

**Bias in Fact Checking?:
An Analysis of Partisan Trends Using PolitiFact Data**

Thomas A. Colicchio¹

*Professor Peter Arcidiacono, Faculty Advisor
Professor Michelle Connolly, Faculty Advisor*

Duke University
Durham, North Carolina
2023

¹ Thomas Colicchio graduated from Duke University in May of 2023 with High Distinction in Economics and a minor in Computer Science. Beginning in September of 2023, he is working as an Associate Consultant for Bain & Company in Washington D.C. He can be reached at tcolicchio16@gmail.com.

Acknowledgements

I would like to first thank my advisors Dr. Peter Arcidiacono and Dr. Michelle Connolly for their endless guidance and support without which this paper would not have been possible. I began this research as a semester-long independent study, but because of the encouragement of Dr. Arcidiacono and the support of our entire Duke Economic Analytics Lab (DEAL) research team, I decided to pursue this Honors Thesis. With that, I owe a deep gratitude to Dr. Matthew Lilley for his guidance as well as his infectious curiosity that has been instrumental in making this work so enjoyable. I also want to thank Nicholas Papavassiliou and Kishen Anand for all their incredible work on this project, and Dr. Jeffrey DeSimone for leading the DEAL program that provided me with the opportunity to pursue this research. Additionally, I would like to extend my thanks to my thesis workshop classmates as well as my friends and family for their constant support and encouragement throughout the year.

Abstract

Fact checking is one of many tools that journalists use to combat the spread of fake news in American politics. Like much of the mainstream media, fact checkers have been criticized as having a left-wing bias. The efficacy of fact checking as a tool for promoting honesty in public discourse is dependent upon the American public's belief that fact checkers are in fact objective arbiters. In this way, discovering whether this partisan bias is real or simply perceived is essential to directing how fact checkers, and perhaps the mainstream media at large, can work to regain the trust of many on the right. This paper uses data from PolitiFact, one of the most prominent fact checking websites, to analyze whether or not this bias exists. Prior research has shown that there is a selection bias toward fact checking Republicans more often and that they on average receive worse ratings. However, few have examined whether this differential treatment can be attributed to partisan bias. While it is not readily apparent how partisan bias can be objectively measured, this paper develops and tests some novel strategies that seek to answer this question. I find that among PolitiFact's most prolific fact checkers there is a heterogeneity in their relative ratings of Democrats and Republicans that may suggest the presence of partisanship.

JEL classification: D83, D84, L82

Keywords: Fact checking; Partisan bias; Media bias; Polarization

Introduction

In recent years, American politics has been largely characterized by a surge in the spread of fake news and increasing levels of political polarization. The widespread adoption of social media has transformed the nature of public discourse and allowed false information to spread “farther, faster, deeper, and more broadly” than ever before (Vosoughi, Roy & Aral 2018). Consequently, Americans have increasingly sorted into ideological echo chambers and engaged less with people they disagree with (Bright 2017). The January 6th Capitol riots demonstrated how this dangerous coupling of misinformation and polarization can threaten foundational elements of American democracy like the peaceful transition of power. Now, with trust in American institutions at all-time lows (Jones 2022), some estimate that over 60% of Republicans question the results of the 2020 Election (Monmouth University Poll 2022).

In response, fact checking has arisen as one of several tools to combat the spread of misinformation and hopefully restore civility to American politics. PolitiFact, one of the most prominent fact checking organizations, was founded in 2007 and won a Pulitzer Prize for its reporting on the 2008 Presidential Election. Since its founding, PolitiFact has conducted over 20,000 fact checks and has been widely cited by other media outlets. Notably, the economists Hunter Alcott and Matthew Gentzkow have used PolitiFact as an objective source of truth in a paper about fake news (Alcott & Gentzkow 2017). However, fact checkers – like much of the mainstream media – have been subject to criticism from Republicans who claim that the organization has a left-wing bias. Overall, PolitiFact does fact check Republicans more often than Democrats and gives them worse ratings on those fact checks (Ostermeier 2011). The Duke Reporter’s Lab analyzed references to PolitiFact in the media and found that liberal-leaning publications were much more likely to cite fact checks as credible while conservative-leaning publications were much more likely to describe the practice as a whole in a negative light and allege partisan bias (Adair & Iannucci 2017). Additionally, a 2019 Pew Research poll found that 70% of Republicans believe fact checkers tend to favor one-side while only 29% of Democrats hold this belief (Walker & Gottfried 2019).² Skepticism surrounding PolitiFact’s objectivity limits the organization’s ability to carry out its mission. Accordingly, without exploring whether this

² Among independents, 63% of those who lean Republican believe fact checkers favor one-side while only 35% of independents who lean Democrat hold this view.

perception of partisan bias is real, fact checking will continue to represent another symptom of America's political polarization rather than serve as a potential antidote.

An example of a PolitiFact fact check that could leave one with the impression that the organization is biased comes from a review of a tweet from Tammy Baldwin. The Democratic Senator tweeted that "Latina workers make 54 cents for every dollar earned by white, non-Hispanic men," and PolitiFact's D.L. Davis rates the statement as "true." Davis admits that the research she cites to corroborate the claim does not account for the fact that these two populations on average hold different jobs, and that if this difference was considered, the claim would no longer hold (Davis 2022). As Baldwin's statement is quoted above, it is possible to believe that all she was arguing was that the average white man earns nearly twice as much as the average Latina woman. Yet, in the next sentence of her tweet, Baldwin asserted that "it's past time that Latina workers are given equal pay for equal work" (Baldwin 2022). In this way, it seems reasonable to infer that Davis – who noted that she found this statement on Twitter – cherry-picked Baldwin's first sentence and chose not to include the subsequent one because doing so would alter the "true" rating per Davis' own explanation.

In contrast, a Republican state legislator from New York, William Barclay, received a "mostly true" rating for claiming that "a proposal in Syracuse would pay gang members \$100-\$200 per week to stay out of trouble" (Barclay 2023). In justifying the "mostly true" rating, PolitiFact's Marnique Panepento explained that "the statement is accurate but needs additional context" because it did not also mention other aspects of the proposal like resources for mental health support and career advancement (Panepento 2023). In one case, a statement's context is obscured to ensure that a "true" rating is defensible, and in the other, a statement is rated as "mostly true" because a politician only highlighted one aspect of a proposal despite the fact that he linked an article providing more context on the proposal in his tweet (Eisenstadt 2023).³ These are only two examples that very well may not be representative of the typical PolitiFact fact check, and so in isolation they cannot be considered sufficient evidence of partisan bias. They do, however, serve as a potential explanation for why some Republicans believe PolitiFact is biased and thus help validate the relevance of this research question. In this paper, I choose to take the ratings that PolitiFact assigns statements as given because there is no apparent way to readily analyze the objectivity of the reasoning by which fact checkers reach their verdicts.

³ More information on how PolitiFact defines each rating category can be found here: <https://www.politifact.com/article/2018/feb/12/principles-truth-o-meter-politifacts-methodology-i/#Truth-O-Meter%20ratings>.

It is important to emphasize that just because Republicans are fact checked more frequently and receive worse ratings does not prove that a partisan bias exists. This differential treatment could be caused by a variety of other factors. Perhaps, Republicans tend to make more false statements or statements that for whatever reason PolitiFact is more likely to fact check. In reality, the complexity of a concept like partisan bias makes it very difficult to objectively measure. This paper seeks to develop a theoretical framework that describes what one would expect to observe if this bias did exist and then tests what is actually observed using data from PolitiFact. Partisan bias could materialize in either a selection bias with respect to who gets fact checked or a ratings bias in terms of how they are fact checked. Although the process by which PolitiFact decides what to fact check is relatively opaque, they do reveal that they tend to fact check statements that are prominent and which might cause typical Americans to ask, “is that true?” (Holan 2018). In testing for a partisan selection bias, I estimate a proxy for a politician’s expected honesty and examine how this figure relates to the frequency with which a politician is fact checked. Furthermore, I investigate how PolitiFact’s most prominent fact checkers rate Democrats and Republicans differently. This analysis seeks to discover relative differences between different fact checkers’ ratings yet does not seek to conclude which fact checkers in particular are biased versus objective. In these ways, these findings are limited in the extent to which they generalize to fact checking at large and what they can say conclusively about the existence of PolitiFact’s partisan bias. Nevertheless, this paper intends to create a foundation from which future research can build upon given that most of the existing literature on partisan bias in fact checking has only acknowledged differences in selection and ratings but not sought to explain them.

Literature Review

Despite the growing prominence of fact checking, not much economic research has focused on this topic. There is a sizable body of political science research, yet only a share of this research focuses specifically on partisan biases in fact checking. Additionally, that research tends to show that Democrats receive more favorable ratings yet does not explore the cause of this difference.

The 2017 Duke Reporter's Lab report referenced above qualified that they "are not assessing whether there is in fact any partisan slant," but nevertheless they called for fact checkers to better understand the reasons for this perception of bias in order to regain the trust of conservative audiences (Adair & Iannucci). A 2015 paper by two political scientists studying Americans' perception of fact checking also found a partisan divide and reasoned that this divide undermines the credibility and impact of fact checkers (Nyhan & Reifler 2015). The fact that Republicans on average receive worse ratings on fact checks and are fact checked more often may lead to this perception of bias. Some have argued that this selection bias – the fact that more Republican statements are fact checked – is partial evidence of a partisan agenda (Ostermeier 2011). Others contend that it is difficult to make that sort of claim without better understanding how fact checkers decide which statements to rate (Farnsworth & Lichter 2016). Presumably, fact checkers do not fact check undisputed claims. Instead, they tend to seek out dubious claims or statements that might leave the average American confused. In this sense, if it is true that Republicans tend to make more potentially dubious or confusing statements, it follows that they would be fact checked more. Accordingly, without knowledge of fact checkers' internal selection methodologies, researchers have struggled to test whether or not partisan bias exists. One study by a group of computer scientists used sentiment analysis to check PolitiFact articles for partisan-coded language, but they did not find any systematic differences in language usage that would imply a significant degree of partisanship (Card et al. 2018).

Another potential way to test for partisan bias involves comparing ratings across different fact checking websites. Chloe Lim, a Stanford political scientist, checked rates of agreement among different fact checking websites (Lim 2018) Although the number of statements fact checked by multiple websites was relatively small, she discovered a high agreement rate on statements that were rated as "true" or "false" but a low agreement rate among statements that were given a rating in between "true" or "false" like "half true" (Lim 2018). Lim finds this result concerning given that the fact checking of statements in the "ambiguous scoring range" is where fact checkers have the most to offer the public. Thus, she suggests that fact checkers should seek to independently review statements reviewed by their

peers more frequently and that the definition of what makes a statement “fact check worthy” should be more narrowly specified (Lim 2018). Others have highlighted that the vague definition of what constitutes a “fact-checkable” statement has contributed to the perception of bias and overall mistrust of fact checkers. Although PolitiFact claims that they do not fact check opinions (Holan 2018), Real Clear Politics “Fact Check Review” claims that 18% of PolitiFact fact checks in July of 2018 were of opinions (Investor’s Business Daily 2018).

While the body of research on partisan bias in fact checking remains limited, there is a growing recognition of the importance of understanding and addressing these perceptions of bias. This paper employs several novel strategies that aim to test for partisan bias beyond simply showing that Democrats and Republicans on average receive different ratings.

Data

This PolitiFact dataset ranges from May 2, 2007 – PolitiFact’s establishment – until the date the scraping script was run – February 23, 2023. Each observation represents an individual fact check that includes the date it occurred, the author of the fact check, the statement being checked, the individual or group who made said statement, and the author’s ruling on the veracity of the statement. The individual or group who made the fact checked statement is referred to as the source throughout this paper. A statement can be rated as true, mostly true, half true, mostly false, false, or pants-on-fire false, and these truth ratings index to 1-6 respectively.⁴ Also, a day-based time index is generated, and a dummy variable called *ElectionMonth* is created to tag the 30 days prior to a Presidential or Midterm Election. All else equal, these months, and election years in general, tend to experience a spike in fact checks.

Each source is labeled as a Republican, a Democrat, or a non-partisan, and sources are specifically tagged if they are an organization rather than a person.⁵⁶ For example, PolitiFact will sometimes fact check a statement released by the Democratic or Republican National Committee. All non-partisan sources and organization sources are filtered out of the dataset so that the analysis only considers sources who have a political affiliation and are individual people. These sources are referred to as political sources or partisan sources throughout the paper. In total, the dataset contains 13,115 political fact checks of 467 unique political sources who have been fact checked at least 5 times. Political sources who have been fact checked at least 20 times are referred to as prominent sources, and a dummy variable is created for each of them that tags each observation where they are the source.⁷ There are 93 prominent sources. Fig. 1 shows the distribution of fact checks by year broken out by party.

