Beyond Partisanship? Electoral Competitiveness and US Governors' Policy Responses to the COVID-19 Pandemic

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Abstract:

Preliminary studies support the notion that partisanship can help explain different governors' policy responses to the COVID-19 pandemic. However, the effects of other political factors on states' responses are not yet understood. Some differences in gubernatorial responses initially attributed to partisanship may also be driven by other factors. We study one such factor - electoral competitiveness - to gauge whether electoral concerns influenced gubernatorial responses to COVID-19. We construct a model to estimate each incumbent governors' odds of reelection before the outbreak of COVID-19 and use OLS regressions to estimate the effect of electoral concerns on governors' policy responses to COVID-19. Throughout our analysis we utilize a number of strategies to account for the severity of the COVID-19 outbreak in each state. Through our study, we seek to determine how governors' partisanship and the electoral incentives they faced influenced the policies they implemented in response to the COVID-19 pandemic. We echo the finding of other scholars that partisanship has a large effect on gubernatorial policy decisions in response to COVID-19. However, we find little strong or consistent evidence that electoral constraints shaped governors' policy responses to COVID-19. That said, our results are tentative, and cannot firmly rule out any of several plausible causal accounts in which electoral constraints could shape governors' policies. Further research is needed to definitively confirm or reject any link between electoral constraints and governors' policy responses to COVID-19.

Introduction:

In recent months, reporters have noted a pattern in state-level policy responses to the COVID-19 pandemic. In general, the media suggests, responses to COVID-19 follow a partisan divide. Republican governors, in this account, have been slower to restrict citizen behavior, and quicker to eventually lift such restrictions, than their Democratic counterparts. Researchers have begun to examine this claim and find that it generally seems to hold true. One preprint study estimates that states with Republican governors and higher shares of Trump voters adopted social distancing measures 2.7 days later on average.[1] Other observers offer some qualitative evidence that GOP governors followed President Trump's lead, and President Trump's early skepticism about COVID-19 led them to enact policies in response to COVID-19 later than their Democratic counterparts.[2]

However, scholars currently lack evidence on factors that might modify or account for these partisan effects. Governors may accord more or less importance to the party line under

[1] Adolph, Christopher, Kenya Amano, and Bree Bang-Jensen. "Pandemic Politics: Timing State-Level Social Distancing Responses to COVID-19," March 28, 2020, 19.

[2] Kettler, Jaclyn, Luke Fowler, and Stephanie Witt. "Democratic Governors Are Quicker in Responding to the Coronavirus than Republicans." The Conversation. Accessed June 6, 2020. http://theconversation.com/democratic-governors-are-quicker-in-responding-to-the-coronavirus-than-republicans-135599.

different circumstances. Effects which seem to be driven by a governor's party may in fact be explained by other factors. Governors who appear to be following the party line when implementing policies in response to COVID-19 may in fact be responding to other factors. Moreover, the size of partisan effects may differ depending on the severity of the pandemic, with other factors influencing governors' decisions at different points throughout the pandemic's course. To explain the crisis behavior of governors, and determine whether partisan effects hold up when other explanatory variables are incorporated, researchers need further evidence that tests the impact of additional factors on public-health responses.

We test the effect of one such factor on the policies governors implemented in response to COVID-19: their perceived odds of reelection. We have reason to believe a state's perceived electoral competitiveness may modify baseline partisan differences. Research has found that governors eligible for reelection in competitive states are more likely to request aid in the wake of natural disasters.[3] Thus close elections may enlist effort on the part of governors to respond to crises. On the other hand, close elections may enlist effort on the part of governors to limit the economic costs of COVID-19, and thus may make governors averse to the known and considerable costs of stringent public-health measures. Thus, variables tied to reelection (including the competitiveness of a governor's reelection bid as well as that governor's eligibility to run again in the first place) may shape governors' responses to COVID-19. However, plausible accounts can be offered for governors who face reelection pressures to be either more likely or less likely to enact public-health measures.

We test the effect of reelection odds, in the form of a modeled probability of reelection and a binary variable indicating whether a governor is eligible for reelection, on governors' policy responses to COVID-19. We also evaluate whether the effects of gubernatorial partisanship persist once an analysis controls for a governor's electoral prospects - with the expectation that governors who are near-certain to win or lose will be less responsive to electoral incentives. We carry out these tests with a set of linear regression analyses that test the impact of these factors on governors' adoption of three common public-health measures, and the duration of these measures once implemented.

We find that partisan effects generally hold up even in models that incorporate the impact of electoral competitiveness. The statistical significance of party effects varies, but our findings consistently suggest Democratic governors are more likely to enact restrictions on gatherings, close non-essential businesses, and enact stay-at-home orders than their Republican counterparts. Democratic governors also appear to keep these restrictions in place longer once they are enacted. Caution is in order with any finding supported by estimates whose statistical significance is limited, but a combination of effect sizes with practical significance, effect directions that are generally consistent with each other, and prior research that echoes this finding, suggests there is likely some substance to partisanship affecting differences in policy responses to the COVID-19 pandemic.

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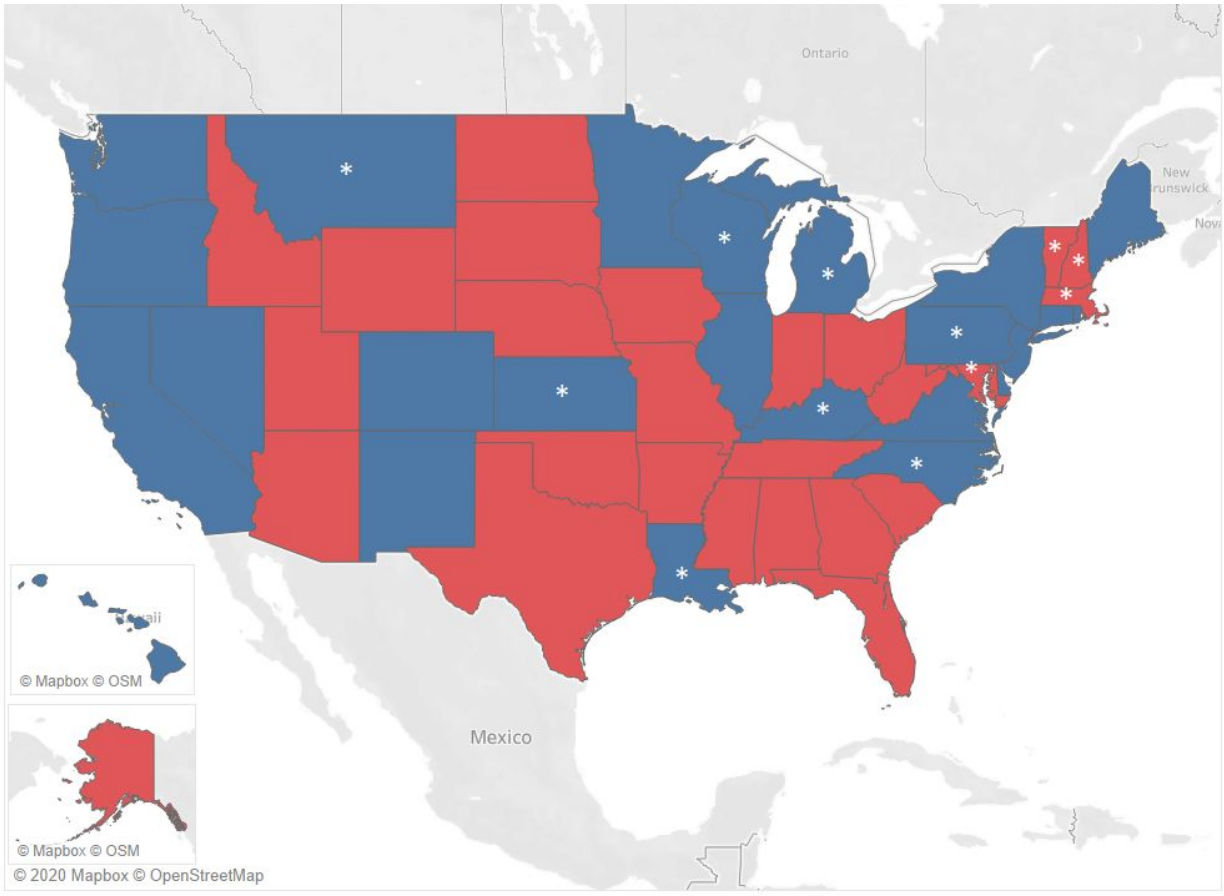
[3] Gasper, John T, and Andrew Reeves. "Governors as Opportunists: Evidence from Disaster Declaration Requests," n.d., 25.

Analyses examining electoral competitiveness and the presence of term limits produce fewer clear findings. Some individual regressions for specific policies and stages of pandemic severity are consistent with an account in which competitive elections deter stringent public-health measures, and ensure governors lift these measures earlier. However, these effects are tentative at best - often lacking in statistical and practical significance - and are contradicted by other results. Moreover, for most policies and stages of pandemic severity, term limits seem to reduce the likelihood a governor will enact stringent public health measures - a finding at odds with an account in which electoral pressures make governors reluctant to implement public-health restrictions. This pattern, too, is characterized by small effect sizes with limited practical significance and little or no statistical significance. Additionally, this pattern, like the pattern observed for electoral competitiveness, is cast into doubt by contradictory results across different policies, stages, and measures. Different tests produce term limit effects that differ in size, direction, and statistical significance. Overall, we observe effects of competitiveness and term limits whose validity is called into question by both internal and mutual contradictions. This evidence is too limited and tentative to wholly rule out several plausible accounts in which the competitiveness of a state's next gubernatorial election and its governor's eligibility to run for reelection shaped pandemic responses. However, on the basis of the evidence we have, we cannot reject the null hypothesis in favor of any such account.

