# Editor's Choice: Measuring Candidate Quality Using Local Newspaper Endorsements

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I construct a new measure of candidate quality differentials using local newspaper endorsements. I argue that political endorsements made by newspapers can be used as expert opinions that reflect quality differences between the candidates in an election. Using a dataset of 21,095 local newspaper endorsements, I simultaneously estimate the quality differences between candidates in 6,432 elections, along with a dynamic measure of the partisan bias of 368 local newspapers. Using the new measure, I show that a one standard deviation increase in relative candidate quality increases a candidate's two-party vote share by 3.4 percentage points and that candidate quality accounts for about one-fourth of the incumbency advantage. These findings advance debates on the source of incumbency effects and demonstrate the broader electoral impact of candidate quality. I conclude by discussing the potential of these endorsement-based measures to enhance our understanding of candidate quality in electoral politics and governance.

The quality of politicians is an important aspect of the overall quality of representation and has been a topic of interest to political scientists for decades. In formal models of elections, voters use signals of candidate quality and past performance to weed out bad politicians (Dewan and Shepsle 2011), hold politicians accountable (Ashworth 2012), and align politician incentives with their own (Barro 1973; Ferejohn 1986). High-quality candidates make government policy more valuable and effective for citizens, and political parties have incentives to recruit high-quality candidates to increase their chances of winning power. Candidate quality is often discussed in popular media as an important explanation for electoral performance and a party's overall electoral success.

Empirically, however, it is hard to quantify the importance of candidate quality because candidate quality itself is difficult to measure. Many existing measures of candidate quality are narrowly defined and single out only particular characteristics of candidates, such as their professional background or previous office-holding experience, or define candidate quality as electoral performance itself. More holistic measures, such as expert judgments, are typically not available in a way that would allow for a broader assessment of the role that candidate quality plays in elections and governing. The difficulties in observing and quantifying candidate quality limit the ability of political scientists to study important theoretical and empirical questions about the impact that candidate quality has on electoral politics and public policy.

In this article, I construct a new measure of differences in candidate quality—which I refer to as "candidate quality differentials"—using the political endorsements made by local newspapers.[1] When making endorsements, local newspaper editors act as experts making a recommendation and are good judges of candidate quality because they know much more than the average voter about issues in the election and about the characteristics and qualifications of candidates. Therefore,

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1. While the term "challenger quality" is often used in past literature to describe the experience or qualifications of challengers, endorsement-based quality differentials capture a broader concept: the relative difference in quality between two candidates in an election, of which challenger quality is a component.

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newspaper endorsements can be used to measure the difference in candidate quality between two candidates in an election.

The simple idea behind the measure is that higher-quality candidates are more likely to be endorsed by local newspapers. Although newspapers and their editors may have partisan biases that affect their endorsement behavior, this bias is actually useful for estimating candidate quality. That is because newspapers that are biased in favor of one party will only endorse a candidate of the other party if that candidate's relative quality advantage is large. These surprising or unexpected endorsements are referred to as "credible" endorsements in the economics literature (Chiang and Knight 2011) and are strong signals of significant candidate quality differences. Conditional on the partisan biases of the set of newspapers making endorsements in a race, higher-quality candidates will be endorsed more often, and the magnitude of their relative quality advantage can be identified by the credibility of the endorsements they earn.

I use a dataset of 21,095 local newspaper endorsements to estimate quality differences between candidates in 6,432 elections while also estimating and controlling for a dynamic measure of the partisan bias of 368 newspapers published across the United States. The newspaper endorsement-based measure of candidate quality differentials has many benefits over existing measures. First, quality differentials not only indicate which of two candidates is higher quality but also provide an estimate of the magnitude of that relative quality advantage. This overcomes a major limitation of many proxy measures of candidate quality and provides for a more nuanced measure of candidate quality. Second, similar to expert ratings, quality differentials are more comprehensive than many common, more narrowly defined measures of candidate quality. Third, it is possible to calculate quality differentials in any scenario in which political endorsements are made, which is historically quite common among local newspapers in the United States. These quality differentials can be constructed for elections where other expert ratings are unavailable or where obtaining personal and professional background information about the candidates is difficult, such as in historical elections or in local government elections.

To validate the new endorsement-based measures of both partisan bias and quality differences, I first show that the partisan bias of local newspapers based on endorsements is correlated with widely used alternative measures of newspaper bias.[2] This step confirms that the empirical framework accurately takes into account the partisan biases of newspapers when estimating the quality differences derived from endorsements. Next, I show that quality differentials are correlated with expert ratings of candidate qualifications and that winning candidates who have large quality advantages in their elections subsequently have higher legislative effectiveness scores and net approval ratings while in office. This provides evidence that the quality differentials from endorsements are predictive of candidates' future governing effectiveness and performance in office. As a final validation, I reestimate quality differentials while explicitly incorporating candidate ideological positions into the model. This exercise reveals that once newspaper partisanship is taken into account, candidate's ideological positions are only a relatively small factor in endorsement decisions and shows that the estimated quality differentials are not simply explained only by the fact that more moderate candidates are more likely to be endorsed.

After validating the endorsement-based quality differentials, I use the measure to explore the relationship between candidate quality, incumbency, and electoral outcomes. I find that a one standard deviation increase in candidate quality is associated with a 3.4 percentage point increase in two-party vote share. Furthermore, I find that candidate quality accounts for roughly one-fourth of the incumbency advantage, while approximately one-third of the effect of candidate quality can be attributed to incumbency status. These results offer new insights into the long-standing debate over the sources of incumbency advantages and suggest that direct benefits of holding office may play a larger role than previously estimated. I conclude by discussing how these measures provide a new lens for examining electoral dynamics and suggest valuable directions for future research on candidate quality and its implications for governance.

## DIFFICULTIES IN MEASURING CANDIDATE QUALITY

Political scientists who study elections often define candidate quality as being good at winning elections. As Maisel, Stone, and Maestas (1999, 1–2) note, the somewhat circular reasoning common in the literature is that "quality candidates are those who receive a lot of votes." Popular media also tends to measure candidate quality simply as over- or underperformance in an election (Jain and Sit 2023; Silver 2022). This leads scholars to define candidate quality using indicators of (previous) electoral success—such as incumbency status or prior office-holding experience (Cox and Katz 1996; Jacobson and Kernell 1981). Those who do well and win their elections are high-quality candidates, while those who do poorly and lose are not. This post hoc definition of candidate quality can be useful in some cases, for example, to predict future electoral success, but it is not how I conceptualize candidate

2. Specifically, I compare the endorsement-based measure of bias from this article to partisan bias measures developed in Ho and Quinn (2008), Gentzkow and Shapiro (2010), and Puglisi and Snyder (2015).

quality in this article. Although previous electoral success is, of course, an indicator of candidate quality, defining it this way is not useful for studying how candidate quality contributes to incumbent success, understanding how voters identify and reward high-quality candidates, or examining how candidate quality impacts governance.

Instead, I conceptualize candidate quality as the individual characteristics of candidates that will make them effective in the elected position for which they are running. In this conception, candidate quality refers to the qualifications of the candidates rather than their potential for electoral success per se. Factors that make someone more effective at governing can include objective and observable facts about the candidates, such as their education, professional experience, or previous accomplishments, but also may include candidate traits that are difficult to measure, such as a candidate's intelligence, competency, and integrity. The quality of the candidate is defined by whether the candidate will be able to govern effectively given their individual experiences and personal attributes.

Because measuring candidate qualifications and (potential) governing effectiveness is a difficult task, existing ways of quantifying candidate quality are quite limited. Many researchers use indicators of past electoral success to define candidate quality rather than trying to assess candidate quality directly. For example, previous office-holding experience—including incumbency, prior experience, years of experience, and "relevant" experience (Hirano and Snyder 2019)—is often used to define high-quality candidates. While such indicators do have a theoretical connection to governing effectiveness (gaining experience in office may actually cause you to be more effective in that position), they are coarse measures that do not differentiate between high- and low-quality candidates who are incumbents or who have similar levels of experience. The (lack of) scandals is another indicator that some have used as a proxy for candidate quality in an electoral context (Basinger et al. 2014; Miller and Hamel 2021; Puglisi and Snyder 2011), although this measure is limited in its ability to identify high-quality candidates before they are elected. Others have argued that campaign donations could be used to measure candidate quality, though Prat, Puglisi, and Snyder (2010) find that donations are only "positive, but weak" predictors of legislator effectiveness, and campaign contributions are also confounded with ideological considerations (Bonica 2014) and competitiveness.

Another way to measure candidate quality is through expert opinions, which includes candidate ratings or rankings made by researchers, political organizations, or professional groups. In theory, expert evaluations of candidate quality can overcome the limitations of proxy indicators, as experts can directly and comprehensively evaluate candidates on their (potential) governing effectiveness based on their qualifications and experiences. The validity and reliability of expert judgments in political science research has been evaluated and verified in previous work (Steenbergen and Marks 2007), and expert judgments have been used specifically in the context of measuring candidate quality. For example, Mondak (1995) calculates quality and competence-integrity scores based on content analysis of legislator biographies paired with undergraduate and graduate student ratings of character traits. Krasno and Green (1988, 912) create a quality index based on candidate backgrounds, composed of "all characteristics which imply attractiveness or skill." In other cases, political scientists have used surveys of experts to measure candidate quality. Some examples include Stone et al. (2010), Stone and Simas (2010), and Buttice and Stone (2012), who all use a survey of expert informant ratings of members of Congress to quantify the valence quality of candidates; Luttbeg (1992), who uses expert rankings of "best" and "worst" legislators, from surveys conducted by newspapers, to assess the impact of rankings on election outcomes; Miquel and Snyder (2006), who use a survey of legislators, lobbyists, and journalists who rate the effectiveness of state legislators in North Carolina; and Lim and Snyder (2015), who use the qualification rankings from the American Bar Association to differentiate between judicial candidates of varying quality.