⁴ ~1% of fact checks rate whether an individual has switched their position on a particular issue not the veracity of a statement they made. These observations are not considered in the analysis.

⁵ Non-partisan sources include foreigners, celebrities, apolitical organizations, and other individuals without an apparent partisan affiliation.

⁶ I have manually tagged some politicians as partisan whom PolitiFact labeled as non-partisan yet have apparent partisan affiliations. These include politicians PolitiFact simply misses like Mark Dayton and Zell Miller and independents like Bernie Sanders who caucuses with one of the two major parties. It is possible that PolitiFact’s labeling may include other mistakes.

⁷ This construction tags roughly 20% of sources with at least 5 fact checks as prominent. While the 20 fact check cut off is fairly arbitrary, the results from regressions using these variables do not change significantly when the cut off is adjusted.

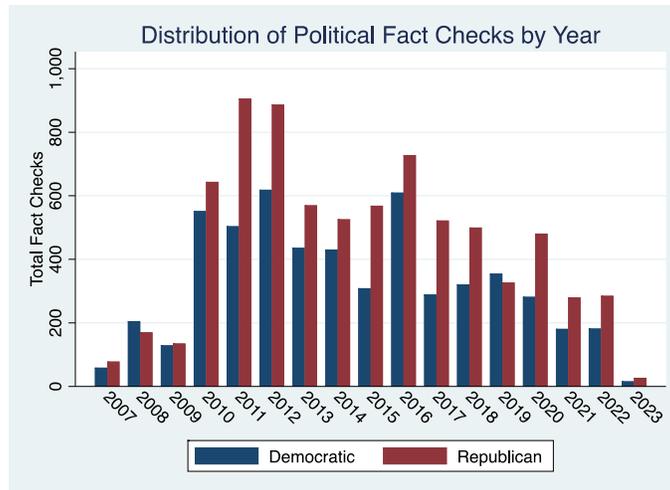


Figure 1: Political Fact Checks by Party by Year

The frequency of fact checks tends to peak every cycle in the Presidential Election year, and Republicans are more frequently fact checked than Democrats in every year except 2019. Note that 2019 is the only year in the sample in which the Democratic Party had a Presidential Primary, but the Republican Party did not. The drop off in political fact checks since 2016 can be explained by Meta’s Third-Party Fact-Checking Program. Since 2016, Meta has paid third party fact checkers like PolitiFact to review viral posts on Facebook and Instagram (Meta 2016). Consequently, this shift in PolitiFact’s focus has resulted in less fact checks of politicians and other political figures in recent years.

Democrats also tend to receive better ratings where their mean rating is approximately 2.9, slightly better than a “half true” rating, compared to Republicans’ mean rating of roughly 3.6, which lies between a “half true” and “mostly false” rating. Table 1 shows the relative frequencies with which both parties receive each rating.

Table 1: Share of Ratings by Party for all Political Sources

| Rating | Party | |
|---------------|------------|------------|
| | Democratic | Republican |
| True | 53% | 47% |
| Mostly True | 56% | 44% |
| Half True | 47% | 53% |
| Mostly False | 35% | 65% |
| False | 29% | 71% |
| Pants on Fire | 21% | 79% |
| Total | 42% | 58% |

The party splits for “true” and “mostly true” favor Democrats but only marginally. However, Republicans receive “false” ratings more than twice as often and “pants on fire” ratings three times more often compared to Democrats. Additionally, these differences in the rating of Democrats and Republicans have been generally constant from year to year even after the post-2016 decrease in political fact checks.

There are 194 fact checkers – also referred to as authors – who have conducted at least 5 fact checks of political sources. Authors who have conducted at least 100 political fact checks are tagged as prominent authors. There are 36 of these prominent authors, and a dummy variable is generated for each that tags every fact check they conduct. Together, they have conducted roughly 70% of the political fact checks.⁸ Moreover, several prominent authors are not directly PolitiFact employees and instead affiliated with news organizations that have partnerships with PolitiFact. PolitiFact has affiliate partnerships with newspapers in 14 states. These affiliate authors predominantly focus on checking politicians from their own states. Although we can expect that national fact checkers follow a set of common editorial guidelines that govern what they fact check and how, affiliate fact checkers are likely also influenced by the unique guidelines and standards of their direct employer.

⁸ Once again, the decision to make the cut off for prominent authors 100 political fact checks was fairly arbitrary, however, this paper’s findings are relatively stable when this cut off is adjusted.

Descriptive Results

Before discussing the empirical strategy that guides how this paper tests for partisan bias, these descriptive findings further illustrate the differences in how Democrats and Republicans are fact checked that drive this perception of partisan bias. Table 2 shows the differences in how Congresspeople of both parties are rated from the 111th-117th Congress.⁹

Table 2: Fact Checks of Democratic and Republican Legislators by Congress¹⁰

| 111th-117 th Congress | Unique Politicians | Share of Politicians | Total Fact Checks | Share of Checks | Checks per Politician | Avg. Rating |
|-------------------------------------|-----------------------|-------------------------|----------------------|--------------------|--------------------------|----------------|
| Senate | | | | | | |
| Democrats | 56 | 51% | 665 | 40% | 11.88 | 2.68 |
| Republicans | 54 | 49% | 1,012 | 60% | 18.74 | 3.31 |
| Total | 110 | 100% | 1,677 | 100% | 15.25 | 3.06 |
| House of Rep. | | | | | | |
| Democrats | 137 | 42% | 811 | 41% | 5.92 | 2.96 |
| Republicans | 187 | 58% | 1,165 | 59% | 6.23 | 3.57 |
| Total | 324 | 100% | 1,976 | 100% | 6.10 | 3.32 |

In both chambers of Congress, Democrats receive better ratings than Republicans. Roughly 60% of these fact checks review Republican legislators compared to 40% that review Democratic legislators. Interestingly, PolitiFact has reviewed two more Democratic Senators compared to Republican Senators. Overall, Senators are rated better than members of the House of Representatives. Per the “Checks per Politician” column, each Senator who is fact checked is on average fact checked more frequently compared to the average member of the House who is fact checked. This difference makes sense because the Senate is generally viewed as the more prestigious chamber given the fewer number of Senators, longer term lengths, and special procedural powers like their role in Supreme Court nominations.

Note that a politician is only tagged as a Senator or member of the House if they are in office at the time of the fact check. For example, Elizabeth Warren started serving in the Senate during the 113th

⁹ This time period spans from roughly 2009 to 2021.

¹⁰ In the Appendix, Table 2 is expanded to show these results broken out by individual Congresses.

Congress, so if she was fact checked before that, perhaps while she was campaigning for her seat, that fact check would not be incorporated into this table. Additionally, if a politician is actively running for President as either a primary candidate or as their party’s nominee and they are concurrently a member of Congress, those fact checks are excluded from this table. Some politicians who run for President are also members of Congress, but during their campaigns they are more likely to be fact checked not because they are a legislator but because they are running for President. Thus, this exclusion prevents the results from being biased by the fact that in some cycles only one party has an open primary.

Table 3 shows the differences in how Democrat and Republican governors have been fact checked from 2010 to 2022. Again, this table excludes fact checks of governors who are running for President.

Table 3: Fact Checks of Democratic and Republican Governors by Year¹¹

| 2010-2022 | Unique Politicians | Share of Politicians | Total Fact Checks | Share of Checks | Checks per Politician | Avg. Rating |
|------------------|--------------------|----------------------|-------------------|-----------------|-----------------------|-------------|
| Governors | | | | | | |
| Democrats | 23 | 50% | 207 | 19% | 9.00 | 2.66 |
| Republicans | 23 | 50% | 855 | 81% | 37.17 | 3.23 |
| Total | 46 | 100% | 1,062 | 100% | 23.09 | 3.12 |

Here, while the same number of governors from both parties have been fact checked, approximately 80% of those fact checks review Republican Governors. This split is larger than that for Congresspeople. Additionally, Republican governors are rated worse than Democrat governors, and their average ratings are very similar to those of Senators. It is possible this stark difference is a result of the most active affiliates being located in states that have had Republican Governors more often than Democratic ones recently. Wisconsin, Florida, Texas, Virginia, and Ohio are the states with the five most prolific affiliates, and all but Virginia have predominantly had Republican Governors over the last 15 years. Because national authors likely only fact check Governors who are relevant on the national stage, most of the fact checks of Governors should come from affiliate authors. In this way, it is difficult to definitively claim that these results are evidence of a greater selection bias than observed elsewhere in the data. Although an equal number of unique Governors from both parties have been fact checked, each

¹¹ In the Appendix this table is shown again broken out by year.

Republican Governor is fact checked disproportionately more. Additionally, the fact that the most active state affiliates tend to develop in states with Republican Governors could be construed as a kind of selection bias in and of itself. Next, Table 4 shows the differences in how different Presidents have been fact checked.

Table 4: Fact Checks of Presidents

| Presidents | In Office | | Out of Office | | Total | |
|------------|-----------|-------------|---------------|-------------|-----------|-------------|
| | Frequency | Avg. Rating | Frequency | Avg. Rating | Frequency | Avg. Rating |
| Obama | 429 | 2.72 | 154 | 2.75 | 583 | 2.73 |
| Trump | 576 | 4.33 | 388 | 4.33 | 964 | 4.33 |
| Biden | 172 | 3.51 | 71 | 3.20 | 243 | 3.29 |

Without surprise, President Trump is rated significantly worse than President Obama and President Biden. Although one would expect President Trump to be fact checked more often as well, it is a bit surprising that he was fact checked over 100 times more in office compared to President Obama was when he was in office given the fact that President Obama served two terms.¹² President Biden is the only President whose average ratings differ between when he was President and when he was not. Biden’s worse ratings during his presidency could be because he is under higher scrutiny from fact checkers now that he is President or because of a change in the truthfulness of his statements.

In Table 5, a breakdown of each prominent author’s fact checks is displayed. For each author, it displays the total number of political fact checks conducted, the share of these that were of Republicans, the average ratings of both parties, and the differences in these average ratings. Additionally, the last column indicates if an author is a national fact checker or affiliate fact checker, and if so, specifies the state. The table is sorted in descending order of the authors’ difference in rating means so that the authors who rate Republicans the worst relative to Democrats are at the top.

¹² Also, 2016 was the year PolitiFact launched their fact checking partnership with Meta, which led to a decrease in fact checks of politicians making the frequency with which President Trump was fact checked stand out to a greater degree.

Table 5: Breakdown of Prominent Authors' Fact Checks

| Author | Total Fact Checks | Share Rep. | Rep. Mean | Dem. Mean | Diff. in Means | Affiliate |
|----------------|-------------------|------------|-----------|-----------|----------------|--------------|
| McCarthy | 101 | 72% | 4.78 | 3.00 | 1.78 | National |
| Nichols | 177 | 40% | 4.13 | 2.72 | 1.41 | California |
| Qiu | 161 | 68% | 3.87 | 2.54 | 1.33 | National |
| Greenberg | 630 | 64% | 4.13 | 2.81 | 1.32 | National |
| Bowers | 122 | 61% | 3.59 | 2.50 | 1.09 | National |
| Valverde | 243 | 64% | 3.85 | 2.76 | 1.08 | National |
| Contorno | 98 | 61% | 3.93 | 2.97 | 0.96 | National |
| Davis | 99 | 52% | 3.49 | 2.54 | 0.95 | Wisconsin |
| O'Rourke | 122 | 63% | 3.40 | 2.47 | 0.94 | National |
| Jacobson | 1418 | 58% | 3.86 | 3.08 | 0.79 | National |
| Sherman | 619 | 61% | 3.74 | 2.97 | 0.77 | Florida |
| Carroll | 264 | 60% | 3.68 | 2.94 | 0.74 | National |
| Specht | 155 | 53% | 3.91 | 3.18 | 0.74 | N. Carolina |
| Gillin | 177 | 72% | 3.31 | 2.62 | 0.69 | Florida |
| Moorhead | 110 | 60% | 3.24 | 2.57 | 0.67 | National |
| Emery | 254 | 38% | 3.80 | 3.15 | 0.66 | Rhode Island |
| Ashford-Grooms | 112 | 75% | 3.48 | 2.82 | 0.65 | Texas |
| Farley | 292 | 53% | 3.52 | 2.91 | 0.62 | National |
| Feran | 126 | 64% | 2.90 | 2.29 | 0.61 | Ohio |
| Litke | 119 | 59% | 4.09 | 3.49 | 0.60 | Wisconsin |
| Fiske | 233 | 58% | 3.70 | 3.11 | 0.59 | Virginia |
| Holan | 397 | 51% | 3.42 | 2.85 | 0.57 | National |
| Selby | 678 | 63% | 3.50 | 2.96 | 0.54 | Texas |
| Wichert | 143 | 47% | 3.45 | 2.91 | 0.54 | New Jersey |
| Sharockman | 216 | 66% | 3.40 | 2.86 | 0.54 | Florida |
| Kertscher | 646 | 55% | 3.70 | 3.25 | 0.45 | Wisconsin |
| Sanders | 179 | 61% | 3.33 | 2.88 | 0.44 | National |
| Clark | 105 | 42% | 3.09 | 2.66 | 0.44 | New York |
| Mariano | 140 | 77% | 3.53 | 3.13 | 0.40 | Georgia |
| Gorman | 196 | 59% | 3.30 | 3.02 | 0.28 | Virginia |

| | | | | | | |
|----------------------|-------|-----|------|------|-------|------------|
| O'Neill | 109 | 54% | 3.32 | 3.16 | 0.16 | New Jersey |
| Nelson | 121 | 68% | 3.94 | 3.82 | 0.12 | Wisconsin |
| Owen | 117 | 61% | 2.80 | 2.78 | 0.02 | Texas |
| Koff | 87 | 64% | 2.96 | 2.97 | 0.00 | Ohio |
| Stirgus | 205 | 64% | 2.61 | 2.72 | -0.11 | Georgia |
| Umhoefer | 245 | 60% | 3.33 | 3.48 | -0.15 | Wisconsin |
| Non-Prominent | 3,899 | 56% | 3.46 | 2.77 | 0.69 | |

Every prominent author besides Chris Nichols, Bill Wichert, C. Eugene Emery Jr., and Dan Clark rate Republicans more often compared to Democrats. All four of these authors are from affiliates in blue states: California, New Jersey, Rhode Island, and New York respectively. In a similar sense, Willoughby Mariano is the prominent author who has focused the highest share of his fact checks on Republicans, 77%, and he is from a deep red state – Georgia. These findings make sense because fact checkers from highly partisan states are likely to disproportionately observe statements from politicians of the dominant party.