In isolation, the results of individual regressions have limited statistical and practical significance. On the whole, we find evidence to suggest that the strong gubernatorial partisanship effects noted in the media and prior research are robust to analyses that incorporate at least one alternative political explanation. We find little evidence for several causal accounts in which the competitiveness of a state's next gubernatorial election or its governor's eligibility to run for reelection might affect public health policies implemented by the state's governor. Moreover, what evidence we do find is generally contradictory and statistically insignificant. That said, more refined models, more precise methods, and further data may reveal effects too subtle or variable to be detected in our analysis. Further research is needed to conclusively document or reject any impact of electoral concerns on governors' policy responses to COVID-19.

Figure 1: Map of the Party Affiliation of Governors across the United States



States that President Trump won in the 2016 election, but which currently have Democratic governors, as well as states that Hillary Clinton won in the 2016 election, but which currently have GOP governors, are marked with asterisks.

2: Data and Methods:

We assess the impact of a governor's party as well as reelection concerns on their responses to COVID-19 using data on political factors, COVID-19 cases, and policy responses. We use political data, including current data points as well as historical election results provided by the CQ Voting and Elections Collection, to measure state and governor partisanship and estimate a governor's odds of reelection.[4] We use public health data collected by Johns Hopkins University to gauge the timing and spread of the COVID-19 outbreak in each state.[5] Finally, we use policy data to determine the date when each state adopted 3 popular policies implemented in response to COVID-19, as well as the duration of these policies once implemented.[6]

The three state-level policies we chose to analyze were: the implementation of a stay-at-home order, the recommendation to limit group gatherings, and the closing of all businesses deemed non-essential. As many states have already implemented these policies, and some have begun to rescind them, we study the date of implementation for each policy, as well as the length of time for which these policies were in place. We selected these three policies because they are some of the most widely adopted policies across the United States. However, the exact time at which each of these policies was implemented varied widely from state to state. Some governors implemented these policies as soon as the novel Coronavirus spread to their state, while others waited until a large number of cases developed to adopt the same measures. The universality of these policies also varied; some (such as recommendations against large-group gatherings) were adopted in virtually every state, but at different times and for different durations, while others (such as mandatory stay-at-home orders) have been more controversial and less widespread. We aim to explain variation in the adoption and duration of these policies by reference to political factors.

2.1 Dependent Variable

In order to gauge different states' policy responses to COVID-19, we study whether or not each governor implemented each of the aforementioned policies by the time their state reached one of several cases-per-capita cutoffs. We use cases per capita in order to control for differences in state population, which could make raw case counts a misleading measure of a state's level of disease spread and risk. In this way, we avoid a likely pitfall of analyses focused on raw case counts, as the same number of cases in different states could indicate different levels of outbreak severity and prompt state governors to react very differently. By using cases per capita, we avoid this pitfall and equalize any effect of population. This allows us to isolate and analyze the differential responses of governors to comparable levels of outbreak severity.

In order to generate these dependent variables, we use four different cutoff points in our analysis, which indicate when a given state reached four different levels of cases per capita. We

[4] "CQ Voting and Elections Collection." Accessed June 6, 2020. https://library.cqpress.com/elections/.
[5] Johns Hopkins Coronavirus Resource Center. "COVID-19 United States Cases by County." Accessed June 6, 2020. https://coronavirus.jhu.edu/us-map.
[6] GitHub. "COVID19StatePolicy/SocialDistancing." Accessed June 6, 2020. https://github.com/COVID19StatePolicy/SocialDistancing.

selected these cutoffs so as to capture the full range of states' case prevalence and spread. We aimed for a mix of thresholds that all states reached rapidly, as well as thresholds that states reached later on as the pandemic peaked and some states eased restrictions. In order to not only capture the range of outbreak severity and timing, but maintain similar intervals between our cutoffs (after taking into account the exponential nature of pandemic growth), we opted for a set of cutoffs that increased exponentially - each double the last. In this way, we arrived at the cutoffs below:

- 125 cases per million people
- 250 cases per million people
- 500 cases per million people; and
- 1000 cases per million people

We first determined the date by which states reached these cutoff points, using data on cases collected by the Johns Hopkins Coronavirus Research Center. We then generated a binary variable indicating whether or not a state had enacted each policy by the date in which it reached each of the aforementioned cutoffs. We also generated a discrete variable that measured the duration of a given policy in a given state.

We recognize this data has some limitations; differences in testing capacity and policies across states mean that the number of cases recorded in a state may be linked loosely and imperfectly to that state's actual case count. Accordingly, we considered looking instead at mortality figures, which might limit the effect of untested cases. Ultimately, we decided against this measure for three reasons. First, because attribution of deaths still requires a positive test, and guidelines for attribution to COVID-19 vary by state (some place more weight on comorbidities), the validity of recorded deaths as a measure of outbreak severity may be no better than that of case counts. Second, because mortality can vary considerably depending on a patients' risk factors and medical treatment, comparisons of death rates across different states may reflect very different total counts of cases. Finally, and most importantly, we sought to use the measure most relevant to governors' decisions. Due to COVID-19's incubation period, case counts are already a lagging measure of outbreaks. Nevertheless, many cases occur well before deaths, and so it seems likely that many governors chose to implement public-health policies based on the number of cases in their state, which could show a growing outbreak while death totals remained low. Furthermore, because additional cases can translate into new cases as well as deaths, any governor concerned with limiting death rates or total deaths would have reason to track case counts. Thus, we deemed the rate of cases present in a state a reasonable proxy for the information governors had at their disposal about the severity of the virus in their state when they made policy decisions.

2.2 Independent Variable

To measure the impact of electoral competitiveness on a governor's response to COVID-19, we use two variables. One such variable is a simple dummy variable that indicates whether a governor is term-limited or not. The second variable, discussed in more detail below,

aims to estimate the *ex-ante* competitiveness of a governor's reelection bid (assuming the incumbent runs for reelection) using factors whose value was known as of this spring.

Our political competitiveness variable is built on an OLS regression of incumbent party margins of victory in gubernatorial elections from 2006 to 2018. This regression uses own-party presidential margin of victory in the previous presidential election, own-party margin of victory in the previous gubernatorial election, and the presence or absence of an incumbent governor in an election to predict the margin that an incumbent governor's party can expect to achieve at the polls. By virtue of these specifications, our regression predicts gubernatorial reelection odds using factors knowable in advance - and thus available to governors responding to the COVID-19 pandemic no matter the number of years before their state's next gubernatorial election.

We exclude third-party candidates' vote shares, any election featuring a third-party candidate in the top two candidates, as well as any third-party incumbents, from our analysis, as these cases may create unusual dynamics that do not reflect two-party matchups. No state currently has a third-party incumbent governor or seems likely to feature a third-party candidate among the top two finishers in its gubernatorial election, and thus we determined this restriction would make our model more representative of the situation current governors face.

The equation we trained on historical data, and subsequently used to predict incumbent governors' margins of victory or defeat, is as follows

$$Yi = \beta 0 + \beta 1 * X1i + \beta 2 * X2i + \beta 3 * X3i + \varepsilon i$$

Where:

- Yi is the incumbent party's margin of victory or defeat in a gubernatorial election
- $\beta 0$ is the Y-intercept, which crosses the y-axis at $\cong -7.958$.
- $\beta 1$ is the coefficient of the statewide margin for the last presidential nominee of the incumbent's party prior to the current election (denoted by $X1i$), and is $\cong +0.223$ (that is, for every percentage point increase in the presidential nominee's margin in the last presidential election, we would expect the incumbent governor's margin to increase by 0.223 points).
- $\beta 2$ is the coefficient of the incumbent party's margin of victory in the last regularly scheduled gubernatorial election (denoted by $X2i$) and is equal to $\cong +0.103$ (that is, for every percentage point increase in the incumbent party's margin in the last election, we would expect the incumbent governor's margin to increase by 0.103 points).
- $\beta 3$ is the coefficient for a dummy variable indicating whether the incumbent is seeking reelection or not (denoted by $X3i$) and is equal to $\cong +14.480$ (that is, incumbent governors who run for reelection are expected to outperform a non-incumbent candidate of their own party by 14.480 percentage points).

- εi is the error term (the median residual for this regression on historical data is -2.513).

This regression equation was developed using the historical election results of gubernatorial elections from 2006 through 2018. A modified version, trained on results from 2006 through 2016, was used to generate predictions for 2018 that were matched against actual 2018 results to check this model's validity, and showed comparable accuracy in and out of sample. Some variations on this model achieved R-squared values as high as 0.48 but performed poorly in out-of-sample testing - and raised concerns of overfitting. The actual model used has an R-squared value of 0.3244; its coefficients are all statistically significant at a 0.01 significance threshold, and all but the intercept coefficient is statistically significant with a significance threshold of 0.001.

Using the coefficients generated by this model, and the model's uncertainty (as captured in the standard error of this model's residuals), we generate a distribution of predicted two-party margins for each current incumbent governor. We set the standard deviation of this distribution at 16.33, the residual standard error of our model. We then calculate the share of outcomes in the resulting distribution that would result in a win for the incumbent governor. We calculate the absolute distance between this share and 50% or 0.5. We then reverse the scaling of this variable, so that low values will indicate low competitiveness and high values will denote close elections. Finally, we transform the result into a variable that ranges not from 0 to 0.5, but from 0 to 1. Thus, the result of our calculations is a variable that ranges from 0 to 1, with 0 representing certain victory or defeat and 1 representing coin-flip odds of reelection. We use this variable as a measure of the expected competitiveness of a state's next gubernatorial election, and generally refer to it as "electoral competitiveness" or some variant of this term.