Although expert opinions may be more holistic measures of governing effectiveness, they are difficult to collect for a large set of candidates and races, and they are often unavailable in many historical contexts. In Mondak (1995), quality and competence-integrity scores are only available for a single year of sitting US House members, and Krasno and Green (1988) composite ratings were only constructed for US House candidates who challenged incumbents between 1972 and 1980. The expert informants from Stone et al. (2010), Stone and Simas (2010), and Buttice and Stone (2012) only include judgments of candidates in a few years in a partial sample of Congressional districts. Rankings of effectiveness used in Miquel and Snyder (2006) and Prat et al. (2010) only cover North Carolina state legislators, while Lim and Snyder's (2015) bar association ratings are limited to judicial candidates. Additionally, manually evaluating candidates and constructing subjective measures of candidate quality or running surveys to collect a large set of expert opinions is often prohibitively time consuming and expensive. These limitations on the creation and collection of expert evaluations make it difficult to use these measures in comprehensive studies about candidate quality, even if they represent a more conceptually valid measure of governing effectiveness.

## NEWSPAPER ENDORSEMENTS AS (BIASED) EXPERT OPINIONS

Typically, newspaper endorsements have been used by political scientists to measure the partisan bias of news rather than candidate quality (Ansolabehere, Lessem, and Snyder 2006; Larcinese, Puglisi, and Snyder 2011; Puglisi and Snyder 2011, 2015). However, I will argue and show empirically that newspapers decide who to endorse in part based on candidate quality in addition to partisan alignment. The simple idea is that newspapers are more likely to endorse higher-quality candidates, and therefore newspaper endorsements can be used as expert opinions that measure the differences in quality between two candidates in an election. Notably, in previous work, Hirano and Snyder (2014, 2019) use newspaper endorsements to identify high-quality candidates in the context of primary elections, where partisan and policy differences between candidates are small, and hence the ideological stances of the papers matter less for their endorsement decisions.

In the United States, it is common for local newspapers to make endorsements of candidates. In many cases, newspapers summarize their endorsements in a list for voters leading up to or on election day. It is also not uncommon for papers to write an entire editorial article explaining their endorsement of a particular candidate. Figure 1 displays two examples of local newspaper endorsements as printed by the *Wisconsin State Journal* (fig. 1*A*) and the *Wilmington Evening Journal* (fig. 1*B*). Political endorsements provide a window into a newspaper's own partisan preferences, as they are an explicit political act that requires a newspaper to choose between competing candidates from opposing political parties.

Newspaper editorial boards feel that they are trying to inform the public about the candidates, not in an attempt to manipulate their readers but rather as an act of public service. They provide information about the policy positions and qualifications of candidates and explain the reasoning behind their endorsement to readers. They claim that they strongly weigh aspects of candidate quality when making their endorsements. They take the time to research the candidates and issues and act as experts expressing informed opinions about who they think is the best candidate. Undoubtedly, editors and reporters know more about elections than the average citizen, and they often have experience evaluating candidates and assessing their past behavior and performance while in office, through both the newspaper's reporting and with the experience of having made endorsements after evaluating candidates in previous races.

Public interviews with editorial board members give insight into the decision-making process that newspapers use to make political endorsements. The following quotations from editorial boards explaining how they make their endorsements is illustrative:

A Editorial List


State Journal endorses

Governor
Anthony Earl (D)

Secretary of State
Fred Rice (R)

State Treasurer
Harold Clemens (R)

Congress
2nd District: Jim Johnson (R)
3rd Dist.: Steve Gunderson(R)

State Senate
13th: Barbara Lorman (R)
15th: Tim Cullen (D)
17th: Richard Kreul (R)
27th: Everett Bidwell (R)

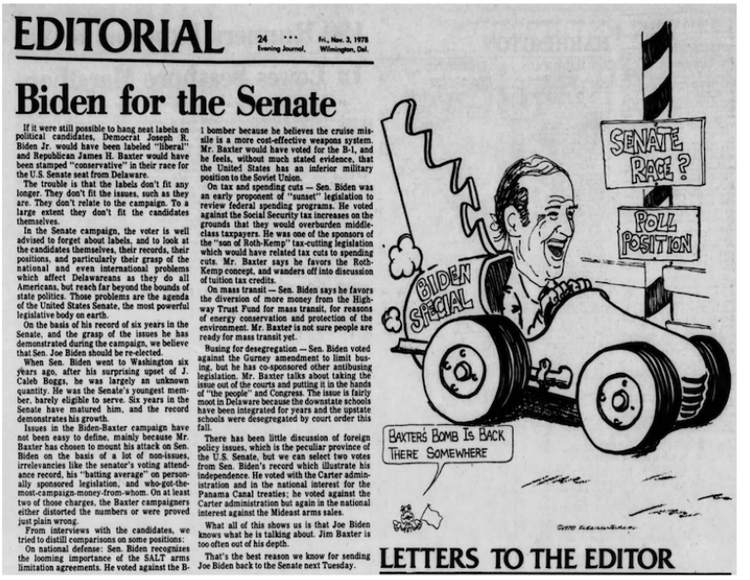
State Assembly
25th: Gary K. Johnson (D)
31st: Randall J. Radtke (R)
37th: John Manske (R)
38th: Joseph E. Tregoning (R)
91st: Dale W. Schultz (R)
93rd: Nancy Harper (R)
94th: Mary Lou Munts (D)
95th: Marjorie M. Miller (D)
96th: Gordon Harman (R)
98th: Robert Stanek (R)
99th: Thomas A. Loftus (D)

Dane Co. Attorney
Robert Burr (R)

Dane Co. Sheriff
Jerome Lacke (R)

Dane Co. Clerk
Carol Little (D)

B Editorial Announcement


EDITORIAL

24 ... Evening Journal, Fri., Nov. 3, 1978 Wilmington, Del.

Biden for the Senate

If it were still possible to hang neat labels on political candidates, Democrat Joseph R. Biden Jr. would have been labeled "liberal" and Republican James H. Baxter would have been stamped "conservative" in their race for the U.S. Senate seat from Delaware.

The trouble is that the labels don't fit any longer. They don't fit the issues, such as they are. They don't relate to the campaign. To a large extent they don't fit the candidates themselves.

In the Senate campaign, the voter is well advised to forget about labels, and to look at the candidates themselves, their records, their positions, and particularly their grasp of the national and even international problems which affect Delawareans as they do all Americans, but reach far beyond the bounds of state politics. Those problems are the agenda of the United States Senate, the most powerful legislative body on earth.

On the basis of his record of six years in the Senate, and the grasp of the issues he has demonstrated during the campaign, we believe that Sen. Joe Biden should be re-elected.

When Sen. Biden went to Washington six years ago, after his surprising upset of J. Caleb Boggs, he was largely an unknown quantity. He was the Senate's youngest member, barely eligible to serve. Six years in the Senate have matured him, and the record demonstrates his growth.

Issues in the Biden-Baxter campaign have not been easy to define, mainly because Mr. Baxter has chosen to mount his attack on Sen. Biden on the basis of a lot of non-issues, irrelevancies like the senator's voting attendance record, his "batting average" on personally sponsored legislation, and who-got-the-most-campaign-money-from-whom. On at least two of those charges, the Baxter campaigners either distorted the numbers or were proved just plain wrong.

From interviews with the candidates, we tried to distill comparisons on some positions:

On national defense: Sen. Biden recognizes the looming importance of the SALT arms limitation agreements. He voted against the B-1 bomber because he believes the cruise missile is a more cost-effective weapons system. Mr. Baxter would have voted for the B-1, and he feels, without much stated evidence, that the United States has an inferior military position to the Soviet Union.

On tax and spending cuts — Sen. Biden was an early proponent of "sunset" legislation to review federal spending programs. He voted against the Social Security tax increases on the grounds that they would overburden middle-class taxpayers. He was one of the sponsors of the "son of Roth-Kemp" tax-cutting legislation which would have related tax cuts to spending cuts. Mr. Baxter says he favors the Roth-Kemp concept, and wanders off into discussion of tuition tax credits.

On mass transit — Sen. Biden says he favors the diversion of more money from the Highway Trust Fund for mass transit, for reasons of energy conservation and protection of the environment. Mr. Baxter is not sure people are ready for mass transit yet.

Busing for desegregation — Sen. Biden voted against the Gurney amendment to limit busing, but he has co-sponsored other antibusing legislation. Mr. Baxter talks about taking the issue out of the courts and putting it in the hands of "the people" and Congress. The issue is fairly moot in Delaware because the downstate schools have been integrated for years and the upstate schools were desegregated by court order this fall.