With the exception of Chris Nichols and D.L. Davis – who conducted the Tammy Baldwin fact check referenced in the Introduction – the ten fact checkers who rate Republicans the worst compared to Democrats are all national fact checkers. In contrast, only one of the ten authors who rates Republicans best relative to Democrats is a national fact checker. This trend could be biased by President Trump’s fact checks that receive poor ratings on average and thus drive down the Republican average rating among national fact checkers. Only two of the 36 prominent authors rate Republicans better than Democrats, Eric Stirgus from Georgia and Dan Umhoefer from Wisconsin, while two others give Democrats and Republicans essentially the same ratings on average. The magnitude of these differences in means for the authors who rate Republicans the worst relative to Democrats are significant. Bill McCarthy gives Republican statements a little less than a “false” rating and Democratic statements a “half true” on average. Jon Greenberg who is the third most prolific fact checker rates Republicans slightly worse than “mostly false” on average and Democrats a bit better than “half true.” An interesting finding is that PolitiFact Wisconsin, the most prolific affiliate, exhibits partisan heterogeneity amongst their prominent authors. While Davis has one of the largest differences in means between his Democratic and Republican ratings, Umhoefer actually rates Republicans marginally better.

In Table 6, the composition and fact checking tendencies of the ten most prolific state affiliates are detailed. For each affiliate, the total number of fact checks conducted, the share of those that are of Republicans, the number of authors who have conducted at least five fact checks, the number of prominent authors, the party rating means, and the difference in means is displayed.

Table 6: Breakdown of the Top 10 Most Prolific State Affiliates

| State Affiliate | Fact Check Freq. | Rep. Share | Authors | Prom. Authors | Rep. Mean | Dem. Mean | Diff. in Means |
|-----------------|------------------|------------|---------|---------------|-----------|-----------|----------------|
| WI | 1,479 | 58% | 16 | 4 | 3.64 | 3.21 | 0.43 |
| FL | 1,227 | 63% | 13 | 3 | 3.58 | 2.90 | 0.68 |
| TX | 1,174 | 64% | 12 | 3 | 3.47 | 2.86 | 0.60 |
| VA | 589 | 57% | 5 | 2 | 3.41 | 3.11 | 0.30 |
| OH | 544 | 52% | 11 | 1 | 3.11 | 2.71 | 0.40 |
| GA | 510 | 67% | 6 | 2 | 2.98 | 2.83 | 0.16 |
| RI | 411 | 35% | 12 | 1 | 3.57 | 3.00 | 0.58 |
| NJ | 326 | 52% | 3 | 2 | 3.17 | 2.91 | 0.27 |
| NY | 228 | 43% | 3 | 1 | 3.23 | 2.58 | 0.64 |
| NC | 225 | 57% | 4 | 1 | 3.73 | 3.05 | 0.68 |
| National | 5,227 | 59% | 61 | 12 | 3.79 | 2.87 | 0.92 |

Here, only Rhode Island and New York fact check Democrats more often than Republicans, and Georgia is the affiliate that fact checks Republicans the most relative to Democrats. This pattern follows what was observed in Table 5 in that fact checkers from partisan states will more often fact check the dominant party who has a larger presence in their state’s politics. New Jersey, however, rates both parties roughly the same amount. Virginia and Georgia have relatively few authors relative to how many fact checks they have conducted because they each have two prominent authors with at least 140 political fact checks. Every affiliate listed rates Republicans worse. Georgia rates Republicans the best relative to Democrats and their difference in means is half the size of the next closest affiliate. Once again, these results alone cannot conclude that a partisan bias exists, but rather they further underscore why many perceive PolitiFact to be biased and help direct this paper’s empirical strategy that hypothesizes what we might observe if a partisan bias did exist.

Empirical Strategy

The first way that PolitiFact could exhibit partisan bias is through their selection of who they fact check. PolitiFact states that they do not track how often they check Democrats versus Republicans, but all things considered, they reason that they are more likely to fact check the party in power and or “people who repeatedly make attention-getting or misleading statements” (Holan 2018). PolitiFact sources statements to fact check in two ways. One, their fact checkers, or authors, scan social media and the news for potentially questionable statements, and two, PolitiFact allows their readers to submit statements they wish to see checked (Holan 2018). From the body of statements submitted and those that authors come across in their research, PolitiFact then selects the “most newsworthy and significant” statements that are not opinions (Holan 2018). However, the share of fact checks that are sourced from reader submissions versus those found by PolitiFact authors is unknown as is the share of fact checks submitted by the public that are ultimately fact checked. In this way, if a selection bias exists, it could be the result of a bias in the reader submitted statements. For example, if PolitiFact’s readers tend to lean left, they could submit more statements from Republicans than Democrats for review. This would bias the sample of statements PolitiFact authors choose from and could explain the selection bias observed in the data.

Although there is still uncertainty regarding the specifics of this selection process, this information helps us hypothesize what the other possible explanations for the observed selection bias are other than partisan bias. The first is that Republicans could make more statements that are “newsworthy and significant.” If statements made by Republican politicians are more prominent, then it would follow that PolitiFact authors are more likely to either hear about them in the news or have them submitted by readers. In a different sense, Republicans could be more likely to make “attention-getting or misleading statements.” In other words, Republicans could be more misleading or be expected to be more misleading. It is also reasonable to infer that all else equal misleading statements are more newsworthy so that there is a relationship between these two potential explanations. On Twitter, for example, research has suggested that false information tends to spread to more users compared to true information (Vosoughi, Roy & Aral 2018). Despite what PolitiFact claims, the data does not reveal any pattern

between how often a party is fact checked and whether or not they are in power with the exception of the President. Even when there is a Democratic President, Republicans tend to get fact checked more. PolitiFact fact checkers either ignore this guideline in practice or its impact is outweighed by the other factors considered such as a politician’s prominence or expected honesty.

In order to control for the expected honesty of a source, I estimate the following linear OLS regression to derive source fixed effects.

$$Rating_{ijt} = \alpha + \beta_1 ElectionMonth_{m(t)} + \varphi_{y(t)} \sum_{t=1}^T Year_{y(t)} + \gamma_i \sum_{i=1}^I Author_i + \delta_j \sum_{j=1}^J Source_j + \varepsilon_{ijt} \quad (1)$$

In this model, the i subscript indexes to different authors, the j subscript indexes to different politicians, and the t subscript indexes to different days. I , J , and T represent the total number of authors, sources, and days respectively. The *ElectionMonth* dummy variable indicates if a fact check occurred within 30 days of a Presidential or Midterm Election. Here, the function $m()$ classifies individual days, t , as occurring during election months or not. Year fixed effects are represented by φ , and similarly the function $y()$ maps individuals days to particular years. Author fixed effects are represented by γ , and source fixed effects are represented by δ . The constant is represented by α and ε represents the error term.

The year fixed effects control for changes in ratings that occur in individual years and are most significant in election years. The β_1 coefficient controls for time effects on a more specific level in capturing the changes in the types of ratings that are typically given out within a month of an election. Author fixed effects control for an author’s rating tendencies. These idiosyncratic tendencies could manifest through how lenient they are as a rater or what types of statements – more honest or more dishonest – they tend to fact check. In these ways, the fixed effects estimated for every source represent the average rating they receive controlling for these other regressors. Note that no term to control for a source’s partisan affiliation like *Republican* is included in this model because the source fixed effects would absorb its effects, and it would be omitted. The sample used to estimate this regression includes partisan sources who have been fact checked at least 5 times, which includes 9,904 fact checks.

Next, these source fixed effects are used as a regressor in equations (2) and (3) to explore the relationship between how often a source is fact checked and their fixed effect. In these models, the sample is altered such that each observation is a politician rather than a fact check. In this way, each

term only varies by j rather than i , j , and t as in equation (1), and each observation maps to a unique source fixed effect.¹³ This log-linear model regresses the estimated source fixed effects represented by *SourceFE* on the natural log of *SourceFrequency* where *SourceFrequency* indicates how many times a particular source has been fact checked.

$$\ln(\text{SourceFrequency}_j) = \alpha + \beta_1 \text{SourceFE}_j + \varepsilon_j \quad (2)$$

The coefficient β_1 indicates the relationship between the continuous variable *SourceFE* and the natural log of *SourceFrequency*. I choose to use the log of *SourceFrequency* so that this model can observe nonlinear relationships between the variables of interest. The fact that Presidents have been fact checked so many more times than most other sources leads to a positively skewed distribution of *SourceFrequency*. While President Obama has been fact checked over 500 times and President Trump nearly 1,000, less than a dozen other political sources have been fact checked 100 times. Thus, the natural log transformation reduces the impact of these outliers.

This model is estimated twice, once on a sample of 209 Democratic sources and again on 258 Republican sources. Comparing the coefficients in the Democratic and Republican variations can indicate whether or not the relationship differs between parties. If a partisan bias underlies PolitiFact's selection bias toward Republicans, one might expect to see a negative relationship between the Democratic fixed effects and *SourceFrequency* and a positive relationship between Republican fixed effects and *SourceFrequency*. This result would suggest that authors tend to target more honest Democrats but more dishonest Republicans.

This model does not, however, consider a source's prominence only their expected honesty. Accordingly, one could contend that its results are obscured by the fact that a source's prominence is not controlled for. This log-linear model is estimated on the same samples as regression (2) but attempts to control for a source's prominence by accounting for the highest political office they held.

$$\begin{aligned} \ln(\text{SourceFrequency}_j) = & \alpha + \beta_1 \text{SourceFE}_j + \beta_2 \text{President}_j + \beta_3 \text{VP}_j \\ & + \beta_4 \text{Governor}_j + \beta_5 \text{Senator}_j + \beta_6 \text{HouseRep}_j + \varepsilon_j \quad (3) \end{aligned}$$

¹³ The sample does not include sources that have been fact check less than five times because no source fixed effect was estimated for them.

In this specification, the dummy variables *President*, *VP*, *Senator*, *HouseRep*, and *Governor* indicate the highest office a politician has ever held. Because observations in this model do not vary across time, these dummy variables are mutually exclusive for a given source such that it does not take into account the fact that a politician might have held two of these offices at different times. For example, Joe Biden who has served as the Vice President and President is tagged as a President here, and Mike Pence who has been the Vice President and a Governor is tagged as the Vice President. The hierarchy of offices used to determine which office a politician should be tagged with when conflicts exist is President, Vice President, Governor, Senator, and member of the House. The base level can be thought of as a non-prominent source. More specifically, this non-prominent source is an individual who has never held any of these offices, and thus, is likely a state legislator, a mayor of a major city, a non-elected civil servant, or a political pundit. Accordingly, this model tests whether or not the relationship between expected honesty and *SourceFrequency* differs between parties after controlling for prominence.