We made the decision to measure absolute distance from 50% of a governor's reelection odds on the basis of a key assumption. We assumed for the purposes of this analysis that governors who are heavily favored to win reelection and governors all but written off will respond similarly to electoral incentives. Specifically, we assumed such governors' behavior would be less sensitive to electoral concerns than the behavior of governors who face tight reelection contests. This is because any small shift in votes as a result of a governor's public health policies will be less likely to sway contests when two candidates are separated by a large number of percentage points than it will be to sway contests that may come down to a few percentage points.

Term-limited governors represent a difficult case for such a variable. In theory, these governors should show no response to reelection pressures. However, the decisions of many such governors may be shaped by other electoral concerns. These include: looming runs for federal office; the prospects of an allied or own-party successor; and presidential or down ballot contests that may be influenced by a governor's performance. Thus, we chose not to exclude these governors from our analysis altogether and shrink an already-limited dataset. We tested regressions that imputed reelection odds of zero to these governors. However, we were concerned this might understate the political fortunes of popular governors and obscure the closeness of elections and the importance of electoral concerns to term-limited incumbents.

When we conducted regressions under the above specifications, these concerns seemed to hold true. Thus, we chose not to impute reelection odds of zero for these governors. We chose, rather, to include a dummy variable in our analysis to denote term-limited governors - and use this variable to gauge any difference in responses to similar electoral conditions between governors who were term-limited and those who were not.

The resulting variable (see charts and map below) is generally quite favorable to incumbents, as it gives all but one (Andy Beshear of Kentucky) better than even odds of being reelected. It is also somewhat bearish on many governors who seem safe - only Mark Gordon of Wyoming is given over a 90% chance of being reelected. This is likely a product of the considerable residual standard error incorporated into this model. Our model is almost certainly too bearish on some governors, and likely overestimates some Democrats in deep-red states. However, insofar as these biases reflect caution about a model with limited explanatory power, these limitations - while real, and potential targets for future iterations of this model - otherwise make for a more robust model.

Figure 2: Distribution of Gubernatorial Election Competitiveness Scores for US States

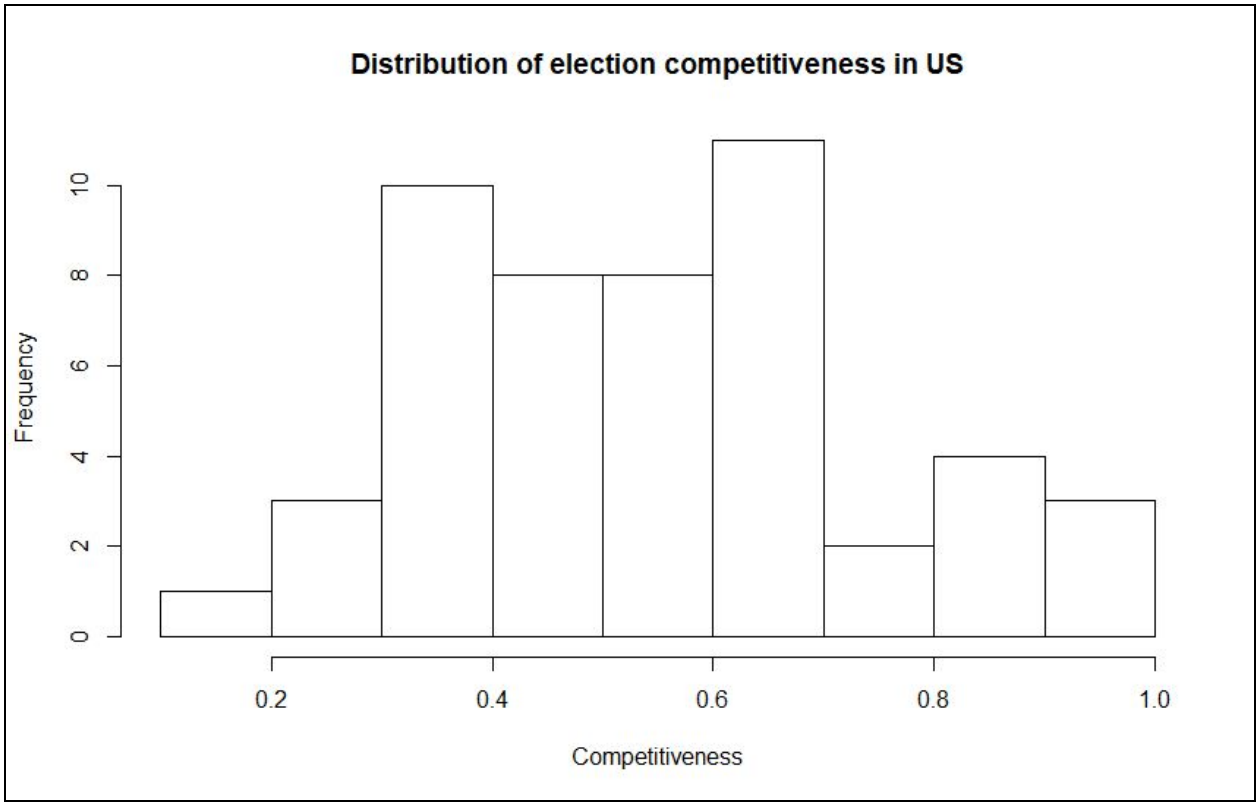


Figure 3: Distribution of Governors' Reelection Odds

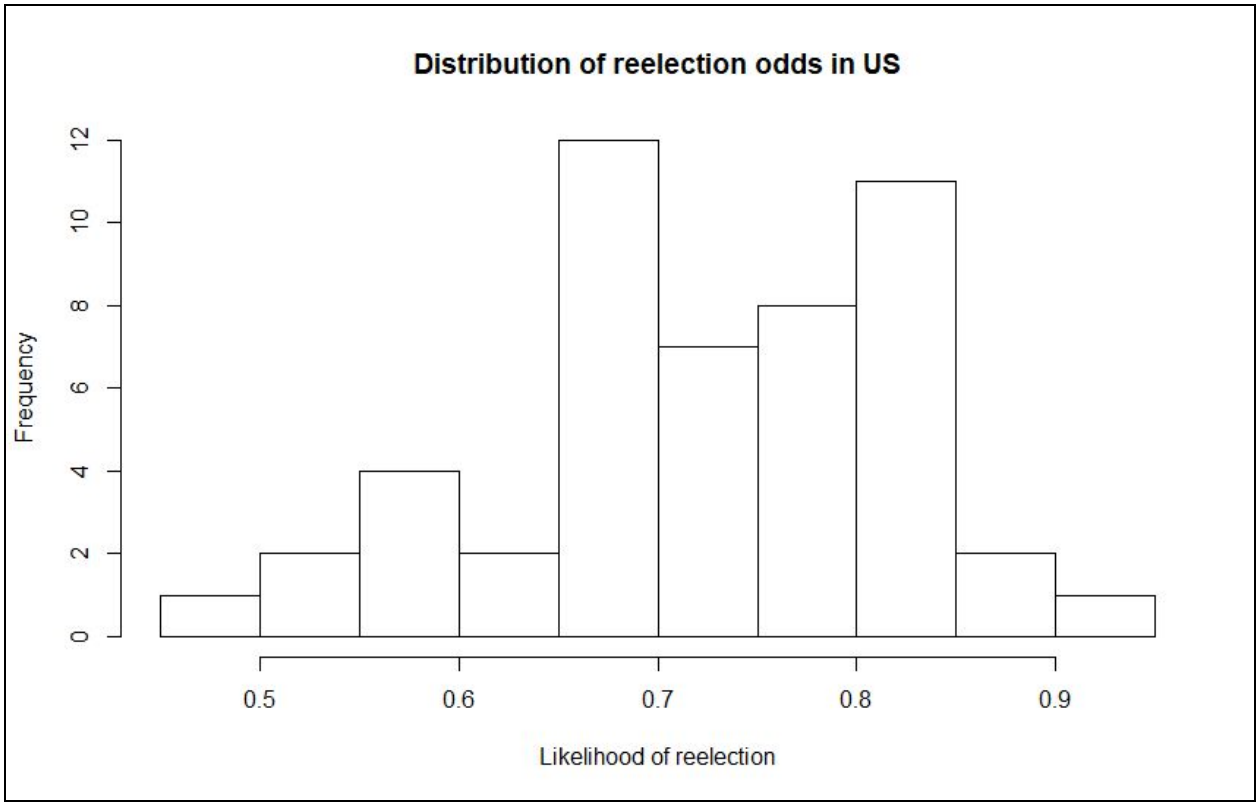
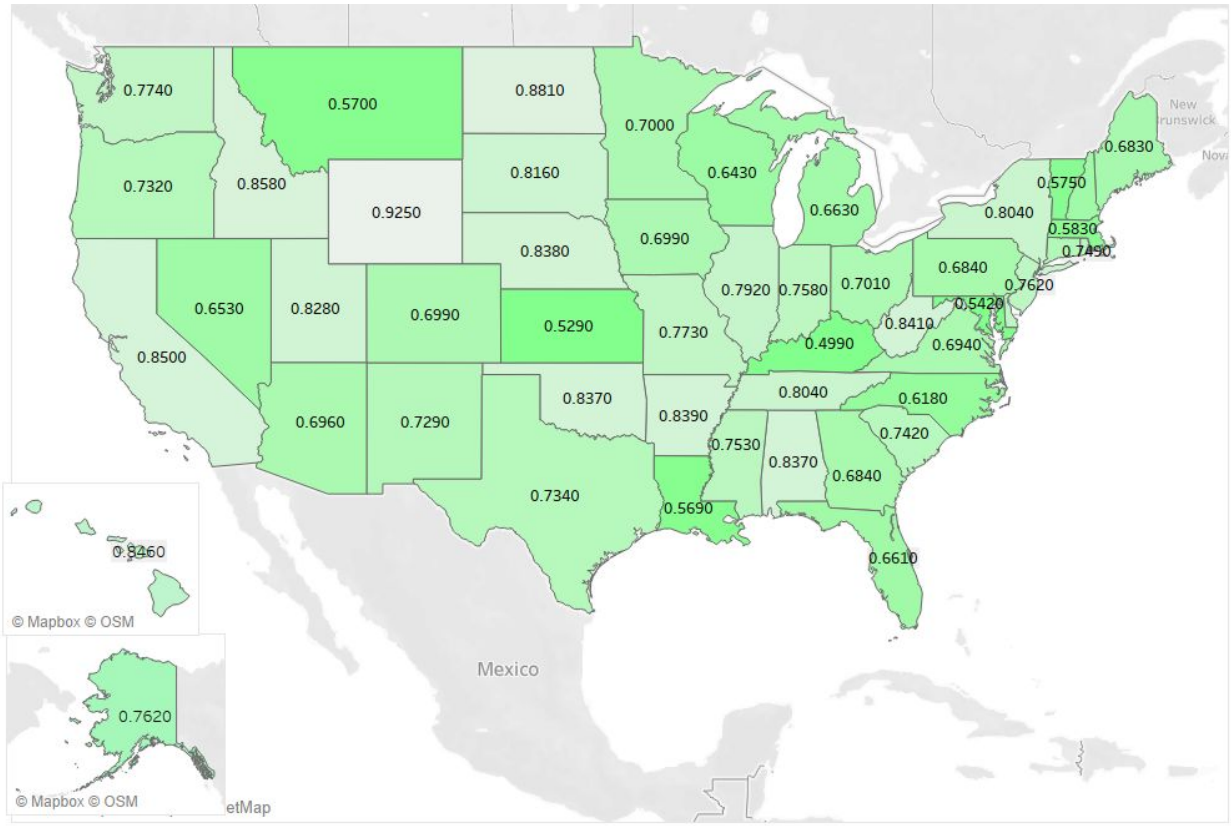


