani & Algara, 2021; Rogers, 2023, for a comprehensive treatment of this literature) that constituency partisan advantages are increasing in salience as factors determining electoral outcomes at the expense of waning candidate-centered characteristics, such as the incumbency advantage and quality advantage typically enjoyed by a party.* While we stress that both incumbency and quality-based differentials still correlate to a substantive degree with congressional election outcomes, particularly in the case of the United States Senate, they are rapidly declining in the salience as pivotal factors given the trends we find in [Figure 2](#) as electoral outcomes become increasingly determined by the partisan preferences of constituencies tasked with deciding which candidate gets selected to represent their views on Capitol Hill.

**Figure 2: Temporal Variation in Incumbency Advantage, Quality Advantage, & Partisanship Dynamics in U.S. House & Senate Elections**



## 4.2 Assessing Quality Challenges to Incumbent Re-Elections

In the previous section, we assess the relationship between election outcomes and a set of three main predictor variables consisting of incumbency advantage, candidate quality advantage, and constituency partisanship for both House and Senate elections. While informative, this approach does not allow us to speak to how these characteristics, particularly the role of quality challengers in opposing the re-election bids of incumbents. To that end, we assess our models in the subset of House and Senate elections that are incumbent re-election bids. Indeed, this accounts for the vast array of cases of House and Senate elections in our data, with over 87% and 77% of these elections featuring an incumbent seeking re-election in a general election contest.<sup>15</sup>

In this analysis, our main interest is the relationship between quality challenger opposition and incumbent performance across both election types in our baseline models and models providing for temporal variation. To estimate this in a straight forward manner, we respecify our incumbent party models in equations 2 and 4 with a new binary measure coded as 1 if an incumbent faced a quality challenger in the general election and 0 if the incumbent faced an amateur challenger rather than the quality advantage binary indicator. Note that this respecification of equations 2 and 4 results in the dropping of the incumbency advantage covariate, since we hold incumbency constant by focusing solely on incumbent re-election bids. As mentioned earlier, we define quality challengers in the standard way as candidates currently or previously holding elected office and amateur challengers as those lacking previous political experience (Jacobson, 1989; Cox & Katz, 1996). As such, the coefficient for the quality challenger variable should be negative, indicating that an incumbent's predicted margin in the previous election should decline when being opposed by a quality challenger relative to an amateur challenger.

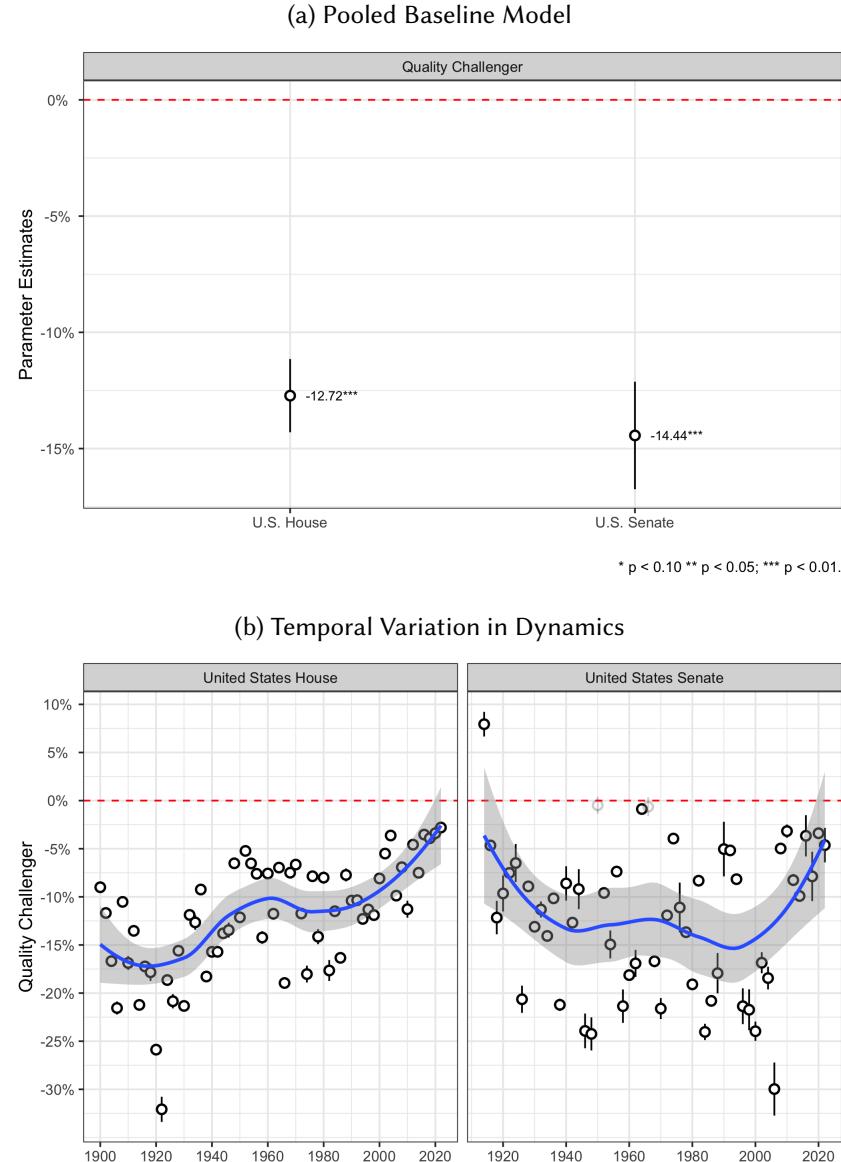
[Figure 3A](#) articulates the baseline estimated relationship between facing a quality challenger and an incumbent's margin in the ensuing general election while [Figure 3B](#) displays how this estimated relationship varies over time.<sup>16</sup> [Figure 3A](#) shows that the baseline relationships are -

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<sup>15</sup>As such, 23,143 of our 26,672 House election cases from 1900-2022—and 1,488 of our 1,919 Senate election cases from 1914-2022—are elections with an incumbent on the general election ballot.

<sup>16</sup>In the appendix, we also present the the relationship between constituency partisanship and election outcomes

Figure 3: Baseline & Temporal Variation in Quality Challenges to Incumbents in U.S. House & Senate Elections



12.72% and -14.44% in the House and Senate contexts, respectively. Unsurprisingly, both incumbent members of Congress and U.S. Senators do similarly, and markedly, worse when facing off in a general election against a quality challenger rather than a political amateur. However, this quality challenger “penalty” for incumbents, especially in the House, appears to be waning over time. As during incumbent re-election bids. These results are very similar to the preceding results estimating the partisan advantage, with constituency partisanship playing an increasing role in shaping electoral outcomes.

[Figure 3B](#) shows, the quality challenger coefficients approach 0% for both the House and Senate over time. During the 2022 midterm elections, the predicted penalties of facing a quality challenger relative to an amateur challenger were -2.79% and -4.62% for the House and Senate, respectively. Indeed, the quality challenger estimates during the 2022 elections were only about 22% and 32% of the pooled estimates, suggesting a further waning of a candidate differential from the baseline estimate. Further articulating this decline can be found in the U.S. House, with the 2020 and 2022 elections reporting the smallest quality challenger “penalty” paid by incumbents since 1900, with incumbents only losing 3.38% and 2.79% in electoral margin when facing a quality challenger relative to an amateur challenger. While we note that these quality challenger estimates on incumbent re-election bids may be endogenous given that weak and unpopular incumbents are likelier to draw quality challengers than popular incumbents (see [Highton, 2008](#)), we contend that the declining “quality challenger penalty” for incumbents is consistent with our previous findings showing a descriptive decline in the salience of candidate-centered differentials as determinants of congressional election outcomes. Taken together, this assessment of incumbent re-election bids provides additional evidence that candidate-differentials, while still a salient factor in shaping congressional election outcomes, are indeed waning over time and during the contemporary electoral period.

## 5 Increasing Predictive Power of Partisanship in Electoral Outcomes

The preceding evaluations of our electoral models present one clear finding that candidate-based differentials are still significant predictors in shaping congressional election outcomes while their relationship with the electoral outcomes is shrinking over time as constituency partisanship becomes a more salient predictor of elections for the U.S. House and Senate, respectively. Indeed, our preceding results show that: (1) the incumbency advantage; (2) the candidate quality advantage; and (3) the quality challenger penalty for incumbents are increasingly approaching zero over

time. In other words, while these candidate-based differentials still have a measurable significant relationship with election outcomes, they are increasingly close to becoming insignificant predictors of congressional elections as we move into the contemporary period of partisan-centered congressional elections.

In this section, we more explicitly test the proposition that partisanship alone explains much more of the variation in congressional election outcomes at the expense of a *full* model of election outcomes incorporating both partisanship and candidate-based differentials (i.e., the incumbency advantage and quality advantage) as salient explanatory variables. To test this proposition, we conduct the following two-step simple analysis. First, we respecify equations 1 and 2 to include constituency partisanship as the only predictor variable of congressional election outcomes (i.e., the Democratic-Republican margin in equation 1 and the incumbent party-opposing party margin in equation 2). We run these two bivariate models for each cross-sectional election year and note the proportion of the variance in election outcomes that are solely explained by constituent partisanship as articulated by the cross-sectional  $R^2$ . Secondly, we add all the covariates found in the *full* model of equations 1 and 2, where election outcomes are modelled as a function of the incumbency advantage, the quality advantage, constituency partisanship, and seat partisanship. We take the cross-sectional  $R^2$  of these *full* congressional election models and subtract it with the bivariate partisanship-only models, to articulate the amount of additional variance in outcomes explained by the “full model” over the partisanship-only bivariate models. Using this analysis, we assess whether: (1) constituency partisanship (i.e., the partisan advantage) alone explains most of the variance in congressional election outcomes over time; and (2) whether adding seat partisanship and the additional candidate-centered predictor covariates (i.e., the incumbency and quality advantage explanatory variables) improves the overall fit of the model.

[Figure 4](#) presents the results of the analysis in which we model the cross-sectional model  $R^2$  over-time and in the pooled baseline context, with the blue bars articulating the proportion of the variance explained by the bivariate model and the red bars showing how much additional variance is explained when specifying the “full” model. [Figure 4A](#) shows this analysis for U.S.

House elections from 1900-2022 while [Figure 4B](#) shows this analysis for U.S. Senate elections from 1914-2022; with the top half of each panel showing the results for the revised Jacobson model and the bottom half showing the results for the incumbent party model. Looking at the first column of [Figure 4A](#) corresponding to the pooled baseline model, we find that in the Revised Jacobson model (incumbent party model) specification, constituency partisanship only explains about 0.54 (0.28) of the variance while the full model incorporating the candidate-differential predictors explains about 0.77 (0.39) of the variance. This represents a modest increase of predictive power, as the  $R^2$  rises only by 0.23 if one specifies the “full” model with additional covariates beyond partisanship. Moreover, the “full” model does not add additional predictive power over time. Indeed, as [Figure 4A](#) shows for the 2022 election cycle, the bivariate model explains 0.964 (0.827) percent of the variance in the revised Jacobson model (incumbent party model) while the “full” model explains almost an identical amount at 0.964 (0.903), thus suggesting that adding additional predictor variables to the model does not increase the predictive power of our congressional election models over time, as the gap between the blue and red bars in the figure shrinks to almost an indiscernible amount. Indeed, for the revised Jacobson model found in [Figure 4A](#), we find that since 2012 the “full” model does not predict more than 0.08 percent of the variance above the bivariate partisanship-only model, with the results of the 2018, 2020, and 2022 model showing that the “full” model does not predict even 0.01 percent more of the variance than the bivariate model for the three most recent election cycles.

We find the same results when assessing U.S. Senate elections in [Figure 4B](#). While slightly less consistent than the results for the House elections, recent election cycles show that candidate-based differentials do not add much in terms of the predictive power of the simple bivariate model. In the last three election cycles in 2018, 2020, and 2022; the “full” model only helps explain a mere 0.10, 0.08, and 0.03 more of the variance over the bivariate model according to the revised Jacobson model. This same dynamic is confirmed, to a lesser extent, in the incumbent party model. Taken together, both figures find robust support that partisanship alone is increasingly predictive of congressional election outcomes, with inclusion of candidate-centered variables not adding

