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Democratic governors quicker to issue stay-at-home orders in response to COVID-19

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A B S T R A C T

Does U.S. governors’ political partisanship matter to their responses to the COVID-19 public health crisis? Drawing from upper echelons theory, we examined whether and when the governors’ political partisanship (Democratic versus Republican) mattered to the time they took to issue stay-at-home orders, which were advocated to be a strong defense to combat the COVID-19 pandemic. Our findings based on event history methodology reveal that Democratic governors took about 9 fewer days than Republican governors to issue statewide stay-at-home orders. In addition, governing discretion and governing demands exacerbated the relationship of governors’ political partisanship with the time to their issuance of stay-at-home orders. For instance, when governing discretion was high, Democratic governors took 18 fewer days than Republican governors to issue stay-at-home orders. Moreover, when governing demands were high, Democratic governors took 25 fewer days than Republican governors to declare stay-at-home orders. Our findings are robust to different sets of analyses and a comprehensive set of controls. Moreover, additional analyses suggest that governors’ political partisanship was also related to the issuance of reopening plans and that governing discretion and governing demands moderated the relationship. This research provides theoretical and actionable practical implications for various stakeholders in the fight against COVID-19.

Introduction

The COVID-19 pandemic is a public health crisis of historic proportion that has fundamentally disrupted society and daily life, bringing substantial losses of human life as well as economic turmoil. However, initial responses to and management of the COVID-19 outbreak across the United States (U.S.) have been met with a varying sense of urgency among state leaders. With the intensity of the threat becoming more apparent in the earlier stages of the crisis, the U.S. Center for Disease Control (CDC) and the World Health Organization (WHO) advised physical distancing1 as the most effective approach for mitigation, particularly before a vaccine and other therapeutics become available (Birx, 2020, March 30; CDC, n.d; Madara, 2020, April 3). The Federal Government released advisements on physical distancing, hand-washing, limiting and canceling travel, but left governors the latitude to implement physical distancing and other measures within their states (Allyn, 2020, March 29).

Statewide stay-at-home orders,2 which prohibit non-essential business and social gathering, emerged as a frontline strategy to implement physical distancing and were advocated as an effective defense that U.S. governors could take to manage the public health crisis. Drawing on their emergency powers (The Network for Public Health Law, n.d.), governors issued these statewide stay-at-home orders in an effort to counteract the spread. Amidst mounting scientific evidence, advisements from public health experts, political pressure, and a declaration of national emergency, governors had varied reactions to the pandemic in that some governors were quick to issue orders to lockdown their states, whereas other governors were more hesitant to make such decisions. The media speculated that governors’ political partisanship played an important role in deciding whether to issue stay-at-home orders. Following the release of these orders, the media often referred to them as “stay-at-home orders,” which was the term used by the CDC in their advisements (Allyn, 2020, March 30; CDC, n.d; Madara, 2020, April 3).

1 Commonly referred to as “social distancing,” we utilize the term physical distancing to more precisely describe the non-pharmaceutical intervention by which people prevent the spread of the virus and reduce instances of close contact with others. We thank the editor for this suggestion.

2 These orders are sometimes referred to as statewide lockdown or shelter-in-place orders with an apparent preference in politicians referring to them as stay-at-home orders (Hauck, Reyes, & Ortiz, 2020).

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role in these decisions (e.g., Barabak, 2020; April 25; McGreal, 2020, April 21). Along these lines, political leaders, party members, and the general public have often appeared divided along party lines as to the seriousness of the existential threat of COVID-19 and the imperative of mitigation measures (Heath, 2020, March 6; Tierney, 2020, March 25). In the earlier days of the crisis unfolding, for example, Democrats were about twice as likely as Republicans to believe that the virus posed an imminent threat according to some polling (Heath, 2020, March 6). However, scientific evidence based on longitudinal data and rigorous methodology of analysis is needed to verify such speculations.

Upper echelons theory (UET; Hambrick, 2007; Hambrick & Mason, 1984) suggests governors’ political partisanship, an indicator of their values, may shape their decisions on stay-at-home orders (Chin, Hambrick, & Treviño, 2013). Drawing upon UET, we theoretically explore and empirically test whether U.S. governors’ political partisanship mattered to the time they took to issue statewide stay-at-home orders during the public health crisis of COVID-19. Moreover, we also investigate the moderating roles of the two boundary conditions (i.e., governing discretion and governing demands) suggested by UET (Hambrick, 2007).

We found that governors’ political partisanship was related to the time they took to issue stay-at-home orders with Democratic governors acting more quickly. In addition, we found that governing discretion and governing demands significantly moderated the relationship. Democratic governors took less time (Republican governors took more time) to issue stay-at-home orders when they had more governing discretion and governing demands. The significant moderating effect of governing discretion, in particular, suggests that voters may consider having a state legislature that is controlled by a different party than the governor’s. A split governing structure at the state level appears to mitigate the influence of the governor’s political partisanship. Alternatively, governing demands appear to constrain governors’ ability to consider new information, making them more likely to act in ways consistent with their pre-existing laurels and toe the party line. Thus, these observations highlight the potential importance of checks and balances on the power of governors and political structures.

In summary, we believe our research makes several contributions. This research extends UET to the fields of political science and public health. Our findings contribute to evidence regarding the generalizability and robustness of UET. Specifically, our moderation analyses reveal the contingencies of UET and, thus, contribute to the precision of this theory. To be noted, although executive work demands have long been theoretically argued as a boundary condition of UET, there is little empirical evidence. We contribute to UET research by offering knowledge on the moderating effect of executive work demands. Perhaps more importantly, our findings provide timely and evidence-based practical implications for various stakeholders, such as governors, public health experts, voters, and so on. For example, our finding that governors’ political partisanship relates to the time they took to issue stay-at-home orders suggests that governors need to be aware of this (Uggerslev & Sulsky, 2008) and make emergency decisions based on science and evidence.

Since management scholars mainly study business leaders, their research findings may not provide direct references to political leaders. As an attempt to break disciplinary boundaries, we extend theory in the management field to understand governors’ responses to the COVID-19 pandemic, which has affected most people in the world. Thus, in a broader sense, this study contributes to the relevance, importance, and legitimacy of management science and scholarship.

Theoretical foundation

Upper echelons theory

UET (Hambrick & Mason, 1984) is a theoretical perspective in the management field that is particularly relevant for us to understand how governors’ political partisanship may relate to their issuance of stay-at-home orders. This theory was proposed to explain how business executives’ characteristics may shape their firms’ strategic choices and performance. It is “built on the premise of bounded rationality” (Hambrick, 2007, p. 334), which means due to executives’ limitations to objectively and thoroughly interpret complex and uncertain situations, their strategic decisions are likely to be based on their construed reality rather than a result of calculations of optimal actions (Finkelstein, Hambrick, & Cannella, 2009).