Figure 4: Map of Reelection Odds of Governors across the United States



Map of competitiveness; stronger shades of green = more competitive. Labels show estimated reelection odds. DE = 0.772, NH = 0.657, CT = 0.721.

2.3 Analysis

After we generated a measure of electoral competitiveness for each state, we utilized a number of OLS regressions to examine the link between reelection odds and policy responses to the COVID-19 pandemic. Specifically, we looked for a relationship between the electoral competitiveness of a state and a governor's likelihood of adopting a given policy before reaching a number of different cases-per-capita cutoffs. Similarly, we looked for a relationship between the electoral competitiveness of a state and the duration of the policies each governor implemented in response to COVID-19.

In these regressions, we included three factors in addition to our political competitiveness measure. These were:

- The party of a given governor
- A dummy variable indicating whether a state's governor was term-limited
- President Trump's 2016 margin of victory in each state.

We included the party variable in order to test specifically for an effect of electoral competitiveness on governors' policy responses that existed in addition to, and survived controls for, a governor's party. In this way, we sought to measure whether partisanship or electoral competition more consistently explained variation in policy responses.

We included the dummy variable measuring whether a governor was term-limited for the reasons detailed above: namely, that governors ineligible for reelection might respond differently to electoral constraints, although we could not exclude such governors from our analysis in section 2.2 or impute to them reelection odds of zero without reducing the validity of our competitiveness coefficient. We included an explicit dummy variable to indicate when a governor was term-limited, not because we believed this was a perfect solution - some term-limited incumbents may well be indifferent to their political fortunes - but because it seemed to be the best of several imperfect options.

Finally, our regression controls for President Trump's margin of victory or defeat in a given state. This serves as a stand-in for the overall partisan lean of a state (as opposed to its gubernatorial choices), as well as a number of potential unobserved confounders and explanatory variables that are difficult to control for individually but covary with Trump margins. It is worth noting that because President Trump's margin of victory is one input in our model of reelection odds, its inclusion as a control will tend to reduce the observed effect of electoral competitiveness as well as any effect of Trump margin (though the effect of Trump's margin on policy responses is simply too rife with potential and known unobserved confounders to examine for purposes of causal inference). However, the potential of this measure to capture a number of unobserved covariates and confounders makes it worth including. To the extent this variable may influence the observed effect of reelection odds, this control will tend to reduce this observed effect, and make any statistically or practically significant findings more robust, not less.

To analyze the varied implementation of the policies being studied, we utilized a multivariable OLS regression with the following equation:

$$Yi = \beta 0 + \beta 1 * X1i + \beta 2 * X2i + \beta 3 * X3i + \beta 4 * X4i + \varepsilon i$$

In this case Y represents our dependent variable - a binary variable indicating whether each state had implemented each of the 3 policies studied by each of the aforementioned cases-per-capita cutoffs. In this case, $X1$ represents the independent variable - our measure of political competitiveness, measured on a 0-1 scale. $X2$ represents the variable we utilized to control for the party of a governor as described above, while $X3$ represents the variable we utilized to control for President Trump's margin of victory in each state during the 2016 election. Finally, $X4$ represents our final control variable - our binary variable indicating whether or not each governor is term-limited.

The multivariable OLS regression we utilized to study the duration of the implemented policies, rather than their implementation date, had the same structure as above. However, in this case Y represents the duration of each of the policies being studied rather than an indication of their implementation by a certain cutoff point.

Overall, to gauge the effect of political competitiveness, we compared the policy implementation and duration coefficients these regressions produced for our three chosen policies at each of the chosen cases-per-capita cutoffs. This allowed us to estimate the relationship between competitiveness and term limits on the one hand (which each provide some indication of the likely impact of reelection concerns on a governor's decisions), and policy adoption and length on the other.

2.4 Assumptions

In this study, we make several key assumptions which are worth discussing in some detail. One assumption we make is that the data on the number of COVID-19 cases in their state which governors had access to and acted upon bore some relation to the Johns Hopkins data we used to gauge outbreak severity. We acknowledge that governors' decisions may have been based not on per-capita case counts alone, or specifically on Johns Hopkins' data, but on holistic projections of the spread of Coronavirus within their states. Still, we believe data from Johns Hopkins offers a reasonable approximation of case data as well as the more holistic projections governors were likely given and acted upon as they formulated a pandemic response. We recognize that pandemic severity is a function of more than a simple case count. That said, we have reason to believe many factors that make a pandemic severe and harmful will covary with case count. We also recognize that different states may have favored different data sources. However, we argue our chosen cutoffs are high enough that, by the time states reached them, different institutions had time to attain some measure of correspondence in their case coding and counts. Additionally, by this point it is likely that overall case volume would have reduced the impact of persistent differences between different institutions' coding methods, and states' assessments of overall pandemic severity. Thus, it seems likely that case counts bear some relation to the actual severity of the COVID-19 pandemic in a given state, at a given time. It also seems reasonable to believe that unobserved differences between states with similar case counts have decreased over time.

As a result, we can say with some confidence - though further evidence, especially qualitative evidence, may shed light on this question in more detail - that governors' assessments of pandemic severity are unlikely to have differed according to unobserved variables unrelated to case counts, but related to a governor's partisanship or a state's competitiveness. Moreover, our control for a state's baseline partisanship (President Trump's performance in a given state in the 2016 election) is correlated with several potential confounders that might affect governors' assessments of pandemic risks (e.g. population density). Thus this control allows us to control for any impact these confounders might have on governors' assessments of pandemic severity, and limit any influence they might have on the observed effects of partisanship and electoral concerns. Thus, even if governors utilized case counts or other data which differed drastically from the measures of pandemic severity we utilized, this should not have a significant effect on our results.