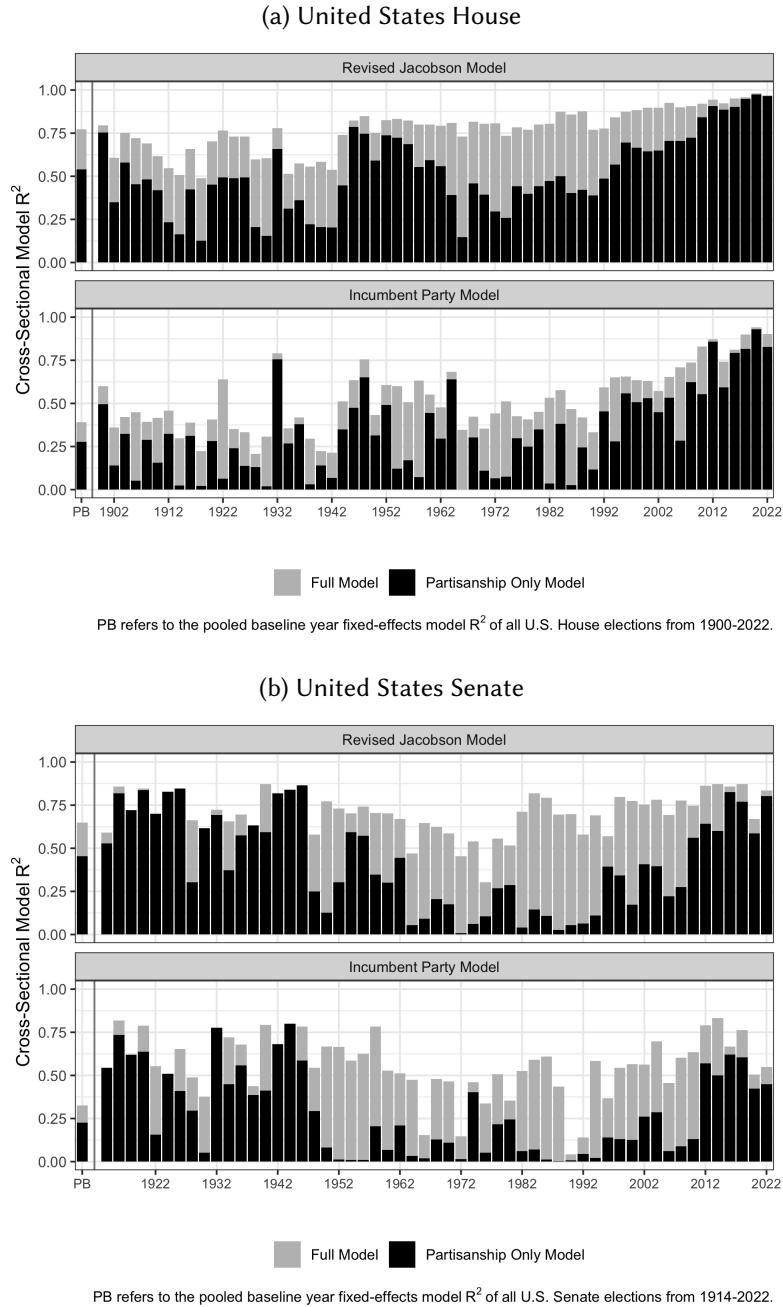
much explanatory power to baseline models of congressional election outcomes. *In other words, candidate-centered differentials are of lesser consequence as predictors of U.S. House and Senate elections, with constituency partisanship alone explaining about all the variance in congressional election outcomes independent of the addition of candidate-centered differentials traditionally argued as salient predictors of these outcomes, such as the incumbency advantage and candidate quality advantage.*

## 6 Did Quality Challengers Cost Senate Republicans the Majority in 2022?

We motivate this manuscript by highlighting the skepticism by Senate Minority Leader Mitch McConnell (R-KY) regarding the likelihood of Senate Republicans capturing a U.S. Senate Majority during the 2022 midterm elections. In this manuscript, we provide evidence warranting this skepticism by finding that, despite the rising role of partisanship as a determinant of congressional election outcomes, candidate-based differentials still play a significant but waning role in congressional election outcomes. According to the results of our revised Jacobson model, a variant of a convention model predicting congressional election outcomes (see [Jacobson, 2015](#); [Gelman & King, 1990](#); [Cox & Katz, 1996](#); [Carson, Sievert & Williamson, 2020](#)), the candidate quality advantage amounted to about 7.49% in the U.S. Senate context while it played a significantly minor role in U.S. House elections, with this advantage corresponding to about 0.58%.

To evaluate whether Sen. McConnell's pessimism regarding the likelihood of winning the Senate was well founded given the lack of quality candidates nominated in key races, we qualitatively assess the counterfactual of whether nominating a quality candidate over an amateur candidate may have made a difference in the election outcome. This counterfactual exploration would provide context as to whether the modest, albeit decreasing, role of candidate quality differentials in congressional elections may have proven to be pivotal during the 2022 U.S. Senate elections. To do this, we subset the 2022 U.S. Senate outcomes that were decided by less, in terms

Figure 4: Predictive Power of Both Models in U.S. House & Senate Elections



of two-party margin separating the Democratic and Republican candidate, than the significant point-estimate for the candidate quality advantage, which is 7.49% [ $\beta = 7.49$ , 95% CI: 7.01, 7.97].<sup>17</sup>

<sup>17</sup>We note that this estimate is taken from the model articulated in equation 3, which estimates the marginal effect of candidate quality differential for each individual election cycle from 1914 to 2022 using Jacobson's (2015) framework.

This resulted in identification of seven Senate races that were decided by less than the quality advantage coefficient for the 2022 election cycle. We then identify the races in which a “quality challenge counterfactual” could have taken place. For example, in Arizona, the “quality challenge counterfactual” is a Republican quality candidate opposing a Democratic incumbent, given that the observed quality challenge was a Republican amateur opposing a Democratic incumbent. In this example, the quality candidate counterfactual takes place with the Republican candidate given the presence of a Democratic incumbent in the race. In another example, consider the Nevada U.S. Senate race between Former Republican Attorney General Adam Laxalt and Democratic Senator Catherine Cortez Masto. In this example, the “quality challenge counterfactual” takes place on the Republican side, with the counterfactual being electoral detrimental as the Republicans go from nominating a quality challenger to an amateur challenger. We replicate this exercise with the 2022 House elections for continuity and to assess the McConnell proposition in the lower chamber and we hold fixed the presence of an incumbent in the race along with the observed election outcome.

Tables 1 and 2 present the results of our quality counterfactual outcomes in both the House and Senate, respectively. Owing to the very small quality advantage present in 2022 House elections [ $\beta = 0.58$ , 95% CI: 0.42, 0.75], we find that no observed outcome may have been altered from a counterfactual quality challenge. For example, in the closest race of the cycle in Colorado’s 3<sup>rd</sup> congressional district, we find that Democrats would have lost by a *greater* margin given that the counterfactual is nominating a quality challenger to oppose Republican Congresswoman Lauren Boebert rather than former Aspen, CO city councilor Adam Frisch. As such, the 2022 CO-03 race goes from no party having a quality advantage (i.e., a coding of 0), given that the Republican incumbent drew a Democratic quality challenger, to a clear Republican quality advantage (i.e., a coding of -1) since the counterfactual posits that the Republican incumbent drew a Democratic amateur.

By contrast, we find suggestive evidence in Table 2 that a lack of quality candidates may have cost Republicans control of the United States Senate. In the contests held in Arizona, Georgia, and

Pennsylvania, we find that the counterfactual nomination of Republican quality candidates over Republican amateurs may have negated a clear Democratic quality advantage, thus changing the outcome of these contests. In Arizona, the nomination of a Republican quality candidate over amateur venture capitalist Blake Masters would have negated a clear Democratic quality advantage for the incumbent, which as we found is worth about 7.49%, thus going from an observed Democratic margin of 4.99% to a counterfactual margin of -2.50% resulting in the unseating of Democratic Sen. Mark Kelly. Similarly in Georgia, the nomination of a Republican quality candidate over amateur former college football star Herschel Walker would have negated a clear Democratic quality advantage, thus going from an observed Democratic margin of 2.73% to a counterfactual margin of -4.75% resulting in the unseating of Democratic Sen. Raphael Warnock. While not featuring an incumbent re-election bid, we find a similar counterfactual change in the Pennsylvania Senate election between Democratic Lt. Governor John Fetterman and television personality Republican Mehmet Oz. Nominating a Republican quality candidate over the amateur Oz would have negated a clear Democratic quality advantage, thus going from an observed Democratic margin of 5.02% to a counterfactual margin of -2.46% resulting in Republicans keeping the seat of retiring Sen. Pat Toomey.

Coupled with the counterfactual pickups previously mentioned in Arizona and Georgia, this counterfactual outcome would have denied Senate Democrats of their only pickup of a Republican seat and provided for a net two-seat gain for Republicans, one more than necessary for a majority. In the remaining races in Nevada, Ohio, and Wisconsin, we find that the counterfactual quality challengers would have just exasperated the observed outcome since all of these races drew quality challengers from the seat out-party, with Republicans losing by a greater margin in Nevada and Democrats losing by a greater margin in Ohio and Wisconsin.<sup>18</sup> Lastly, our “quality challenger counterfactual” is inconclusive for the North Carolina Senate race, since both parties nominated quality candidates for the seat left open by retiring Republican Sen. Richard Burr.<sup>19</sup> Of course, in

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<sup>18</sup>By seat out-party, we mean that Republicans nominated a quality candidate to contest a Democratic seat in Nevada while Democrats nominated quality candidates to contest Republican seats in Ohio and Wisconsin

<sup>19</sup>This race featured U.S. Rep. Ted Budd (R-NC) being opposed by former statewide-elected Chief Justice of the North Carolina Supreme Court Cheri Beasley (D-NC).

the counterfactual that Republicans forgo their observed nomination of a quality candidate for an amateur candidate, Democrats may have well picked up the open Republican seat. However, if Democrats forgo nominating a quality candidate they lose the race in the observed scenario in which Republicans still nominate a quality candidate or if Republicans nominate a political amateur.

Table 1: 2022 U.S. House Election Quality Counterfactual Outcomes

Congressional District Race	Observed Outcome/ Counterfactual	Observed Democratic Margin	Counterfactual Democratic Margin	Election Race Context	Observed Quality Challenge	Counterfactual Quality Challenge
CA-13	No Change	-0.44	-1.02	Dem Open	Only Dem Quality (open)	Both Quality (open)
CO-3	No Change	-0.17	-0.75	GOP Incumbent	Dem Quality	Dem Amateur
MI-10	No Change	-0.51	-1.09	Dem Open	Only Dem Quality (open)	Both Quality (open)

2022 U.S. House Quality Advantage Estimate = 0.58% [95% CI: 0.42, 0.75]

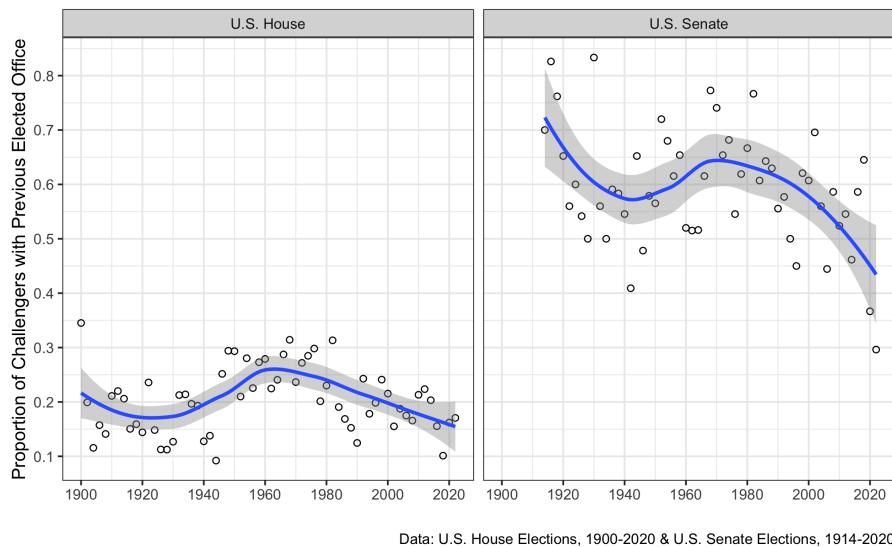
Table 2: 2022 U.S. Senate Election Quality Counterfactual Outcomes

U.S. Senate Race	Observed Outcome/ Counterfactual	Observed Democratic Margin	Counterfactual Democratic Margin	Election Race Context	Observed Quality Challenge	Counterfactual Quality Challenge
AZ	Dem win/Counterfactual Loss	4.99	-2.50	Dem Incumbent	GOP Amateur	GOP Quality
GA	Dem win/Counterfactual Loss	2.73	-4.75	Dem Incumbent	GOP Amateur	GOP Quality
NC	No Change	-3.30	-10.79	GOP Open	Both Quality (open)	Dem Amateur
NV	No Change	0.80	8.29	Dem Incumbent	GOP Quality	GOP Amateur
OH	No Change	-6.47	-13.96	GOP Open	Only Dem Quality (open)	Both Quality (open)
PA	Dem win/Counterfactual Loss	5.02	-2.46	GOP Open	Only Dem Quality (open)	Both Quality (open)
WI	No Change	-1.01	-8.50	GOP Incumbent	Dem Quality	Dem Amateur

2022 U.S. Senate Quality Advantage Estimate = 7.49% [95% CI: 7.01, 7.97]

In the preceding analysis, we find suggestive qualitative evidence that the failure to nominate quality Republican candidates may have cost Senate Republicans a majority in the 118<sup>th</sup> Congress. While not a systematic counterfactual analysis, we find qualitatively that Sen. McConnell's pessimism in the odds of a majority given the quality of Republican candidates seems justified. Perhaps this pessimism of winning elections on the basis of nominating amateur candidates, challengers in particular, is a source of concern for party leaders tasked with winning legislative majorities.

Figure 5: The Decline of Quality Challengers in U.S. House & Senate Elections



In Figure 5 we plot the proportion of quality challengers emerging in House and Senate elections since 1900. As one can see, there is a steady decline of quality challengers being nominated to oppose incumbents. Especially in the U.S. Senate, valuable office that is traditionally seen as the pinnacle of a political career for progressively ambitious politicians (Schlesinger & Schlesinger, 1966), the 2022 election cycle saw the lowest proportion of quality challengers nominated to oppose incumbents in the direct-election era, with only 30% of incumbents seeking re-election. While we find that candidate-based differentials such as incumbency and candidate quality to be waning as predictors of congressional elections given the ascension of nationalized partisan elections, our results indicate that these differentials still possess a significant and substantive

relationship with electoral outcomes. Thus while these candidate differentials are waning, an incumbency and quality advantage can still pay electoral dividends for a party as opposed to *not* having these candidate differentials in their favor (i.e., lacking an incumbent on the ballot or a quality non-incumbent). This presents a paradox with [Figure 5](#), if party elites and partisan primary voters recognize the electoral utility of candidate-based differentials, then why has the proportion of amateurs nominated steadily risen over time, particularly in the Senate? One possible answer is that nominated amateurs might fit to ideologically polarized parties more than quality candidates ([Thomsen, 2014, 2017](#)), but we do not have evidence for this argument yet. We contend that the results presented here and the 2022 U.S. Senate election outcomes necessitates further inquiry as to why political amateurs are increasingly nominated at the expense of quality challengers. Does candidate quality fall by the wayside to ideological considerations during contentious primary elections? Indeed, in Republican Senate primaries in Arizona and Georgia, respectively, amateurs decisively defeated sitting statewide elected officials for the nomination.<sup>20</sup> In light of this, are quality challengers increasingly less likely to enter primaries as congressional elections continue to be polarized and nationalized? Assessment of these key questions will inform our understanding of how candidate-differentials emerge during the partisan era.