In essence, UET posits, “(1) executives act on the basis of their personalized interpretations of the strategic situation they face, and (2) these personalized construals are a function of the executives’ experience, values, and personalities” (Hambrick, 2007, p. 334). As such, companies’ strategies and performance tend to reflect their executives’ experience, values, and personalities. There is a large body of research on UET over the past three decades (Finkelstein et al., 2009; Neely, Lovelace, Cowen, & Hiller, 2020) with most research focused on executives’ experiences. There is also some research on executives’ personalities and the least amount of research on executives’ values. In general, empirical evidence suggests executives matter to their firms’ strategic actions and performance, supporting the premises of UET (e.g., Finkelstein et al., 2009; Jeong & Harrison, 2017; Wang, Holmes, Oh, & Zhu, 2016).

Proponents of UET later refined it and proposed managerial discretion and executive work demands as two boundary conditions that may moderate the relations of executives’ characteristics with firm outcomes (Hambrick & Finkelstein, 1987; Hambrick, Finkelstein, & Mooney, 2005). In essence, Hambrick and colleagues argue that as executives’ managerial discretion and work demands increase, their characteristics are more likely to be reflected on their strategic choices and subsequently on their firm outcomes. There has been some research on the moderating role of managerial discretion, which generally supports Hambrick and colleagues’ proposition (e.g., Finkelstein et al., 2009; Li & Tang, 2010). However, to our knowledge, there is little empirical evidence regarding the moderating role of executive work demands (Finkelstein et al., 2009).

Governors as chief executive officers

Although governors and business executives operate in different segments of the society, they are top leaders of their own organizations and have power and discretion in their positions. In fact, governors are commonly regarded and referred to as “chief executives” in the political science field (e.g., Ferguson, 2003; Keena & Knight-Finley, 2018). Specifically, declaring this very sentiment, the National Governors Association states, “all of whom are popularly elected, serve as the chief executive officers of the fifty states” (The National Governors Association, n.d.).

Like chief executive officers (CEOs) in corporate America, governors are the head of their states and sit on the boundary between their states and the external environment. Externally, they represent their states and need to deal with the federal government and various agencies, the news media, and other stakeholder groups. Internally, they implement state laws, oversee the operation of state agencies, advance new policies and programs, approve state budgets and appropriations, and so on. On top of the above responsibilities, they also need to balance their own political party’s agenda, their citizens’ requests, and the opposing party’s demands in their states’ legislature as all of the governors are either members of the Democratic Party or the Republican Party, which have dramatically different views and policies on most issues, including public health. In support, some scholars have described the challenges governors face as such, “[t]hey are faced with conflicting demands from their party’s legislative delegations, their core constituents, and citizens as they make policy decisions” (Barrilleaux & Rainey, 2014, p. 438).
Therefore, the complex, demanding, contradictory, and voluminous stimuli open doors for bounded rationality and constitute a ripe environment to which UET can extend. A key assumption of UET is that executives have “discretion or latitude of action” (Hambrick, 2007, p. 335). Although a lot of governors’ power is vested and regulated by state constitutions and laws, research and practice indicates that governors do have discretion in their policy making and courses of action (Barrilleaux & Rainey, 2014; Jones & Olken, 2005). For instance, using their power of vetoing state legislation and approving state budgets, governors have the discretion to block the passage of state laws that they do not support. Using their appointment power, they can nominate heads of state agencies and in some states can appoint state court judges (The National Associations of Governors, n.d.). Governors also have the discretion not to toe the party line, perhaps in part because “parties are no longer a required vehicle for transportation into office” (Beyle & Muchmore, 1983, p. 17). For instance, although the Republican Party has staked out a position of disapproval with regard to the Patient Protection and Affordable Care Act (or “Obamacare”), not all Republican governors have entirely embraced this. Some Republican governors, such as the former governor of Florida, Rick Scott, chose to expand their Medicaid programs (Barrilleaux & Rainey, 2014) despite a Supreme Court’s ruling that “gave U.S. governors an unexpected power to oppose expanding their Medicaid programs as required under the original law” (Barrilleaux & Rainey, 2014, p. 438).

Taken together, we argue that UET is applicable to U.S. governors to understand how their experiences, personality, and values may shape their decision making. As we detail below, UET suggests that as an indicator of their values, U.S. governors’ political partisanship or their political party affiliation is likely to play a role in how quickly they issue stay-at-home orders in an effort to enforce physical distancing and combat the spread of COVID-19.

**Governors’ political partisanship and statewide stay-at-home orders**

Statewide stay-at-home orders have dire consequences. They severely restrict economic and social activities. They mandate closures of non-essential businesses and physical schools, limit the size of social gatherings that makes it practically impossible to attend religious activities or hold celebrations like weddings, and require citizens to stay at home except for essential activities. Violations of the stay-at-home orders may lead to fines, arrest, or the loss of business licenses. In fact, it is estimated that the stay-at-home orders locked down about ninety percent of the U.S. population for several weeks (Norwood, 2020 April 3). The stay-at-home orders’ aggressiveness, intrusion of citizens’ freedom, and unprecedented disruption to the U.S. economy and the stock market tap on the fundamental differences in values between the Democratic Party and the Republican Party. Thus, Democratic governors and Republican governors tend to have different opinions on the proclamation of such orders. Values are commonly regarded as “a broad tendency to prefer certain states of affairs over others” (Hofstede, 1980, p.19). It has been well documented that the two parties have different values as reflected in their divergent policy preferences (Francia, Green, Herron, Powell, & Wilcox, 2005). For instance, classic philosophical differences have suggested that the Democratic Party prefers a “big government” or a government that plays an active role in society that consists of passing more and stricter regulations and laws, whereas the Republican Party favors a smaller government and fewer regulations; the Democratic Party supports government involvement in healthcare, whereas the Republican Party believes private companies can more effectively provide healthcare services; the Democratic Party prefers shared responsibility, equality, and social change, whereas the Republican Party favors individual responsibility and the maintenance of the status quo (e.g., Francia et al., 2005; Schwartz, 1996; Skitka & Tetlock, 1993). Therefore, given the high degree of government involvement inherent in stay-at-home orders, using such orders to contain the COVID-19 public health crisis more closely aligns with the Democratic Party’s values and policy stance but is different from the Republican Party’s values and policy stance. To the extent that Democratic and Republican governors share their own party’s values, UET suggests that they tend to differ in their attitudes toward issuing stay-at-home orders: Democratic governors may be more inclined and quicker to issue such orders than Republican governors (Hambrick, 2007).