Results

3.1 Policy Implementation by State

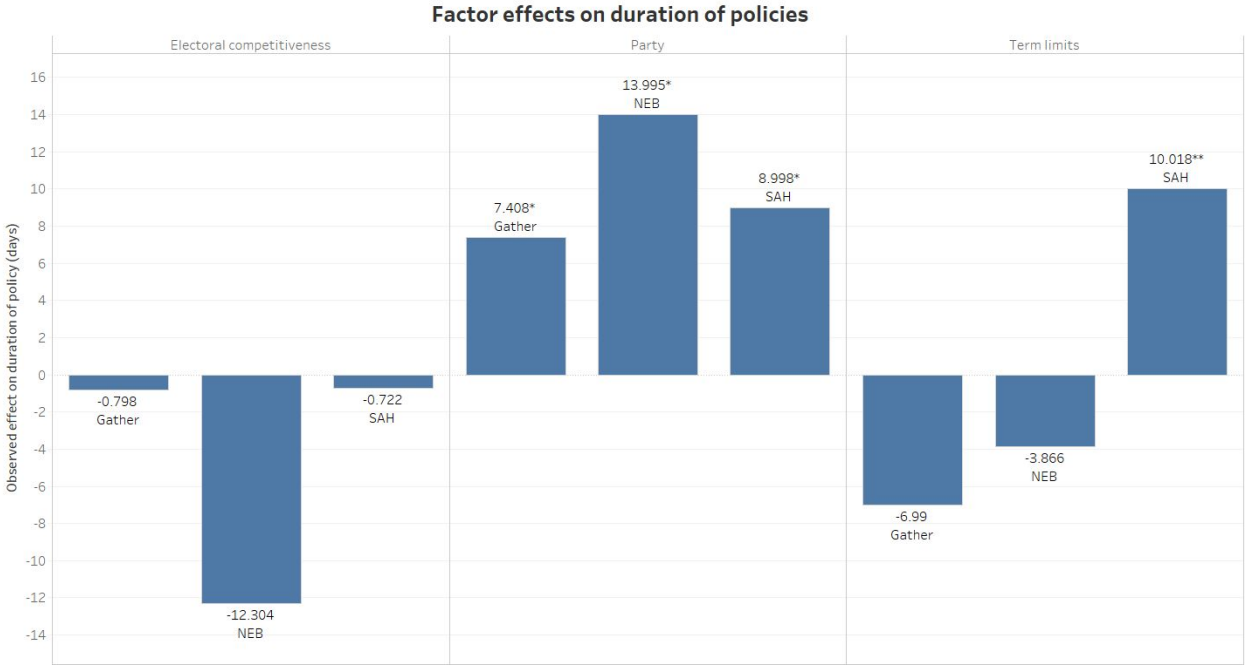
Overall, the number of states who adopted each of the policies studied varies tremendously. 12 states never implemented a formal stay-at-home order, although 5 of those 12 implemented a less-formal, non-mandatory stay-at-home advisory. This being stated, there were still 7 states who never issued any form of stay-at-home order. By contrast, almost all states issued some form of recommended limit on the number of people allowed to gather together; only two states - North Dakota and Pennsylvania - did not. However, the enforcement of these recommendations varies by state and given the voluntary nature of the policy, it is likely that compliance with this recommendation varied widely across states. Lastly, only 30 states enacted formal restrictions closing all non-essential small businesses, although it seems likely almost all states implemented some version of this policy at some point. This number does not account for differences in the definition of non-essential, which varies by state, or the fact that some states have issued mandates closing particular types of businesses (ex: restaurants or cinemas) without issuing a formal mandate closing all non-essential businesses. However, we can see a broad trend: limits on gatherings were the most common policy response to COVID-19; stay-at-home orders were also implemented by a large majority of states; and the closing of non-essential businesses was less widespread and may have been less uniform.

3.2 Relationship Between Duration of Policies and Gubernatorial Re-Election Probability

Table 1: Observed Effect of Political Factors on Policy Duration

	Stay-At-Home Orders	*Closure of Non-Essential Businesses*	*Recommended Limits on Gatherings*
Electoral Competitiveness	-0.722 (9.786)	-12.304 (15.967)	-0.798 (8.573)
Dem governor	8.998* (4.126)	13.995* (5.9)	7.408* (3.130)
Term-limited governor	10.018** (3.548)	-3.866 (7.741)	-6.99 (4.254)
Trump vote share	-0.1294 (0.102)	-0.304 (0.159)	-0.095 (0.085)
Intercept	56.043*** (6.109)	28.766** (9.854)	70.926*** (5.211)
Observations	43	50	48

Figure 5: Political Factor Effects on Duration of Policies



There does not seem to be any substantial observed effects of greater electoral competitiveness on the duration of any of the policies studied. For both the duration of stay-at-home orders and the duration of recommended limits on gatherings the observed effects are insignificant and less than 1 day, with very large standard errors. This suggests that there is likely no effect of electoral competitiveness on governors' decisions as to the duration of these two policies. While the observed effect of electoral competitiveness on the closure of non-essential businesses seems large, with a governor in a perfectly competitive race (50% chance of winning) being likely to close non-essential businesses for 12 days less than their counterparts who are 100% certain of winning their race, this finding is not statistically significant. Additionally, the standard error of this coefficient is larger than the coefficient itself. While the size of this effect could warrant further investigation, and more detailed and refined models of competitiveness may help to distinguish between any causal effect and the statistical noise that obscures it, the evidence at hand does not allow us to reject the null hypothesis with any meaningful level of confidence.

Gubernatorial term limits, however, do seem to affect stay-at-home order length. On average, governors who are term-limited implement stay at home orders for 10 days longer than their non-term-limited peers. As this finding is highly statistically significant ($p < 0.01$) and the standard error is less than half of the observed effect, it seems likely that gubernatorial term limits do have a large effect on the duration of stay-at-home orders. It appears governors who are in their last term are much more likely to implement this policy for a longer amount of time than their non-term-limited peers.

The effect of term limits on the duration of non-essential business closures is less clear. On average, we find that governors who are term-limited kept non-essential businesses closed for 3.6 days less than their non-term-limited counterparts. This coefficient is not statistically significant and has a standard error of 7.74 days, double the observed effect. Additionally, this effect seems difficult to reconcile with our finding that term-limited governors implement stay-at-home orders for longer than their counterparts. Thus, it is difficult to accord too much importance to this observed effect.

The effect of term limits on the duration of recommended limits on gatherings seems to also run counter to the findings of their effect on stay-at-home orders. Our analysis suggests that term-limited governors recommend limits on gatherings for 7 days less than their non-term-limited counterparts. Although this observed effect is not statistically significant, its standard error is a little more than half the effect. This suggests that being term-limited may have a negative effect on the duration of recommended limits on gatherings, but further evidence is needed to gauge the validity of this potential effect.

We do find a significant relationship between the party of a governor and the length of stay-at-home orders. On average, Democratic governors keep stay-at-home orders in place 9 days longer than their Republican counterparts. Even the lower bound of the 95% confidence interval (2.83 days) indicates an effect with some practical significance, and this effect's p-value of 0.008 reflects the estimate's considerable robustness. However, the estimated effect of

partisanship is smaller than the estimated effect of term limits on the duration of governors' stay-at-home orders.

We also find that Democratic governors close non-essential businesses for almost 14 more days than Republican ones. This effect is statistically significant and has a standard error of 5.9 days. Even if our estimate overstates the actual magnitude of this effect by nearly two standard errors, our observed coefficient suggests that Democratic governors will keep such orders in place for several more days. Moreover, the direction of the observed effect is consistent with the significant effect we found for stay-at-home orders. Thus, it seems highly likely that partisanship had a practically and statistically significant effect on the length of time for which governors closed non-essential businesses in response to COVID-19.

Finally, a governor's party appears to have a strong and statistically significant effect on the duration of limits on gatherings. Democratic governors kept limits on gatherings in place for 7.408 days longer than their Republican counterparts, and the SE of this effect (3.13) as well as its p-value (0.023) suggest that partisanship likely exerts a substantial effect on the duration of policies that limit gatherings, just as it affects the duration of other policies enacted in response to COVID-19.

Overall, we find that electoral competitiveness likely had no effect on the duration of the policies which governors implemented in response to COVID-19. While we find the possibility of electoral competitiveness having a large effect on the duration of non-essential business closures, the large standard error of this finding stops us from making any firm conclusions about the effects of electoral competitiveness on the duration of this policy, and a finding isolated to one policy suggests this effect could reflect a meaningful relationship, or it could reflect statistical noise.

The effect of gubernatorial partisanship on the duration of policies implemented in response to COVID-19 is more consistent, statistically significant, and large. This factor's impact on the duration of stay-at-home orders, business closings, and recommended limits on gatherings is statistically significant across all policies, with relatively low standard errors and observed effects of at least 7 days. While the effect of partisanship on the duration of non-essential business closings is by far the largest, all observed effects of this variable offer support for the view that Democratic governors kept policy responses to COVID-19 in place longer than their GOP counterparts.

The observed impact of a term-limited governor is very inconsistent. The presence of a term-limited governor seems to exert a strong and statistically significant effect on the duration of stay-at-home orders. Term-limited governors appear likely to implement such orders for longer periods of time. However, this relationship seems to be reversed when we examine the duration of non-essential business closings as well as recommended limits on gatherings. Although neither of these findings are statistically significant, they suggest that term-limited governors implemented these policies for less time than their counterparts who were not term-limited. Thus, our findings do not suggest a uniform impact of being term-limited on the duration of policies governors implemented in response to COVID-19. Rather, the size and