## 7 Discussion & Future Avenues of Research

In this paper, we examine whether candidate-centered characteristics such as candidate quality and incumbency during the partisan context of the 2022 U.S. congressional midterm elections at both levels of competition. Given increases in elite-level polarization and the partisan nature of elections, we expect that candidate-centered differentials continued to lose their salience as predictors of congressional election outcomes. Using various model specifications and contexts, we find strong evidence of this expectation, with the incumbency and candidate quality advantage

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<sup>20</sup>In Georgia, Herschel Walker secured the Republican nomination by about a 55% margin over statewide-elected Agricultural Commissioner Gary Black while, in Arizona, Blake Masters performed about 23% better than third-place finisher statewide-elected Attorney General Mark Brnovich en-route to a 12% primary victory.

following markedly below baseline levels and decreasing over time. Along the same lines, we also find that the electoral utility of nominating a quality challenger relative to an amateur challenger to be declining in both contemporary U.S. House and Senate elections, with the “quality challenger penalty” faced by incumbents being at its lowest level since 1900 in the U.S. House context. Conversely, we also find that constituency partisanship alone explains nearly all the variance in congressional elections, further underscoring the rise of partisanship as the dominant factor in determining congressional election outcomes at the expense of candidate-centered differentials. Taken together, we find that the 2022 midterm congressional elections followed the same general pattern as previous elections in the contemporary period at *both* levels of partisan competition, with the rise of partisanship as a determinant of these election outcomes corresponding with a decline in the salience of the candidate-centered differentials of incumbency and candidate quality advantages.

While we find candidate-centered differentials to be waning as both a salient factor and predictor of congressional elections, we still find a modest role for candidate-based differentials within the context of the U.S. Senate. Within the context of the 2022 U.S. Senate elections, we find that a candidate quality advantage amounted to about a 7.5% boost in electoral support and show in a counterfactual analysis that conceding a candidate quality advantage to Democrats may have contributed to the loss of three key races and Senate majority for Republicans. Indeed, we find suggestive evidence for Sen. McConnell’s assertion that the lack of nominating quality candidates in key U.S. Senate races may have indeed cost the Republicans the majority in the 2022 midterm elections. Holding all other race attributes constant, we find that the nomination of a quality candidates in the 2022 U.S. Senate elections in Arizona, Georgia, and Pennsylvania may have flipped observed Democratic wins to counterfactual Democratic losses, which would have provided for a two-seat Republican pickup, a 52-48 majority in the 118<sup>th</sup> Congress, and complete Republican control on Capitol Hill.<sup>21</sup> Particularly in the cases of Arizona and Georgia, we find that the counterfactual nomination of quality challengers over amateurs may have resulted in

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<sup>21</sup>We note that the quality advantage estimate for the U.S. House was far too small in the 2022 midterm election cycle to alter any of the observed outcomes.

the unseating of vulnerable Democratic Senators.<sup>22</sup> Thus while we find that candidate-centered differentials to be waning in contemporary congressional elections, we do find suggestive evidence that, at least in the U.S. Senate, the lack of recruiting quality candidates may be pivotal in deciding which party controls the majority in the forthcoming Congress. We conclude by speculating that the decline in the salience of candidate quality as a predictor of congressional election outcomes may be associated with the overall decline in the nomination of quality candidates and the rise of amateur candidates in contemporary elections.

Given the findings of this article showing that candidate-centered factors are becoming less salient to partisan competition in congressional elections, we contend that future work assess potential causes explaining this decline. Indeed, we descriptively find that the decline in candidate quality as a salient factor in determining election outcomes to be associated with the rise of amateurs being nominated as challengers opposing incumbents. Perhaps in the contemporary period of polarized and partisan elections the stark electoral differences that separated quality and amateur candidates could be waning ([Jacobson & Kernell, 1983](#)). Perhaps quality candidates do not provide parties with the stark historical electoral advantages of electoral skill and fundraising prowess that they did during an era of more candidate-centered elections? We contend that our findings positing a decline in the incumbency and candidate quality advantages warrant further investigation by scholars, particularly with the expectation that candidate-centered differentials should continue to lose their salience as predictors of electoral outcomes beyond the 2022 midterm elections.

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<sup>22</sup>In these two contests in Arizona and Georgia; Republican voters nominated amateur candidates in the form of venture capitalist Blake Masters and former University of Georgia football star Heisman Trophy winner Herschel Walker to oppose Democratic Senators Mark Kelly and Raphael Warnock, respectively. These amateur challenges proved unsuccessful, with Sen. Kelley defeating Masters by about 5% and Sen. Warnock, in a December runoff, defeating Herschel Walker by close to 3%.

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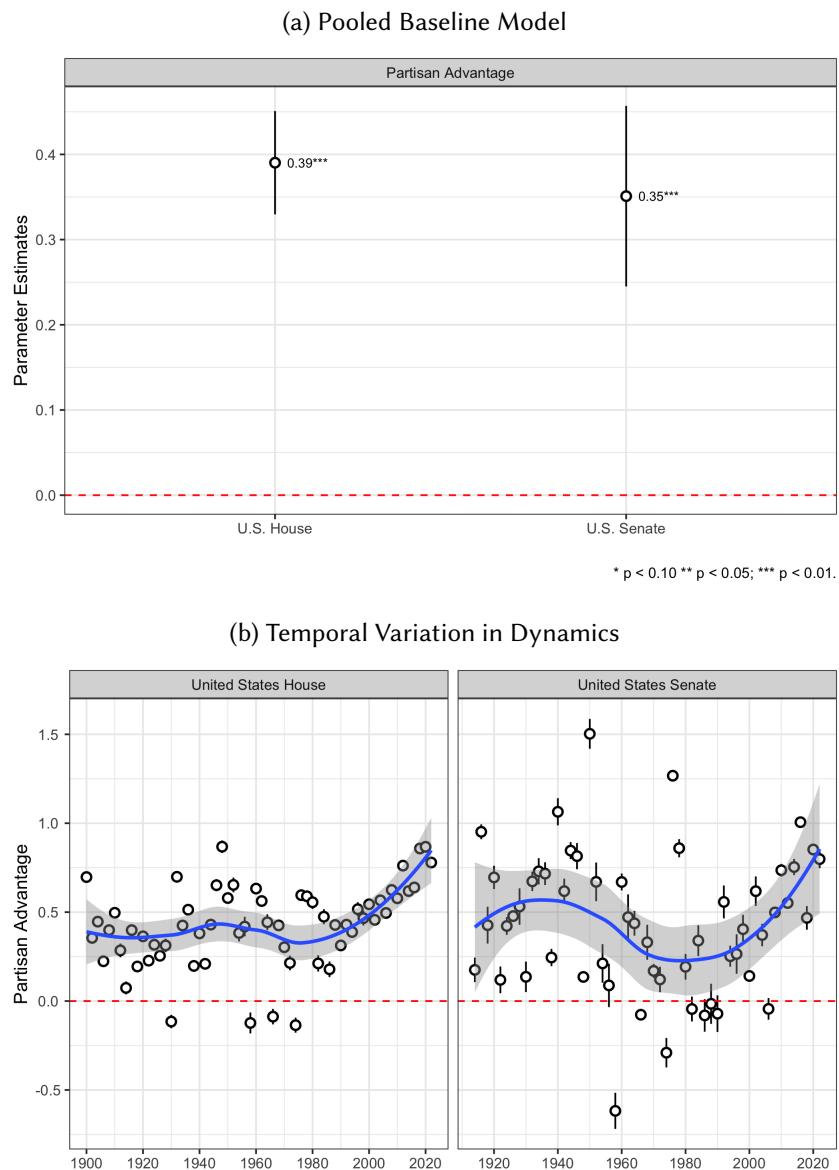
## **A Supporting Appendix for “Do Quality Candidates and Incumbents Still Matter in the Partisan World? Comparing Trends & Relationship Between Candidate Differentials and Congressional Election Outcomes, 1900-2022”**

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## A.1 Temporal Dynamics of Constituency Partisanship Effect on Incumbent Re-Elections

Figure A1. Baseline & Temporal Variation in Partisan Advantage in U.S. House & Senate Elections, Incumbent Re-Election Models



## A.2 Manuscript Model Outputs

Table A1. Pooled Baseline OLS Revised Jacobson Congressional Election Models, 1900-2022

	Outcome Variable: Democratic Margin in Election	
	U.S. House, 1900-2022	U.S. Senate, 1914-2022
	(1)	(2)
Incumbency Advantage	6.658*** (0.868)	4.297*** (1.090)
Quality Advantage	10.097*** (0.554)	10.370*** (0.840)
Constituency Partisanship	0.489*** (0.020)	0.518*** (0.057)
Democratic Seat	6.193*** (0.536)	7.364*** (1.841)
Constant	6.760*** (0.074)	-15.395*** (1.358)
Year Fixed-Effects	Yes	Yes
Observations	19,740	1,772
R <sup>2</sup>	0.773	0.650
Adjusted R <sup>2</sup>	0.772	0.638

Note: tabular results for manuscript equation 1.

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

Table A2. Pooled Baseline OLS Revised Incumbent Party Congressional Election Models,  
1900-2022

	Outcome Variable: Incumbent Party Margin in Election	
	U.S. House, 1900-2022	U.S. Senate, 1914-2022
	(1)	(2)
Inc incumbency Advantage	8.605*** (0.904)	5.678*** (1.177)
Quality Advantage	13.486*** (0.808)	13.354*** (1.005)
Constituency Partisanship	0.399*** (0.032)	0.363*** (0.053)
Democratic Seat	3.713*** (0.937)	5.770** (2.274)
Constant	-0.834 (0.744)	-2.811** (1.421)
Year Fixed-Effects	Yes	Yes
Observations	19,740	1,772
R <sup>2</sup>	0.392	0.327
Adjusted R <sup>2</sup>	0.390	0.304

Note: tabular results for manuscript  
equation 2.

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

Table A3. Interactive OLS Revised Jacobson Congressional Election Models, 1900-2022

	Outcome Variable: Democratic Margin in Election	
	U.S. House, 1900-2022	U.S. Senate, 1914-2022
	(1)	(2)
Incumbency Advantage	-0.966*** (0.345)	2.568*** (0.551)
Quality Advantage	6.660*** (0.182)	7.381*** (0.580)
Constituency Partisanship	0.744*** (0.002)	0.290*** (0.0003)
Democratic Seat	5.342*** (0.500)	6.402*** (1.923)
1902 Election	4.599*** (0.005)	
1904 Election	-1.205*** (0.016)	
1906 Election	7.437*** (0.030)	
1908 Election	-1.767*** (0.024)	
1910 Election	4.387*** (0.042)	
1912 Election	-6.398*** (0.030)	
1914 Election	-18.859*** (0.022)	
1916 Election	-7.681*** (0.001)	-2.532*** (0.183)
1918 Election	-13.570*** (0.008)	-2.324*** (0.191)
1920 Election	-6.507*** (0.045)	10.544*** (0.432)
1922 Election	14.104*** (0.074)	25.155*** (0.436)
1924 Election	-1.713*** (0.006)	12.301*** (0.185)
1926 Election	2.488*** (0.012)	26.437*** (0.116)
1928 Election	-6.168*** (0.012)	2.535*** (0.325)
1930 Election	7.518*** (0.032)	34.286*** (0.154)
1932 Election	0.093** (0.046)	7.475*** (0.227)
1934 Election	-4.000*** (0.030)	13.737*** (0.255)
1936 Election	-6.694*** (0.058)	-2.996*** (0.029)
1938 Election	-19.793*** (0.029)	-20.537*** (0.601)
1940 Election	-3.410*** (0.002)	-4.191*** (0.294)
1942 Election	-11.792*** (0.022)	-11.784*** (0.389)
1944 Election	2.355*** (0.008)	0.692** (0.277)
1946 Election	-14.730*** (0.004)	-12.959*** (0.228)
1948 Election	1.821*** (0.019)	20.465*** (0.142)
1950 Election	-9.325*** (0.016)	-4.763*** (0.303)
1952 Election	-0.663*** (0.013)	13.952*** (0.379)
1954 Election	7.155*** (0.014)	27.918*** (0.265)
1956 Election	5.283*** (0.019)	24.946*** (0.348)
1958 Election	13.340*** (0.018)	26.943*** (0.001)
1960 Election	-2.683*** (0.002)	12.242*** (0.317)
1962 Election	-3.331*** (0.003)	9.692*** (0.188)
1964 Election	-8.368*** (0.010)	1.376*** (0.253)
1966 Election	-16.487*** (0.002)	4.554*** (0.283)
1968 Election	-6.597*** (0.003)	8.659*** (0.378)
1970 Election	-0.010 (0.007)	14.539*** (0.382)