In addition to selection bias, the second way that PolitiFact could exhibit partisan bias is through ratings bias. Without analyzing the justifications fact checkers give for their ratings and taking them as given, it is impossible to prove that an author exhibits outright partisan bias. Instead, I can compare different authors to test if there is a heterogeneity in partisanship. In observing relative differences in partisan ratings between authors, I do not seek to take a stance on which authors are biased and which are objective. Rather, I seek to test whether or not there are significant differences in relative partisan ratings, which infer that some of these authors are biased. While not definitively conclusive, these results can still be informative in that they could show which types of PolitiFact authors have the largest differences in their average ratings of Democrats and Republicans. This OLS regression tests for this relative bias by comparing the ratings of the prominent authors using the rest of the authors who will be referred to as the non-prominent authors as the omitted category and thus base level.

$$\begin{aligned}
 Rating_{ijt} = & \alpha + \beta_1 ElectionMonth_{m(t)} + \beta_2 Republican_j \\
 & + \varphi_t \sum_{t=1}^T Year_{y(t)} + \delta_{f(j)} \sum_{j=1}^J ProminentSource_{f(j)} + \gamma_{g(i)} \sum_{i=1}^I ProminentAuthor_{g(i)} \\
 & + \eta_{g(i)} \left(\sum_{i=1}^I ProminentAuthor_{g(i)} * Republican_j \right) + \varepsilon_{ijt} \quad (4)
 \end{aligned}$$

Note that the observations in this sample represent fact checks like in equation (1) and not sources like in equations (2) and (3). Here, terms vary by i , j , and t . This model uses the same time controls as equation (1) in addition to a *Republican* control. The coefficient β_2 indicates the marginal difference in rating that Republicans receive relative to Democrats on average. Given that Republicans receive worse ratings, we can expect this coefficient to be positive. δ represents prominent source fixed effects. Here, although j ranges from 1 to J , the function $f()$ classifies individual sources j as a prominent source or a non-prominent source. Thus, a source fixed effect is only estimated for prominent sources – those who have been fact checked at least 20 times – and the non-prominent sources in aggregate represent the omitted category. A prominent source’s fixed effect δ can be interpreted as the difference in rating they tend to receive relative to the average non-prominent source. Similarly, the function $g()$ classifies individual authors, i , as prominent authors or non-prominent authors. Only if they are prominent is an author fixed effect γ estimated for them. The interaction term between *ProminentAuthor* and *Republican* estimates another fixed effect for each prominent author, η . A given prominent author’s γ represents the difference in average rating they give Democrats relative to how the average non-prominent author rates Democrats. The sum of a prominent author’s γ and η represents the difference in average rating they give Republicans relative to the average rating non-prominent authors give Democrats. In the analysis, a prominent author’s γ term will be referred to as their Democratic fixed effect and the sum of their γ and η terms will be referred to as their Republican fixed effect. The sum of a given prominent author’s η and the coefficient β_2 represents the difference in average rating they give Republicans relative to how the average non-prominent author rates Republicans. Comparing these author-party fixed effects can reveal how prominent authors tend to rate Democrats and Republicans relative to non-prominent authors, and how different prominent authors tend to rate Democrats and Republicans relative to one another.

I chose not to estimate source fixed effects for every source because this could risk overfitting the model to the data given the relatively large number of sources who have been fact checked only a handful of times. Also, for these prominent sources, we can say with some degree of confidence that their fixed effects do in fact represent their average honesty and would be useful predictors of the rating they are expected to receive on their next fact checked statement. With less prominent sources who have been only fact checked a few times their fixed effects are more likely to be a function of which

statements of theirs PolitiFact chose to fact check rather than an indication of the veracity of the average statement they tend to make.

Selection Bias Regression Results

Fig. 2 depicts the source fixed effects as estimated by equation (1) for sources with at least 40 fact checks.¹⁴

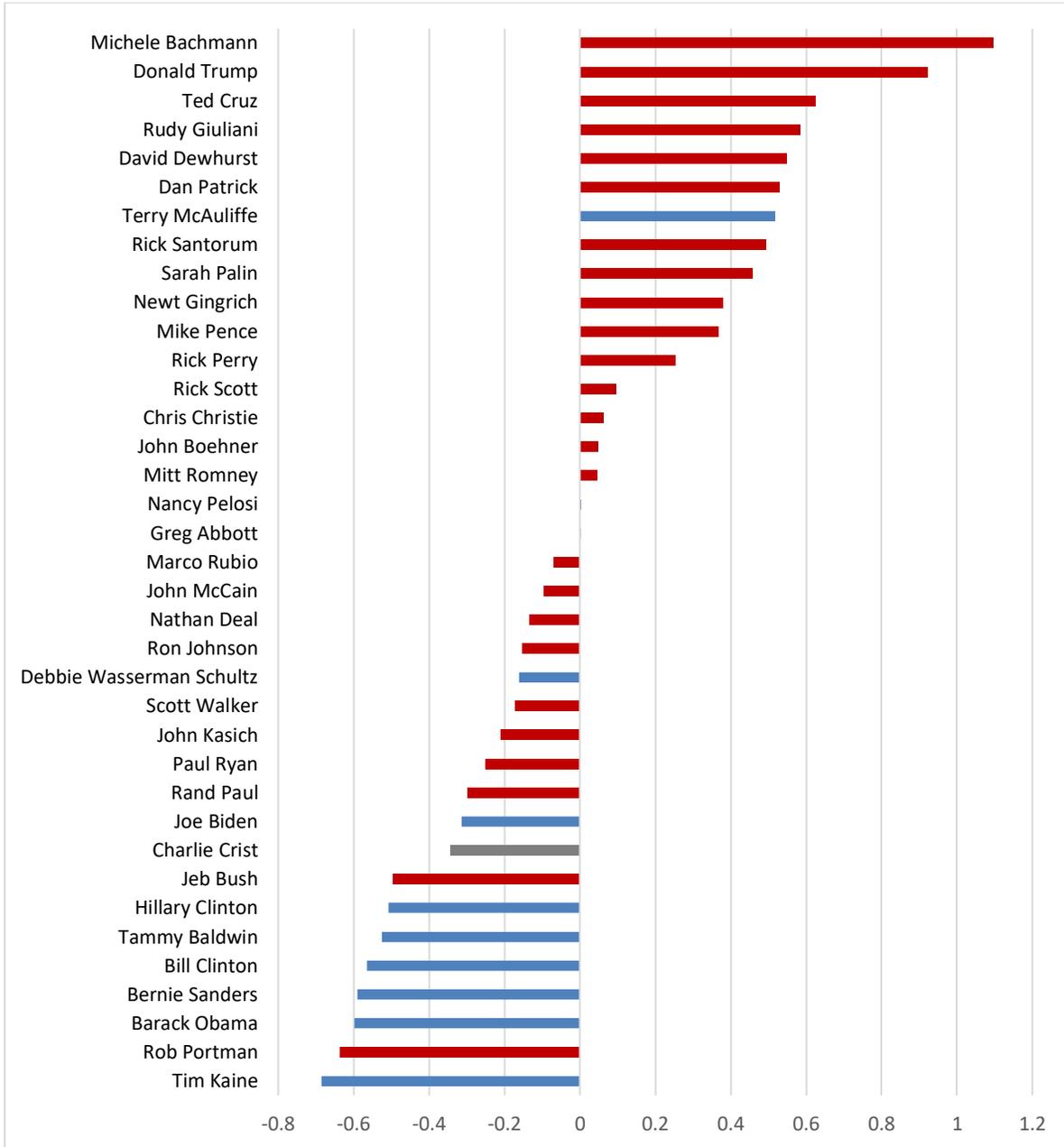


Figure 2: Source Fixed Effects for Sources with at least 40 Fact Checks

¹⁴ Only sources with at least 40 fact checks were included simply so that Fig. 2 could fit on a single page.

Overall, this figure underscores the fact that Republicans receive worse ratings but highlights a few exceptions. Terry McAuliffe who has served as the chair of the DNC and the Governor of Virginia is an outlier amongst Democrats as he receives very poor ratings relative to the rest of the sample, and Rob Portman a Republican Senator from Ohio is an outlier amongst Republicans in that he has the second lowest fixed effect of all sources displayed here. The only displayed source with a worse fixed effect than Donald Trump is Michelle Bachmann a Republican state legislator from Minnesota. Notably, Nancy Pelosi and Greg Abbott's fixed effects are essentially 0 meaning that they be thought of as the average source in this sample. Additionally, the number of Democrats versus Republicans displayed in Fig. 2 emphasizes the degree of partisan selection bias in that there are over twice as many prominent Republicans who have been fact checked 40 times compared to prominent Democrats.

The ex-Governor of Florida Charlie Crist's fixed effect is represented with a gray bar in Fig. 2 because he has changed his party affiliation over time. In 2007, Crist was elected governor as a Republican, however, he left the party to run for Senate as an independent in April of 2010 after losing to Marco Rubio in the Republican primary (Hamby 2010). Then, in December of 2012, Crist joined the Democratic party prior to launching another gubernational campaign (Blake 2012). In order to test whether fact checkers treated Crist differently over time, I estimate these source fixed effects using equation (1) but treat him as 3 separate sources dependent upon his partisan affiliation at a given time. Crist's fixed effects do change in accordance with what one would expect if PolitiFact was biased against Republicans. While "Republican Crist" has a fixed effect of $-.166$, "Independent Crist's" fixed effect decreases to $-.409$, and "Democratic Crist" has a fixed effect of $-.412$. Consequently, this result suggests that Crist was rated better as an Independent than as a Republican, and marginally better than that as a Democrat. As a Republican from 2007 to 2010, Crist was fact checked 26 times, and as an Independent and Democrat from 2010 to the present, he was fact checked 63 times. If the Republican Crist and the post-Republican party Crist were different sources, they would both be prominent sources. Because Crist is only one source, however, and no other source who has been fact checked at least 5 times has switched parties, it is impossible to use this finding to make a general claim. If it is true, however, that there is a selection bias toward fact checking dishonest statements by Republicans, it follows that when Crist was a Republican his more dishonest statements were fact checked, but when he moved to the Democratic party his more honest statements were selected. Although unlikely, it is

possible that Crist’s propensity to lie changed over time as he matured and coincidentally tracked with the timing of his partisan switches.

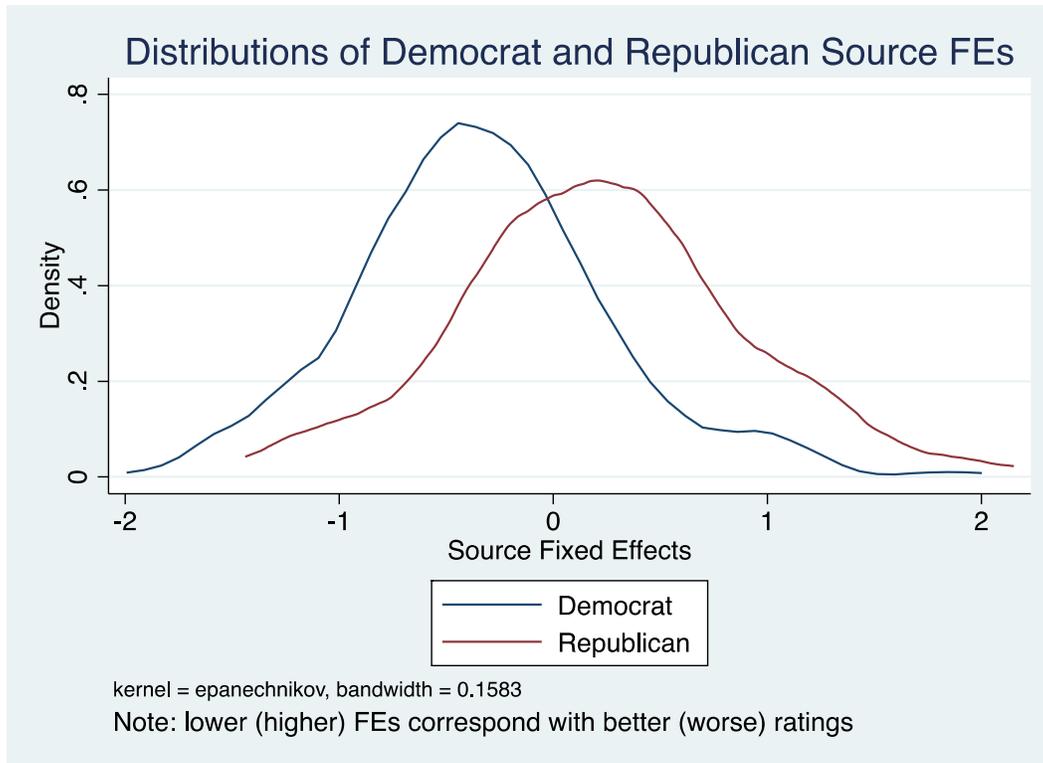


Figure 3: Distributions of Democrat and Republican Source FEs

In Fig. 3, a kernel density plot displays distributions of both Democrat and Republican source fixed effects. Note that a one unit change in a source fixed effect corresponds to a one category change in rating. For example, a unit change in rating could be the difference between a “true” and “mostly true” rating or a “half true” and “mostly false” rating. These distributions look approximately normal, and as expected, the Democratic distribution is centered left of the Republican distribution because Democrats on average receive better ratings. Additionally, the Democratic distribution’s higher peak signals that there are more Democratic sources concentrated around the Democratic mode. This general point about the concentration of the Democratic fixed effects is further emphasized by the fact that the Republican distribution has a roughly 25% greater variance compared to the Democratic one. The Democratic mean would need to be shifted right by approximately 0.9 of its standard deviations to be reach the Republican mean, while the Republican mean would have to shift by roughly 0.8 of its standard deviations leftward to reach the Democratic mean. Notably, if the sample is further restricted to

only include sources who have been fact checked at least 30 times, the Republican distribution’s variance is roughly 75% larger than the Democratic one.¹⁵ This finding indicates that all else equal, knowing a source is a Democrat allows one to better predict their average rating than knowing they are a Republican. Also, this differences in variances increases as the sample is restricted to sources who have been fact checked more often. One could argue that the fact that Republicans’ average ratings are not only worse but are more dispersed indicates that fact checkers review Republican statements with more scrutiny. On the other hand, the argument would reason that Democrat fixed effects vary less because fact checkers do not rate different Democrats that differently. Instead, their bias tends to pull their average ratings of Democratic sources toward a particular average rating.