There has been little discussion of foreign policy issues, which is the peculiar province of the U.S. Senate, but we can select two votes from Sen. Biden's record which illustrate his independence. He voted with the Carter administration and in the national interest for the Panama Canal treaties; he voted against the Carter administration but again in the national interest against the Mideast arms sales.

What all of this shows us is that Joe Biden knows what he is talking about. Jim Baxter is too often out of his depth.

That's the best reason we know for sending Joe Biden back to the Senate next Tuesday.



LETTERS TO THE EDITOR

Figure 1. Newspaper endorsement examples. (*A*) A list of endorsements from the Wisconsin State Journal in 1982 for federal, state, and local candidates. © Wisconsin State Journal. (*B*) *The Wilmington Evening Journal* endorsement for Joe Biden during his second run for the US Senate in Delaware in an article format. © The News Journal – USA TODAY NETWORK via Imagn Images.

*The Arizona Republic*: The Republic has endorsed candidates for more than 120 years because we believe our choices can inform readers and spur community debate. Let's make this clear: We're not telling you how to vote. We respect the sanctity of your decision, based on your beliefs, research and contemplation. But at the same time, we know you're busy. You may not have the time to meet the candidates, to hear them speak, to cull their election literature and research their records. We do that. We follow the races closely. We talk to the campaigns and candidates. We research their records and explain why we think a certain candidate deserves your vote (Arizona Republic Editorial Board 2016).

*The Boston Globe*: The Globe endorses candidates to clarify key issues at stake in a political race and to help inform readers who are aligned with the editorial board's positions and values when they are deciding how to vote. We do the work of reporting and analysis that many readers don't have time to do. Particularly for down-ballot (nonpresidential, local) races and for ballot questions, we take the time to learn about the candidates and questions, to interview candidates and proponents, and to deliberate on the tradeoffs. We then transparently share that reasoning and information as a service to readers and voters who don't have the opportunity to meet candidates in person or to vet them as thoroughly as the board (Bina Venkataraman, quoted in Jones 2020)

*The New York Times*: The closest analogy to this process may be a job interview. What is it in the candidates' experience that prepares them for the job we're trying to fill? We have all read their résumés and watched their debate performances; their platforms and programs are on their websites. We're trying to get at something different—how they would perform in office and whether they have any idea of how to accomplish whatever goals they've set . . . Whose platform and record are most consistent with our values? Whose temperament and character are best suited to the demands of the presidency? (Kathleen Kingsbury, quoted in Takenga 2020)

These quotes are representative of what other editorial boards say about why and how they make endorsements (Jones 2020) and show that in addition to a candidate's "positions and values," editorial boards evaluate and make their decision about who to endorse based on candidate qualifications and, ultimately, "how they would perform in office." Notably, the focus of these endorsements is on the candidates' ability to govern effectively rather than their chances of winning an election. Editorial boards aim to highlight which candidate is most capable of fulfilling the responsibilities of public office, emphasizing factors such as competence, qualifications, and alignment with community values. Their recommendations are not driven by strategic calculations about electoral success but rather by an assessment of which candidate they believe will serve the public best. This distinction reinforces the idea that endorsements function as expert evaluations of governing potential, providing a reliable lens for assessing candidate quality.

## DATA AND EMPIRICAL EVIDENCE

In this section, I empirically test whether previous measures of candidate quality, such as incumbency or prior experience, predict newspaper endorsements. To do so, I collect and compile a set of 21,095 newspaper endorsements from 368 local newspapers in the United States.[3] The dataset includes endorsements from many major regional newspapers and for elected offices ranging from president down to local government positions.

Table 1 provides summary statistics for the set of all partisan newspaper endorsements that are used in the subsequent analyses. The endorsements span 1950 to 2020 and come from 368 unique newspapers, including newspapers from a large majority of states as well as Washington, DC.[4] About 13% of the endorsements are for presidential candidates, 9% are for candidates for US Senate, 25% are for candidates for US House, 34% are for candidates for statewide offices, 16% are for state legislative candidates, and the remaining 3% are for local government offices. In general, Democrats are endorsed 51% of the time, though at a slightly lower rate in presidential races. The summary statistics in table 1 also reveal evidence of a strong preference for incumbents: Incumbents earn the endorsements of newspapers 78% of the time when running for reelection.

To test the extent to which newspaper endorsements are driven by candidate quality factors, in table 2, I predict newspaper endorsements using candidate characteristics related to

3. App. A describes the data and the data collection procedure in detail.

4. In app. A, fig. A1 presents the number of endorsements in the data from each year, fig. A2 presents the main county of circulation for newspapers in the sample, fig. A3 presents the share of endorsements in the sample that were for Democrats in each year, and table A1 lists all newspapers and the number of endorsements collected from each.

Table 1. Newspaper Endorsement Summary Statistics

| Office | No. | Share | % Dem | % Incs | No. Papers | No. Elections |
|---|---|---|---|---|---|---|
| President | 2,680 | .13 | .40 | .58 | 351 | 18 |
| US Senate | 1,993 | .09 | .54 | .73 | 340 | 481 |
| US House | 5,247 | .25 | .52 | .84 | 307 | 2,301 |
| Statewide | 7,193 | .34 | .50 | .78 | 353 | 1,790 |
| State legislature | 3,404 | .16 | .55 | .85 | 112 | 1,602 |
| Local govt | 578 | .03 | .53 | .74 | 70 | 240 |
| Total | 21,095 | 1.00 | .51 | .78 | 368 | 6,432 |

Note. No. is the number of endorsements for the office type indicated in each row. Share is the share of all endorsements for the office type. % Dem is the percentage of the endorsements that are for the Democratic candidate, while % Incs is the percentage of endorsements that are for the incumbent when the incumbent is running for reelection. No. Papers is the number of unique newspapers that make endorsements for the office type. No. Elections is the number of unique elections for that office type. See app. A for additional details.

quality.[5] The outcome variable in table 2 is an indicator variable for whether the newspaper endorsed a Democrat, and each observation is a newspaper endorsement made in an election. Explanatory variables include incumbency, (any) previous elected experience, and scandal, all of which are coded as 1 when they favor the Democratic candidate (e.g., when the Democrat is the incumbent), −1 when they favor the Republican candidate (e.g., when the Republican is the incumbent), and 0 when there is no difference (e.g., when nobody is the incumbent in an open seat). The decades of experience variables are calculated as the difference in experience between the Democratic and Republican candidates. In all of the specifications, I control for the concurrent or most recent presidential election two-party Democratic vote share in the main county where the endorsing newspaper circulates (Dem Vote Share) to account for potential audience demand side effects, and in columns 2 through 6, I include newspaper fixed effects to control for each newspaper's partisan bias (differences across newspapers in their propensity to endorse Democrats).

In column 1 of table 2, Democratic vote shares of the county where the newspaper circulates are shown to significantly predict its endorsement behavior. This is consistent with evidence from the economics literature that finds that media tends to slant its news coverage in the direction of its audience's preexisting biases (Gentzkow and Shapiro 2010). However, the low $R^2$—only 0.025—shows that it is not very good at explaining the overall variation in individual endorsements. After adding in newspaper fixed effects, in column 2, the $R^2$ jumps from 0.025 to 0.154, and the adjusted-within $R^2$ reveals that the Dem Vote Shares variable accounts for only 1% of the variation in newspaper endorsements. In many cities where there is more than one newspaper and a large enough population with heterogeneity in audience partisanship, newspapers may choose to divide up the local market by adopting opposing partisan positions rather than competing for the dominant partisan audience (Mullainathan and Shleifer 2005). For example, in New York City, the *New York Post* is known to be a conservative newspaper that still does well in the city despite the overwhelmingly Democratic population. So, while there is a tendency for the bias of papers to match the dominant voter's partisanship in the county where the paper circulates, this is only a small factor in explaining specific newspaper endorsements.

Columns 3 through 6 add candidate characteristics related to quality to the regression. In column 3, the results show that incumbency is a strong predictor of earning a local newspaper's endorsement: Being an incumbent is associated with a 26.2 percentage point increase in the probability of being endorsed by a newspaper. Columns 4 and 5 show that prior experience is also a very strong predictor of being endorsed by a newspaper and that there are nonlinear effects of length of experience. Column 6 shows that being in a scandal reduces the probability of being endorsed, as expected.[6]

5. The candidate characteristics were in part collected manually along with endorsements but also come from Inter-university Consortium for Political and Social Research and McKibbin (1997), Lewis et al. (2022), Klarner (2018), Basinger et al. (2014), Miller and Hamel (2021), Boche et al. (2018), and Bonica (2023).