1972 Election	3.889*** (0.009)	5.629*** (0.008)
1974 Election	12.834*** (0.005)	8.183*** (0.535)
1976 Election	-2.291*** (0.026)	12.851*** (0.226)
1978 Election	-6.846*** (0.018)	2.680*** (0.208)
1980 Election	-3.972*** (0.031)	5.745*** (0.297)
1982 Election	7.280*** (0.016)	16.713*** (0.143)
1984 Election	0.113*** (0.007)	9.948*** (0.283)
1986 Election	4.948*** (0.026)	18.328*** (0.194)
1988 Election	-1.776*** (0.005)	4.891*** (0.190)
1990 Election	0.658*** (0.003)	11.417*** (0.314)
1992 Election	-7.063*** (0.010)	6.921*** (0.261)
1994 Election	-18.615*** (0.016)	-6.579*** (0.324)
1996 Election	-10.084*** (0.003)	0.078 (0.196)
1998 Election	-10.019*** (0.009)	3.952*** (0.213)
2000 Election	-4.870*** (0.017)	10.445*** (0.307)
2002 Election	-7.529*** (0.006)	3.836*** (0.070)
2004 Election	-2.786*** (0.001)	6.318*** (0.280)
2006 Election	5.172*** (0.003)	14.921*** (0.352)
2008 Election	-2.158*** (0.025)	12.245*** (0.083)
2010 Election	-19.270*** (0.007)	-9.064*** (0.204)
2012 Election	-5.747*** (0.002)	7.298*** (0.266)
2014 Election	-13.101*** (0.011)	-2.637*** (0.315)
2016 Election	-7.108*** (0.020)	5.771*** (0.202)
2018 Election	-0.229*** (0.027)	9.059*** (0.084)
2020 Election	-8.563*** (0.020)	6.054*** (0.201)
2022 Election	-11.953*** (0.002)	-0.222 (0.157)
Inc incumbency Advantage X 1902 Election	4.762*** (0.089)	
Inc incumbency Advantage X 1904 Election	3.147*** (0.064)	
Inc incumbency Advantage X 1906 Election	6.331*** (0.090)	
Inc incumbency Advantage X 1908 Election	2.043*** (0.029)	
Inc incumbency Advantage X 1910 Election	1.125*** (0.0001)	
Inc incumbency Advantage X 1912 Election	1.847*** (0.073)	
Inc incumbency Advantage X 1914 Election	2.590*** (0.079)	
Inc incumbency Advantage X 1916 Election	0.114*** (0.029)	-6.052*** (0.245)
Inc incumbency Advantage X 1918 Election	3.284*** (0.031)	-0.457 (0.338)
Inc incumbency Advantage X 1920 Election	-2.349*** (0.007)	-0.722** (0.302)
Inc incumbency Advantage X 1922 Election	10.126*** (0.048)	-2.757*** (0.281)
Inc incumbency Advantage X 1924 Election	3.935*** (0.014)	9.349*** (0.126)
Inc incumbency Advantage X 1926 Election	6.389*** (0.021)	-0.157*** (0.002)
Inc incumbency Advantage X 1928 Election	6.018*** (0.001)	0.075 (0.567)
Inc incumbency Advantage X 1930 Election	6.950*** (0.003)	3.124*** (0.165)
Inc incumbency Advantage X 1932 Election	3.321*** (0.026)	1.119*** (0.320)
Inc incumbency Advantage X 1934 Election	-0.478*** (0.028)	-4.255*** (0.495)
Inc incumbency Advantage X 1936 Election	1.986*** (0.010)	-0.952*** (0.133)
Inc incumbency Advantage X 1938 Election	1.287*** (0.054)	6.962*** (0.034)

Incumbency Advantage X 1940 Election	1.302*** (0.003)	5.081*** (0.160)
Incumbency Advantage X 1942 Election	3.979*** (0.011)	-2.300*** (0.348)
Incumbency Advantage X 1944 Election	6.481*** (0.001)	-9.828*** (0.111)
Incumbency Advantage X 1946 Election	-3.208*** (0.034)	-1.706*** (0.116)
Incumbency Advantage X 1948 Election	4.151*** (0.063)	2.910*** (0.083)
Incumbency Advantage X 1950 Election	1.428*** (0.035)	5.069*** (0.125)
Incumbency Advantage X 1952 Election	4.405*** (0.021)	-7.406*** (0.359)
Incumbency Advantage X 1954 Election	4.958*** (0.100)	-1.268*** (0.241)
Incumbency Advantage X 1956 Election	3.044*** (0.054)	-1.853*** (0.478)
Incumbency Advantage X 1958 Election	9.162*** (0.032)	4.461*** (0.081)
Incumbency Advantage X 1960 Election	6.905*** (0.084)	-0.741 (0.633)
Incumbency Advantage X 1962 Election	5.489*** (0.100)	-5.643*** (0.255)
Incumbency Advantage X 1964 Election	9.779*** (0.053)	6.768*** (0.245)
Incumbency Advantage X 1966 Election	9.363*** (0.122)	12.563*** (0.250)
Incumbency Advantage X 1968 Election	15.199*** (0.098)	1.756*** (0.405)
Incumbency Advantage X 1970 Election	15.544*** (0.096)	-4.088*** (0.453)
Incumbency Advantage X 1972 Election	15.487*** (0.074)	8.363*** (0.330)
Incumbency Advantage X 1974 Election	14.493*** (0.096)	3.723*** (0.107)
Incumbency Advantage X 1976 Election	14.313*** (0.060)	2.208*** (0.266)
Incumbency Advantage X 1978 Election	14.350*** (0.041)	-7.853*** (0.503)
Incumbency Advantage X 1980 Election	17.221*** (0.077)	-0.571* (0.306)
Incumbency Advantage X 1982 Election	12.937*** (0.092)	9.027*** (0.415)
Incumbency Advantage X 1984 Election	15.169*** (0.079)	8.935*** (0.280)
Incumbency Advantage X 1986 Election	16.225*** (0.039)	2.849*** (0.583)
Incumbency Advantage X 1988 Election	20.702*** (0.096)	0.480 (0.411)
Incumbency Advantage X 1990 Election	10.574*** (0.074)	7.197*** (0.167)
Incumbency Advantage X 1992 Election	9.788*** (0.073)	5.944*** (0.258)
Incumbency Advantage X 1994 Election	12.181*** (0.036)	12.350*** (0.211)
Incumbency Advantage X 1996 Election	9.921*** (0.028)	4.755*** (0.247)
Incumbency Advantage X 1998 Election	11.767*** (0.094)	1.925*** (0.400)
Incumbency Advantage X 2000 Election	15.063*** (0.098)	8.133*** (0.591)
Incumbency Advantage X 2002 Election	16.368*** (0.057)	7.746*** (0.295)
Incumbency Advantage X 2004 Election	14.483*** (0.046)	9.924*** (0.525)
Incumbency Advantage X 2006 Election	10.351*** (0.025)	3.774*** (0.798)
Incumbency Advantage X 2008 Election	8.858*** (0.067)	7.477*** (0.252)
Incumbency Advantage X 2010 Election	6.534*** (0.069)	0.877*** (0.235)
Incumbency Advantage X 2012 Election	3.091*** (0.069)	6.679*** (0.391)
Incumbency Advantage X 2014 Election	4.927*** (0.045)	0.341 (0.373)
Incumbency Advantage X 2016 Election	5.688*** (0.010)	1.078*** (0.193)
Incumbency Advantage X 2018 Election	1.116*** (0.090)	-1.555*** (0.393)
Incumbency Advantage X 2020 Election	0.905*** (0.013)	-4.535*** (0.064)
Incumbency Advantage X 2022 Election	0.013 (0.009)	-2.847*** (0.274)
Quality Advantage X 1902 Election	9.083*** (0.128)	
Quality Advantage X 1904 Election	7.097*** (0.061)	
Quality Advantage X 1906 Election	8.961*** (0.060)	

Quality Advantage X 1908 Election	4.106*** (0.053)
Quality Advantage X 1910 Election	7.630*** (0.005)
Quality Advantage X 1912 Election	8.794*** (0.081)
Quality Advantage X 1914 Election	7.470*** (0.090)
Quality Advantage X 1916 Election	8.441*** (0.039)
Quality Advantage X 1918 Election	4.240*** (0.028)
Quality Advantage X 1920 Election	16.214*** (0.025)
Quality Advantage X 1922 Election	10.102*** (0.014)
Quality Advantage X 1924 Election	12.055*** (0.028)
Quality Advantage X 1926 Election	9.532*** (0.044)
Quality Advantage X 1928 Election	8.568*** (0.007)
Quality Advantage X 1930 Election	12.379*** (0.041)
Quality Advantage X 1932 Election	2.646*** (0.025)
Quality Advantage X 1934 Election	3.669*** (0.043)
Quality Advantage X 1936 Election	6.450*** (0.001)
Quality Advantage X 1938 Election	11.872*** (0.055)
Quality Advantage X 1940 Election	11.503*** (0.008)
Quality Advantage X 1942 Election	6.098*** (0.008)
Quality Advantage X 1944 Election	7.936*** (0.026)
Quality Advantage X 1946 Election	1.024*** (0.074)
Quality Advantage X 1948 Election	0.070 (0.105)
Quality Advantage X 1950 Election	3.352*** (0.055)
Quality Advantage X 1952 Election	-2.838*** (0.024)
Quality Advantage X 1954 Election	-1.932*** (0.146)
Quality Advantage X 1956 Election	0.400*** (0.079)
Quality Advantage X 1958 Election	0.425*** (0.077)
Quality Advantage X 1960 Election	-0.689*** (0.091)
Quality Advantage X 1962 Election	2.805*** (0.117)
Quality Advantage X 1964 Election	0.202*** (0.050)
Quality Advantage X 1966 Election	11.284*** (0.143)
Quality Advantage X 1968 Election	-0.255** (0.111)
Quality Advantage X 1970 Election	2.075*** (0.136)
Quality Advantage X 1972 Election	4.222*** (0.065)
Quality Advantage X 1974 Election	2.678*** (0.100)
Quality Advantage X 1976 Election	1.934*** (0.074)
Quality Advantage X 1978 Election	3.601*** (0.058)
Quality Advantage X 1980 Election	0.391*** (0.100)
Quality Advantage X 1982 Election	3.252*** (0.111)
Quality Advantage X 1984 Election	2.195*** (0.091)
Quality Advantage X 1986 Election	6.615*** (0.062)
Quality Advantage X 1988 Election	0.491*** (0.123)
Quality Advantage X 1990 Election	3.144*** (0.097)
Quality Advantage X 1992 Election	2.014*** (0.089)
Quality Advantage X 1994 Election	-0.179*** (0.040)
Quality Advantage X 1996 Election	-0.071** (0.036)
	-3.187*** (0.295)
	-7.448*** (0.568)
	0.850 (0.578)
	-5.487*** (0.554)
	-10.944*** (0.364)
	-0.097 (0.658)
	8.433*** (0.853)
	3.774*** (0.418)
	1.211*** (0.437)
	6.047*** (0.713)
	1.012*** (0.231)
	3.881*** (0.488)
	-8.858*** (0.004)
	2.763*** (0.505)
	3.377*** (0.218)
	-2.804*** (0.271)
	10.106*** (0.056)
	-10.618*** (0.210)
	2.717*** (0.609)
	-4.057*** (0.389)
	-2.702*** (0.742)
	1.461*** (0.124)
	4.799*** (0.956)
	7.020*** (0.353)
	-6.776*** (0.353)
	-8.191*** (0.351)
	8.570*** (0.660)
	10.614*** (0.749)
	-1.298*** (0.465)
	-2.129*** (0.203)
	-3.631*** (0.345)
	12.294*** (0.842)
	5.172*** (0.463)
	-3.192*** (0.544)
	10.660*** (0.405)
	12.440*** (0.828)
	16.718*** (0.565)
	4.230*** (0.297)
	-1.658*** (0.388)
	-4.559*** (0.351)
	-2.572*** (0.496)

Quality Advantage X 1998 Election	2.152*** (0.126)	13.364*** (0.642)
Quality Advantage X 2000 Election	0.561*** (0.132)	10.483*** (0.898)
Quality Advantage X 2002 Election	-0.065 (0.086)	2.320*** (0.385)
Quality Advantage X 2004 Election	-0.636*** (0.057)	5.792*** (0.725)
Quality Advantage X 2006 Election	1.510*** (0.057)	4.739*** (1.107)
Quality Advantage X 2008 Election	1.688*** (0.093)	-2.918*** (0.415)
Quality Advantage X 2010 Election	-3.464*** (0.078)	1.147 (0.730)
Quality Advantage X 2012 Election	-2.667*** (0.101)	-2.018*** (0.613)
Quality Advantage X 2014 Election	-4.012*** (0.103)	-0.764 (0.623)
Quality Advantage X 2016 Election	-3.637*** (0.076)	-3.781*** (0.456)
Quality Advantage X 2018 Election	-5.996*** (0.022)	0.090 (0.414)
Quality Advantage X 2020 Election	-6.626*** (0.067)	-6.385*** (0.269)
Quality Advantage X 2022 Election	-6.076*** (0.098)	0.106 (0.825)
Constituency Partisanship X 1902 Election	-0.361*** (0.0002)	
Constituency Partisanship X 1904 Election	-0.283*** (0.001)	
Constituency Partisanship X 1906 Election	-0.480*** (0.001)	
Constituency Partisanship X 1908 Election	-0.319*** (0.001)	
Constituency Partisanship X 1910 Election	-0.315*** (0.001)	
Constituency Partisanship X 1912 Election	-0.390*** (0.0002)	
Constituency Partisanship X 1914 Election	-0.396*** (0.001)	
Constituency Partisanship X 1916 Election	-0.236*** (0.001)	0.819*** (0.006)
Constituency Partisanship X 1918 Election	-0.553*** (0.002)	0.591*** (0.008)
Constituency Partisanship X 1920 Election	-0.373*** (0.0005)	0.456*** (0.007)
Constituency Partisanship X 1922 Election	-0.435*** (0.0001)	0.381*** (0.010)
Constituency Partisanship X 1924 Election	-0.400*** (0.001)	0.280*** (0.003)
Constituency Partisanship X 1926 Election	-0.392*** (0.001)	0.439*** (0.011)
Constituency Partisanship X 1928 Election	-0.476*** (0.001)	0.004 (0.006)
Constituency Partisanship X 1930 Election	-0.561*** (0.0003)	0.807*** (0.008)
Constituency Partisanship X 1932 Election	-0.120*** (0.001)	0.367*** (0.0004)
Constituency Partisanship X 1934 Election	-0.379*** (0.0003)	0.181*** (0.0001)
Constituency Partisanship X 1936 Election	-0.216*** (0.002)	0.654*** (0.006)
Constituency Partisanship X 1938 Election	-0.337*** (0.002)	0.552*** (0.001)
Constituency Partisanship X 1940 Election	-0.455*** (0.002)	1.061*** (0.006)
Constituency Partisanship X 1942 Election	-0.491*** (0.001)	0.787*** (0.002)
Constituency Partisanship X 1944 Election	-0.352*** (0.001)	0.730*** (0.002)
Constituency Partisanship X 1946 Election	0.153*** (0.001)	1.115*** (0.003)
Constituency Partisanship X 1948 Election	0.033*** (0.001)	-0.128*** (0.004)
Constituency Partisanship X 1950 Election	-0.157*** (0.001)	1.404*** (0.010)
Constituency Partisanship X 1952 Election	0.021*** (0.001)	0.607*** (0.013)
Constituency Partisanship X 1954 Election	-0.050*** (0.0002)	0.817*** (0.008)
Constituency Partisanship X 1956 Election	-0.056*** (0.00003)	0.727*** (0.005)
Constituency Partisanship X 1958 Election	-0.301*** (0.001)	-0.018*** (0.002)
Constituency Partisanship X 1960 Election	-0.114*** (0.001)	0.530*** (0.008)
Constituency Partisanship X 1962 Election	-0.181*** (0.001)	0.309*** (0.0001)
Constituency Partisanship X 1964 Election	-0.169*** (0.001)	0.276*** (0.001)