The regression results from equation (2) examine the relationship between these source fixed effects and the frequency with which sources are fact checked are shown in Table 7.

Table 7: Regression (2) Results

| | (2) Democratic Log Source Freq | (2) Republican Log Source Freq. |
|---|-----------------------------------|------------------------------------|
| Source FE | -0.162+ (0.0962) | -0.0339 (0.0845) |
| Constant | 2.348*** (0.0649) | 2.466*** (0.0590) |
| N | 211 | 258 |
| adj. R-sq | 0.009 | -0.003 |
| Standard errors in parentheses | * p<0.05 *** p<0.001” | + p<0.10 ** p<0.01 |

For Democrats, this log-linear model estimates a negative relationship between source fixed effects and source frequency that is statistically significant at the 0.10 level. In accordance with what one might expect to observe if a partisan bias existed, this finding suggests that having a higher expected honesty is correlated with being fact checked more – not less for Democrats. That being said, the model predicts that the size of the impact that a source’s fixed effect has on its *SourceFrequency* is small. A 0.1

¹⁵ Removing President Trump because he is an outlier only decreases the difference in the variances of each party’s distribution to 65%.

unit change in a source's fixed effect is associated with a 1.6% increase in the number of times they are fact checked. To contextualize the significance of a 0.1 unit change in a source's fixed effect, note that the standard deviation of the distribution of the source fixed effects is less than one. Thus, shifting a source's fixed effect by one full unit – more than a single standard deviation – would only change their predicted source frequency by 16%. The weakness of this relationship is further underscored by the low adjusted R-squared value.

The Republican variation shows that their source fixed effects are an even worse predictor of source frequency and actually has a negative adjusted R-squared value. These results do not alter significantly when President Trump is removed from the sample either. In this way, this model does not show that sources of either party are more likely to be fact checked if they have higher fixed effects. The regression results from equation (3) shown in Table 8 examine whether this relationship changes after controlling for a source's prominence.

Table 8: Regression (3) Results

| | (3) Democratic Log Source Freq. | (3) Republican Log Source Freq. |
|---------------------------------------|------------------------------------|------------------------------------|
| Source FE | -0.0784 (0.0841) | 0.00347 (0.0759) |
| President | 3.457*** (0.576) | 4.647*** (0.801) |
| VP | 0.601 (0.575) | 1.983* (0.799) |
| Governor | 0.712*** (0.188) | 0.960*** (0.177) |
| Senator | 0.629*** (0.141) | 0.606*** (0.149) |
| House Rep. | 0.202+ (0.1207) | 0.143 (0.1206) |
| Constant | 2.138*** (0.0712) | 2.221*** (0.0716) |
| N | 211 | 258 |
| adj. R-sq | 0.271 | 0.214 |
| Standard errors in parentheses | | |
| ** p<0.01 | *** p<0.001” | |
| + p<0.10 | * p<0.05 | |

Here, neither the Democratic nor Republican variation generates a statistically significant coefficient for the source fixed effects. The coefficients on the “office” dummy variables are mostly statistically significant and all positive, which as expected suggests that sources who hold prominent political offices are more likely to be fact checked. For *President* and *VP*, the Republican coefficients are larger than those for Democrats. However, note that the Republican coefficients for *President* and *VP* are effectively source fixed effects for Donald Trump and Mike Pence because they are the only Republicans who held those offices since 2008.¹⁶ Similarly for Democrats, the coefficient for *VP* is simply a Kamala Harris fixed effect because in this model Joe Biden is tagged as a President.

¹⁶ There are only 4 total fact checks of President George W. Bush.

Accordingly, the small number of individual sources used to estimate these coefficients limit their ability to make any general claims about how often one would expect a future President or Vice President of either party to be fact checked.

The model estimates that for Republicans being a Governor increases a politician's number of fact checks by 96% while for Democrats being a Governor increases a politician's source frequency by 71%. This finding is in accord with the findings in Table 4 that show how Republican Governors are fact checked much more often compared to Democratic Governors. For Senators, the coefficients for both parties are very similar, and for members of the House of Representatives although the Republican coefficient is not statistically significant, the Democratic coefficient is positive and significant. Once again, the stark difference in the fact checking frequency of Democratic and Republican governors can be partially explained by the fact that the most active PolitiFact state affiliates tend to be from states that have recently had Republican governors more frequently than Democratic ones. Overall, the direction of the relationships between these prominence coefficients and *SourceFrequency* are consistent across parties. Although Republicans are fact checked more, there is no evidence to suggest that Democrats who are prominent are fact checked less because of their prominence as could be the case if a partisan bias existed. One potential flaw with this specification is that every source with at least five fact checks is treated as a single observation. In this way, the results could be biased toward representing the relationship between the *SourceFrequency* and *SourceFE* for sources with less than 20 fact checks. Even with the log transformation, there more sources with relatively few fact checks than sources with greater than 20. When the minimum *SourceFrequency* is adjusted, however, the p-values of the various coefficients become very high because the sample sizes are too small.

With regard to the effect of expected honesty as measured by source fixed effects on source frequency, there is no evidence to suggest it is an important determinant. When removed from these regressions, the adjusted R-squared terms only changes marginally. This is not to say that expected honesty is not an important determinant of how often a source is fact checked but rather that these fixed effects are likely an inadequate proxy for this phenomenon. One problem is the fact that these fixed effects are endogenous with the data in that they are estimated using PolitiFact ratings, which are potentially biased. In fact, the central aim of this analysis is to test for the presence of that alleged bias. Future research should seek to create this proxy for expected honesty independently. A potential solution could involve large language models (LLMs); one could input transcripts of speeches and interviews as well as campaign advertisements and social media posts into a model like ChatGPT and

ask it to rate each politicians' average truthfulness. Alternatively, a less technically complex solution could involve designing Amazon Mechanical Turk surveys that ask respondents to rate each politician on an honesty scale (Johnson & Ryan 2020). Such a survey would have to control for the partisan affiliation and ideology of the respondents, but one advantage of this option is that what it would truly be estimating is the public's expectation of a politician's honesty. Presumably, this expectation of honesty is what PolitiFact uses as a gauge when deciding to fact check statements that it believes the public is likely to consider misleading not the actual average honesty of a politician. The true average honesty of a politician seems to be an even more immeasurable and subjective metric.

Additionally, there are also more nuanced ways to approximate politicians' prominence that could reveal different patterns between prominence and the number of times a source is checked. For example, researchers could use the number of social media followers a politician has or pull data from Google Trends to analyze how often a politician's name has been searched online. Overall, the necessity to devise creative proxies for expected honesty stems from the lack of transparency with regard to PolitiFact's selection process. Hypothetically, if it was known what percentage of PolitiFact fact checks came from reader submissions, researchers could measure PolitiFact's selection bias by designing a field experiment. In this experiment, researchers could submit a sample of statements from Democrats and Republicans controlling for various factors like newsworthiness and politician prominence and track what share of each set of statements PolitiFact ultimately fact checked.

Ratings Bias Regression Results

The results of equation (4) are shown in Table 9. While this model cannot prove that an author is biased, it can show how authors rate Republicans and Democrats differently relative to their peers. Comparing how two authors with large enough sample sizes rate members of each party significantly differently may suggest that one of them exhibits partisanship.

Table 9: Regression (4) Results

| | (4) Rating | (4 cont.) Rating | |
|------------------------------|---------------------|-----------------------------------|----------------------|
| Prominent Source FEs | YES | Year FEs | YES |
| Election Month | 0.156** (0.0562) | Republican | 0.544*** (0.0666) |
| Non-Prominent Authors | 0 (.) | Non-Prominent Authors#Rep. | 0 (.) |
| Sharockman | -0.0222 (0.212) | Sharockman#Rep. | 0.0899 (0.255) |
| Sherman | 0.111 (0.118) | Sherman#Rep. | 0.192 (0.151) |
| Holan | 0.276* (0.123) | Holan#Rep. | -0.180 (0.169) |
| Bowers | -0.0299 (0.237) | Bowers#Rep. | 0.320 (0.297) |
| McCarthy | 0.215 (0.371) | McCarthy#Rep. | 0.594 (0.418) |
| Wichert | 0.463* (0.199) | Wichert#Rep. | -0.0793 (0.313) |
| Emery | 0.468** (0.152) | Emery #Rep. | -0.230 (0.230) |
| Nichols | -0.337 (0.213) | Nichols#Rep. | 0.813** (0.299) |
| O'Rourke | -0.374 (0.299) | O'Rourke#Rep. | 0.204 (0.360) |
| Davis | -0.514* (0.299) | Davis#Rep. | 0.701* (0.360) |

| | | | |
|-----------------------|----------------------|----------------------------|--------------------|
| | (0.258) | | (0.347) |
| Clark | 0.436 (0.331) | Clark#Rep. | -0.774+ (0.452) |
| Umhoefer | 0.674*** (0.194) | Umhoefer#Rep. | -0.378 (0.241) |
| Litke | 0.836*** (0.250) | Litke#Rep. | -0.521+ (0.316) |
| Stirgus | -0.183 (0.247) | Stirgus#Rep. | -0.577* (0.293) |
| O'Neill | 0.149 (0.260) | O'Neill#Rep. | 0.0760 (0.369) |
| Nelson | 0.631+ (0.334) | Nelson#Rep. | 0.0792 (0.385) |
| Greenberg | 0.139 (0.120) | Greenberg#Rep. | 0.347* (0.149) |
| Gillin | -0.000333 (0.230) | Gillin#Rep. | 0.197 (0.276) |
| Sanders | 0.00423 (0.229) | Sanders#Rep. | -0.0315 (0.280) |
| Carroll | 0.412* (0.160) | Carroll#Rep. | -0.179 (0.203) |
| Qiu | 0.0220 (0.219) | Qiu#Rep. | 0.174 (0.263) |
| Jacobson | 0.346*** (0.0820) | Jacobson#Rep. | -0.0470 (0.106) |
| Ashford-Grooms | -0.311 (0.362) | Ashford-Grooms#Rep. | 0.295 (0.410) |
| Valverde | -0.0965 (0.179) | Valverde#Rep. | 0.0677 (0.220) |
| Moorhead | -0.0792 (0.234) | Moorhead#Rep. | 0.0111 (0.299) |
| Specht | -0.284 | Specht#Rep. | 0.553 |

| | | | |
|------------------|---------------------|---|---------------------|
| | (0.344) | | (0.406) |
| Farley | 0.148 (0.149) | Farley#Rep. | -0.0657 (0.199) |
| Gorman | 0.353+ (0.199) | Gorman#Rep. | -0.395 (0.260) |
| Koff | 0.0724 (0.334) | Koff#Rep. | -0.328 (0.426) |
| Contorno | 0.607* (0.266) | Contorno#Rep. | 0.0746 (0.332) |
| Owen | -0.295 (0.292) | Owen#Rep. | -0.270 (0.355) |
| Feran | -0.00305 (0.268) | Feran#Rep. | -0.287 (0.334) |
| Kertscher | 0.510*** (0.116) | Kertscher#Rep. | -0.0900 (0.154) |
| Selby | 0.153 (0.134) | Selby#Rep. | -0.0757 (0.167) |
| Fiske | -0.0860 (0.186) | Fiske#Rep. | 0.207 (0.244) |
| Mariano | 0.283 (0.354) | Mariano#Rep. | -0.00407 (0.392) |
| Constant | 2.353*** (0.139) | Standard errors in parentheses | |
| N | 9904 | + p<0.10 | * p<0.05 |
| adj. R-sq | 0.133 | ** p<0.01 | *** p<0.001 |

In this regression, the year fixed effects are largest for election years, which indicates that near elections statements tend to receive worse ratings. This finding could be the result of sources making more questionable statements in these years or fact checkers scrutinizing statements to a higher degree than usual. More specifically, the coefficient on *ElectionMonth* is also positive and statistically significant, which indicates that this trend is accentuated in the period immediately preceding these elections. After controlling for the fixed effects of prominent sources, the statistically significant and

positive coefficient on *Republican*, which is 0.544, represents the average difference between the ratings that Republican and Democratic sources receive. In other words, a non-prominent author fact checking a non-prominent Democrat and a non-prominent Republican will be expected to give the Republican a little over half a category worse of a rating. I will refer to this difference as the “Republican penalty.” Once again, for a given prominent author, their fixed effect represents how they rate the average Democrat relative to a non-prominent author, and the sum of this fixed effect and the coefficient on the interaction term between their fixed effect and *Republican* represents how they rate Republicans relative to how a non-prominent author rates Republicans. These author-party fixed effects are more readily interpretable in a visual representation as shown in Fig. 4.