In addition, the polarized political climate in the years leading up to the pandemic may also influence governors to toe the party line regarding the issuance of stay-at-home orders to contain the spread of COVID-19 (Goelzhauser & Rose, 2017). Specifically, partisan conflicts and animosity worsened, and American federalism became more contested during the Trump administration (Goelzhauser & Konisky, 2019). Democratic and Republican parties had public showdowns of their irreconcilable policy differences on key issues such as climate change and healthcare. Moreover, Democratic governors tended to use their power to challenge national policies or pass state laws to replace national inaction (Somin, 2019, July 12).

With respect to containing COVID-19, Democratic governors were dissatisfied with the federal government’s early responses and were politically motivated to use their legal authority to quickly enact statewide stay-at-home executive orders to show their active responses in contrast to the federal government’s passive reactions. Republican governors, however, were expected to show support for and solidarity with their own party and the sitting Republican president. Up to the declaration of a national emergency on March 13, 2020, it was reported that the White House tried to minimize the severity of COVID-19 and was more concerned with the negative impact of COVID-19 on the economy, especially the stock market (Bredemeier, 2020, April 14; Pew Research Center, 2020, April 16). A strong economy was believed to be a powerful asset for the President and the Republican Party to win the 2020 presidential and congressional elections. Given the messages from the White House and the Republican Party and the worry of the potentially devastating impact of statewide stay-at-home orders on the economy during the earlier days of the pandemic in the U.S., Republican governors might have been hesitant to issue such orders.

In addition, governors of one party usually go along with sentiments of citizens of the same party. As noted earlier, polls in early March 2020 indicated that citizens’ attitudes toward the severity of COVID-19 fell along party lines with citizens of the Republican Party being less concerned and citizens of the Democratic Party being more concerned (Heath, 2020, March 6; Tierney, 2020, March 25). Meanwhile, UET research suggests that political partisanship would tend to drive governors to selectively seek and attend to information that is congruent with their political stances (Baum, 2011; Chin et al., 2013). In support, Democratic governors normally appear on left-leaning news outlets such as CNN and MSNBC, whereas Republican governors typically appear on right-leaning news outlets such as Fox News (Mitchell, Gottfried, Kiley, & Matsa, 2014, October 21). Unfortunately, the news outlets with varying positions on the political spectrum conveyed different messages on the severity of COVID-19. A notable difference, for example, is that a prime time Fox Business show host dismissed the COVID-19 threat on-air as “yet another attempt to impeach the president” on March 9, 2020 (Grynbaum, 2020, March 27) when there had been 519 COVID-19 cases in the U.S. and 3,960 cases worldwide one day earlier (Johns Hopkins University and Medicine Coronavirus Resource Center, 2020, March 8). Thus, governors

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3 A complete and historical overview of the political platforms of the respective Democratic and Republican parties and their migration and evolution over time is beyond the scope of this study. However, there are numerous articles and texts that interested readers can refer to for further review of the political philosophies of the two parties (e.g., Mason, 2011; Miller & Schofield, 2008; Saad, Jones, & Brenan, 2019).
frequent exposure to information from the media that tends to be consistent with their preexisting beliefs regarding the threat of COVID-19 would likely reaffirm their views toward the issuance of stay-at-home orders from a partisan perspective. Taken together, we propose the following hypothesis:

Hypothesis 1. Governor political partisanship is positively associated with the issuance of stay-at-home orders, such that Democratic governors are quicker than Republican governors at issuing stay-at-home orders.

Governing contingencies

In addition, according to UET, two factors are likely to moderate the role of governors’ political partisanship relative to the issuance of stay-at-home orders. The first factor is governors’ governing discretion (it was termed managerial discretion in the UET framework), which refers to the latitude of action governors have when issuing stay-at-home orders. For those governors with more discretion, they are more likely to act according to their political partisanship with respect to the proclamation of stay-at-home orders (e.g., Democratic governors may take even less time to issue such orders to shut down their states). For instance, when a state’s governorship and legislature share the same political party, the governor may receive less opposition and pressure from the state legislature and thus have more discretion. However, when a state’s governorship and legislature are of opposite political party, the governor could be subject to greater scrutiny and objection from the state legislature and therefore have less discretion. In the case of states with Democratic governors but Republican state legislatures, for example, the governors would likely take more time to issue stay-at-home orders. Conversely, Republican governors with Democratic state legislatures would likely take less time to issue stay-at-home orders.

Hypothesis 2a. Governing discretion moderates the relationship between governor political partisanship and the issuance of a stay-at-home order, such that when governing discretion is high, it takes Democratic governors less time to issue stay-at-home orders and Republican governors more time to issue stay-at-home orders.

Hypothesis 2b. Governing demands moderate the relationship between governor political partisanship and the issuance of a stay-at-home order, such that when governing demands are high, it takes Democratic governors less time to issue stay-at-home orders and Republican governors more time to issue stay-at-home orders.

Method

Sample and research setting

To test our hypotheses, we adopted event history analysis (EHA) methodology to observe all fifty U.S. governors and their respective states’ responses to the COVID-19 pandemic. EHA, sometimes referred to as survival or duration analysis and often used in medicine, economics, and sociology, is frequently used to study the timing of events and its use is ideal when data are censored (Box-Steffensmeier & Jones, 2004). For instance, the technique enables medical researchers to longitudinally examine the efficacy of a treatment (e.g., a medication) on cancer recurrence (e.g., Norden et al., 2009). Alternatively, it enables economists to consider the various predictors of firm survival (i.e., when firms go out of business; Thompson, 2005). The method is versatile and well suited for the present context given the ability of event history models to track subjects until an event happens (e.g., the issuance of a stay-at-home order) or the observation period ends. As to the latter, a distinct advantage of EHA is its ability to account for subjects that do not experience a focal event of interest (e.g., firm failure, a stay-at-home order) during the period of analysis and are thus censored. Moreover, with our approach, we can estimate the effect of a treatment (i.e., a governor’s Democratic Party membership) on an outcome (i.e., the issuance of a stay-at-home order) while accounting for the dynamic nature of the setting (e.g., that new information arose daily). Although alternative analytic techniques may be used, such as panel data analysis, such analyses do not account for censored data and would be more limited in their explanatory ability.4

Data were structured for event history analysis using state-day observations as the unit of analysis. The state-day structuring to the dataset allowed for the ability to account for the inclusion of time-varying covariates and the dynamic unfolding and progression of the COVID-19 pandemic. We observed all fifty U.S. governors and their respective states from March 11th to April 15th, 2020. In organizing the dataset for analysis, we selected March 11th as the starting date of the observation window because the WHO declared the COVID-19 outbreak to be a pandemic on March 11th and President Trump announced a European travel ban on the same date. On March 13th, President Trump declared a national emergency concerning the COVID-19 outbreak. In the wake of these events, governors of both parties adopted varying physical distancing policies, with a particular reliance on stay-at-home orders. Using this research setting, we explore the variation across states in issuing these statewide stay-at-home orders (Gershman, 2020, April 28). We chose the end date of April 15th since this created an observation window that was long enough for the focal event (i.e., the issuance of a stay-at-home order) to have occurred and close enough to the physical distancing deadline that the Federal Government recommended. Moreover, this date was over a week after the issuance of the last stay-at-home order on April 7th.5