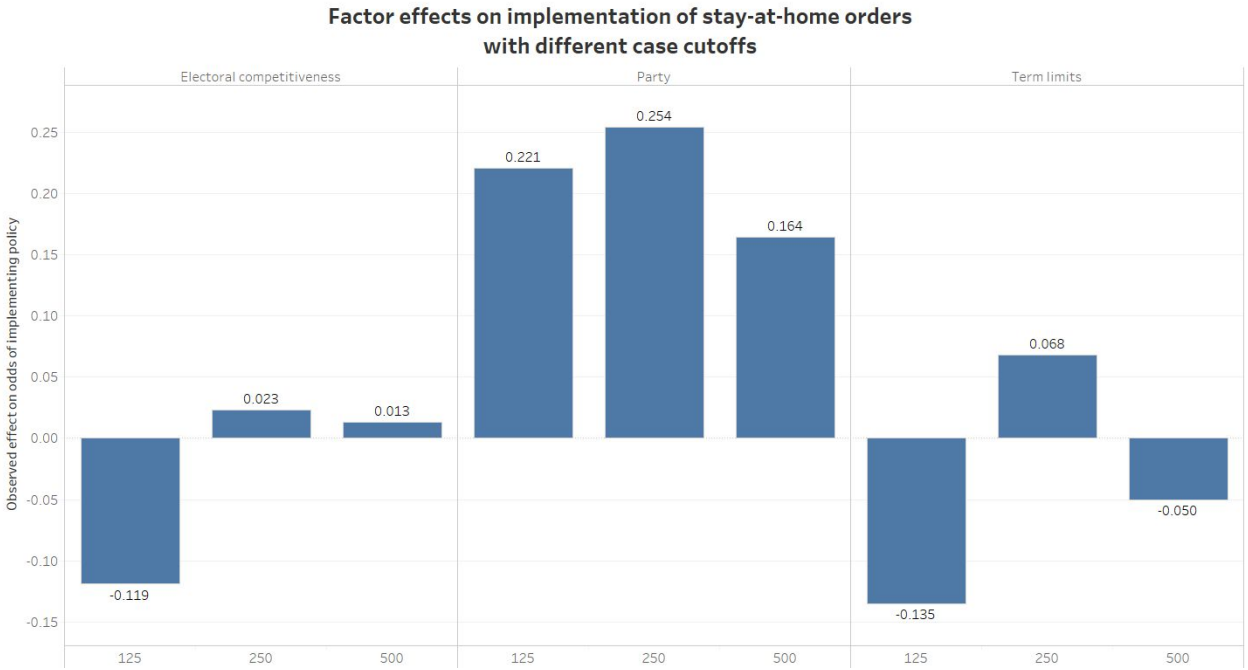
direction of observed effects varies across policies. On the whole, the magnitude of the observed effects of this variable are similar to the magnitude of the observed effects of partisanship (though a marked difference is seen in the impact of these variables on the duration of business closings). However, these predicted effects of being term-limited are less statistically significant and consistent than the observed effects of partisanship, and this makes it difficult to draw firm and generalizable conclusions from them with any degree of confidence.

3.3 Effect of Political Factors on Stay-At-Home Orders

Table 2: Observed Effect of Political Factors on Policy Implementation for Stay-At-Home Orders

	125 cases/million	*250 cpm*	*500 cpm*	*1000 cpm*
Electoral competitiveness	-0.119 (0.4)	0.023 (0.383)	0.013 (0.336)	0.013 (0.336)
Dem governor	0.221 (0.148)	0.254 (0.142)	0.164 (0.124)	0.164 (0.124)
Term-limited governor	-0.135 (0.194)	0.068 (0.186)	-0.05 (0.163)	-0.05 (0.163)
Trump vote share	-0.003 (0.004)	-0.006 (0.004)	-0.006 (0.003)	-0.006 (0.003)
Intercept	0.435 (0.247)	0.461 (0.236)	0.745*** (0.208)	0.745*** (0.208)
Observations	50	50	50	50

Figure 6: Factor Effects on Implementation of Stay-At-Home Orders with Differential Cases-per-Capita Cutoffs



Before discussing observed effects, a note on the results below is in order. Throughout our analysis we find that regressions utilizing both the 500 cases-per-million and the 1000 cases-per-million cutoffs yielded the same outputs for all policies analyzed. Accordingly, we only utilize and discuss the 500 cases-per-million outputs in our analysis.

For each of the cutoffs we use, we find no statistically significant relationship between electoral competitiveness and an incumbent governor's likelihood of implementing a stay-at-home order by the time that cutoff was reached. For every cutoff, we obtain a standard error more than twice our estimated effect. Similarly, we observe p-values of 0.969, 0.952, and 0.766 at each of the cutoff levels as they decrease in magnitude; values which offer little reason to support the null hypothesis. As a result, it is difficult to place too much stock in the observed effect of electoral competitiveness on governors' propensity to implement stay-at-home orders. Additionally, the direction of this effect shifts between the 125 and 250 cases-per-million thresholds, with the effect decreasing as the thresholds increase. At the 125 cases-per-million threshold a governor whose next election is predicted to be perfectly competitive is 12% less likely to have implemented a stay-at-home order than a governor facing an election in which they have 100% certainty of winning. This effect shifts at the 250 cases-per-million threshold, as a governor facing maximum electoral competitiveness becomes 2% more likely to have implemented a stay-at-home order by this cutoff than a counterpart facing an uncompetitive election. This effect decreases even further at the 500 cases-per-million cutoff. The shifting direction of this effect may indicate it is driven by statistical noise rather than a causal relationship. More evidence is needed to draw definitive conclusions from these effects, but it

seems likely that electoral competitiveness had little or no impact on governors' propensity to impose stay-at-home orders.

The observed coefficients for the effect of a governor's political party are more consistent than those observed for the competitiveness of a governor's reelection bid. They are also much more pronounced. Like the coefficients discussed above, coefficients for a governor's party are not statistically significant. However, these coefficients do approach practical significance - or at least, they are consistently greater than the value of their respective standard errors. These effects' magnitude (all indicate a partisan effect associated with an increase of 16% - 26% in a governor's likelihood of implementing stay-at-home measures), their consistency with other observed partisan effects (the presence of a Democratic governor appears to make the implementation of business closings and limits on gatherings more likely and lengthens the shelf life of all policies), and their concurrence with existing studies on the subject all offer reason to judge these effects by more than their p-values. Additionally, these p-values range from 0.073 to 0.193, making them too large to indicate statistical significance according to prevailing significance thresholds, but small enough that, in combination with the magnitude and consistency of partisan effects on this and other measures, they warrant further investigation. We should not accept these effects uncritically, and it is notable that partisan effects - seen by some as *the* determinant of states' pandemic responses - do not attain unimpeachable significance. However, the partisan effect seen here would still have practical significance if correct, even if the true effect's scale was smaller than our coefficients suggest due to the presence of standard errors that limit its significance. This being said, it is worth noting that the effect of partisanship decreases at the 500 cases-per-million threshold, with the standard error becoming larger in proportion to the coefficient. This suggests that partisanship may have had a larger effect on governors' decisions to implement stay-at-home orders early in the COVID-19 pandemic (before the 125 and 250 cases-per-million cutoffs) than it did as the pandemic progressed. The lower effect of partisanship at later stages of the pandemic may be consistent with an account in which initial responses to uncertain health risks reflected partisan differences in risk sensitivity or aversion to the costs of public-health measures. In such an account, these partisan differences may have decreased later in the COVID-19 pandemic as case counts and public-health experts' recommendations have grown more consistent and uniform. However, more research is needed to investigate and validate any such account.

As for the impact of a governor subject to term limits, these results offer no clear insights. None of the observed coefficients are statistically significant. The effect closest to significance is the effect seen as states reached the 125 case-per-million mark, and even this effect has a p-value of 0.491. While p-values alone are not always reason enough to reject a coefficient out of hand, the high p-values and contradictory signs of these coefficients, as well as their limited magnitude and practical significance, suggest the observed effects in this regression are products of chance, not indicators of any meaningful relationship. If any such relationship exists, it is too small, subtle, and challenging to isolate without more precise methods.

Overall, we find few statistically significant relationships between political factors and the likelihood governors will implement stay-at-home orders. On examining the impact of a governor's party, we observe effects of considerable magnitude and potential practical

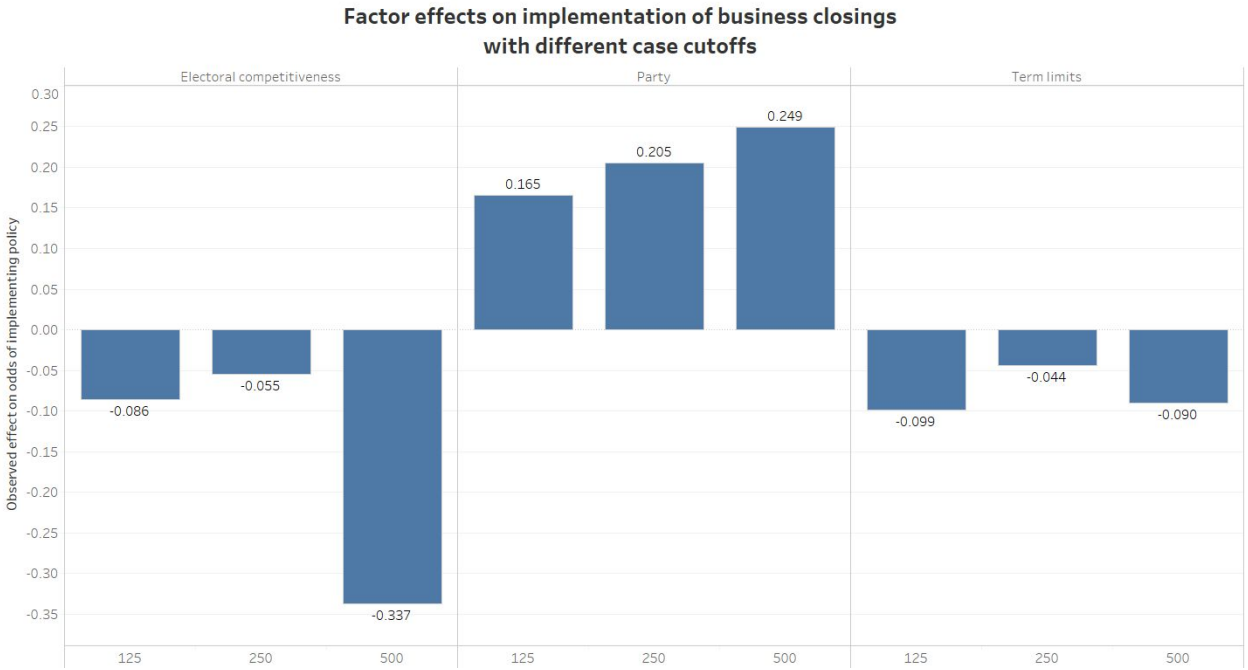
significance. This supports other researchers' claims that partisanship has had a large effect on the policy responses of governors to the COVID-19 pandemic. The observed effects of gubernatorial term limits are less consistent (both internally and in relation to the observed effects of this variable on other public health measures), and less pronounced. Therefore, observed coefficients seem less likely to reflect meaningful effects. Similarly, our findings for electoral competitiveness suggest no clear and pronounced impact. While the size of the observed effect early in the pandemic (at the 125 cases-per-capita cutoff) suggests that electoral competitiveness may have some effect on the policy decisions of governors in response to COVID-19, the changing directions of this predicted effect, along with a lack of statistical significance and large standard errors, offer little evidence that electoral competitiveness affected the implementation of stay-at-home orders.