6. Because not all candidates who are involved in scandals are included in the regression results, because of the fact that many candidates who are in serious scandals either resign or do not win their primaries, the

Table 2. Predicting Newspaper Endorsements

| Variables | (1) Endorse D | (2) Endorse D | (3) Endorse D | (4) Endorse D | (5) Endorse D | (6) Endorse D |
|---|---|---|---|---|---|---|
| Dem Vote Share | .672*** | .698*** | .493*** | .641*** | .541*** | .291*** |
| | (.030) | (.049) | (.044) | (.072) | (.075) | (.082) |
| Incumbency | | | .262*** | .202*** | .291*** | .402*** |
| | | | (.004) | (.005) | (.008) | (.009) |
| Prior experience | | | | .250*** | .222*** | .152*** |
| | | | | (.008) | (.008) | (.008) |
| Decades of experience | | | | | −.120*** | −.166*** |
| | | | | | (.008) | (.008) |
| (Decades of experience)$^2$ | | | | | .055*** | .062*** |
| | | | | | (.002) | (.002) |
| Scandal | | | | | | −.091** |
| | | | | | | (.046) |
| Observations | 19,481 | 19,481 | 18,519 | 7,648 | 6,244 | 4,405 |
| Adjusted $R^2$ | .025 | .154 | .343 | .468 | .561 | .631 |
| Adjusted within $R^2$ | | .010 | .228 | .348 | .459 | .556 |
| Newspaper FEs | No | Yes | Yes | Yes | Yes | Yes |

Note. Outcome variable (Endorse D) is coded as 1 for a Democratic endorsement, 0 for a Republican endorsement, and 0.5 for either a third-party endorsement, an explicit nonendorsement, or when the paper endorses both candidates. Dem Vote Share is the concurrent or most recent presidential election results in the main county where the endorsing newspaper circulates. Incumbency is coded as +1 for a Democratic incumbent, −1 for a Republican incumbent, and 0 for open seats. Prior experience is an indicator variable equal to +1 (Democratic advantage), −1 (Republican advantage), or 0 (if both or neither have relevant experience). Decades of experience and (Decades of experience)$^2$ is calculated with the difference in decades of experience between the Democratic and Republican candidates. Scandal is coded as +1 for a Democratic scandal, −1 for a Republican scandal, and 0 if neither (or both) were in a scandal. Columns 2–6 include newspaper fixed effects. Not all endorsements are included in each regression due to missing candidate data.

* $p < .10$.

** $p < .05$.

*** $p < .01$.

Although these common proxies for candidate quality are predictive of newspaper endorsements, they do not tell the whole story. At best (column 6), these models can explain 63.1% of the variation in endorsement decisions. So, while endorsements are related to the characteristics that political scientists typically consider to be related to candidate quality, they are not only reflective of existing measures.

## ESTIMATION OF PARTISAN BIAS AND QUALITY DIFFERENTIALS

When making endorsements, newspapers consider both their partisan preferences and the quality of the candidates. This means that the number and share of endorsements that any particular candidate gets depends not only on their quality relative to their opponent but also on the partisan preferences and ideological values of the newspapers making endorsements in the race. In order to accurately measure differences in candidate quality between candidates, partisan biases of newspapers must be taken into account.[7]

Others have established that local newspapers have partisan biases (Ansolabehere et al. 2006; Gentzkow, Glaeser, and Goldin 2006; Gentzkow and Shapiro 2010). The partisan bias of newspapers is useful, however, because it can help reveal information about the magnitude of the differences in candidate quality. Higher-quality candidates should be more likely to be endorsed by a newspaper, conditional on the newspaper's partisan bias. Only if candidate quality differences are large will a strongly biased newspaper endorse a candidate from the party they typically do not prefer. This means

estimated effects of scandals on endorsements is a conservative estimate of the effect of scandals on getting endorsed.

7. I present a formal model of newspaper endorsement decisions in app. B.

that, for example, when a strongly Republican-leaning newspaper endorses a Republican candidate, it is not unexpected, and not much information about candidate quality is revealed. But when that same newspaper endorses a Democratic candidate in an election, it is a much stronger signal of differences in candidate quality—in this example, indicating a relatively high-quality Democratic candidate. This idea of "credible" endorsements—unexpected endorsements given the partisan lean of the newspaper—has also been utilized in empirical work examining the effects of endorsements on voting.[8]

In the case in which a newspaper is very Republican leaning, such that the paper's ideology is close to the ideological position of the Republican candidate, then the Democratic candidate would need to be much higher quality (or the Republican candidate much lower quality) in order for the paper to endorse the Democratic candidate. The same would be true of Democratic-leaning papers—for a Republican to win a Democratic newspaper's endorsement, the Republican candidate would have to be much higher quality relative to the Democratic candidate. More unbiased or neutral newspapers will seem to care more about differences in candidate quality, as their ideological position will be closer to the midpoint between the parties, and hence differences in quality will be more likely to determine endorsement decisions.

## Empirical estimation

The large number of endorsements in my dataset allows me to empirically estimate the partisan bias of newspapers and differences in candidate quality simultaneously. Observing many endorsements from a single newspaper reveals that paper's partisan bias, while observing many endorsements in a single contest across multiple newspapers reveals candidate quality differentials in that particular race. I use a simple linear probability model along with high-dimensional fixed effects to estimate both newspaper partisan bias and candidate quality differentials.[9] In total, I use 21,095 endorsements to estimate the partisan bias for 368 newspapers and candidate quality differentials in 6,432 elections (see table 1). The main model specification is

$$E_{n,j,t} = \alpha + (\beta_{1,n} + \beta_{2,n}t) + \gamma_{j,t} + \varepsilon_{n,j,t}, \quad (1)$$

where $E_{n,j,t}$ is newspaper $n$'s endorsement for office $j$ in year $t$, coded as 1 for a Democratic endorsement, 0 for endorsing the Republican, and 0.5 for explicitly endorsing neither candidate, for endorsing both candidates, or for endorsing a third-party candidate. The $(\beta_{1,n} + \beta_{2,n}t)$ term captures the newspaper's partisan bias—its propensity to endorse Democratic candidates across all its endorsements in a particular year. The $\gamma_{j,t}$ are contest-specific fixed effects that capture the relative likelihood of the Democratic candidate being endorsed in that particular electoral contest. These contest fixed effects are the measure of the relative differences in candidate quality. Because $E_{n,j,t}$ is an indicator variable for a Democratic endorsement, it means that positive values for the estimated bias and contest-specific fixed effects indicate a pro-Democratic bias or a pro-Democratic quality advantage, and negative values indicate pro-Republican bias or pro-Republican quality advantage.

The estimate of the newspaper's partisan bias in any particular year captures the newspaper's propensity to endorse Democratic candidates while also controlling for differences in candidate quality. The $\beta_{2,n}t$ term allows this partisan bias to change over time (linearly). These trends broadly accommodate longer-term changes in a newspaper's editorial board ideological positioning, which may affect its propensity to endorse Democrats over the paper's endorsement history. After estimation, I standardize the newspaper partisan bias estimates to have unit variance, and I center the newspaper partisan bias measure around 0 so that a neutral newspaper that is equally likely to endorse Democrats or Republicans has a partisan bias measure equal to 0.

The contest-specific fixed effects, $\gamma_{j,t}$, capture the effect of quality differences between the two candidates running for office $j$ in year $t$ on the endorsement behavior of newspapers. They measure how likely it is that the Democratic candidate is endorsed among all newspapers making endorsements in the electoral contest while controlling for those newspapers' partisan bias. I refer to this contest-specific effect as the "quality differential" in that election. The quality differentials estimated from this model are election-specific fixed effects that pick up relative quality differences between candidates rather than the absolute value of the quality of each candidate. Positive values of $\gamma_{j,t}$ indicate that the Democratic candidate running for office $j$ in year $t$ is relatively higher quality than the Republican candidate, while negative values indicate that the Republican candidate running is relatively higher quality. A large quality differential between candidates could be due to the higher-quality candidate being a very good candidate, the lower-quality candidate being a particularly bad candidate, or both. I standardize the quality differential estimates to have unit variance for ease of interpretation,

8. For examples, see Ladd and Lenz (2009), Chiang and Knight (2011), Leon (2013), Casas, Fawaz, and Trindade (2016), Fowler and Kim (2022), and Schuster (2023).

9. In app. C, I try a variety of empirical specifications and show that the quality differentials estimates are robust to alternative and more flexible estimation procedures.

so a one-unit increase in the quality differential corresponds to a one standard deviation increase in the propensity of newspapers to endorse the Democratic candidate in that race.

In the linear probability model, I assume that newspapers only care about the party affiliation of the candidates, so ideological extremity or moderation does not factor into the endorsement decision. While this is a strong assumption, I do this because in many elections in the data there are no estimates of the ideological scores of both candidates, so they cannot be incorporated into the model. Later in the article and also in appendix D, I use a more limited set of elections where measures of the ideological positioning of both candidates are available to show that directly incorporating ideological positions into the endorsement model results in very similar partisan bias and quality differential estimates.

## ENDORSEMENT-BASED PARTISAN BIAS ESTIMATES

I use the linear probability model to estimate the partisan bias of 368 newspapers across the sample. The bias measure for each individual newspaper can change linearly to reflect potential changes in a newspaper's editorial stance over time. Figure 2 graphs density plots of the standardized estimates of newspaper partisan bias in the 1950s and in the 2010s. The partisan bias distributions show that local news was Republican-leaning in the 1950s and that distribution has become flatter (more varied) and more Democratic-leaning in the most recent decade. This is consistent with other findings in the literature, which document a heavily Republican bias in newspaper endorsements in the 1950s and 1960s that becomes more neutral over time (Ansolabehere et al. 2006), and provides initial evidence that the newspaper fixed effects with linear trends are accurately picking up the expected changes in local news partisan bias over this time period. Each newspapers' average partisan bias along with its time trend is presented in appendix table A1.