Each state was observed until it exited the dataset upon issuing either a stay-at-home order or until the end date of the observation

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4 Since further discussion of the relative advantages of EHA is beyond the scope of this article, we direct readers to Klein and Moeschberger (2006) for further detail regarding EHA and the handling of censored data.
5 In conducting EHA, an observation window is defined by the researcher that is conducive to studying the phenomenon of interest. In the stability and robustness checks section, we examine whether our findings are robust to the selection of different observation windows and as we describe below find our conclusions unchanged.
Table 1

Dates of Issuance for Stay-at-home Orders.

| State     | Stay-at-home Order Date | Governor’s Political Affiliation |
|-----------|-------------------------|----------------------------------|
| California| 3/19/2020               | Democratic                       |
| Illinois  | 3/21/2020               | Democratic                       |
| New Jersey| 3/21/2020               | Democratic                       |
| New York  | 3/22/2020               | Democratic                       |
| Connecticut| 3/23/2020              | Democratic                       |
| Louisiana | 3/23/2020               | Democratic                       |
| Ohio      | 3/23/2020               | Republican                       |
| Oregon    | 3/23/2020               | Democratic                       |
| Washington| 3/23/2020               | Democratic                       |
| Delaware  | 3/24/2020               | Democratic                       |
| Indiana   | 3/24/2020               | Republican                       |
| Massachusetts| 3/24/2020       | Republican                       |
| Michigan  | 3/24/2020               | Democratic                       |
| New Mexico| 3/24/2020               | Democratic                       |
| West Virginia | 3/24/2020        | Republican                       |
| Hawaii    | 3/25/2020               | Democratic                       |
| Idaho     | 3/25/2020               | Republican                       |
| Vermont   | 3/25/2020               | Republican                       |
| Wisconsin | 3/25/2020               | Democratic                       |
| Colorado | 3/26/2020               | Democratic                       |
| Kentucky | 3/26/2020               | Democratic                       |
| Minnesota| 3/27/2020               | Democratic                       |
| New Hampshire | 3/27/2020       | Republican                       |
| Alaska    | 3/28/2020               | Republican                       |
| Montana   | 3/28/2020               | Democratic                       |
| Rhode Island | 3/28/2020         | Democratic                       |
| Kansas    | 3/30/2020               | Democratic                       |
| Maryland  | 3/30/2020               | Republican                       |
| North Carolina | 3/30/2020        | Democratic                       |
| Virginia  | 3/30/2020               | Democratic                       |
| Arizona   | 3/31/2020               | Republican                       |
| Tennessee | 3/31/2020               | Republican                       |
| Nevada    | 4/1/2020                | Democratic                       |
| Pennsylvania | 4/1/2020              | Democratic                       |
| Maine     | 4/2/2020                | Democratic                       |
| Texas     | 4/2/2020                | Republican                       |
| Florida   | 4/3/2020                | Republican                       |
| Georgia   | 4/3/2020                | Republican                       |
| Mississippi| 4/3/2020               | Republican                       |
| Alabama   | 4/4/2020                | Republican                       |
| Missouri  | 4/6/2020                | Republican                       |
| South Carolina | 4/7/2020           | Republican                       |
| Arkansas  | Not issued              | Republican                       |
| Iowa      | Not issued              | Republican                       |
| North Dakota | Not issued           | Republican                       |
| Nebraska | Not issued              | Republican                       |
| Oklahoma | Not issued              | Republican                       |
| South Dakota | Not issued         | Republican                       |
| Utah     | Not issued              | Republican                       |
| Wyoming  | Not issued              | Republican                       |

window. Table 1 presents the dates on which each state issued a stay-at-home order, if at all. In total, there were 50 states and 993 state-day observations. The models were specified with a Weibull distribution to estimate duration (in days) given its alignment with our research question and ease of interpretation. Standard errors were clustered by state to account for possible non-independence of observations within states. Data for the variables in this study were obtained from multiple sources. Specifically, we utilized data from (1) State Governors’ Offices (2) The Book of the States (3) The COVID Tracking Project (4) Ballotpedia (5) the U.S. Census Bureau (6) The Kaiser Family Foundation (7) the Federal Aviation Administration (8) the U.S. Bureau of Economic Analysis and (9) the Institute for Health Metric and Evaluation. Each variable and its source are listed in Table A1 in the Appendix.

Dependent variable

The dependent variable, issuance of stay-at-home orders, is set using the date the governor of each state issued a statewide stay-at-home order. For each state, the variable takes on a value of 0 until the day on which the state issued a stay-at-home order when the variable takes on a value of 1 and the state subsequently exits the dataset. All but eight states, including Arkansas, Iowa, Nebraska, North Dakota, Oklahoma, South Dakota, Utah, and Wyoming, had issued these orders during the Spring 2020 pandemic lockdown in the U.S.6

Independent, moderator, and control variables

Governor political partisanship

In line with our conceptualization of governor political partisanship, we operationalize governors’ political partisanship with their political party membership. Governor political partisanship was coded as a dichotomous variable with 1 representing that the state was led by a governor with membership in the Democratic Party and 0 if the state was led by a governor with membership in the Republican Party. There were twenty-four Democratic and twenty-six Republican governors.

Governor discretion

Hambrick and Finkelstein (1987) argued that business leaders’ managerial discretion may emanate from environmental, organizational, and individual managerial characteristics. Following their logic, we argue that one environmental factor that may significantly limit a governor’s discretion is whether the state legislature shares the same political party as the governor. It stands to reason that if both the governor and the political party controlling the state legislature share the same politics, the governor receives more support, is less likely to be challenged, and thus has more governing discretion. Governing discretion was operationalized as a dichotomous variable with a value of 1 if the state legislature was controlled by the same political party as the governorship and 0 otherwise.

Governing demands.

UET suggests task challenges, performance challenges, and executive aspirations determine executive work demands or governing demands. Accordingly, one task challenge directly resulting from the COVID-19 public health crisis that tends to increase a governor’s governing demands is the number of COVID-19 deaths per day within a state. Governing demands were coded as a time-varying variable that measured the cumulative number of COVID-19 deaths each day within a state. The number of COVID-19 deaths was scaled per 100,000 people in a state and log transformed for normality. It stands to reason that as COVID-19 deaths among a state’s population become more apparent each day, governors would experience mounting pressure from various fronts and feel challenged to do a good job.