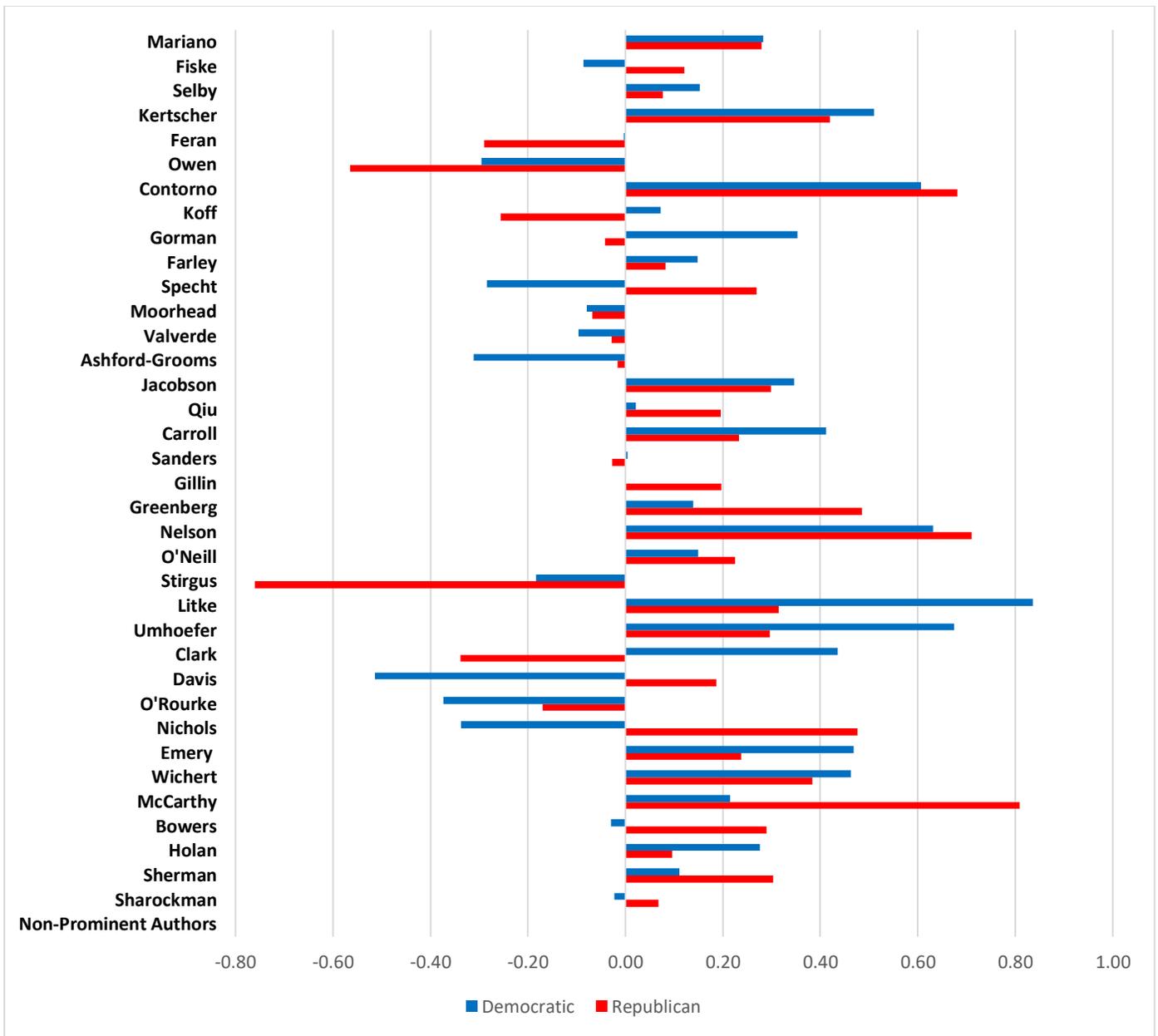


Figure 4: Prominent Author-Party Fixed Effects from Regression (4)

In interpreting this figure, it is important to note that the Republican bars represent how an author rated Republicans after controlling for the Republican penalty. In other words, an author's blue bar represents their γ term while their red bar represents the sum of their γ and η terms as specified in equation (4). Thus, an author like Willoughby Mariano, whose Republican and Democrat bars are of similar sizes, rates both Republican and Democrats about 0.3 points worse than non-prominent authors do, however, he still rates Republicans about half a point worse than Democrats. This figure illustrates

that the majority of prominent authors give out worse ratings on average compared to the non-prominent authors as shown by the fact that most of the bars are positive. In fact, roughly half of the prominent authors rate both Democrats and Republicans worse than non-prominent authors do. Stephen Koff (OH) and Dan Clark (NY) are the only authors who rate Republicans better than non-prominent authors do and rate Democrats worse than non-prominent authors do. In contrast, Paul Specht (NC), Warren Fiske (VA), D.L. Davis (WI), and Chris Nichols (CA) are the prominent authors who rate Democrats better than non-prominent authors do and Republicans worse than non-prominent authors do.

Fig. 5 demonstrates what these author-party fixed effects look like when the Republican penalty is added to each prominent authors' red bar. By not controlling for the Republican penalty, Fig. 5 depicts more clearly which party a prominent author rates better than the other outright. The dashed black line marks magnitude of the Republican penalty.¹⁷

¹⁷ Any author whose Republican bar is to the right (left) of that line rates Republicans worse (better) than non-prominent authors rate Republicans on average.

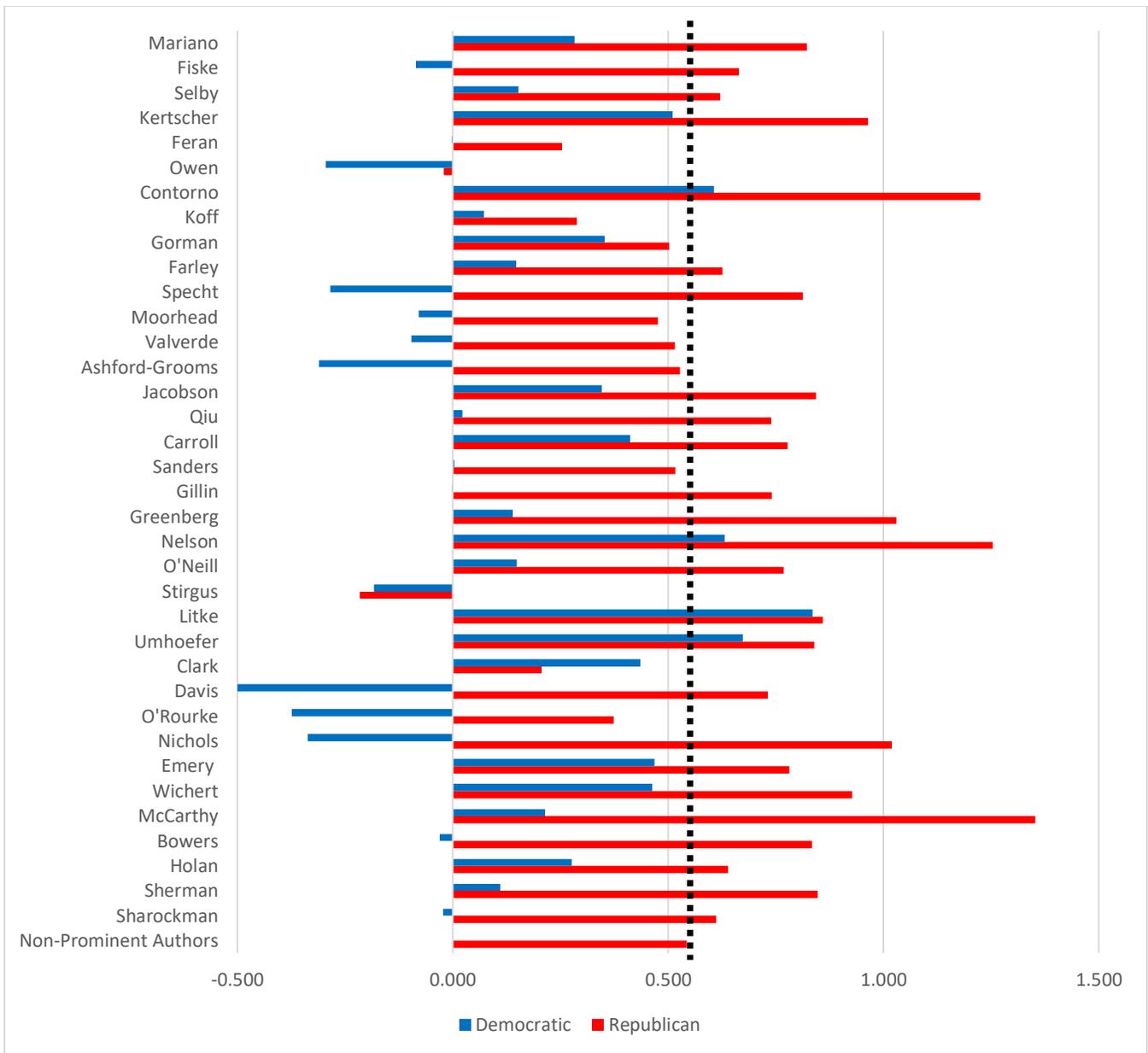


Figure 5: Prominent Author-Party Fixed Effects from Regression (4) without Controlling for the Republican Penalty

Only Clark (NY) rates Republicans noticeably better than Democrats. Eric Stirgus (GA), who is an outlier in that he rates both Republicans and Democrats better than non-prominent authors do, rates members of both parties very similarly on average as does Eric Litke (WI).

Taking the author-party fixed effects from the Fig. 4 representation as given in a sense assumes that the set of non-prominent authors are unbiased in aggregate. In other words, it assumes the Republican penalty is justified because Republicans should receive worse ratings. Within this framework, nine prominent authors – Warren Fiske (VA), Steve Contorno (Nat'l), Paul Specht (NC), Jon Greenberg (Nat'l), Erin O'Neill (NJ), D.L. Davis (WI), Bill McCarthy (Nat'l), Becky Bowers (Nat'l), and Amy Sherman (FL) – rate Democrats better than Republicans and thus could be considered biased toward Republicans relative to non-prominent authors. Once again, however, this model does not seek to determine who the more objective raters are, the prominent or the non-prominent authors. It could be the case that the non-prominent authors are biased in favor of Republicans relative to these listed prominent authors. However, this heterogeneity in partisan ratings does suggest that someone is likely biased.

To be sure, it is possible that these differences in relative ratings are because different authors fact check different samples. This explanation would infer that these listed prominent authors tend to fact check more dishonest Republicans and honest Democrats. That being said, this specification hopes to limit the possibility that this selection bias could occur at random by focusing on authors with at least 100 political fact checks. Even if one contends that these prominent authors conduct ratings objectively but review a biased sample that includes more dishonest Republican statements and more honest Democratic statements, the fact that they choose to fact check those particular statements suggests that they may have a left-wing bias. Another counterargument is that we should see differences in ratings for prominent authors who are state affiliates and disproportionately fact check politicians from their state. Republicans in New York, whom Clark (NY) rates better than Democrats, are different than the average national Republican politician. Additionally, it could be the case that PolitiFact assigns different authors to different types of fact checks. While this organizational structure would certainly lead different authors to fact check very different samples, we have no way of ascertaining whether this is the case.