To validate that the endorsement-based partisan bias measure is an accurate reflection of each newspaper's bias, I compare the endorsement-based estimates to three different empirical measures of media slant from the political science and economics literature on media bias. The first is the "slant" measure that comes from Gentzkow and Shapiro (2010), in which slant is estimated based on how similar the text in a newspaper is to language used in legislator speeches in the Congressional record. The second set of newspaper bias measures comes from Ho and Quinn (2008), who estimate the ideal points of newspapers by classifying the editorial positions taken by newspapers on major Supreme Court cases and comparing the newspaper positions with the votes of Supreme Court justices on the same set of cases. The third measure of bias comes from Puglisi and Snyder (2015), who use newspaper endorsements of ballot propositions to place newspapers on an ideological scale relative to the interest groups and to the median voter's ideological position in each newspaper's state. I compare the

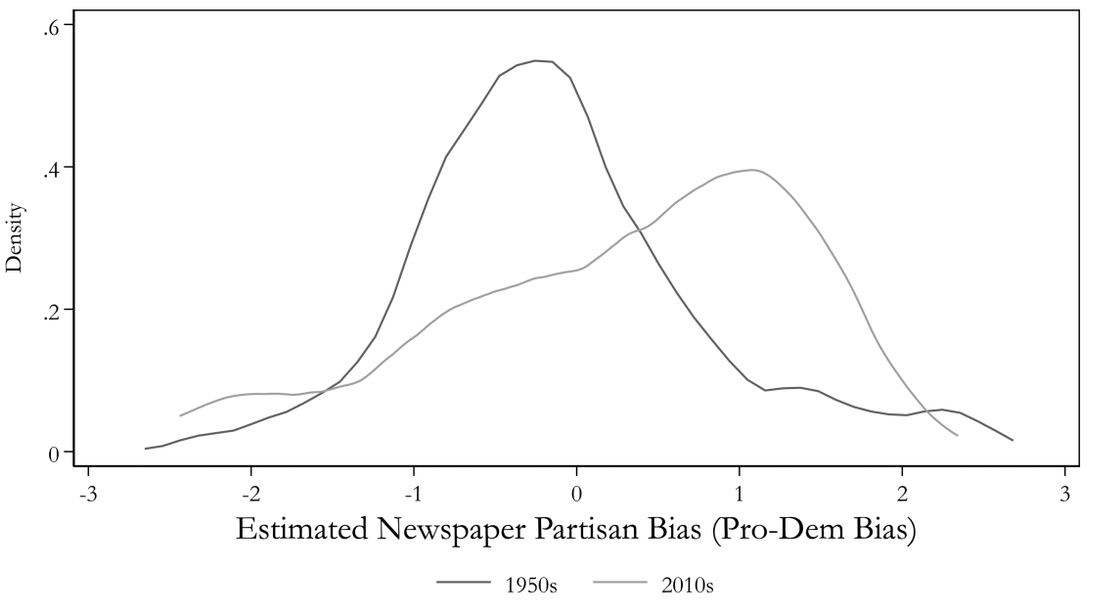



Figure 2. Partisan bias of local newspapers, 1950s and 2010s.

endorsement-based partisan bias measures to all cases in which alternative partisan slant or bias measures are available for newspapers in each dataset and plot the correlations between the endorsement-based bias measure and each of the three alternative bias measures in figure 3.

The endorsement-based bias measures are positively correlated with all alternative bias measures. The lowest correlation is with the Gentzkow and Shapiro (2010) slant measure; this is likely because their measure reflects a more nuanced form of partisan slant based on similarities of phrases used by newspapers and members of Congress rather than on explicit political positions taken by newspaper editors. In contrast, the Ho and Quinn's (2008) and Puglisi and Snyder's (2015) measures are based on editorial boards' explicit position-taking on policy positions and hence are more representative of the same ideological decisions newspapers make when endorsing candidates in partisan elections. In general, the correlations suggest that the endorsement-based partisan bias measure is picking up on the same underlying partisan and ideological preferences as previous measures of bias widely cited in the literature on media bias. In appendix C, I try numerous alternative endorsement models to measure the partisan bias of local newspapers in more flexible ways and show that the partisan bias estimates (and, importantly, the quality differentials from the contest-specific fixed effects) are robust across a range of specifications.

## ENDORSEMENT-BASED QUALITY DIFFERENTIAL ESTIMATES

Using the same linear probability model of endorsements, I estimate the candidate quality differential for each of the 6,432 elections in the newspaper endorsement sample. These are contest-specific quality differences—as the candidate pairings change, or the year or office in which the candidates are competing changes, the candidate quality differential can change as well (i.e., even the same candidate pairings can have a quality differential that varies across years). Although the results in table 2 provide initial evidence that newspaper endorsements are correlated with common proxy measures of candidate quality, in this section, I validate the empirically estimated quality differentials from the econometric model by comparing them to other expert judgments, legislative effectiveness scores, and net approval ratings to assess the extent to which quality differentials are related to indicators of governing ability.

### Expert informant judgments

In the first validation of the quality differentials, I use the expert informant ratings of US House candidates from the UC Davis Congressional Election Study (UCD-CES). Informant rankings for candidates' ideological positions as well as their valence characteristics derived from this survey

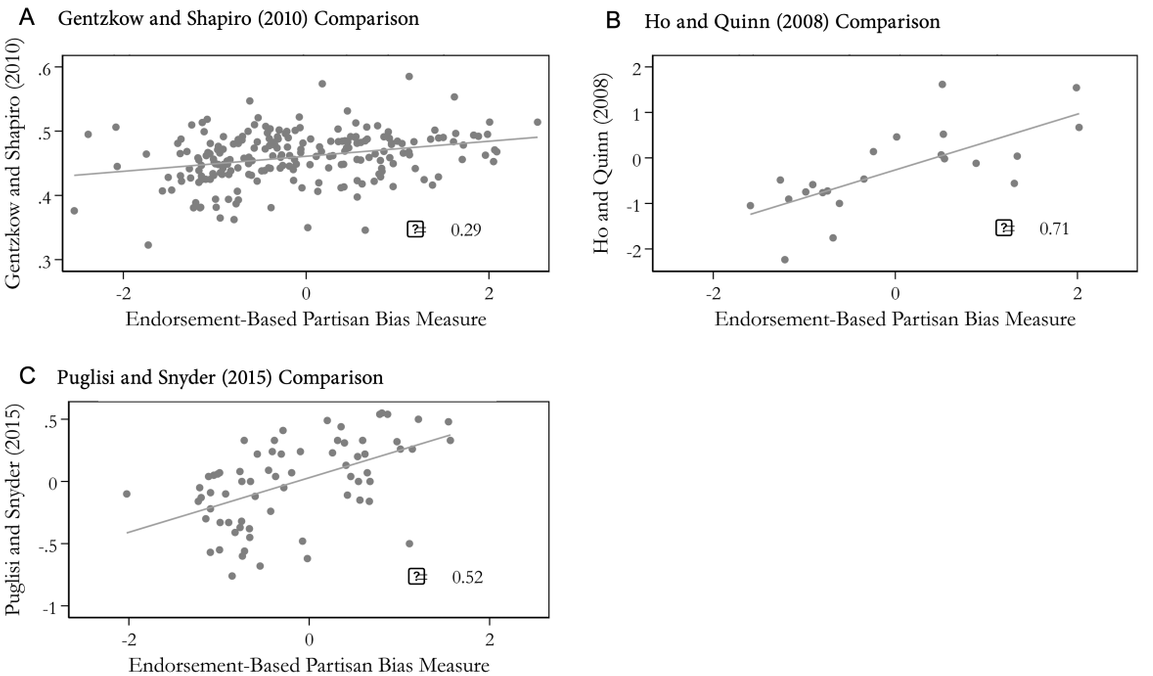



Figure 3. Comparison to alternative media bias measures.

have been used in numerous papers that explore the relationship between ideological positioning, candidate valence characteristics, and electoral outcomes (Adams et al. 2011; Adams et al. 2017; Buttice and Stone 2012; Simas 2013; Stone et al. 2010; Stone and Simas 2010).

The survey asks two sets of "valence" characteristic questions of the expert informants. The first are "campaign-valence" items, which Stone and Simas (2010, 373) defined as "the skills and resources instrumental to waging an effective campaign." The campaign valence items are factors like name recognition and fundraising ability, which are important for electoral success but are more situational rather than about the candidates themselves. The second set of valence questions asked are "character-valence" items, which are defined as "the bundle of qualities and skills that relate to character and job performance" (373). There are seven character valence questions in total. One of the items in the valence category directly asks experts to judge to what extent candidates have the "qualifications to hold office," which mirrors my definition of candidate quality and the language that newspaper editors use to describe their endorsement considerations. Because the character valence items are more related to the intrinsic qualities of candidates, I compare endorsement-based quality differentials to the informant character valence index and the "qualified for office" question as a validation exercise.