Control variables. We also included several control variables to parse out the effects of our primary variables of interest as cleanly as possible (Antonakis, Bendahan, Jacquart, & Lalive, 2010).

First, we implemented controls to account for differences in state size in that more populated states may be more exposed to the virus threat as well as elements of the state environment that may facilitate the spread. To do so, we measured population using the natural logarithm of state population. Along these lines, we controlled for urbanization given that greater populations residing in urban areas could increase exposure rates. This variable is measured as the percentage of a state’s population residing in urban areas. We included a control

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6 The statewide stay-at-home or “state lockdown” orders that we consider in this manuscript reflect the stay-at-home executive orders issued by state governors. However, for clarity we also note that independent of whether a state’s governor issued a stay-at-home order, local decision makers (e.g., mayors, county executives, or local health department directors) in counties, cities, or other municipalities may have taken (and sometimes did) their own mitigation measures (e.g., a stay-at-home order for their area). It is the case that local officials took these measures even in states where the governor issued a statewide stay-at-home order. “Partial lockdowns,” such as in the case of Utah, Wyoming, and Oklahoma, for example, still nonetheless reflect situations in which the governor did not issue a stay-at-home order.
for population density since the pandemic could be a greater concern in more densely populated states, which was measured using its natural logarithm. Since states with large airports were identified as areas vulnerable to spread, we included a control for airport activity using the natural logarithm of enplanements by the largest airport within a state. To the extent that states’ gross state product (GSP) as a measure of the market value of final goods and services for a state (i.e., sometimes referred to as GDP by state) reflects the economic importance and productivity of a state, we also incorporated it as a control since such importance may affect governors’ decision making. To adjust for variance in state size, GSP was scaled by state population. There is also some evidence that the virus spreads more quickly in communities where there are social inequities (Scott, 2020). To account for this possibility, we included a measure of income inequality within a state using the Gini index (Dasgupta, Sen, & Starrrett, 1973).

Second, we included controls that related to the state’s healthcare system resources relevant to managing the pandemic. Particularly, we controlled for the number of physicians, which was scaled per 100,000 people in a state and log transformed for normality. In addition, we controlled for hospital bed utilization using a time-varying measure of the mean number of hospital beds needed for COVID-19 each day. Similarly, the measure was scaled per 100,000 people in a state and log transformed for normality.

Third, we controlled for election-related factors in light of the possibility that such factors could affect the strategic incentives or decision-making processes of governors. In this regard, we included dichotomous controls with 1 representing a presidential swing state, the governor facing reelection during the 2020 election cycle, the governor being up against term limits, or that the state went Republican during the last presidential election, and 0 otherwise.

Fourth, we added controls for other individual differences that may be argued to affect governor decision-making. Specifically, we included a dichotomous control with 1 representing a state having a female governor and 0 otherwise. We also included a continuous variable representing governor age.

Estimation method and results

As discussed, this study utilizes EHA. In our estimation procedure, we use Weibull parametric regression to estimate the hazard of issuing a stay-at-home order. Weibull models allow for the shape of the hazard rate to be increasing as time goes by. There are two main components of EHA models, a survivor function and a specific parameterization. In our Weibull models, the hazard (i.e. \( h(t) \)) and survivor function (i.e. \( S(t) \)) is specified as:

\[
    h(t) = p_1 \lambda e^{t \beta}, \\
    S(t) = exp(-\lambda t^p)
\]

The baseline hazard function is specified as:

\[
    h_0(t) = p e^{t \beta -1}
\]

While the parameterization of the systematic component in our Weibull hazard models is specified as:

\[
    \lambda = \exp(x \beta)
\]

where \( x_i \) is the observation value for covariates and the independent variable for observation \( j, \beta \) is the vector of coefficients, \( \lambda_i \) is the scale parameter where we include the systematic component (i.e., \( x_i \beta \)), \( p \) is the shape parameter, and \( t \) is the time to issue a stay-at-home order (i.e., the dependent variable). This means that the hazard function can be rewritten as:

\[
    h(t) = h_0(t) \lambda
\]

It is important to show that a Weibull model estimates the ancillary parameter of \( p \) that can be interpreted as a shape parameter where if greater than 1 it can be assumed that the hazard of issuing a stay-at-home order is increasing over time. We can interpret the shape in that the average observation is \( (\frac{t}{p+1}) \) times more likely to issue a stay-at-home order after \( t_s \) number of days versus \( t_b \) number of days for all \( t_a > t_b \). For example, if \( t_a = 32 \) days and \( t_b = 24 \) days; then a state would be \( (\frac{t_b}{t_a})^{p+1} \) more likely to issue a stay-at-home order after 32 days than after 24 days. Specifically, the initial estimated shape parameter is \( p = 6.15 \), which indicates states would be 4.39 times more likely to issue a stay-at-home order after 32 days than after 24 days.

Because our setting is non-experimental, there is potential for bias because Democratic governors are not randomly distributed across the fifty states. In fact, most governors’ affiliations tend to match the ideology of their state’s population. This might introduce bias because the state’s ideology might cause both the governor’s affiliation and the reaction to COVID-19. After all, the population might have different preferences for a response. To account for this, we follow the precedent of several studies in economics, political science, and strategic management (e.g. Devarakonda & Reuer, 2018; Rocha and Van Praag, 2020; Miller & Toh, 2020; Parker-Lue & Lieberman, 2020) by adjusting for the probability (i.e. propensity score) that a given governor was Democratic. In particular, we employ a method proposed by Hirano and Imbens (2001) to remove the bias that arises from a non-random assignment of governor affiliation to a state’s ideology by using inverse-probability weights. This method alleviates concerns that the results are driven by a lack of valid counterfactuals by most heavily weighting state observations with governors who have opposite political party membership than their states’ voter preferences would suggest. We also note that the method does not require the use of an exogenous instrument and relies instead on sample rebalancing to create balance between treated and untreated observations (i.e., Democratic v. Republican governors), such that on average there are no differences in voter preferences across states in the weighted sample. For these reasons, our use of inverse-probability weights is well aligned with our research question and empirical setting.

In this method, we estimate the probability that a given state has a Democratic governor given the vote share of Barack Obama in the 2012 presidential election and Hillary Clinton in the 2016 presidential election. This way, we capture the ideology of each state’s population independent of their respective governor’s affiliation. Then, we estimate weights per the inverse probability so that we weigh Democratic governors more heavily. Conversely, governors whose party affiliation matches the state’s voting patterns in presidential elections (i.e. state ideology) are weighed the least. The inverse-probability weights are given by the following:

\[
    w_i = \frac{I(\text{DemocraticGovernor}_i = 1)}{p_1(\text{DemocraticGovernor}_i = 1)} + \frac{I(\text{DemocraticGovernor}_i = 0)}{1 - p_1(\text{DemocraticGovernor}_i = 1)}
\]

In the first stage, voter preferences explain 24.5 percent of whether a state has a Democratic or a Republican governor; and the \( p \) is 287.14 with two degrees of freedom, which helps provide strong evidence of its validity.