On the other hand, the representation in Fig. 5 repeats the obvious story that the data has told throughout this paper, which is simply that Republicans receive worse ratings. Yet, it is interesting that this model shows that prominent authors on average give worse ratings to both parties compared to non-prominent authors. This finding could be because they are on average harsher, more meticulous reviewers, or perhaps, because they are the most experienced fact checkers, they seek out – or are assigned to cover – the most controversial statements. Fig. 6, which can be found in the Appendix, displays the kernel density plots of the Democratic and Republican fixed effects. Two versions of the

Republican distribution are plotted. One in which the Republican penalty is controlled for, and thus, is centered fairly close to the Democratic distribution, and a second which is shifted left to account for the Republican penalty and shows the outright differences in ratings between the two parties for prominent authors.

Fig. 7 depicts a scatter plot where each circle represents a particular prominent author and displays the relationship between their Democratic and Republican fixed effects. The size of each circle is dependent upon the number of political fact checks a given prominent author has conducted so that larger circles represent the more prolific authors. The red line represents the line of best fit, and the dashed line is a 45-degree line that helps interpret the plot.¹⁸ Note that this scatter includes the controlled Republican fixed effects, which normalize the Republican fixed effects to the Democratic ones.

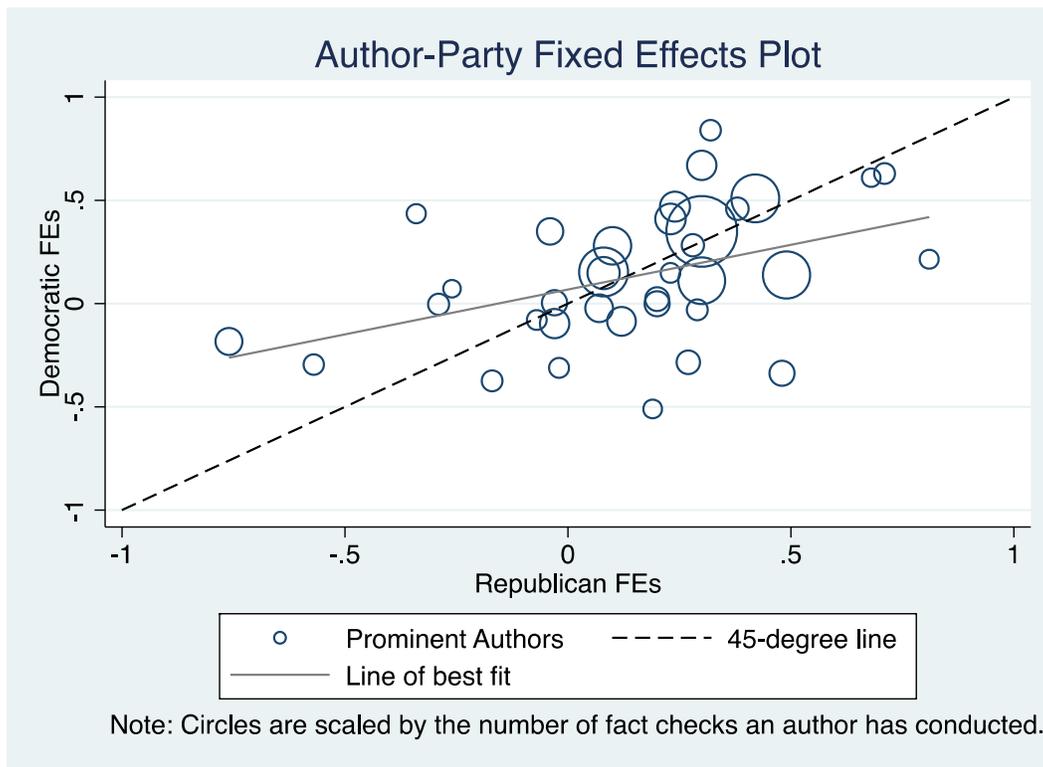


Figure 7: Prominent Author-Party Fixed Effects Scatter Plot

In Fig. 7, any prominent author who is plotted beneath the 45-degree line rates Republicans more than 0.544 points worse relative to Democrats, and any author above the 45-degree line rates

¹⁸ Note that the line of best fit does not weight different prominent authors differently based on the number of fact checks they have conducted.

Republicans less that 0.544 points worse relative to Democrats. This scatter plot is the first visualization of the author-party fixed effects that differentiates prominent authors based on how many fact checks they have conducted. Through this lens, the fact that many of the most prolific prominent authors – represented by the bigger circles – are located on or very close to the 45-degree line is evidence in support of the claim that PolitiFact’s most prominent authors are not the most partisan. Although these authors on the 45-degree line rate Republicans roughly half a point worse than Democrats, the authors who are farther from the 45-degree line – in either direction – are less prolific in relative terms. In other words, if it was the case that the Republican penalty was biased upwards, and Republicans should only be rated for example 0.3 points worse, PolitiFact’s most prolific authors would exhibit less partisan bias than some of these prominent yet less prolific fact checkers who are represented by relatively smaller circles.

In theory, if there was no partisan bias and the Republican penalty perfectly captured the extent to which Republicans should be rated worse, we would observe that each author’s plot would lie on the 45-degree line. In this hypothetical, each author’s Democratic and Republican fixed effect should be equal. The authors plotted in the bottom lefthand quadrant would represent the most lenient raters who have equally negative fixed effects for both parties, and fact checkers plotted further along the 45-degree line would represent relatively harsher fact checkers. Because not all the prominent authors lie on the 45-degree line, we know that this is not the case. If no partisan bias exists, this deviation from the line must be explained by a misestimation of the Republican penalty, which represents the average difference in ratings that a non-prominent author gives a non-prominent Republican compared to a non-prominent Democrat, is biased.¹⁹ In other words, the 0.544-point adjustment does not properly normalize the two parties’ fixed effects. It could either be too large meaning that Republicans should receive better ratings on average or too small, which implies the inverse. In these ways, it is not possible to conclusively claim that partisan bias is what we observe without more robustly verifying the accuracy of the “Republican penalty.” It could be the case that Republicans should only be rated a fourth of a point or a tenth of a point worse instead. One could even contend that PolitiFact under-penalizes Republicans as they attempt to fight the perception that they have a left-wing bias. Regardless, more thought must be given to what, if anything, can be done to objectively answer the question: do Republicans make more misleading statements, and if so to what extent?

¹⁹ Note that this refers to bias in a strictly empirical sense as in the coefficient on *Republican* does not represent the “true” difference in ratings that Republicans and Democrats should receive.

In these ways, this discussion further underscores the difficulty of objectively measuring ideological bias. One solution would be independently estimating the fact checkers own ideology by searching open-sourced state voting records. Some U.S. states allow citizens to request voter files, which could then be matched on a list of PolitiFact fact checkers. That being said, this method is limited by the fact that different states have different laws. Also, one could only infer what state a fact checker was from ad hoc using their biography on PolitiFact.com and other publicly available information on the internet. Alternatively, researchers could conduct a sentiment analysis on fact checkers' body of work to estimate a fact checker's ideology using their word choice. This is what Card et al. sought to do, however, they only used text from the articles that fact checkers published justifying their ratings (Card et al. 2018). Not only do fact checkers publish longer form pieces on PolitiFact that are not related to one specific fact check, but most of these fact checkers are journalists who publish articles in other periodicals. By gathering these publications, a similar analysis to that conducted by Card et al. could be replicated on this larger body of text and potentially lead to different results. The benefit of independently sourcing author ideology is that these estimates could be used to generate author fixed effects that are not endogenous to the dataset. This would allow us to test for partisan bias in ratings outright rather than limit our claims to describing the relative bias between authors. Although these findings are limited in this sense, they do show a differential in partisan ratings from prominent authors that does not appear to be random. Yet, they cannot conclusively claim which authors are biased and whether or not this bias constitutes a partisan bias.

Conclusion

This paper adds to the existing literature surrounding fact checking and more specifically partisan bias in fact checking by developing and testing several strategies that seek to evaluate the extent to which we can conclude that decisions to fact check Republicans more often and give them worse ratings is due to partisan bias. First, I build on Ostermeier (2011) by showing in greater detail how this selection bias varies by different types of politicians with the starkest differences between parties coming from the fact checking of Governors. Additionally, I estimate a weak negative relationship between the expected honesty of Democratic sources and the frequency with which they are fact checked, however most of the tests to investigate this relationship are inconclusive. Thus, these results point to the need to develop more robust and independently sourced estimates for the “expected honesty” of sources as well as more nuanced proxies for source prominence. When comparing the average ratings of authors by party, we see that most of the prominent authors who rate Republicans the worst relative to how they rate Democrats are national fact checkers rather than state affiliates. Furthermore, we observe a heterogeneity in partisan ratings among prominent authors that suggests that some of these fact checkers may exhibit a partisan bias. In order to strengthen the confidence of this claim, more thought must be given to the task of controlling for differences in fact check samples between authors. Also, similar to the limitations that come with estimating endogenous source fixed effects, better strategies must be developed to estimate the ideology or partisan affiliation of fact checkers themselves. Ultimately, greater transparency into PolitiFact’s selection process could help overcome many of the limitations constraining this analysis and lead to the design of more conclusive testing methodologies. While much more complex, the greatest opportunity for future research to reach conclusive claims about partisan bias lies in testing the objectivity of the fact check ratings themselves rather than taking them as given.

Many believe – especially due to the impact of President Trump – that Republicans should receive worse ratings on fact checks, however, it is important to test this claim empirically, if fact checkers genuinely want to hold political figures accountable for false statements and bolster the American public’s media literacy. In its current form, fact checking is trusted and respected by one side of the political spectrum while it is at best ignored and at worst ridiculed by the other side. Thus, in order for fact checking to serve its social function to the best of its ability, it is essential to either refute the existence of partisan bias and consider better strategies for building trust amongst Republicans or confirm its existence and consider how these biases can be mitigated.

References

- Allcott, Hunt, and Matthew Gentzkow. "Social Media and Fake News in the 2016 Election." *Journal of Economic Perspectives*, vol. 31, no. 2, 2017, pp. 211-36, doi:10.1257/jep.31.2.211.
- Barclay, Will A. (@WillABarclay). "Crime literally pays in New York. A proposal in Syracuse would pay gang members \$100 - \$200 per week to stay out of trouble. This is the surest sign that in the fight against crime, the criminals have won." Twitter, 7 Mar. 2023, 1:16 PM, <https://twitter.com/WillABarclay/status/1633169642406526979?s=20>.
- Baldwin, Tammy (@SenatorBaldwin). "On Latina Equal Pay Day, we bring attention to the fact that Latina workers make 54 cents for every dollar earned by white, non-Hispanic men. It's past time that Latina workers are given equal pay for equal work." Twitter, 8 Dec. 2022, 2:38 PM, twitter.com/SenatorBaldwin/status/123456789012345678.
- Blake, Aaron. "Charlie Crist becomes a Democrat." *Washington Post*, 8 Dec. 2012.
- Boche, Adam, et al. "The new Voteview.com: preserving and continuing Keith Poole's infrastructure for scholars, students and observers of Congress." *Research & Politics*, vol. 2, no. 1, 2015, pp. 1-7, doi:10.1177/2053168015579984.
- Bright, Jonathan, Explaining the Emergence of Echo Chambers on Social Media: The Role of Ideology and Extremism (March 10, 2017). Available at SSRN: <https://ssrn.com/abstract=2839728> or <http://dx.doi.org/10.2139/ssrn.2839728>
- Card, Dallas, et al. "PolitiFact Language Audit." *Proceedings of the 56th Annual Meeting of the Association for Computational Linguistics (Volume 1: Long Papers)*, Association for Computational Linguistics, 2018, pp. 1257-1268.
- Cole, S. (2019). Politifact-analysis. [Code] <https://github.com/srcole/politifact-analysis>. Accessed on: September 15, 2022.
- Davis, D.L. "Yes, Wage Gap Does Have Big Impact on Latina Workers." *PolitiFact*, 16 Dec. 2022, https://www.politifact.com/factchecks/2022/dec/16/tammy-baldwin/yes-wage-gap-does-have-big-impact-latina-workers/?cid=twitter_PolitiFactWisc.
- Eisenstadt, Marnie. "Syracuse Wants to Pay 50 Gang Members to Stay Out of Trouble as Part of Anti-violence Program." *Syracuse.com*, 7 Mar. 2023, 6:00 a.m., updated 7 Mar. 2023, 6:27 p.m., <https://www.syracuse.com/news/2023/03/syracuse-wants-to-pay-50-gang-members-to-stay-out-of-trouble-as-part-of-anti-violence-program.html>.
- "Fact Checkers & Big Media." *Investor's Business Daily*, 26 Apr. 2018, www.investors.com/politics/editorials/fact-checkers-big-media/.
- Farnsworth, Stephen J. and S. Robert Lichter. "A Comparative Analysis of the Partisan Targets of Media Fact-checking: Examining President Obama and the 113th Congress."