Constituency Partisanship X 1966 Election	-0.569*** (0.001)	-0.372*** (0.002)
Constituency Partisanship X 1968 Election	-0.312*** (0.001)	0.231*** (0.010)
Constituency Partisanship X 1970 Election	-0.393*** (0.0004)	-0.082*** (0.002)
Constituency Partisanship X 1972 Election	-0.341*** (0.002)	-0.260*** (0.010)
Constituency Partisanship X 1974 Election	-0.472*** (0.002)	-0.530*** (0.012)
Constituency Partisanship X 1976 Election	-0.116*** (0.00004)	0.336*** (0.010)
Constituency Partisanship X 1978 Election	-0.195*** (0.0004)	0.470*** (0.018)
Constituency Partisanship X 1980 Election	-0.158*** (0.0004)	0.012*** (0.001)
Constituency Partisanship X 1982 Election	-0.201*** (0.0003)	-0.037*** (0.0004)
Constituency Partisanship X 1984 Election	-0.174*** (0.001)	0.150*** (0.003)
Constituency Partisanship X 1986 Election	-0.332*** (0.0001)	0.092*** (0.006)
Constituency Partisanship X 1988 Election	-0.260*** (0.001)	-0.355*** (0.004)
Constituency Partisanship X 1990 Election	-0.353*** (0.001)	0.034*** (0.010)
Constituency Partisanship X 1992 Election	-0.189*** (0.001)	0.111*** (0.013)
Constituency Partisanship X 1994 Election	-0.116*** (0.002)	0.115*** (0.002)
Constituency Partisanship X 1996 Election	-0.070*** (0.001)	0.210*** (0.011)
Constituency Partisanship X 1998 Election	-0.112*** (0.0005)	0.134*** (0.009)
Constituency Partisanship X 2000 Election	-0.165*** (0.001)	0.002 (0.003)
Constituency Partisanship X 2002 Election	-0.233*** (0.001)	0.254*** (0.001)
Constituency Partisanship X 2004 Election	-0.179*** (0.001)	0.211*** (0.004)
Constituency Partisanship X 2006 Election	-0.213*** (0.0003)	0.021*** (0.006)
Constituency Partisanship X 2008 Election	-0.147*** (0.001)	0.328*** (0.001)
Constituency Partisanship X 2010 Election	0.066*** (0.001)	0.376*** (0.017)
Constituency Partisanship X 2012 Election	0.076*** (0.001)	0.284*** (0.002)
Constituency Partisanship X 2014 Election	0.018*** (0.0004)	0.393*** (0.004)
Constituency Partisanship X 2016 Election	-0.018*** (0.0004)	0.633*** (0.006)
Constituency Partisanship X 2018 Election	0.067*** (0.0005)	0.240*** (0.001)
Constituency Partisanship X 2020 Election	0.164*** (0.0003)	0.593*** (0.006)
Constituency Partisanship X 2022 Election	0.167*** (0.001)	0.442*** (0.019)
Constant	6.734*** (0.007)	-7.932*** (0.732)
Year Fixed-Effects	Yes	Yes
Observations	19,740	1,772
R <sup>2</sup>	0.803	0.728
Adjusted R <sup>2</sup>	0.801	0.689
Residual Std. Error	15.211 (df = 19491)	14.866 (df = 1551)
F Statistic	321.038*** (df = 248; 19491)	18.840*** (df = 220; 1551)

Note: tabular results for manuscript equation 3.

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

Table A4. Interactive OLS Revised Incumbent Party Congressional Election Models, 1900-2022

	Outcome Variable: Incumbent Party Margin in Election	
	U.S. House, 1900-2022	U.S. Senate, 1914-2022
	(1)	(2)
Incumbency Advantage	2.230*** (0.049)	-4.171*** (0.350)
Quality Advantage	9.164*** (0.077)	-2.258** (0.946)
Constituency Partisanship	0.737*** (0.004)	0.239*** (0.024)
Democratic Seat	2.862*** (0.924)	2.088 (2.783)
1902 Election	-8.990*** (0.126)	
1904 Election	2.021*** (0.241)	
1906 Election	-2.645*** (0.484)	
1908 Election	5.450*** (0.280)	
1910 Election	-0.626 (0.468)	
1912 Election	-5.927*** (0.182)	
1914 Election	-4.295*** (0.310)	
1916 Election	2.872*** (0.021)	-14.325*** (0.344)
1918 Election	4.750*** (0.075)	-18.425*** (0.550)
1920 Election	-1.553*** (0.591)	-21.467*** (1.007)
1922 Election	-12.498*** (0.862)	-1.131 (1.433)
1924 Election	2.467*** (0.176)	-15.285*** (0.324)
1926 Election	3.757*** (0.349)	-24.459*** (0.152)
1928 Election	4.284*** (0.157)	-9.068*** (0.567)
1930 Election	10.021*** (0.217)	-14.859*** (0.514)
1932 Election	-3.691*** (0.086)	-17.095*** (0.655)
1934 Election	-1.987*** (0.533)	-11.262*** (0.793)
1936 Election	1.629*** (0.623)	-8.883*** (0.114)
1938 Election	8.048*** (0.399)	-27.783*** (1.502)
1940 Election	14.445*** (0.137)	-16.418*** (1.080)
1942 Election	0.205 (0.381)	-33.721*** (1.749)
1944 Election	1.128*** (0.068)	-12.155*** (0.667)
1946 Election	6.171*** (0.200)	-21.619*** (0.725)
1948 Election	3.746*** (0.137)	-9.254*** (0.165)
1950 Election	4.357*** (0.398)	-26.205*** (1.199)
1952 Election	1.213*** (0.207)	-11.257*** (1.041)
1954 Election	8.704*** (0.218)	-14.443*** (0.778)
1956 Election	8.674*** (0.264)	-22.714*** (1.043)
1958 Election	4.835*** (0.154)	-15.483*** (0.051)
1960 Election	0.218** (0.089)	-15.410*** (1.284)
1962 Election	0.318*** (0.019)	-21.131*** (0.238)
1964 Election	3.652*** (0.042)	-18.814*** (0.772)
1966 Election	-4.977*** (0.016)	-10.766*** (1.009)
1968 Election	1.033*** (0.023)	-16.919*** (0.954)
1970 Election	4.682*** (0.115)	-10.908*** (1.612)

1972 Election	-2.575*** (0.180)	-16.495*** (0.387)
1974 Election	2.337*** (0.006)	-4.229*** (0.974)
1976 Election	5.751*** (0.399)	-25.521*** (0.474)
1978 Election	-0.009 (0.218)	-33.240*** (0.494)
1980 Election	3.840*** (0.399)	-13.262*** (0.747)
1982 Election	-3.385*** (0.262)	-15.680*** (0.210)
1984 Election	0.790*** (0.104)	-38.709*** (0.622)
1986 Election	1.078*** (0.304)	-17.056*** (0.581)
1988 Election	9.211*** (0.005)	-22.340*** (0.343)
1990 Election	6.857*** (0.056)	7.023*** (1.319)
1992 Election	-3.121*** (0.247)	-10.841*** (0.848)
1994 Election	-4.971*** (0.286)	-24.660*** (1.089)
1996 Election	1.371*** (0.099)	-17.427*** (0.653)
1998 Election	2.207*** (0.055)	-29.455*** (0.933)
2000 Election	4.946*** (0.357)	-19.006*** (1.512)
2002 Election	5.965*** (0.055)	-19.533*** (0.236)
2004 Election	5.943*** (0.082)	-29.919*** (0.723)
2006 Election	-0.408*** (0.128)	-5.838*** (1.044)
2008 Election	0.143 (0.479)	-23.098*** (0.760)
2010 Election	-0.267 (0.220)	-13.518*** (0.382)
2012 Election	0.812*** (0.068)	-19.483*** (0.849)
2014 Election	4.203*** (0.133)	-19.349*** (1.009)
2016 Election	5.917*** (0.412)	-22.001*** (0.384)
2018 Election	-2.119*** (0.498)	-13.849*** (0.519)
2020 Election	3.403*** (0.326)	-16.091*** (0.111)
2022 Election	1.879*** (0.099)	-14.731*** (0.394)
Inc incumbency Advantage X 1902 Election	13.411*** (0.236)	
Inc incumbency Advantage X 1904 Election	0.370 (0.287)	
Inc incumbency Advantage X 1906 Election	2.747*** (0.055)	
Inc incumbency Advantage X 1908 Election	-2.359*** (0.104)	
Inc incumbency Advantage X 1910 Election	0.340 (0.235)	
Inc incumbency Advantage X 1912 Election	7.254*** (0.136)	
Inc incumbency Advantage X 1914 Election	2.145*** (0.066)	
Inc incumbency Advantage X 1916 Election	-1.795*** (0.095)	0.889 (0.575)
Inc incumbency Advantage X 1918 Election	-0.942*** (0.055)	9.693*** (0.441)
Inc incumbency Advantage X 1920 Election	-2.268*** (0.394)	11.085*** (0.028)
Inc incumbency Advantage X 1922 Election	8.210*** (0.133)	-9.992*** (0.473)
Inc incumbency Advantage X 1924 Election	2.906*** (0.230)	17.180*** (0.718)
Inc incumbency Advantage X 1926 Election	2.113*** (0.171)	2.354*** (0.121)
Inc incumbency Advantage X 1928 Election	1.793*** (0.104)	-1.115** (0.506)
Inc incumbency Advantage X 1930 Election	-4.032*** (0.057)	11.519*** (0.511)
Inc incumbency Advantage X 1932 Election	4.702*** (0.269)	10.031*** (0.006)
Inc incumbency Advantage X 1934 Election	1.341*** (0.055)	-4.241*** (0.278)
Inc incumbency Advantage X 1936 Election	1.652*** (0.305)	4.679*** (0.276)
Inc incumbency Advantage X 1938 Election	-8.239*** (0.005)	18.544*** (0.046)

Incumbency Advantage X 1940 Election	-9.205*** (0.134)	9.452*** (0.633)
Incumbency Advantage X 1942 Election	4.622*** (0.268)	24.171*** (0.878)
Incumbency Advantage X 1944 Election	2.482*** (0.327)	-1.962*** (0.469)
Incumbency Advantage X 1946 Election	-4.456*** (0.353)	8.622*** (0.261)
Incumbency Advantage X 1948 Election	-1.597*** (0.411)	-0.900*** (0.031)
Incumbency Advantage X 1950 Election	-1.458*** (0.417)	19.541*** (0.069)
Incumbency Advantage X 1952 Election	4.697*** (0.049)	-4.626*** (0.128)
Incumbency Advantage X 1954 Election	-0.964*** (0.112)	7.830*** (0.391)
Incumbency Advantage X 1956 Election	-1.690*** (0.047)	19.302*** (0.376)
Incumbency Advantage X 1958 Election	7.739*** (0.029)	8.645*** (0.549)
Incumbency Advantage X 1960 Election	8.004*** (0.304)	4.248*** (0.073)
Incumbency Advantage X 1962 Election	6.147*** (0.043)	6.658*** (0.619)
Incumbency Advantage X 1964 Election	8.560*** (0.109)	16.760*** (0.436)
Incumbency Advantage X 1966 Election	14.507*** (0.167)	16.835*** (0.338)
Incumbency Advantage X 1968 Election	15.667*** (0.052)	10.176*** (0.317)
Incumbency Advantage X 1970 Election	13.270*** (0.002)	0.592** (0.236)
Incumbency Advantage X 1972 Election	20.284*** (0.022)	16.881*** (0.399)
Incumbency Advantage X 1974 Election	12.566*** (0.024)	2.370*** (0.347)
Incumbency Advantage X 1976 Election	10.908*** (0.172)	20.300*** (0.499)
Incumbency Advantage X 1978 Election	13.944*** (0.117)	16.951*** (0.310)
Incumbency Advantage X 1980 Election	15.117*** (0.238)	3.961*** (0.580)
Incumbency Advantage X 1982 Election	16.059*** (0.269)	17.385*** (1.332)
Incumbency Advantage X 1984 Election	15.847*** (0.118)	34.585*** (0.033)
Incumbency Advantage X 1986 Election	17.030*** (0.091)	11.891*** (0.500)
Incumbency Advantage X 1988 Election	13.787*** (0.035)	16.648*** (0.366)
Incumbency Advantage X 1990 Election	7.360*** (0.352)	1.199 (0.955)
Incumbency Advantage X 1992 Election	12.588*** (0.029)	8.798*** (0.079)
Incumbency Advantage X 1994 Election	14.633*** (0.068)	27.333*** (0.019)
Incumbency Advantage X 1996 Election	11.256*** (0.345)	14.210*** (0.174)
Incumbency Advantage X 1998 Election	11.897*** (0.109)	21.580*** (0.682)
Incumbency Advantage X 2000 Election	11.547*** (0.408)	15.945*** (1.022)
Incumbency Advantage X 2002 Election	12.952*** (0.124)	18.107*** (1.102)
Incumbency Advantage X 2004 Election	11.186*** (0.096)	29.639*** (0.259)
Incumbency Advantage X 2006 Election	10.201*** (0.037)	-9.708*** (0.963)
Incumbency Advantage X 2008 Election	10.119*** (0.536)	20.695*** (1.324)
Incumbency Advantage X 2010 Election	2.086*** (0.236)	9.420*** (0.135)
Incumbency Advantage X 2012 Election	4.233*** (0.420)	19.438*** (1.043)
Incumbency Advantage X 2014 Election	3.915*** (0.027)	8.603*** (0.492)
Incumbency Advantage X 2016 Election	3.277*** (0.109)	14.026*** (0.613)
Incumbency Advantage X 2018 Election	0.683*** (0.024)	5.559*** (1.779)
Incumbency Advantage X 2020 Election	-2.558*** (0.562)	3.375*** (0.565)
Incumbency Advantage X 2022 Election	0.835*** (0.216)	6.690*** (0.679)
Quality Advantage X 1902 Election	5.990*** (0.162)	
Quality Advantage X 1904 Election	7.470*** (0.026)	
Quality Advantage X 1906 Election	12.355*** (0.319)	