We also ran the weights using the partisan voting index (Wasserman & Flinn, 2017) and find that there is no substantive difference in the resulting sign, size, or significance of the coefficients in the second stage models.
where \( w_i \) is the inverse probability weight used in the second stage Weibull model; \( I \) is an indicator function; and \( p_i \) is the estimated probability that the governor is affiliated with the Democratic party given the results of the 2012 and 2016 presidential elections. In the second stage, we reweight the sample using the estimated weights \( w_i \) so that the sample is rebalanced in a way that adjusts for the ideology of the state’s population; thus preventing the possibility that our results are the result of that underlying cause. This method allows us to isolate the effect of the governor’s political affiliation from that of the state’s ideology. This weighting method is reflected across the regressions and results that we report. However, in the robustness section, we show that the results are robust to its exclusion. Specifically, we find highly similar results when running the analyses without the weights.

Table 2 presents the descriptive statistics and correlations for the study. In Fig. 1a-b, we produce model free hazard plots of the study’s dependent variable, the issuance of stay-at-home orders, as a function of governor political partisanship. Fig. 1a portrays the Kaplan-Meier survival curves, which illustrate the time to the issuance of stay-at-home orders for governors based on their political partisanship. Fig. 1b displays the spline smoothed hazard rates of the time to the issuance of stay-at-home orders for governors based on their respective political party. Fig. 1a-b appears to visually impress that Democratic governors were relatively quicker (while Republican governors were relatively slower) to issue stay-at-home orders.

Table 3 presents the main results for our models examining the issuance of stay-at-home orders. The estimates in the analyses are reported as coefficients, which means that positive values are associated with a faster time to the issuance of stay-at-home orders and negative values are associated with a slower time to the issuance of stay-at-home orders. Hazard ratios can be obtained by exponentiating the coefficients. Model 1 includes the primary variables of interest along with the control variables and Models 2-4 add the interaction terms. To aid in interpretation, we include graphs of our results representing Hypothesis 1-2 using predicted probabilities in Fig. 2a-c. In Fig. 3a-b, we present the marginal effects graphs for Hypotheses 2a and 2b.

Hypothesis 1 predicted that governor political partisanship is positively associated with the issuance of stay-at-home orders, such that Democratic governors are quicker than Republican governors at issuing stay-at-home orders. The coefficient is positive and statistically significant in Model 1 (\( b = 1.967, p = .001 \)). The marginal effect of having a Democratic governor on the issuance of a stay-at-home order is \(-8.529\) days (\( p = .003 \)). This means that Democratic governors took 8.529 fewer days on average to issue a stay-at-home order. We plot this relationship in Fig. 1a, where we can observe that the time to the issuance of stay-at-home orders was shorter for Democratic governors. We note that the main effect for Democratic governors turns non-significant in Model 2, which may be because the effect of a Democratic governor with no discretion is no different from the effect of a Republican governor with no discretion. However, upon examination, the effect is relatively stable across models. Taken together, the results provide support for Hypothesis 1.

Hypothesis 2a predicted that governing discretion moderates the relationship between governor political partisanship and the issuance of a Republican governor with no discretion. However, upon examination, the effect is relatively stable across models. Taken together, the results provide support for Hypothesis 1.

10 The marginal effect denotes the change in the probability that the outcome occurs that is associated with a 1 unit change in the focal explanatory variable while holding other explanatory variables constant. Marginal effects are often used in economics, medicine, and strategic management research due to their comparability across studies and lower sensitivity to statistical model conditions. Their use is also particularly helpful when interpreting nonlinear and survival models (Norton, Dowd, & Mancioppi, 2019). Importantly, marginal effects consider rates of change unlike predicted probabilities or simple slopes that only express whether specific point estimates are statistically different from zero. It is important to note that because governor political partisanship (i.e., Democratic governor) is a dichotomous variable, its marginal effect can be interpreted as the difference between Democrats and Republicans in the estimated number of days it takes them to issue a statewide stay-at-home order.

### Table 2: Descriptive statistics and correlations.a

| Variable | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 |
|----------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Mean     | 12.59 | 0.46 | -0.33 | -0.48 | 0.24 | 0.12 | -0.31 | 0.24 | -0.09 | 0.24 | 0.12 | -0.31 | 0.24 | -0.09 | 0.24 | -0.09 | 0.24 | -0.09 |
| S.D.     | 0.19 | 0.00 | 0.19 | 0.00 | 0.19 | 0.00 | 0.19 | 0.00 | 0.19 | 0.00 | 0.19 | 0.00 | 0.19 | 0.00 | 0.19 | 0.00 | 0.19 | 0.00 |

### Table Notes

- *Note*: N = 953. Correlations greater than in (0.06) and (0.08) are significant at \( p < .05 \) and \( p < .01 \), respectively.
- *Raw values* are reported for the descriptive statistics. Continuous independent and control variables were standardized before analysis.
of a stay-at-home order, such that the relationship is stronger (i.e., it takes Democratic governors even less time to issue stay-at-home orders) for governors with governing discretion (i.e., when the governorship and state legislature are controlled by the same political party). The coefficient is positive and significant in both Model 2 ($b = 3.677, p = .007$) and Model 4 ($b = 3.241, p = .017$). The marginal effect of having a Democratic governor with governing discretion on the issuance of a stay-at-home order is $-17.851$ days ($p < .001$). This means that Democratic governors with governing discretion took $17.851$ fewer days on average to issue a stay-at-home order than Republican governors with governing discretion. This relationship is depicted in Fig. 1b, where it illustrates that the time to issuance was shorter for Democratic governors with governing discretion. Therefore, the results support Hypothesis 2a.

Hypothesis 2b predicted that governing demands moderate the relationship between governor political partisanship and the issuance of a stay-at-home order. The coefficient is negative and significant in both Model 3 ($b = -0.543, p = .017$) and Model 4 ($b = -0.952, p = .062$). The marginal effect of having a Democratic governor with governing discretion on the issuance of a stay-at-home order is $-17.569$ days ($p = .000$). This means that Democratic governors with governing discretion took $17.569$ fewer days on average to issue a stay-at-home order than Republican governors with governing discretion. This relationship is depicted in Fig. 1b, where it illustrates that the time to issuance was shorter for Democratic governors with governing discretion. Therefore, the results support Hypothesis 2b.