3.4 Effect of Political Factors on the Closing of Non-Essential Businesses

Table 3: Observed Effect of Political Factors on Policy Implementation for Closing of Non-Essential Businesses

	125 cases/million	*250 cpm*	*500 cpm*	*1000 cpm*
Electoral competitiveness	-0.086 (0.389)	-0.055 (0.385)	-0.337 (0.380)	-0.337 (0.380)
Dem governor	0.165 (0.144)	0.205 (0.142)	0.249 (0.140)	0.249 (0.140)
Term-limited governor	-0.099 (0.188)	-0.044 (0.187)	-0.09 (0.184)	-0.09 (0.184)
Trump vote share	-0.008* (0.004)	-0.008* (0.004)	-0.007 (0.004)	-0.007 (0.004)
Intercept	0.535* (0.24)	0.548* (0.237)	0.754** (0.235)	0.754** (0.235)
Observations	50	50	50	50

Figure 7: Political Factor Effects on Implementation of Non-Essential Business Closings with Differential Cases-Per-Capita Cutoffs



The electoral competitiveness a governor faces in the next election seems to have some effect on the closure of non-essential business at times. Notably, we observe one of the larger coefficients found when studying the effect of electoral competitiveness on any policy - our results suggest a governor who faces a perfectly competitive race will be 34% less likely to close non-essential businesses at the 500 cases-per-million cutoff than a governor facing a completely uncompetitive election. However, this effect is not statistically significant and its standard error is larger than the observed effect. Thus, this effect seems to be an outlier and is far more pronounced than effects seen earlier in the pandemic's severity. At lower levels of outbreak severity, the effect of electoral competitiveness maintains its direction but drastically drops in size, while the standard errors become more than 3 times as large as the observed effects. Thus, overall while our findings suggest that electoral competitiveness may have had an effect on governors' decisions to close non-essential businesses later in the pandemic, and the consistency of these effects' direction should not be dismissed out of hand, more research is needed to confirm whether these results reflect a true effect.

Partisan effects on the closure of non-essential businesses also lack statistical significance. However, the direction of estimated effects in our analysis are consistent at different thresholds, as well as consistent with the observed effect of partisanship on other policies. Just as Democrats are more likely to enact stay-at-home orders and limits on gatherings, they are more likely to shutter non-essential businesses. These effects are large enough to have some practical significance - they do not dip below 0.16, and over longer windows of time they exceed 0.20, or a difference of nearly 20 percentage points in a governor's likelihood of closing

businesses. The standard errors of these effects are fairly sizable, at least relative to the observed effects, but do not dwarf the size of the effects observed. These effects' p-values are more of a mixed bag, but reach as low as 0.083, and are never high enough to make any causal relationship implausible or highly unlikely. The effect of party on business closings does diverge from observed partisan effects on stay-at-home orders. The effect of partisanship on the closure of non-essential businesses grows as the severity of the pandemic progresses. If (limited) signs that partisan effects might be shrinking as states reached a 500 case-per-million cutoff could indicate partisanship was taking a back seat to public health, this divergence on business closings may indicate the opposite: a growing gulf between Republicans concerned with protecting the economy, and increasingly unwilling to leave businesses idle, and Democrats more willing to impose costs on businesses, and remain steadfast in their commitment to public-health restrictions. As with stay-at-home orders, this is a possible causal account - not a definitive one. More research is needed to test any such effect in detail.

The impact of term limits on a governor's propensity to close businesses is fairly consistent across a variety of different cases-per-capita cutoffs. This impact is also consistent with this variable's estimated impact on governors' likelihood of enacting limits on gatherings and the duration for which they do so, as well as its estimated impact on the duration of non-essential business closings. However, the practical significance of this effect is limited; the observed coefficients suggest an effect that modifies governors' odds of closing businesses by less than ten percentage points. The standard errors for these coefficients are all larger than the observed effects, and this fact - coupled with a lack of statistical significance narrowly defined - casts doubt on the effects we observe. However, the consistent direction and size of our observed effect suggest we should not rule out the possibility of term limits affecting governors' decisions to close businesses. Overall, this evidence does not dismiss the possibility of - but offers limited evidence for - a causal relationship. More research is needed before any firm conclusions can be reached about the effect of term limits on governors' decisions to close non-essential businesses.

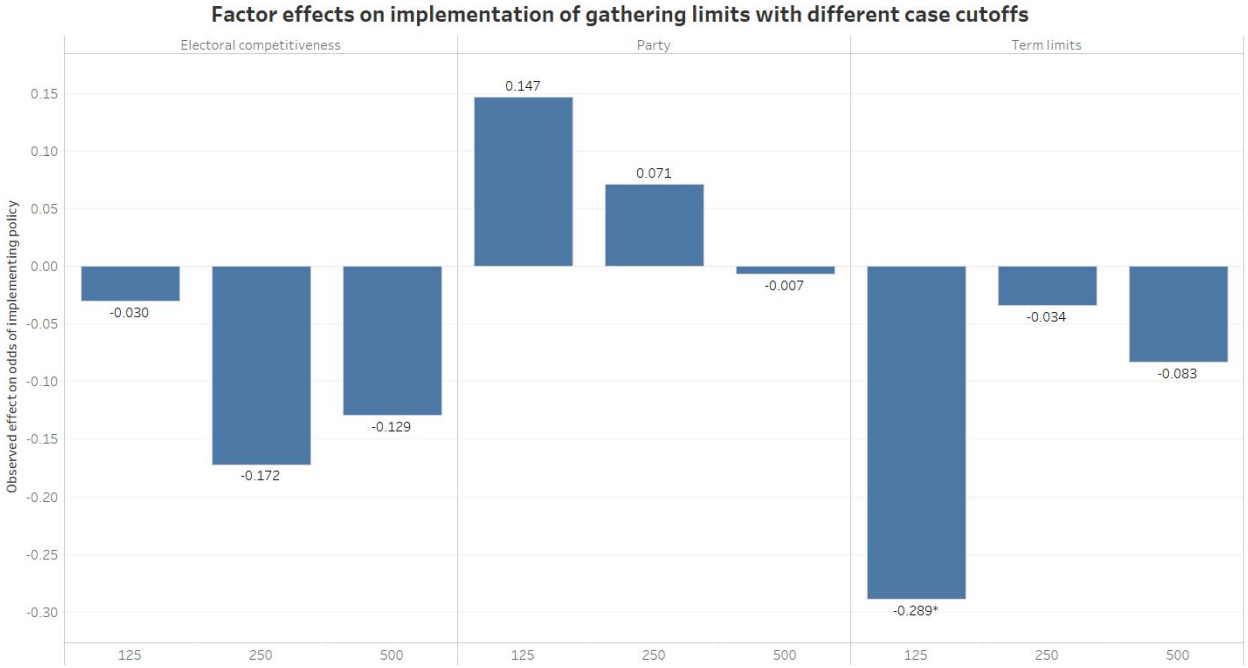
In summary, we find evidence that may indicate electoral competitiveness influenced the closure of non-essential businesses as the COVID-19 pandemic progressed. This observed effect runs contrary to what evidence we found for an effect of electoral competitiveness on the implementation of stay-at-home orders at lower levels of outbreak severity. As such, it is hard to place too much stock in hypotheses about a consistent effect of electoral competitiveness on governors' decisions. Democratic control of the governorship, for its part, seems to consistently increase the likelihood a state will adopt public-health restrictions - both by closing non-essential businesses in response to COVID-19 and more broadly. Finally, while the impact of term limits is consistent for the most part, it is not pronounced enough and does not have enough practical significance to outweigh the uncertainty of our estimate - reflected in its high standard error and p-value.