Quality Advantage X 1908 Election	2.298*** (0.004)
Quality Advantage X 1910 Election	8.496*** (0.195)
Quality Advantage X 1912 Election	10.019*** (0.143)
Quality Advantage X 1914 Election	13.236*** (0.397)
Quality Advantage X 1916 Election	8.016*** (0.050)
Quality Advantage X 1918 Election	7.254*** (0.473)
Quality Advantage X 1920 Election	17.652*** (0.245)
Quality Advantage X 1922 Election	21.602*** (0.561)
Quality Advantage X 1924 Election	11.163*** (0.240)
Quality Advantage X 1926 Election	11.012*** (0.326)
Quality Advantage X 1928 Election	8.366*** (0.007)
Quality Advantage X 1930 Election	12.877*** (0.206)
Quality Advantage X 1932 Election	3.978*** (0.098)
Quality Advantage X 1934 Election	4.225*** (0.403)
Quality Advantage X 1936 Election	4.395*** (0.218)
Quality Advantage X 1938 Election	11.341*** (0.329)
Quality Advantage X 1940 Election	6.537*** (0.245)
Quality Advantage X 1942 Election	7.335*** (0.378)
Quality Advantage X 1944 Election	7.910*** (0.029)
Quality Advantage X 1946 Election	3.387*** (0.456)
Quality Advantage X 1948 Election	-2.253*** (0.081)
Quality Advantage X 1950 Election	3.040*** (0.263)
Quality Advantage X 1952 Election	-3.649*** (0.009)
Quality Advantage X 1954 Election	-2.277*** (0.141)
Quality Advantage X 1956 Election	-0.184 (0.185)
Quality Advantage X 1958 Election	4.676*** (0.246)
Quality Advantage X 1960 Election	-1.878*** (0.036)
Quality Advantage X 1962 Election	1.865*** (0.218)
Quality Advantage X 1964 Election	-2.194*** (0.001)
Quality Advantage X 1966 Election	11.411*** (0.218)
Quality Advantage X 1968 Election	-2.510*** (0.080)
Quality Advantage X 1970 Election	-0.566*** (0.030)
Quality Advantage X 1972 Election	4.106*** (0.063)
Quality Advantage X 1974 Election	7.666*** (0.309)
Quality Advantage X 1976 Election	-0.329*** (0.094)
Quality Advantage X 1978 Election	2.938*** (0.295)
Quality Advantage X 1980 Election	-1.772*** (0.295)
Quality Advantage X 1982 Election	8.990*** (0.444)
Quality Advantage X 1984 Election	2.247*** (0.178)
Quality Advantage X 1986 Election	7.808*** (0.154)
Quality Advantage X 1988 Election	-1.419*** (0.306)
Quality Advantage X 1990 Election	0.898*** (0.028)
Quality Advantage X 1992 Election	1.672*** (0.151)
Quality Advantage X 1994 Election	1.400*** (0.142)
Quality Advantage X 1996 Election	-0.051 (0.158)
	7.810*** (1.026)
	6.510*** (1.379)
	15.874*** (0.099)
	12.719*** (0.376)
	2.378*** (0.195)
	15.408*** (0.564)
	20.764*** (0.463)
	16.563*** (0.770)
	10.962*** (1.206)
	16.620*** (1.100)
	6.996*** (0.458)
	16.367*** (1.092)
	3.961*** (1.457)
	13.680*** (0.849)
	10.178*** (0.152)
	13.184*** (1.014)
	20.314*** (0.384)
	6.392*** (1.539)
	15.609*** (0.612)
	18.132*** (0.186)
	9.313*** (0.764)
	21.764*** (0.055)
	20.623*** (0.636)
	19.809*** (0.270)
	3.614*** (0.864)
	-0.132 (0.294)
	22.085*** (0.459)
	23.314*** (0.754)
	9.184*** (0.890)
	5.170*** (1.252)
	9.520*** (0.251)
	23.160*** (0.775)
	16.686*** (0.513)
	9.207*** (0.730)
	28.284*** (0.409)
	23.687*** (0.983)
	24.226*** (0.097)
	4.176* (2.348)
	8.884*** (0.705)
	5.578*** (0.769)
	11.683*** (1.196)

Quality Advantage X 1998 Election	2.302*** (0.206)	26.012*** (2.068)
Quality Advantage X 2000 Election	-0.924*** (0.163)	26.093*** (0.476)
Quality Advantage X 2002 Election	-2.786*** (0.159)	14.155*** (0.134)
Quality Advantage X 2004 Election	-4.004*** (0.016)	20.169*** (0.256)
Quality Advantage X 2006 Election	0.733*** (0.010)	30.819*** (0.435)
Quality Advantage X 2008 Election	-0.490** (0.222)	7.992*** (0.760)
Quality Advantage X 2010 Election	2.357*** (0.534)	7.531*** (0.305)
Quality Advantage X 2012 Election	-4.254*** (0.045)	7.112*** (1.273)
Quality Advantage X 2014 Election	-2.758*** (0.301)	7.360*** (0.611)
Quality Advantage X 2016 Election	-5.862*** (0.098)	6.706*** (0.083)
Quality Advantage X 2018 Election	-5.584*** (0.095)	12.465*** (0.274)
Quality Advantage X 2020 Election	-6.406*** (0.366)	3.846*** (0.854)
Quality Advantage X 2022 Election	-7.139*** (0.157)	4.662*** (0.002)
Constituency Partisanship X 1902 Election	-0.321*** (0.005)	
Constituency Partisanship X 1904 Election	-0.295*** (0.004)	
Constituency Partisanship X 1906 Election	-0.548*** (0.001)	
Constituency Partisanship X 1908 Election	-0.315*** (0.004)	
Constituency Partisanship X 1910 Election	-0.346*** (0.001)	
Constituency Partisanship X 1912 Election	-0.416*** (0.022)	
Constituency Partisanship X 1914 Election	-0.695*** (0.023)	
Constituency Partisanship X 1916 Election	-0.278*** (0.015)	0.710*** (0.005)
Constituency Partisanship X 1918 Election	-0.621*** (0.012)	0.492*** (0.006)
Constituency Partisanship X 1920 Election	-0.326*** (0.006)	0.426*** (0.057)
Constituency Partisanship X 1922 Election	-0.516*** (0.001)	-0.071 (0.059)
Constituency Partisanship X 1924 Election	-0.428*** (0.006)	0.189*** (0.054)
Constituency Partisanship X 1926 Election	-0.467*** (0.006)	0.343*** (0.032)
Constituency Partisanship X 1928 Election	-0.426*** (0.015)	0.190** (0.084)
Constituency Partisanship X 1930 Election	-0.828*** (0.013)	-0.147** (0.071)
Constituency Partisanship X 1932 Election	-0.043** (0.018)	0.455*** (0.007)
Constituency Partisanship X 1934 Election	-0.373*** (0.016)	0.447*** (0.017)
Constituency Partisanship X 1936 Election	-0.254*** (0.019)	0.494*** (0.010)
Constituency Partisanship X 1938 Election	-0.642*** (0.021)	0.101*** (0.001)
Constituency Partisanship X 1940 Election	-0.431*** (0.012)	0.849*** (0.012)
Constituency Partisanship X 1942 Election	-0.541*** (0.011)	0.379*** (0.011)
Constituency Partisanship X 1944 Election	-0.268*** (0.015)	0.657*** (0.003)
Constituency Partisanship X 1946 Election	-0.063*** (0.021)	0.568*** (0.018)
Constituency Partisanship X 1948 Election	0.155*** (0.023)	0.005 (0.013)
Constituency Partisanship X 1950 Election	-0.179*** (0.012)	1.206*** (0.023)
Constituency Partisanship X 1952 Election	-0.050*** (0.018)	0.278*** (0.085)
Constituency Partisanship X 1954 Election	-0.339*** (0.020)	-0.039 (0.082)
Constituency Partisanship X 1956 Election	-0.342*** (0.025)	-0.149* (0.090)
Constituency Partisanship X 1958 Election	-0.868*** (0.026)	-0.852*** (0.076)
Constituency Partisanship X 1960 Election	-0.107*** (0.001)	0.496*** (0.052)
Constituency Partisanship X 1962 Election	-0.181*** (0.012)	0.232*** (0.073)
Constituency Partisanship X 1964 Election	-0.269*** (0.026)	0.205*** (0.014)

Constituency Partisanship X 1966 Election	-0.838*** (0.025)	-0.329*** (0.008)
Constituency Partisanship X 1968 Election	-0.289*** (0.001)	0.163* (0.085)
Constituency Partisanship X 1970 Election	-0.404*** (0.0001)	-0.137*** (0.042)
Constituency Partisanship X 1972 Election	-0.518*** (0.016)	-0.206*** (0.062)
Constituency Partisanship X 1974 Election	-0.864*** (0.018)	-0.580*** (0.068)
Constituency Partisanship X 1976 Election	-0.115*** (0.003)	0.403*** (0.041)
Constituency Partisanship X 1978 Election	-0.178*** (0.001)	0.653*** (0.010)
Constituency Partisanship X 1980 Election	-0.148*** (0.014)	0.038 (0.070)
Constituency Partisanship X 1982 Election	-0.486*** (0.019)	-0.300*** (0.062)
Constituency Partisanship X 1984 Election	-0.266*** (0.018)	0.086 (0.072)
Constituency Partisanship X 1986 Election	-0.528*** (0.018)	-0.285*** (0.073)
Constituency Partisanship X 1988 Election	-0.302*** (0.011)	-0.361*** (0.086)
Constituency Partisanship X 1990 Election	-0.422*** (0.010)	-0.272*** (0.079)
Constituency Partisanship X 1992 Election	-0.183*** (0.011)	0.074*** (0.005)
Constituency Partisanship X 1994 Election	-0.303*** (0.016)	-0.148*** (0.012)
Constituency Partisanship X 1996 Election	-0.197*** (0.024)	0.166*** (0.009)
Constituency Partisanship X 1998 Election	-0.247*** (0.026)	0.197*** (0.017)
Constituency Partisanship X 2000 Election	-0.170*** (0.011)	-0.088*** (0.033)
Constituency Partisanship X 2002 Election	-0.244*** (0.009)	0.368*** (0.068)
Constituency Partisanship X 2004 Election	-0.169*** (0.004)	0.198*** (0.063)
Constituency Partisanship X 2006 Election	-0.220*** (0.002)	-0.139*** (0.049)
Constituency Partisanship X 2008 Election	-0.113*** (0.017)	0.362*** (0.028)
Constituency Partisanship X 2010 Election	-0.130*** (0.017)	0.297*** (0.012)
Constituency Partisanship X 2012 Election	0.069*** (0.016)	0.359*** (0.025)
Constituency Partisanship X 2014 Election	-0.118*** (0.019)	0.672*** (0.058)
Constituency Partisanship X 2016 Election	-0.059*** (0.017)	0.740*** (0.037)
Constituency Partisanship X 2018 Election	0.123*** (0.013)	0.202*** (0.057)
Constituency Partisanship X 2020 Election	0.140*** (0.013)	0.654*** (0.033)
Constituency Partisanship X 2022 Election	0.091*** (0.016)	0.642*** (0.036)
Constant	0.100 (0.136)	16.381*** (0.730)
Year Fixed-Effects	Yes	Yes
Observations	19,740	1,772
R <sup>2</sup>	0.472	0.478
Adjusted R <sup>2</sup>	0.466	0.405

Note: tabular results for manuscript equation 4.

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

Table 5: Pooled Baseline OLS Revised Incumbent Re-Election Models, 1900-2022

	Outcome Variable: Incumbent Margin in Election	
	U.S. House, 1900-2022	U.S. Senate, 1914-2022
	(1)	(2)
Quality Challenger	-12.724*** (0.803)	-14.436*** (1.179)
Constituency Partisanship	0.390*** (0.031)	0.351*** (0.054)
Democratic Seat	3.761*** (0.926)	6.439*** (2.235)
Constant	20.317*** (0.927)	11.158*** (1.470)
Year Fixed-Effects	Yes	Yes
Observations	17,080	1,369
R <sup>2</sup>	0.373	0.330
Adjusted R <sup>2</sup>	0.371	0.300

Note: tabular results for manuscript Figure 3A.