Table 3
Event History Analysis of the Issuance of Stay-at-home Orders.

| Variables             | (1)     | (2)     | (3)     | (4)     |
|-----------------------|---------|---------|---------|---------|
| Population            | 0.048   | 0.391   | -0.073  | 0.238   |
| Urbanization          | 0.012   | 0.069   | -0.023  | 0.021   |
| Population density    | 0.067   | 0.009   | 0.253   | 0.150   |
| Airport activity      | 0.172   | 0.073   | 0.219   | 0.157   |
| GSP                   | -0.368  | -0.525  | -0.577  | -0.690  |
| Income inequality     | 0.347   | 0.449   | 0.438   | 0.528   |
| No. of physicians     | 0.112   | -0.038  | 0.120   | 0.006   |
| Hospital bed utilization | 0.959 | 0.730   | 0.633   | 0.500   |
| Presidential swing state | -1.347  | -1.448  | -1.621  | -1.695  |
| Facing reelection     | -0.416  | -0.666  | -1.197  | -1.281  |
| Term limits           | 1.053   | 1.559   | 1.348   | 1.683   |
| Went Republican       | -1.138  | -0.226  | -0.950  | -0.159  |
| Female                | -0.289  | -0.315  | -0.427  | -0.354  |
| Governor age          | -0.316  | -0.442  | -0.575  | -0.633  |
| Governing discretion  | -1.346  | -3.877  | -1.550  | -3.713  |
| Governing demands     | -0.543  | -0.363  | -1.217  | -0.952  |
| Democratic governor   | 1.967   | 0.509   | 3.247   | 1.704   |
| Democratic governor ×  | 3.677   | 3.241   | 0.007   | 0.017   |
| Governing discretion  | 2.752   | 2.229   | (0.000) | (0.000) |
| Democratic governor ×  | 993     | 993     | 993     | 993     |

Note: The models provide weighted estimates using inverse-probability weights. The models are specified with robust standard errors clustered by state. Exact p-values in parentheses.
ance of a stay-at-home order, such that the relationship is stronger (i.e., it takes Democratic governors even less time to issue stay-at-home orders) when governing demands are high (i.e., +1 standard deviation). The relevant interaction terms for this hypothesis are significant and positive in both Model 3 ($b = 2.752, p = .003$) and Model 4 ($b = 2.229, p = .062$). The marginal effect of having a Democratic governor with higher governing demands on the issuance of a stay-at-home order is $-25.303$ days ($p = .000$). This indicates that Democratic governors with higher governing demands took 25.303 fewer days on average to issue a stay-at-home order than Republican governors with higher governing demands. This relationship is represented in Fig. 1c, where it shows that the time to issuance was shorter for Democratic governors with higher governing demands. Therefore, Hypothesis 2b is supported.

**Stability and robustness checks**

To examine the stability of the results, we conducted several additional analyses to further explore our theory and the data (Antonakis et al., 2010).

First, we investigated whether our results were sensitive to decisions in compiling the data. Specifically, we investigated the time to the issuance of stay-at-home orders from different starting periods for the observation window, namely, from the time each state had its first positive case instead of the March 11th start date. The results are consistent with this alternative setup and are produced in Table A2 in the Appendix. We also considered a different end date for the observation window by shifting the observation window end date later by one week (i.e., April 22nd). The results are again consistent and are provided in Table A3 in the Appendix.
Second, we examined the sensitivity of the results to excluding states where COVID-19 gained early traction, and thus, may be disproportionately influencing the results. Washington state experienced the first reported case of COVID-19 and the Seattle-Tacoma International Airport serves as a hub for flights in the U.S. Pacific Northwest. New York state is home to the most populous city in the U.S. as well as John F. Kennedy International Airport, which is the busiest airport for international air passenger traffic into North America (Mazareanu, 2020). Excluding these two states left our conclusions unchanged. In another set of models, we excluded Washington, New York, Illinois, and California. Illinois experienced the second reported case of COVID-19 in the U.S. and is home to a major international airport (O’Hare International Airport) and California experienced the first case of community spread and is home to the largest international airport (Los Angeles International Airport) on the U.S. West Coast. Excluding these four states left our conclusions unchanged. We provide these alternative analyses in Table A4 in the Appendix.

Third, we utilize alternative operationalizations for the moderator variables. In particular, for governing discretion, we coded a dichotomous variable with 1 indicating that the state was not a gubernatorial swing state and 0 otherwise. The assumption behind this operationalization is that governors of either party would perhaps feel more empowered to follow their own decision making and would be less susceptible to outside pressures when they did not have to worry as much about a future electoral defeat. For governing demands, we assessed a time-varying count variable that captured the number of other states that issued a stay-at-home order before the focal state. Similar to our primary measure of governing demands, the mounting issuances of stay-at-home orders in other states were likely to exacerbate job pressures and demands for action. We found our conclusions unchanged across these alternative operationalizations and produce the results in Table A5 in the Appendix. In addition, since there is some evidence that other indicators relevant to the spread of the virus may be important to informing governors’ decision making, we considered and analyzed three other spread related measures as alternative operationalizations of governing demands. Specifically, we used the number of COVID-19 positive cases, the test positivity rate, and a composite measure of COVID-19 deaths and COVID-19 positive cases we created, which we title pandemic severity. The alternative operationalizations of governing demands using COVID-19 positive cases and the pandemic severity composite measure produced consistent results. However, we find that the interaction term for Democratic governor and governing demands is non-significant when using the test positivity rate, which may be due to more limited testing at the time. The results of these additional analyses are reported in Table A6 in the Appendix.

Fourth, we considered auxiliary control variables, including governor salary and governor tenure. The findings were consistent and since they were not significant in our estimations nor did we have strong theory for their inclusion, they were excluded from the primary analyses for parsimony. However, we produce the tables from these additional analyses in Tables A7 in the Appendix.

Fifth, we considered the possibility that observations may be correlated due to date since states may experience common shocks. We followed the multi-way clustering approach espoused by Cameron, Gelbach, and Miller (2012) and described in Cameron and Miller (2015). According to Cameron and Miller (2015), we needed to “First, obtain three different cluster-robust “variance” matrices for the estimator by one-way clustering in, respectively, the first dimension, the second dimension, and by the intersection of the first and second dimensions” (p. 336). Then, we followed the method as described in equation 21 in Cameron and Miller (2015):

\[
\hat{V}_2[\hat{\beta}] = \hat{V}_3[\hat{\beta}] + \hat{V}_1[\hat{\beta}] - \hat{V}_4[\hat{\beta}]
\]

where the variance matrix from two-way clustering \(\hat{V}_2[\hat{\beta}]\) is the result of the sum of the matrices from one-way clustering by state \(\hat{V}_3[\hat{\beta}]\) and date \(\hat{V}_1[\hat{\beta}]\), then subtracting the one-way clustering matrix by the intersection of the two \(\hat{V}_4[\hat{\beta}]\) to “avoid double counting” (Cameron & Miller, 2015, p. 236). We take the square root of the diagonal of the resulting matrix to get the standard errors from which we perform standard tests of significance (i.e., p-values). We find that the results are consistent following this approach and we present the results in Table A8 in the Appendix. However, we are cautious in our interpretations of this method as we do not want to overcomplicate the primary methodology used. In particular, there is the possibility when using two-way clustering that the “resulting variance estimate ... may have negative elements on the diagonal” (Cameron et al., 2012, p. 241). We also note that the two-way clustering method is rarely (and to the best of our knowledge never) used in Weibull survival models with censoring. Moreover, in some instances and simpler specifications (e.g., fewer control variables), we did encounter negative variances in the diagonal of the resulting matrix as is the case for income inequality in Model 4 of Table A8.