3.5 Effects of Political Factors on Likelihood of Gathering Limits

Table 4: Observed Effect of Political Factors on Policy Implementation for Recommendation of Limiting Gatherings

	125 cases/million	*250 cpm*	*500 cpm*	*1000 cpm*
Electoral competitiveness	-0.03 (0.249)	-0.172 (0.224)	-0.129 (0.160)	-0.129 (0.160)
Dem governor	0.147 (0.092)	0.071 (0.083)	-0.007 (0.059)	-0.007 (0.059)
Term-limited governor	-0.289* (0.121)	-0.034 (0.108)	-0.083 (0.078)	-0.083 (0.078)
Trump vote share	-0.002 (0.002)	-0.002 (0.002)	-0.002 (0.002)	-0.002 (0.002)
Intercept	0.901*** (0.154)	1.005 *** (0.138)	1.067*** (0.099)	1.067*** (0.099)
Observations	50	50	50	50

Figure 8: Political Factor Effects on Implementation of Recommended Limitations on Gatherings with Differential Cases-per-Capita Cutoffs



We do not find a statistically significant relationship between the competitiveness of a governor's re-election bid and that governor's likelihood of imposing limits on gatherings. At the 125 cases-per-million level, a governor facing perfect electoral competitiveness is only 3% less likely to recommend limitations on gatherings than a governor whose reelection or defeat is assured. As the severity of the outbreak increases, so does the estimated effect of electoral competitiveness. At the 250 cases-per-million cutoff, governors facing perfect electoral competitiveness are 17.2% less likely to implement such limits. At the 500 cases-per-million cutoff, this effect decreases slightly to 12.9%. The consistent direction and relatively consistent moderate size of these coefficients suggests that electoral competitiveness may have influenced some governors' decisions to restrict gatherings, but any such effect is likely to have limited practical significance. The limited magnitude and lack of statistical significance of the effects we observed points to an effect that is small at most - although estimates of any potential effect grow less variable and closer to significance at later stages of the pandemic. More research is needed to conclusively support or reject any such effect.

Evidence for a partisan effect on governors' likelihood of imposing limits on gatherings is mixed. At earlier points in the COVID-19 pandemic, Democrats appear more likely to impose such limits - though this effect is not statistically significant. As the pandemic progresses, this effect all but disappears. This evidence is consistent with an account in which limits on gatherings were tied to early partisan differences in implementation of other policies, but became a point of consensus as GOP states eased other restrictions, because limits on gatherings were less restrictive and provoked less resistance than other policies. This account would explain why a partisan effect is seen for all policies at first, but is less pronounced for gatherings than for other policies later in the pandemic. On the other hand, the evidence we find could indicate that partisanship simply does not affect governors' propensity to limit gatherings. This account has the benefit of simplicity, and is always a possibility in the absence of statistically significant effects. These competing explanations for the results we obtain require further investigation.

The relationship between term limits and a governor's decision to recommend limitations on gatherings is consistently negative, but its scale varies. There is a statistically-significant negative relationship between these variables at the 125 cases-per-million cutoff; governors who are term-limited are 29% less likely to recommend limits on gatherings than those who are not ($p=.021$), and the standard error for this coefficient is markedly smaller than the coefficient itself. However, the strength of this relationship decreases dramatically at the 250 cases-per-million cutoff; at this point, governors who are term-limited are just 3.4% less likely to implement gathering limits than their counterparts. The small magnitude and persistent variation of this effect means that at this cutoff, the impact of term limits is not statistically significant. In fact, at this cutoff the observed standard error exceeds the coefficient's size. At the next cutoff, we find a somewhat larger effect of term limits, although this effect is not as large at this cutoff as it is for a cutoff of 125 cases-per-million. At this point, governors who are term-limited are 8.3% less likely to implement gathering limits. Although this finding is statistically insignificant, the standard error is smaller than the coefficient. On the whole, the consistent negative relationship we observe between term-limited governors and implementation of gathering limits may be reason to examine this effect further - although the observed effects lack statistical, and sometimes (especially at the 250 cases-per-million cutoff) practical significance.

In short, our evidence suggests that electoral competitiveness may have a negative effect on the propensity of governors to limit gatherings - one most visible at higher levels of outbreak severity. By contrast, the effects of both partisanship and term limits on governors' decisions regarding the implementation of this policy seem larger early in the COVID-19 pandemic but become smaller as the pandemic progresses. These effects seem to have some practical significance at times, but for the most part their statistical significance is limited.

4: Conclusions and Further Implications

Overall, our findings echo others' conclusion that partisanship has influenced governors' decisions to implement policies in response to the COVID-19 virus. Across all three policies studied, at a variety of levels of pandemic severity, we find a positive relationship between the presence of a Democratic governor and the likelihood a state will restrict normal activity in order to contain viral spread, as well as the duration of such restrictions. Not every estimate of this relationship is statistically significant, but its consistency suggests greater validity than any single p-value might imply. We tentatively concur with prior findings that Democratic governors are more likely to adopt restrictive public-health measures than their Republican counterparts. We also find that Democratic governors are likely to maintain such policies for longer periods of time - and this effect is statistically significant, with a magnitude that gives it practical significance, for all policies. Even in an analysis that incorporates several other political factors, partisanship seems to drive policy choices in response to COVID-19. This is consistent with over a decade of findings on the strong and persistent influence of party ties on policy. Even in the face of a public-health crisis, partisan cues and attitudes appear to retain their hold. This is true despite a fairly broad consensus among the general public in support of social distancing.[7] Elites, it seems, have managed to stay polarized on a subject on which their voters agree.

The impact of electoral concerns on governors' pandemic responses seems less clear-cut. Governors who face more competitive races generally appear less likely to enact public-health restrictions. This effect is seen at several different stages of the pandemic's progression for our analysis of business closings and restrictions on gatherings, while an analysis of stay-at-home orders shows positive effects at some points in the pandemic and negative ones at others. An analysis of policy duration suggests governors in competitive states kept public-health restrictions in place for a shorter period of time than their counterparts in blowout races. This may reflect a reluctance on the part of governors to impose burdensome restrictions on their voters, or incur the major economic costs associated with a pandemic response, when their reelection is likely to be decided by a narrow margin and any loss of support can prove fateful. Such an account would be consistent with the lower frequency and duration of public-health measures in states with competitive elections. However, we must emphasize that this account is tentative and uncertain. No single effect of this variable is robust at a significance threshold of $p = 0.05$, and unlike partisan effects, this effect is not universal and consistent. Stay-at-home orders

[7] Burns, Katelyn. "Polls: Americans Don't Want to End Social Distancing Policies despite Financial Devastation." Vox, April 29, 2020. https://www.vox.com/policy-and-politics/2020/4/29/21241069/polls-social-distancing-policies-financial-devastation .

represent a notable outlier; the observed effect of competitiveness not only approaches zero (as it does at some of the cases-per-capita cutoffs studied in relation to business closings as well as gathering limits) but actually crosses zero at multiple cutoffs. Thus, the size of this variable's observed effect varies, and so does its direction. Therefore, while it is possible to formulate a coherent causal account that explains most of the observed effects of this variable; a few observed coefficients are problematic for this account, as is the lack of statistical significance in combination with the limited magnitude of some observed effects. Further study, with a more refined model of competitiveness, may be in order.

Finally, term limits seem to shape governors' behavior in ways that resemble the potential impact of competitiveness - with some important differences. Like governors in competitive states, we find that governors who are term limited tend to be more reluctant to enact public-health restrictions, and generally keep these restrictions in place for less time. Furthermore, like governors in competitive states, they exhibit this behavior most consistently with business closings and gathering restrictions, while stay-at-home orders offer a less consistent picture. In the case of term limits, stay-at-home orders differ enough from the general pattern that term-limited governors seem linked to a statistically significant *increase* in stay-at-home order duration - one large enough, and significant enough (even at a $p = 0.01$ threshold), to warrant further study. Even more so than with competitiveness, it is hard to reconcile this effect with the observed effect of term limits on the implementation and duration of other policies. In one case (limits on gatherings at a threshold of 125 cases-per-million) we see a statistically significant impact in the opposite direction. It seems odd for term-limited governors to be both more lax on some public-health measures and more stringent on others - and yet this is what these coefficients seem to suggest. Additionally, if we consider the observed impact of term limits in tandem with that of competitiveness, we find further contradictions. Coefficients for competitiveness suggest that electoral concerns make governors more eager to keep their states open, or reopen them as soon as possible, while coefficients for term limits suggest that those governors who should be *least* impacted by electoral concerns generally avoided restrictions, or lifted them as soon as possible (though even this effect comes with caveats). It is difficult to settle on a causal account that would reconcile both these findings. Instead, it is easy to believe both these findings, with their limited statistical significance and a sample size of 50, are likely due to chance.

If one thing is clear from our findings, it is this: in this, as with so many matters in American politics, party is king. The partisan effects we observe certainly are not the full story - for one thing, they are too small and too variable to achieve statistical significance at every point, though partisan effects on policy duration are all significant. Despite this, a good deal of variation in policy implementation and duration remains unexplained. While partisan effects do not fully explain state responses to COVID-19, party is the clearest part of this story. Beyond observed differences between Democratic and Republican governors - supported by a clear and consistent pattern in the sign of observed party effects, with sufficient magnitude to give this finding practical significance - clear takeaways are harder to find. The impacts of electoral competition and term limits are rife with internal contradictions in these variables' effects on the implementation of individual policies. Additionally, the overall directions of these two variables' effects contradict each other. The observed effects of these variables are sometimes too small,

and usually too variable, to reach many firm conclusions. We offer a few plausible causal accounts for some sets of results - but at times, these causal accounts contradict accounts that explain results found in other portions of our analysis. However, this hardly rules out the possibility that electoral competitiveness or term limits might shape a governor's response to COVID. Rather, our findings suggest this question will require further investigation with more refined tools - such as a more detailed model of reelection odds which offers greater power and less variation, more granular and more extensive data on states' responses over time and perhaps their approach to a resurgence of cases, as well as perhaps a qualitative complement to our primarily quantitative analysis which can shed light on specific findings or reconcile contradictory effects into a coherent story.

Ultimately, further research is needed to replicate and potentially extend these observations, and either confirm and understand or refute and explain the tentative causal accounts and explanations we offer for many of our findings. Thus, we offer few conclusive answers, but some fascinating questions, to any scholar who would help advance this work and allow scholars to better understand governors' responses to COVID-19.

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