In total, there are only 76 US House elections in the 2006 and 2010 UCD-CES survey data that overlap with cases where I am able to estimate endorsement-based quality differentials (which is 25% of their sample of elections). For each election, I calculate the average informant character valence index for both the Democratic and Republican candidates and then create a relative character valence index for each election, which is simply the average character valence index for the Democrat minus the average character valence index for the Republican. I also do the same with average informant answers to the "qualified for office" question. I run a regression of endorsement-based quality differentials on the relative character valence index and plot the relationship in figure 4*A*, and in figure 4*B*, I show an added-variable plot of the results from a regression of endorsement-based quality differentials on the "qualified for office" question while controlling for the other character valence items.

The endorsement-based quality differentials are positively related to both relative quality measures from the expert informant data. The coefficient for relative character valence is positive (though not statistically significant), and the coefficient for the "qualified for office" question is positive and

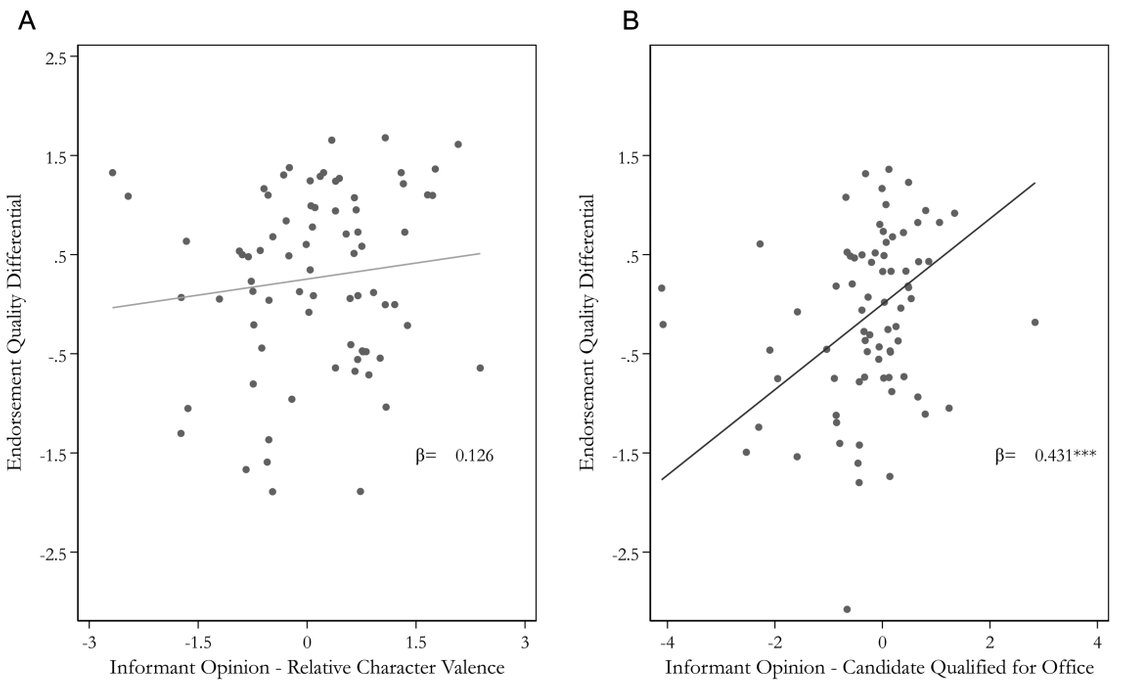



Figure 4. Comparison to informant ratings of candidate qualifications. (*A*) A scatterplot of endorsement-based quality differentials and relative character valence. (*B*) Added variable plot of "qualified for office" while controlling for other character valence items. $\beta$s reports the coefficient of a regression of the endorsement-based candidate quality differential on expert informant rating. *** $p < .01$.

statistically significant, suggesting that the endorsement-based quality differential measure of quality is related to the same candidate qualifications as determined by experts. Although the sample is small due to a limited number of informant ratings that overlap with the estimated quality differentials, these results demonstrate that the quality differences measured by newspaper endorsements are reflective of expert informant judgments of candidate valence and qualifications for office.

### Legislator effectiveness and approval ratings

I also test the relationship between quality differentials and measures of the actual governing performance of politicians. To do so, I examine whether legislative effectiveness scores and politician approval ratings are predicted by candidate quality differentials. If the endorsement-based quality measure is picking up on actual characteristics of candidates that lead to better governing performance while in office, then we would expect that, on average, candidates that are relatively high quality would both be more effective at passing legislation and also have higher job approval ratings from their constituencies.

To measure effectiveness as a legislator, I use the Volden and Wiseman (2012) legislative effectiveness scores for US House members between 1973 and 2020. The legislative effectiveness scores are based on the ability of members to pass legislation, and how substantive that legislation is, and are calculated using a detailed methodology composed of 15 different indicators of effectiveness observed for each member of Congress. I merge the effectiveness scores for each legislator to their estimated endorsement-based quality differential for the election immediately preceding the term for which the legislative effectiveness score was calculated. For approval ratings, I use the US Officials' Job Approval Ratings Database Collection (Niemi, Beyle, and Sigelman 2010) to collect state-level approval ratings of governors and senators. For each politician in the sample, I calculate the average net approval rating (approve minus disapprove) across all surveys for the duration of their term and compare it to the endorsement-based quality differential of the candidate during their election to that same term.

I run regressions to examine the relationship between quality differentials and these governing performance measures, and the results are presented in table 3. The first column shows that relatively higher-quality US House members, as indicated by newspaper endorsements, have significantly higher legislative effectiveness scores, and the second column shows that higher-quality governors and US senators have higher net approval ratings during their term. Although quality differentials are a relative measure of candidate quality, they also appear to be at least partially indicative of candidates who are high quality in the absolute sense given the statistically significant correlations between relative quality governing performance. The overall results confirm that the endorsement-based quality measure not only reflects newspaper editors' perceptions of what makes a candidate high quality but also actually reflects better governance, as indicated by both higher effectiveness in the legislature and higher net approval ratings among constituents.

Table 3. Quality Differentials and Governing Effectiveness

| Variables | (1) LES Scores | (2) Net Approval |
|---|---|---|
| Quality differential | .160*** | .054*** |
| | (.046) | (.018) |
| Observations | 1,917 | 363 |
| Adjusted $R^2$ | .006 | .036 |
| Party-state FEs | No | Yes |
| Mean of dependent variable | 1.020 | .163 |
| SD of dependent variable | 1.525 | .217 |

Note. LES scores are legislator effectiveness scores from Volden and Wiseman (2012). Net approval ratings come from Niemi et al. (2010). Quality differential is the estimated endorsement-based quality differential. Column 1 uses only US House members, while column 2 uses only governors and US senators.

*** $p < .01$.

### QUALITY DIFFERENTIALS AND CANDIDATE IDEOLOGY

As a final validation check, I evaluate the impact of legislator ideology on the endorsement-based measures. Specifically, I estimate alternative versions of newspaper partisan bias and candidate quality differentials that take into account legislator ideological positions for a subset of elections. Newspaper endorsements are partly shaped by the ideological distance between the two candidates in the election—all else equal, partisan newspapers will be less likely to endorse an extreme candidate from the opposing party, as that candidate's views are further from the newspaper's ideological preference. For example, a conservative-leaning newspaper will be more likely to endorse a moderate or conservative Democrat over one with strongly liberal views. Although the main empirical approach assumes that newspapers respond only to candidate partisanship, this may bias quality estimates upward for moderate candidates, who are more likely to receive credible endorsements not necessarily because they are higher quality, but because they are ideologically moderate.

To test this, I reestimate the quality differentials for a subset of elections where ideology data are available for

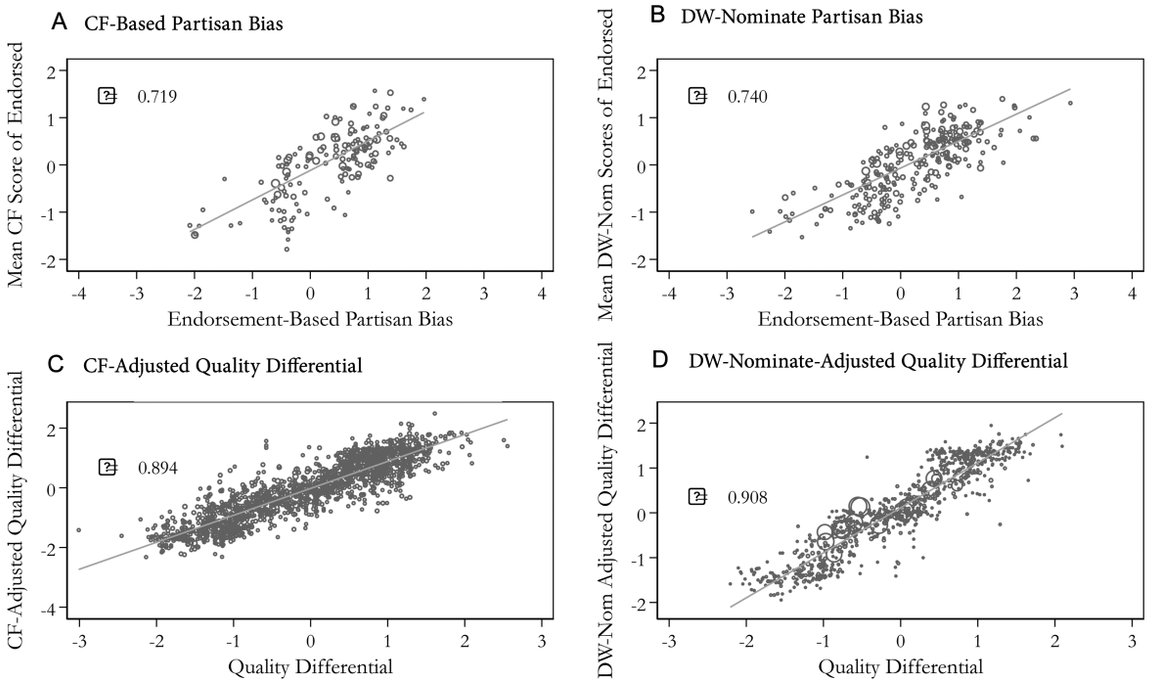



Figure 5. Partisan bias and quality differentials adjusting for extremity.