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

Table A5. Interactive OLS Revised Incumbent Legislator Congressional Election Models, 1900-2022

	Outcome Variable: Incumbent Margin in Election	
	U.S. House, 1900-2022	U.S. Senate, 1914-2022
	(1)	(2)
Quality Challenger	-9.002*** (0.131)	7.940*** (0.652)
Constituency Partisanship	0.697*** (0.007)	0.175*** (0.035)
Democratic Seat	2.861*** (0.914)	2.869 (2.656)
1902 Election	9.901*** (0.367)	
1904 Election	8.949*** (0.052)	
1906 Election	10.730*** (0.369)	
1908 Election	4.805*** (0.242)	
1910 Election	5.491*** (0.090)	
1912 Election	9.247*** (0.182)	
1914 Election	9.617*** (0.088)	
1916 Election	8.905*** (0.187)	-5.395*** (0.336)
1918 Election	10.055*** (0.424)	5.953*** (0.608)
1920 Election	13.936*** (0.145)	4.245*** (1.174)
1922 Election	16.681*** (0.237)	2.035*** (0.731)
1924 Election	15.239*** (0.130)	6.586*** (1.018)
1926 Election	16.608*** (0.061)	0.399*** (0.111)
1928 Election	13.337*** (0.012)	8.033*** (0.731)
1930 Election	18.383*** (0.113)	12.628*** (0.525)
1932 Election	3.512*** (0.359)	5.906*** (0.310)
1934 Election	1.666*** (0.012)	1.443*** (0.284)
1936 Election	5.427*** (0.034)	5.739*** (0.065)
1938 Election	8.236*** (0.003)	12.442*** (0.566)
1940 Election	10.189*** (0.094)	-0.914** (0.373)
1942 Election	11.181*** (0.322)	5.234*** (0.293)
1944 Election	10.937*** (0.438)	-2.306*** (0.391)
1946 Election	4.885*** (0.685)	3.018*** (0.112)
1948 Election	-0.749 (0.670)	13.467*** (0.205)
1950 Election	4.862*** (0.298)	-1.019*** (0.044)
1952 Election	1.957*** (0.157)	-2.731*** (0.444)
1954 Election	4.825*** (0.187)	11.757*** (1.200)
1956 Election	5.329*** (0.315)	6.899*** (0.865)
1958 Election	16.433*** (0.359)	16.508*** (0.805)
1960 Election	5.598*** (0.172)	10.465*** (0.789)
1962 Election	7.637*** (0.179)	5.880*** (0.909)
1964 Election	9.406*** (0.161)	2.087*** (0.637)
1966 Election	19.460*** (0.160)	7.829*** (0.562)
1968 Election	13.921*** (0.058)	14.388*** (0.975)
1970 Election	16.482*** (0.027)	13.864*** (1.013)
1972 Election	20.623*** (0.200)	11.833*** (0.132)

1974 Election	22.185*** (0.269)	4.347*** (0.337)
1976 Election	15.480*** (0.256)	7.458*** (1.182)
1978 Election	16.202*** (0.335)	4.665*** (0.096)
1980 Election	16.767*** (0.377)	9.512*** (0.915)
1982 Election	21.105*** (0.384)	12.188*** (0.638)
1984 Election	18.069*** (0.325)	24.283*** (0.454)
1986 Election	25.290*** (0.293)	19.516*** (0.346)
1988 Election	20.844*** (0.264)	17.639*** (0.932)
1990 Election	14.372*** (0.320)	14.086*** (0.156)
1992 Election	11.682*** (0.056)	7.004*** (0.304)
1994 Election	11.186*** (0.011)	9.323*** (0.567)
1996 Election	12.555*** (0.477)	14.726*** (0.894)
1998 Election	16.078*** (0.445)	18.537*** (0.191)
2000 Election	15.122*** (0.167)	23.998*** (0.310)
2002 Election	15.852*** (0.208)	15.579*** (0.858)
2004 Election	12.068*** (0.106)	21.244*** (0.891)
2006 Election	10.129*** (0.139)	17.135*** (0.807)
2008 Election	8.671*** (0.250)	7.327*** (0.077)
2010 Election	3.907*** (0.173)	0.338 (0.289)
2012 Election	0.911 (0.566)	9.162*** (0.872)
2014 Election	4.795*** (0.538)	0.361 (0.954)
2016 Election	3.553*** (0.510)	-0.951*** (0.118)
2018 Election	-7.730*** (0.461)	3.782** (1.779)
2020 Election	-6.021*** (0.209)	-7.188*** (0.008)
2022 Election	-3.782*** (0.457)	-0.334 (0.833)
Quality Challenger X 1902 Election	-2.676*** (0.361)	
Quality Challenger X 1904 Election	-7.680*** (0.125)	
Quality Challenger X 1906 Election	-12.547*** (0.213)	
Quality Challenger X 1908 Election	-1.521*** (0.059)	
Quality Challenger X 1910 Election	-7.870*** (0.233)	
Quality Challenger X 1912 Election	-4.531*** (0.188)	
Quality Challenger X 1914 Election	-12.227*** (0.430)	
Quality Challenger X 1916 Election	-8.228*** (0.104)	-12.596*** (0.473)
Quality Challenger X 1918 Election	-8.832*** (0.589)	-20.094*** (1.538)
Quality Challenger X 1920 Election	-16.876*** (0.404)	-17.585*** (0.301)
Quality Challenger X 1922 Election	-23.077*** (0.536)	-15.454*** (0.523)
Quality Challenger X 1924 Election	-9.642*** (0.270)	-14.426*** (0.356)
Quality Challenger X 1926 Election	-11.845*** (0.247)	-28.581*** (0.067)
Quality Challenger X 1928 Election	-6.598*** (0.032)	-16.852*** (0.485)
Quality Challenger X 1930 Election	-12.331*** (0.097)	-21.048*** (0.401)
Quality Challenger X 1932 Election	-2.873*** (0.045)	-19.255*** (1.078)
Quality Challenger X 1934 Election	-3.654*** (0.521)	-22.003*** (0.788)
Quality Challenger X 1936 Election	-0.236 (0.225)	-18.096*** (0.513)
Quality Challenger X 1938 Election	-9.277*** (0.405)	-29.156*** (0.978)
Quality Challenger X 1940 Election	-6.712*** (0.173)	-16.547*** (1.561)

Quality Challenger X 1942 Election	-6.708*** (0.329)	-20.620*** (0.431)
Quality Challenger X 1944 Election	-4.789*** (0.019)	-17.138*** (0.407)
Quality Challenger X 1946 Election	-4.450*** (0.527)	-31.869*** (1.572)
Quality Challenger X 1948 Election	2.487*** (0.082)	-32.181*** (0.225)
Quality Challenger X 1950 Election	-3.127*** (0.289)	-8.427*** (1.101)
Quality Challenger X 1952 Election	3.774*** (0.112)	-17.535*** (0.474)
Quality Challenger X 1954 Election	2.476*** (0.086)	-22.885*** (0.089)
Quality Challenger X 1956 Election	1.398*** (0.106)	-15.313*** (0.492)
Quality Challenger X 1958 Election	-5.221*** (0.203)	-29.300*** (0.234)
Quality Challenger X 1960 Election	1.425*** (0.011)	-26.071*** (0.351)
Quality Challenger X 1962 Election	-2.753*** (0.164)	-24.853*** (0.063)
Quality Challenger X 1964 Election	2.042*** (0.120)	-8.816*** (0.431)
Quality Challenger X 1966 Election	-9.951*** (0.365)	-8.576*** (0.146)
Quality Challenger X 1968 Election	1.509*** (0.035)	-24.635*** (0.336)
Quality Challenger X 1970 Election	2.353*** (0.103)	-29.548*** (0.097)
Quality Challenger X 1972 Election	-2.733*** (0.004)	-19.864*** (0.664)
Quality Challenger X 1974 Election	-9.024*** (0.315)	-11.884*** (0.862)
Quality Challenger X 1976 Election	1.142*** (0.056)	-19.045*** (0.669)
Quality Challenger X 1978 Election	-5.135*** (0.268)	-21.611*** (0.837)
Quality Challenger X 1980 Election	0.999*** (0.191)	-27.034*** (0.593)
Quality Challenger X 1982 Election	-8.650*** (0.424)	-16.262*** (0.421)
Quality Challenger X 1984 Election	-2.493*** (0.135)	-31.974*** (0.221)
Quality Challenger X 1986 Election	-7.336*** (0.091)	-28.749*** (0.684)
Quality Challenger X 1988 Election	1.277*** (0.212)	-25.873*** (0.417)
Quality Challenger X 1990 Election	-1.392*** (0.016)	-12.978*** (2.100)
Quality Challenger X 1992 Election	-1.348*** (0.214)	-13.116*** (0.944)
Quality Challenger X 1994 Election	-3.292*** (0.235)	-16.104*** (0.414)
Quality Challenger X 1996 Election	-2.309*** (0.209)	-29.306*** (1.601)
Quality Challenger X 1998 Election	-2.894*** (0.306)	-29.673*** (1.737)
Quality Challenger X 2000 Election	0.913*** (0.130)	-31.904*** (0.139)
Quality Challenger X 2002 Election	3.497*** (0.326)	-24.785*** (0.094)
Quality Challenger X 2004 Election	5.374*** (0.130)	-26.380*** (0.050)
Quality Challenger X 2006 Election	-0.872*** (0.065)	-37.911*** (0.755)
Quality Challenger X 2008 Election	2.082*** (0.349)	-12.918*** (0.448)
Quality Challenger X 2010 Election	-2.283*** (0.580)	-11.108*** (0.303)
Quality Challenger X 2012 Election	4.426*** (0.158)	-16.202*** (0.973)
Quality Challenger X 2014 Election	1.503*** (0.380)	-17.853*** (0.474)
Quality Challenger X 2016 Election	5.471*** (0.094)	-11.598*** (0.441)
Quality Challenger X 2018 Election	5.089*** (0.101)	-15.816*** (0.657)
Quality Challenger X 2020 Election	5.616*** (0.482)	-11.332*** (0.737)
Quality Challenger X 2022 Election	6.207*** (0.347)	-12.565*** (0.262)
Constituency Partisanship X 1902 Election	-0.342*** (0.007)	
Constituency Partisanship X 1904 Election	-0.251*** (0.002)	
Constituency Partisanship X 1906 Election	-0.474*** (0.004)	
Constituency Partisanship X 1908 Election	-0.298*** (0.007)	

Constituency Partisanship X 1910 Election	-0.201*** (0.004)
Constituency Partisanship X 1912 Election	-0.412*** (0.026)
Constituency Partisanship X 1914 Election	-0.623*** (0.025)
Constituency Partisanship X 1916 Election	-0.299*** (0.017)
Constituency Partisanship X 1918 Election	0.777*** (0.014)
Constituency Partisanship X 1920 Election	0.251*** (0.018)
Constituency Partisanship X 1922 Election	0.520*** (0.069)
Constituency Partisanship X 1924 Election	-0.056 (0.073)
Constituency Partisanship X 1926 Election	0.247*** (0.061)
Constituency Partisanship X 1928 Election	0.302*** (0.045)
Constituency Partisanship X 1930 Election	0.356*** (0.087)
Constituency Partisanship X 1932 Election	-0.039 (0.079)
Constituency Partisanship X 1934 Election	0.498*** (0.007)
Constituency Partisanship X 1936 Election	0.554*** (0.003)
Constituency Partisanship X 1938 Election	0.541*** (0.002)
Constituency Partisanship X 1940 Election	0.070*** (0.010)
Constituency Partisanship X 1942 Election	0.889*** (0.004)
Constituency Partisanship X 1944 Election	0.443*** (0.001)
Constituency Partisanship X 1946 Election	0.671*** (0.011)
Constituency Partisanship X 1948 Election	0.640*** (0.002)
Constituency Partisanship X 1950 Election	-0.040 (0.031)
Constituency Partisanship X 1952 Election	1.328*** (0.008)
Constituency Partisanship X 1954 Election	0.495*** (0.091)
Constituency Partisanship X 1956 Election	0.036 (0.091)
Constituency Partisanship X 1958 Election	-0.087 (0.097)
Constituency Partisanship X 1960 Election	-0.793*** (0.087)
Constituency Partisanship X 1962 Election	0.494*** (0.059)
Constituency Partisanship X 1964 Election	0.297*** (0.101)
Constituency Partisanship X 1966 Election	0.262*** (0.0003)
Constituency Partisanship X 1968 Election	-0.252*** (0.022)
Constituency Partisanship X 1970 Election	0.155* (0.085)
Constituency Partisanship X 1972 Election	-0.006 (0.055)
Constituency Partisanship X 1974 Election	-0.054 (0.072)
Constituency Partisanship X 1976 Election	-0.466*** (0.077)
Constituency Partisanship X 1978 Election	1.092*** (0.026)
Constituency Partisanship X 1980 Election	0.684*** (0.009)
Constituency Partisanship X 1982 Election	0.017 (0.072)
Constituency Partisanship X 1984 Election	-0.220*** (0.071)
Constituency Partisanship X 1986 Election	0.164** (0.079)
Constituency Partisanship X 1988 Election	-0.256*** (0.082)
Constituency Partisanship X 1990 Election	-0.191** (0.093)
Constituency Partisanship X 1992 Election	-0.246*** (0.088)
Constituency Partisanship X 1994 Election	0.382*** (0.012)
Constituency Partisanship X 1996 Election	0.077*** (0.005)
Constituency Partisanship X 1998 Election	0.089*** (0.021)
	0.229*** (0.006)

Constituency Partisanship X 2000 Election	-0.153*** (0.014)	-0.034 (0.047)
Constituency Partisanship X 2002 Election	-0.241*** (0.013)	0.443*** (0.078)
Constituency Partisanship X 2004 Election	-0.131*** (0.007)	0.196*** (0.067)
Constituency Partisanship X 2006 Election	-0.202*** (0.004)	-0.219*** (0.066)
Constituency Partisanship X 2008 Election	-0.072*** (0.019)	0.323*** (0.039)
Constituency Partisanship X 2010 Election	-0.119*** (0.020)	0.560*** (0.017)
Constituency Partisanship X 2012 Election	0.064*** (0.022)	0.376*** (0.038)
Constituency Partisanship X 2014 Election	-0.079*** (0.021)	0.578*** (0.059)
Constituency Partisanship X 2016 Election	-0.058*** (0.020)	0.831*** (0.046)
Constituency Partisanship X 2018 Election	0.161*** (0.016)	0.292*** (0.069)
Constituency Partisanship X 2020 Election	0.170*** (0.015)	0.677*** (0.039)
Constituency Partisanship X 2022 Election	0.082*** (0.021)	0.623*** (0.061)
Constant	12.303*** (0.059)	8.786*** (1.011)
Year Fixed-Effects	Yes	Yes
Observations	17,080	1,369
R <sup>2</sup>	0.444	0.460
Adjusted R <sup>2</sup>	0.438	0.386

Note: tabular results for manuscript Figure 3B.