International Journal of Press/Politics, vol. 21, no. 3, July 2016, pp. 286-306.

ForMedia - Third-Party Fact-Checking." Meta, ForMedia,
<https://www.facebook.com/formedia/mjp/programs/third-party-fact-checking>.

Hamby, Peter. "Crist quits GOP primary, stage set for three-way race." CNN, 29 Apr. 2010.

Holan, Angie Drobnic. "The Principles of the Truth-O-Meter: PolitiFact's methodology for independent fact-checking." PolitiFact, 12 Feb. 2018, www.politifact.com/article/2018/feb/12/principles-truth-o-meter-politifact-methodology-in/.

Iannucci, Rebecca and Bill Adair. "Heroes or Hacks: The Partisan Divide Over Fact-Checking." A Report from the Duke Reporters' Lab, June 2017, reporterslab.org/heroes-or-hacks-the-partisan-divide-over-fact-checking/.

Johnson, D., & Ryan, J. B. (2020). Amazon Mechanical Turk workers can provide consistent and economically meaningful data. *Southern Economic Journal*, 87(1), 369-385. doi: 10:1002/SOIJ.12451. John Wiley & Sons, Ltd.

Jones, Jeffrey M. "Confidence in U.S. Institutions Down; Average at New Low." Politics, 5 July 2022, www.gallup.com/politics/379363/confidence-institutions-down-average-new-low.aspx.

Lewis, Jeffrey B., Keith Poole, Howard Rosenthal, Adam Boche, Aaron Rudkin, and Luke Sonnet (2021). *Voteview: Congressional Roll-Call Votes Database*. <https://voteview.com/>

Lim C. (2018). Checking how fact-checkers check. *Research & Politics*, 5(3), 1–7.

Nyhan, Brendan, and Jason Reifler. "Estimating Fact-checking's Effects: Evidence from a long-term experiment during campaign 2014." Dartmouth College, 28 April 2015, nyhan.dartmouth.edu/sites/default/files/nyhan-reifler-fact-checking-2015.pdf.

Nyhan, Brendan. "Facts and Myths about Misperceptions." *Journal of Economic Perspectives*, vol. 34, no. 3, Summer 2020, pp. 220-236.

Ostermeier, Eric. 2011. "Selection bias? PolitiFact rates Republican statements as false at three times the rate of Democrats." *Smart Politics*. February 10, 2011.
<https://smartpolitics.lib.umn.edu/2011/02/10/selection-bias-politifact-rate/>.

Panepento, Marnique O. "Syracuse Proposal Would Pay Gang Members to Stay Away from Crime." PolitiFact, 29 Mar. 2023, www.politifact.com/factchecks/2023/mar/29/william-barclay/syracuse-proposal-would-pay-gang-members-stay-away/.

Sides, John. 2009. "Scoring Truthfulness in the Health Care Debate." *The Monkey Cage*, August 14. URL: http://themonkeycage.org/2009/08/scoring_truthfulness_in_the_he/.

Walker, Mason, and Jeffrey Gottfried. "Republicans far more likely than Democrats to say fact-checkers tend to favor one side." Pew Research Center, 27 June 2019, www.pewresearch.org/fact-tank/2019/06/27/republicans-far-more-likely-than-democrats-to-say-fact-checkers-tend-to-favor-one-side/.

Vosoughi, S., Roy, D., & Aral, S. (2018). The spread of true and false news online. *Science*, 359(6380), 1146-1151. doi: 10.1126/science.aap9559.

Appendix

Table 2a: Fact Checks of Democratic and Republican Senators by Congress²⁰

| Senators | Politicians in Office | Politicians Fact Checked | Total Fact Checks | Checks per Politician | Avg. Rating |
|----------------------------------|-----------------------|--------------------------|-------------------|-----------------------|-------------|
| 111th Congress | | | | | |
| Democrats | 59 | 29 | 78 | 2.69 | 2.86 |
| Republicans | 41 | 31 | 172 | 5.55 | 3.05 |
| 112th Congress | | | | | |
| Democrats | 53 | 23 | 151 | 6.57 | 2.59 |
| Republicans | 47 | 20 | 145 | 7.25 | 3.01 |
| 113th Congress | | | | | |
| Democrats | 53 | 36 | 104 | 2.89 | 2.58 |
| Republicans | 47 | 30 | 246 | 8.20 | 3.41 |
| 114th Congress | | | | | |
| Democrats | 46 | 25 | 107 | 4.28 | 2.61 |
| Republicans | 54 | 23 | 128 | 5.57 | 3.29 |
| 115th Congress | | | | | |
| Democrats | 47 | 31 | 126 | 4.06 | 2.83 |
| Republicans | 51 | 30 | 139 | 4.63 | 3.29 |
| 116th Congress | | | | | |
| Democrats | 45 | 18 | 55 | 3.06 | 2.71 |
| Republicans | 53 | 20 | 81 | 4.05 | 3.74 |
| 117th Congress | | | | | |
| Democrats | 50 | 17 | 44 | 2.59 | 2.64 |
| Republicans | 50 | 24 | 101 | 4.21 | 3.69 |
| Aggregates | | | | | |
| Democrats | - | 56 | 665 | 11.88 | 2.68 |
| Republicans | - | 54 | 1,012 | 18.74 | 3.31 |

²⁰ The second column “Politicians in Office” is not displayed in the condensed version of Table 2 in the Descriptive Results section. This column represents the actual number of Democratic and Republican Senators in office in a given Congress. These figures help contextualize the number of politicians who are fact checked, and thus, we observe.

Table 2b: Fact Checks of Democratic and Republican House of Reps. Members by Congress²¹

| U.S. House of Reps. | Politicians in Office | Politicians Fact Checked | Total Fact Checks | Checks per Politician | Avg. Rating |
|----------------------------|------------------------------|---------------------------------|--------------------------|------------------------------|--------------------|
| 111th Congress | | | | | |
| Democrats | 255 | 55 | 136 | 2.47 | 3.05 |
| Republicans | 179 | 56 | 162 | 2.89 | 3.77 |
| 112th Congress | | | | | |
| Democrats | 193 | 58 | 229 | 3.95 | 2.99 |
| Republicans | 242 | 67 | 312 | 4.66 | 3.46 |
| 113th Congress | | | | | |
| Democrats | 201 | 54 | 120 | 2.22 | 2.72 |
| Republicans | 234 | 78 | 223 | 2.86 | 3.37 |
| 114th Congress | | | | | |
| Democrats | 186 | 33 | 103 | 3.12 | 2.93 |
| Republicans | 246 | 49 | 111 | 2.27 | 3.23 |
| 115th Congress | | | | | |
| Democrats | 193 | 41 | 97 | 2.37 | 3.07 |
| Republicans | 235 | 65 | 157 | 2.42 | 3.65 |
| 116th Congress | | | | | |
| Democrats | 232 | 32 | 68 | 2.13 | 2.88 |
| Republicans | 197 | 49 | 88 | 1.80 | 3.88 |
| 117th Congress | | | | | |
| Democrats | 220 | 25 | 58 | 2.32 | 3.12 |
| Republicans | 212 | 50 | 112 | 2.24 | 3.92 |
| Aggregates | | | | | |
| Democrats | - | 137 | 811 | 5.92 | 2.96 |
| Republicans | - | 187 | 1,165 | 6.23 | 3.57 |

²¹ Refer to fn. 19 for an explanation of the second column “Politicians in Office,” which is not included in the condensed version of this table displayed in the Descriptive Results.

Table 3: Fact Checks of Democratic and Republican Governors by Year

| Governors | Politicians Fact Checked | Frequency | Checks per Politician | Avg. Rating |
|------------------|-------------------------------------|------------------|----------------------------------|------------------------|
| 2010 | | | | |
| Democrats | 4 | 12 | 3.00 | 3.83 |
| Republicans | 7 | 66 | 9.43 | 3.48 |
| 2011 | | | | |
| Democrats | 4 | 7 | 1.75 | 2.86 |
| Republicans | 9 | 143 | 15.89 | 3.25 |
| 2012 | | | | |
| Democrats | 7 | 13 | 1.86 | 3.23 |
| Republicans | 10 | 135 | 13.50 | 3.16 |
| 2013 | | | | |
| Democrats | 5 | 8 | 1.60 | 1.75 |
| Republicans | 10 | 102 | 10.20 | 2.95 |
| 2014 | | | | |
| Democrats | 6 | 14 | 2.33 | 2.93 |
| Republicans | 7 | 92 | 13.14 | 3.17 |
| 2015 | | | | |
| Democrats | 5 | 14 | 2.80 | 3.00 |
| Republicans | 6 | 75 | 12.50 | 3.15 |
| 2016 | | | | |
| Democrats | 6 | 25 | 4.17 | 2.44 |
| Republicans | 10 | 69 | 6.90 | 3.26 |
| 2017 | | | | |
| Democrats | 4 | 21 | 5.25 | 2.29 |
| Republicans | 7 | 41 | 5.86 | 3.22 |
| 2018 | | | | |
| Democrats | 4 | 13 | 3.25 | 2.62 |
| Republicans | 7 | 48 | 6.86 | 3.58 |
| 2019 | | | | |
| Democrats | 6 | 22 | 3.67 | 3.23 |
| Republicans | 5 | 16 | 3.20 | 2.94 |
| 2020 | | | | |
| Democrats | 9 | 28 | 3.11 | 3.23 |
| Republicans | 6 | 22 | 3.67 | 3.23 |
| 2021 | | | | |
| Democrats | 6 | 16 | 2.67 | 2.18 |
| Republicans | 5 | 22 | 4.40 | 3.59 |

| 2022 | | | | |
|-------------------|----|-----|-------|------|
| Democrats | 5 | 14 | 2.80 | 2.14 |
| Republicans | 5 | 24 | 4.80 | 3.71 |
| Aggregates | | | | |
| Democrats | 23 | 207 | 9.00 | 2.66 |
| Republicans | 23 | 855 | 37.17 | 3.23 |

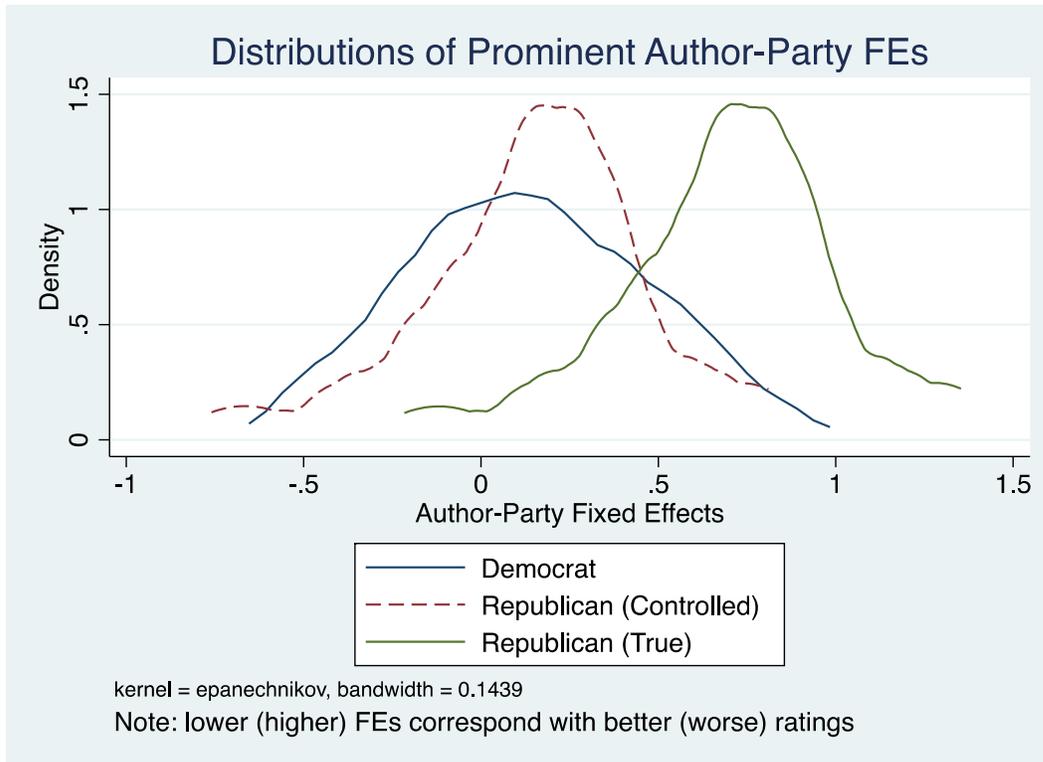


Figure 6: Distributions of Prominent Author-Party Fixed Effects