both candidates, incorporating ideological distance into the model. This exercise allows me to assess whether candidate moderation is driving the endorsement-based quality estimates. If the quality differentials change substantially when accounting for ideology, it would suggest the original measure is conflating moderation with quality. However, if the estimates remain stable, it would indicate that the quality differentials primarily capture broader notions of candidate quality rather than ideological positioning. While data limitations restrict this analysis to a smaller set of elections, it provides a meaningful test of the robustness of the quality measure.

I try two specifications using alternative measures of candidate ideology; in the first, I use the Bonica (2014, 2023) Campaign Finance ideological scores (CF-Scores), and in the second, I use DW-Nominate scores (Lewis et al. 2022). In order to place newspapers on the same scale as CF-Scores or DW-Nominate scores, I calculate newspapers' ideal point as the average of the ideological scores of all candidates they endorse for each decade.[10] In figure 5, I plot the correlations between the estimated newspaper ideologies based on endorsed candidate ideologies and the original estimates of partisan bias, using the CF-Scores as the outcome in figure 5*A* and the DW-Nominate scores in figure 5*B*. Using either ideology measure, the correlation between the ideology of the newspaper and their original partisan bias estimates is positive and relatively high.

I then use the ideology of each newspaper to calculate the difference in ideological distance between each newspaper and candidate in an election.[11] I directly incorporate the relative ideological distance into the endorsement prediction model, which allows me to take into account how ideological extremity or moderation, relative to the newspapers' own ideological position, affects newspaper endorsements and candidate quality differentials.

I reestimate contest-specific fixed effects in the high-dimensional linear probability model, but rather than newspaper fixed effects with linear time trends, I use the calculated difference in ideological distance term to account for newspapers' partisan preferences. Quality differentials can be estimated for only 1,735 elections (27%) of the original sample when using CF-Scores for legislator ideology and for only 778 (12%) of the original sample when using DW-Nominate scores. I plot the correlations between the extremity-adjusted quality differential measures and the original quality differential estimates in figure 5, with the CF-Score–adjusted quality estimates in figure 5*C* and the DW-Nominate–adjusted quality estimates in figure 5*D*.

10. This is a Bayesian approach that minimizes the utility loss from (in)congruence in ideological positioning between the newspaper and the candidates whom they endorse. For an explanation of this approach, see app. D.

11. See app. B and app. D for details.

Again, in both cases, the ideology-adjusted quality differential estimates are highly correlated with the original estimates, suggesting that while there are some differences when adjusting for legislator ideology, it is not the main determinant of the endorsement-based quality differential. This is likely because party affiliation explains a huge share of the variation across candidates' ideological positions, so using party affiliation alone in the empirical estimation captures most of the effects of ideological congruence on newspaper endorsement decisions. These results provide evidence that the original candidate quality differentials are not simply due to the relative moderation or extremity of the candidate.

## CANDIDATE QUALITY, INCUMBENCY ADVANTAGES, AND ELECTION RESULTS

In this section, I use the quality differentials to explore the relationship between candidate quality, incumbency, and election results as an illustrative example of how the new measure can help answer important questions about the role candidate quality plays in electoral politics.

Incumbency effects have been extensively studied in the literature, and a long line of research has tried to disentangle the components of incumbency advantages, which were at times quite large (Cox and Katz 1996; Jacobson 2015). Candidate quality is one plausible explanation for incumbency effects, but there are also other potential explanations for these advantages, such as enhanced media attention or fundraising ability, which are direct officeholder benefits unrelated to candidate quality (in the governing effectiveness sense of the term). These direct office-holding benefits may be detrimental for political accountability if they make it harder for citizens to vote out low-quality politicians. Determining how much of the incumbency advantage is due to candidate quality is a long-standing and important question in the literature, and one that is still relevant today due to the difficulties in measuring candidate quality.

The endorsement-based quality differentials provide one way to examine this issue. A benefit of the endorsement-based quality differentials is that they can identify relatively high- or low-quality incumbents and can also provide an estimate of the magnitude of the quality differences between those incumbents and their challengers. Unlike post hoc measures of candidate quality, quality differentials are determined by newspaper endorsements made prior to election and provide an estimate of potential governing quality that is not defined by electoral success itself. These features make the endorsement-based quality differentials well suited to examine the independent effects of candidate quality in terms of explaining incumbent electoral success and determining the degree to which voters themselves value candidate quality.

Figure 6 displays a density plot of the candidate quality differentials for all incumbents (relative to their challengers)

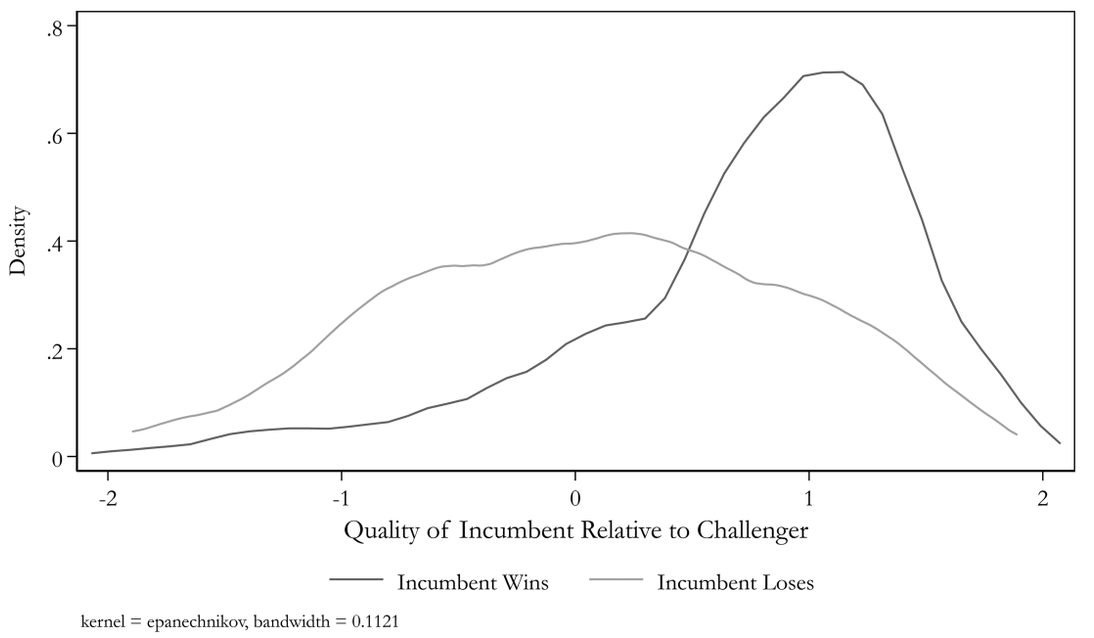



Figure 6. Incumbent quality and electoral success. Positive quality differentials indicate that the incumbent is higher quality than their challenger, while negative quality differentials indicate that the challenger is higher quality than the incumbent. Excludes quality differential outliers greater than 2 or less than −2.