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

### A.3 Including Uncontested Races Robustness Check

In the manuscript, we follow conventional wisdom and only considered elections contested between both parties as our units of analysis. However, excluding races uncontested by one of the major parties may bias the results given that, while the overwhelming number of congressional races are contested by both major parties, our analysis presents a subset of the universe of congressional elections. In this section, we included uncontested races in our analysis thus recovering the omitted cases. Indeed, this analysis has the potential to speak to the scare-off effect, and should provide a stricter test of our hypotheses in the manuscript.

Towards considering uncontested races, we code the one majority party candidate on the ballot as having a quality advantage and earning an imputed 75% percent of the vote.<sup>23</sup> The results of the robustness checks are presented in the subsequent figures, replicated from the manuscript, which includes uncontested races in our analysis.

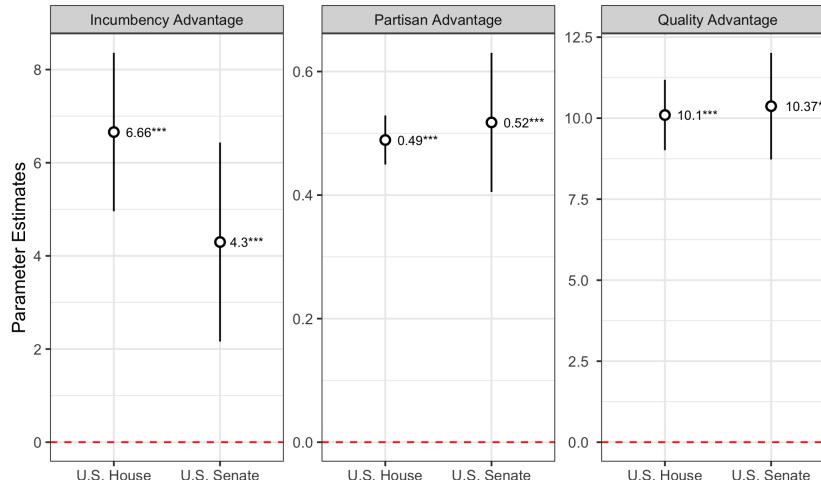
The following figures contain results of these robustness checks, with side-by-side comparisons with the results presented in the manuscript. As Figure 1A shows, the estimated relationships of interest presented in the manuscript and robustness checks accounted for uncontested races are indistinguishable in both the “Jacobson” model and the “Incumbent Party” model. Indeed, the results in Figure 1A show that the baseline relationships found and substantive conclusions presented in the manuscript hold in the robustness checks. Turning to Figure 2A, we also plot the temporal variation in the incumbency advantage, quality advantage, and partisan dynamics in congressional elections for both chambers from the robustness checks. As one can see, the same substantive conclusion emerges from the robustness check including uncontested races, with the incumbency and quality advantage declining over time as a predictor of congressional election outcomes and the role of constituency partisanship increasing over time. This confirms the key conclusion of our manuscript positing that the role of candidate-based differentials (i.e., the incumbency and quality advantage) are declining in salience as predictors of electoral outcomes given the rise of constituency partisanship as a predictor over time. Lastly, our robustness checks in Figure 3A capture the baseline and temporal variation in quality challenges to incumbents in congressional elections for both chamber. The sub-panels of these figures compare the robustness checks and manuscript models. As one can see the results are identical to the results presented in the manuscript showing the decline in the effect of quality opposition to incumbent re-election bids. In other words, this robustness check confirms the substantive story that opposition parties are seeing a decline in the electoral utility of nominating quality challengers to oppose incumbent re-election bids relative to nominating amateur challengers, further adding evidence that candidate-based considerations are declining as salient predictors of congressional elections.

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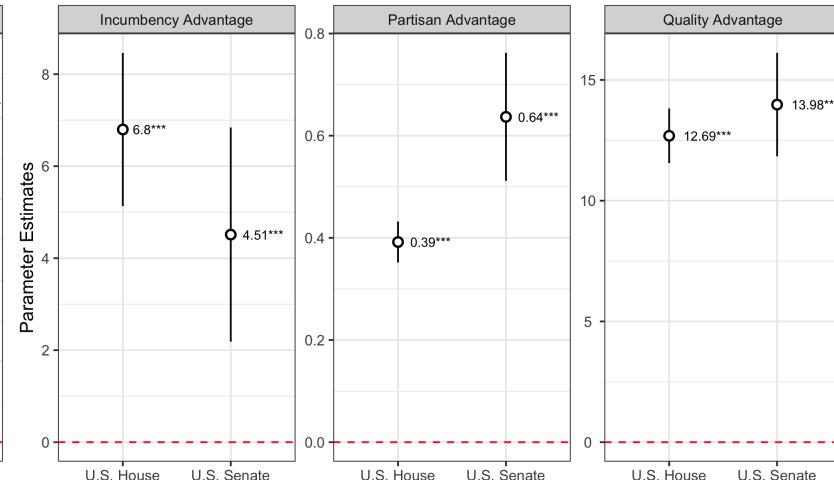
<sup>23</sup>We thank the reviewer for this very helpful analytical strategy during the peer review process.

Figure 1A: Pooled Baseline Incumbency Advantage, Quality Advantage, & State Partisanship Dynamics in U.S. House & Senate Elections

(a) Revised Jacobson Model (Manuscript)



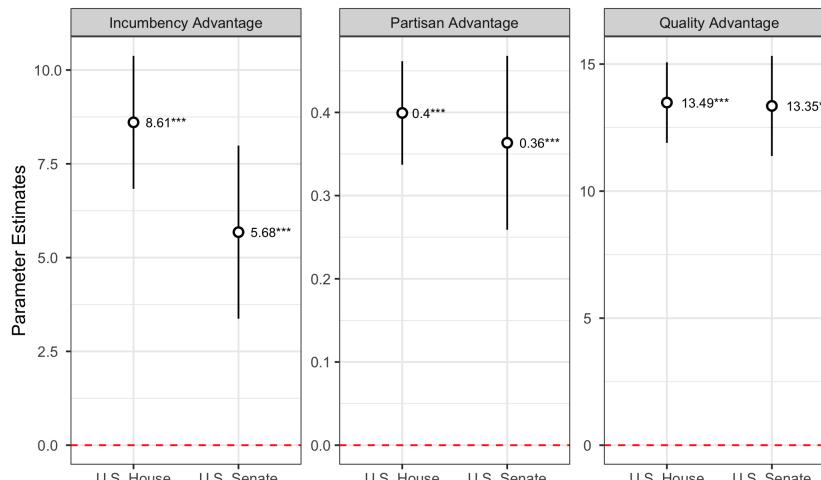
(b) Revised Jacobson Model (Robustness Check)



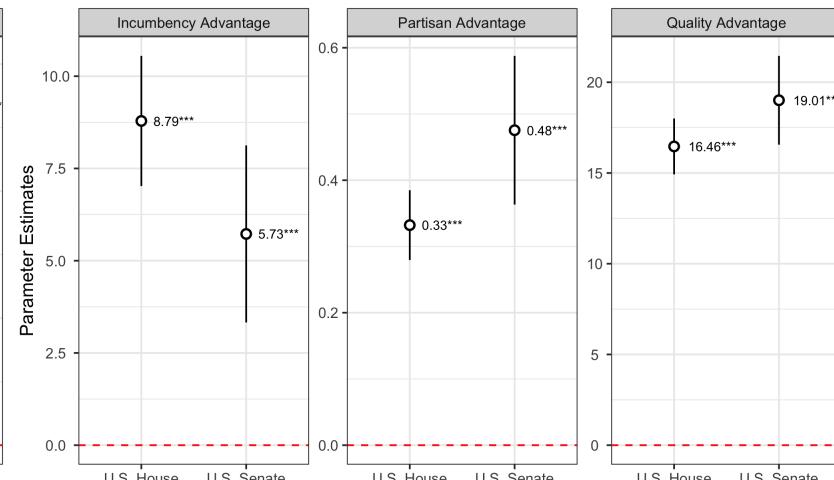
\* p < 0.10 \*\* p < 0.05; \*\*\* p < 0.01.

\* p < 0.10 \*\* p < 0.05; \*\*\* p < 0.01.

(c) Incumbent Party Model (Manuscript)



(d) Incumbent Party Model (Robustness Check)

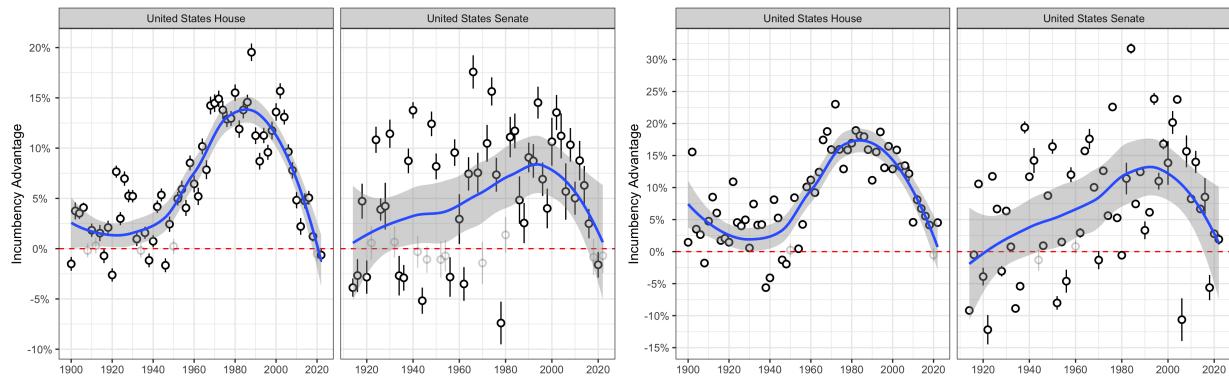


\* p < 0.10 \*\* p < 0.05; \*\*\* p < 0.01.

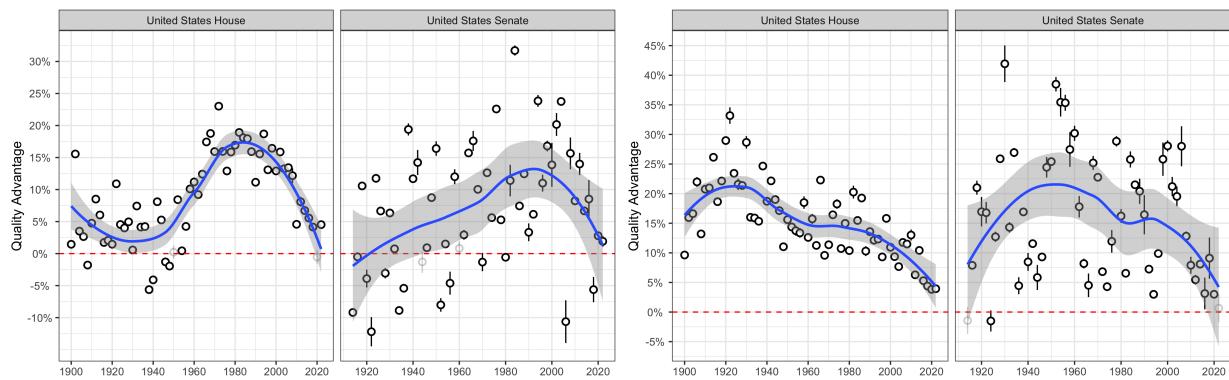
\* p < 0.10 \*\* p < 0.05; \*\*\* p < 0.01.

**Figure 2A: Temporal Variation in Incumbency Advantage, Quality Advantage, & Partisanship Dynamics in U.S. House & Senate Elections**

(a) Incumbency Advantage: Revised Jacobson Model (RC)



(c) Quality Advantage: Revised Jacobson Model (RC)



(e) Partisanship Advantage: Revised Jacobson Model (RC)

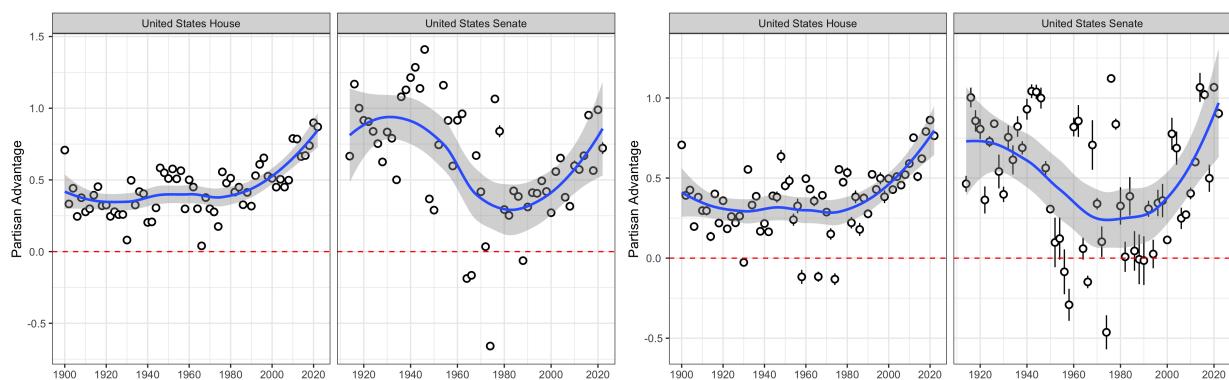


Figure 3A: Baseline & Temporal Variation in Quality Challenges to Incumbents in U.S. House & Senate Elections