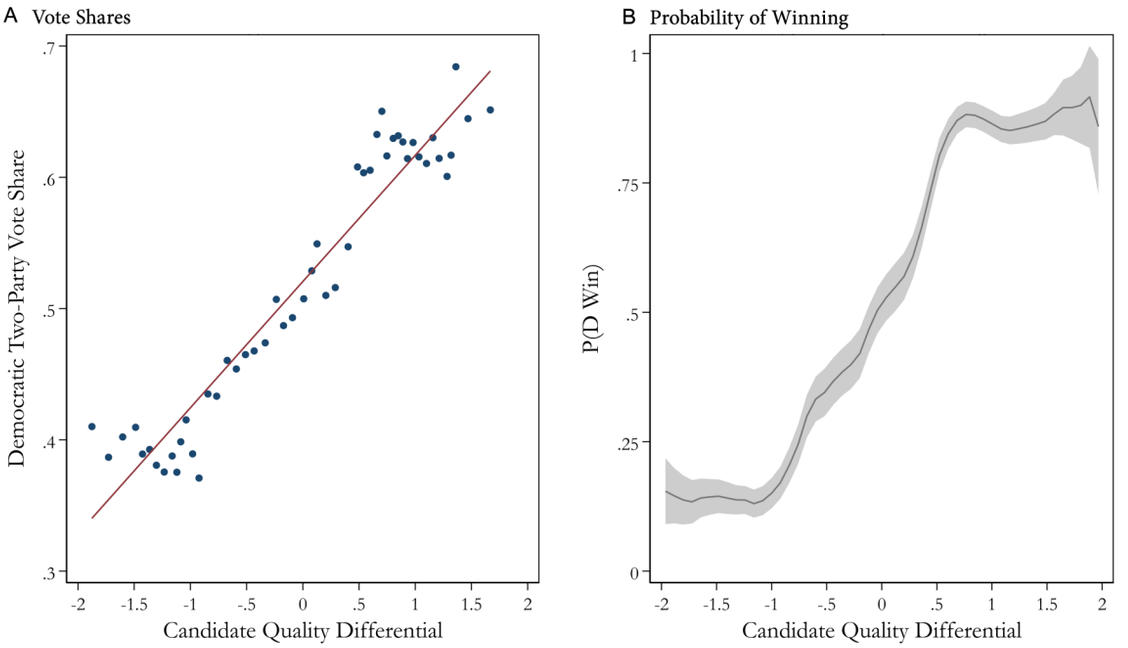



Figure 7. Vote shares, probability of winning, and quality differentials. Excludes quality differential outliers greater than 2 or less than −2.

separately based on whether the incumbent ended up winning or losing their election. Notably, there is a wide range of incumbent quality differentials; not all incumbents are equally qualified. Overall, 16.9% of incumbents are actually lower quality than their challengers. Among incumbent losers, nearly half (45%) are lower quality than their challengers. Even among incumbent winners, however, 14.3% are still estimated to be lower quality than their challengers.[12] So, while it is true that most incumbents are high quality—consistent with the use of incumbency status as a proxy for candidate quality—a significant portion of incumbents are not higher quality than their challengers, and low-quality candidates (either incumbents or challengers) still win their elections somewhat often.

How much do voters value candidate quality? Empirically, there is a strong correlation between the endorsement-based quality differentials and electoral performance. Figure 7*A* graphs a binned scatter plot of the Democratic share of two-party votes conditional on the estimated candidate quality differential with a linear fitted line. I include all elections for which candidate quality differentials could be estimated and merged to election results, across offices and over time, for a total of 3,620 elections. The plots show that higher-quality candidates get more votes, which translates directly into higher-quality candidates being more likely to win their elections, as shown by figure 7*B*.

To assess the relationship between candidate quality effects and incumbency effects, I estimate models of electoral performance in table 4. Specifically, I run a regression of Democratic two-party vote shares (columns 1 through 3) and the probability of a Democratic victory (columns 4 through 6) on the estimated candidate quality differential and an incumbency indicator to quantify the effects that candidate quality and incumbency status have on a candidate's electoral success. In all specifications, I control for "partisan tides" from year to year using year fixed effects and use constituency fixed effects to control for district partisanship.[13]

Columns 1 and 4 of table 4 show that the effect of a one standard deviation increase in relative quality results in an increased vote share of 5 percentage points and an increased probability of winning equal to 13.7 percentage points. Both estimates are statistically significant and substantively meaningful and demonstrate that voters do care about and tend to reward higher-quality candidates with votes.[14] Columns 2 and 5 estimate incumbency effects using

12. In the sample of elections I examine here, incumbents win reelection about 92% of the time.

13. Constituency fixed effects are an indicator variable for a constituency, which is defined as a state-decade indicator variable for any statewide office and as an indicator variable at the district level for US House and state legislative districts. In app. E, table E3 and table E4 replicate the results using the district normal vote, and the substantive results are unchanged.

14. In table E1 and table E2, I control for the effect of (relative) candidate extremity, as moderate candidates might be measured as higher-quality because of their ability to more easily earn credible endorsements.

Table 4. Effects of Quality Differentials on Vote Shares

| Variables | (1) D Vote | (2) D Vote | (3) D Vote | (4) P(D Win) | (5) P(D Win) | (6) P(D Win) |
|---|---|---|---|---|---|---|
| Quality differential | .050*** | | .034*** | .137*** | | .094*** |
| | (.002) | | (.002) | (.011) | | (.011) |
| Incumbency | | .056*** | .042*** | | .154*** | .115*** |
| | | (.002) | (.002) | | (.011) | (.012) |
| Observations | 2,613 | 2,613 | 2,613 | 2,613 | 2,613 | 2,613 |
| Adjusted $R^2$ | .852 | .860 | .878 | .700 | .704 | .716 |
| Year FE | Yes | Yes | Yes | Yes | Yes | Yes |
| Constituency FE | Yes | Yes | Yes | Yes | Yes | Yes |

Note. Sample includes contested elections between years 1950 and 2020. Outcome is the Democratic two-party vote share in the election. The quality differential variable is coded so that negative quality differentials indicate that the Republican is higher quality, while positive values indicate that the Democrat is higher quality.

* $p < .10$.

** $p < .05$.

*** $p < .01$.

the same sample of elections. Incumbency effects in terms of vote shares are estimated to be 5.6 percentage points in this sample of elections, and incumbency increases the probability of winning by 15.4 percentage points. In column 3, the results show that a one standard deviation increase in relative candidate quality increases a candidate's two-party vote share by 3.4 percentage points even after controlling for incumbency effects, year fixed effects, and constituency fixed effects.

How much of the estimated incumbency effect is due to candidate quality? To answer this, I include both variables in the specifications in columns 3 and 6. The estimated effects of quality and incumbency both remain statistically significant in these models; however, they also both diminish. In terms of vote shares, incumbency effects go from 5.6 percentage points without controlling for candidate quality to 4.2 once candidate quality is taken into account, a 25% decrease. In terms of the probability of winning, the effect of incumbency goes from 15.4 percentage points to 11.5, which is also a 25% decrease. According to this analysis, one-fourth of incumbency effects are explained by candidate quality. The effects of candidate quality also decrease once incumbency is taken into account, decreasing by 32% whether looking at the effects on vote shares or on the probability of winning. In other words, about one-third of candidate quality effects are explained by incumbency status.

The share of incumbency effects that are explained by candidate quality differentials in this analysis is lower than that found in previous research on this topic. Focusing on the period between 1950 and 1990, Cox and Katz (1996), Levitt and Wolfram (1997), Ansolabehere, Snyder, and Stewart (2000), and Hirano and Snyder (2009) all estimate that, on average, candidate quality accounts for around 50% of incumbency effects, though this estimate ranges from as low as 0% in some decades to as high as two-thirds of incumbency effects in the 1980s and 1990s. My results are about half as large as the average estimate of previous works and suggest a larger role of direct office-holding benefits (i.e., nonquality related benefits) in explaining incumbency effects.

## CONCLUSION

This article estimates a measure of relative quality differences between candidates for thousands of elections in the United States based on the endorsements of local newspapers. The validation exercises show that the endorsement-based quality differentials are reflective of governing effectiveness and match expert informant assessment of candidate qualifications.

I demonstrate the utility of the quality differential measure by directly investigating candidate quality effects in an electoral context and reexamining the relationship between candidate quality and incumbency effects. I find that higher-quality candidates do better in their elections and that candidate quality can explain one-fourth of estimated incumbency effects. Future research employing quality differentials could delve deeper into the relationship between candidate quality and incumbency and explore how this relationship might change over time and across different types of offices. Whether the effects of candidate quality on candidate

success has declined due to increased partisan polarization over time is also an important line of inquiry, with important implications for the state of democracy in the United States, which would also be facilitated by the use of the quality differentials measure.

The quality differentials can also assist political scientists in more directly examining the factors that determine candidate quality and governing effectiveness among politicians. The quality differentials could also help to explain how candidate quality evolves over time and how the components of candidate quality vary depending on the office type. Another promising avenue of work would be to use the quality differentials to look further downstream and explore the impact that candidate quality can have on other governing outcomes such as economic performance (Besley, Persson, and Sturm 2010) or legislative productivity (Grant and Kelly 2008). Understanding the determinants and consequences of high-quality politicians in our political system has important implications for elections, voters, political parties, and the overall health and efficiency of democracy in the United States.

While the number of local newspaper endorsements is shrinking due to the broader decline of local newspapers, the logic and methodology behind the quality differentials measure are highly adaptable and transferable to other types of political endorsements. For instance, endorsements by interest groups, prominent political figures, media personalities, or other experts can also be used to estimate candidate quality differentials with the same methodology. Additionally, in ongoing work, I am actively expanding the dataset to include new local newspaper endorsements as well as additional historical endorsements, which will extend the measure's temporal and geographic coverage. Future plans for research include collecting endorsements from other sources, such as interest groups, media figures, and prominent commentators, to further broaden the scope of the measure. These efforts will enhance the applicability of the endorsement-based approach, making it a valuable tool for understanding candidate quality and electoral dynamics in the future.

In addition, the article provides a new dynamic measure of local news media bias for hundreds of newspapers in the United States based on their propensity to endorse candidates of each political party. These estimates along with the endorsement data could be used to study the extent to which local news can affect political knowledge, voter choices, and partisan outcomes and whether media bias impacts the quality of candidates who are ultimately elected. Overall, these endorsement-based measures of both candidate quality differentials and newspaper partisan bias have promising potential to help improve our understanding of the importance of candidate quality in American politics.

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