Sixth, we considered the sensitivity of the results to different modeling conditions. In particular, in our regressions, we rebalance the sample by implementing inverse-probability weights to account for concerns that the results may be driven by voter preferences. However, while voter preferences provide the most influential and significant predictor of election outcomes (explaining 24.5% of whether a state has a Democratic or Republican governor with strong evidence of its validity), we acknowledge that we may not be able to account for all of the reasons why some states may have sitting governors of a political party opposite of what state voter preferences would suggest. For instance, some governors who preside over a state where the majority of voters hold opposite political party membership may have particularly strong personalities, which could influence their response to COVID-19. Although, some evidence also indicates that such opposite-partisan governors come about from a confluence of rare chance circumstances that may plausibly provide random variation in when and how these governors attain the governorship. Considering Andy Beshear (Democratic governor of the traditionally Republican state of Kentucky), for instance, an article in The New York Times suggested that Beshear’s win was an anomaly that was more of a referendum on Beshear’s predecessor by disenfranchised voters (Howard, 2019). Alternatively, for example, Charlie Baker’s win (Republican governor of Massachusetts, often noted as a Democratic stronghold) has been described as resulting from a reinvented campaign strategy after a failed gubernatorial campaign in 2010 (Quinn, 2014). Nonetheless, we provide unweighted estimates testing our hypotheses in Table A9 and find that our conclusions are unchanged.

Seventh, we considered the possibility that states’ reopening decisions could also be explained by governors’ political partisanship. Particularly, consistent with our arguments around UET and political partisanship, we anticipated that Democratic governors would be slower to take steps toward reopening and that these relationships are strengthened by governors’ governing discretion and governing demands. In brief, the findings are supportive of this and reveal that governors’ Democratic Party membership was predictive of being slower in initiating reopening action, which is reflective of the concern for social welfare and harm prevention that is a central philosophy of the Democratic Party. Moreover, we find evidence that these relationships are strengthened by governing discretion and governing demands. The sample used to examine the time to reopening was constructed and analyzed in the same way as the study’s focal sample. In the Appendix, we provide further explanation and display the results from regressions predicting reopening in Table A10.
Discussion

As an attempt to understand political leaders’ responses to the COVID-19 public health crisis, we drew from UET and conducted the current study to examine the role of U.S. governors’ political partisanship in the time they took to issue statewide stay-at-home orders as well as two potential governing contingencies. Consistent with our expectations, the results indicate Democratic governors took less time than Republican governors to issue statewide stay-at-home orders, which were advocated to mitigate the spread of COVID-19.

In addition, we found that governing discretion exacerbated the influence of governors’ political partisanship on the speed to issue stay-at-home orders. The more governing discretion, the greater the magnitude with which governors acted upon their political partisanship: Democratic governors took even less time to reach such decisions, whereas Republican governors took even more time to arrive at such decisions if they ever proclaimed such mandates at all. Moreover, governors’ governing demands played a similar moderating role, such that as governing demands increased, governors’ political partisanship had a stronger influence on the time to the issuance of stay-at-home orders. Our research provides meaningful theoretical and practical implications.

Research implications

This study has several research implications. To begin, we contribute to UET by extending it to the fields of political science and public health. Our finding that governors’ political partisanship matters to the issuance of stay-at-home orders suggests the premises of UET are applicable to executives in the public sector. As such, scholars in various fields (e.g., management, political science, education) may use UET as a theoretical framework to guide their future research on the influence of top executives in their fields. Given the large volume of UET research in the management literature (Finkelstein et al., 2009; Needy et al., 2020), we think extending UET to other fields contributes to its validity and generalizability as well as to the enrichment of research on non-business executives.

More importantly, this research contributes to the precision and refinement of UET by providing evidence regarding the moderating roles of managerial discretion and executive work demands. Employing the unique empirical context of examining governors’ mitigation responses to the COVID-19 pandemic, we identify and adopt the terms of governing discretion and governing demands, which coincide with the terms of managerial discretion and executive work demands, respectively, as detailed by UET for use in executive contexts. Consistent with what UET would predict, with high levels of governing discretion and governing demands, governors were found to rely more on their political partisanship with respect to the issuance of stay-at-home orders. Thus, to increase nuanced understanding of top executives’ influence in organizational and societal outcomes, it is important to examine the two contingencies of managerial discretion and executive work demands to reveal when top executives have more or less impact. Along these lines, this research represents one of the first attempts to empirically examine the moderating role of executive work demands and, moreover, to do so in a novel context that concerned governors given their status as their states’ chief executive officers. Our study’s primary results and additional analyses suggest executive work demands appear to be a robust contingency for the relationship of governors’ political partisanship with the time they took to issue stay-at-home orders. We encourage fellow researchers to keep expanding knowledge in this area as to how and when managerial contingencies matter to important outcomes.

Notably, at first look, it is possible that citizens in Democratic governors’ states were more receptive to statewide stay-at-home orders. In turn, Democratic governors decided to quickly issue such orders. In contrast, it is possible that citizens in Republican governors’ states were not receptive to statewide stay-at-home orders. As a result, Republican governors were reluctant to quickly issue such orders. However, we implemented an inverse-probability weighting method and other controls to account for this possibility. The robustness of our findings suggests governors’ political partisanship plays a unique role in the issuance of stay-at-home orders above and beyond citizens’ preferences.

Lastly, our research highlights the importance of research on top executives’ values more generally. As noted earlier, executives’ values have received the least amount of attention from UET scholars with executives’ experience and personality receiving much more research attention. Values, “a broad tendency to prefer certain states of affairs over others” (Hofstede, 1980, p. 19), are believed to be potent predictors of top executives’ strategic choices and in turn various organizational outcomes (Hambrick & Mason, 1984; Schwartz, 1996). The limited but increasing research on top leaders’ values across the private (e.g., Chin et al., 2013; Gupta, Nadkarni, & Mariam, 2019) and public sectors provides encouraging and promising implications for more scholarship in this area.

Implications for practice

Our findings offer timely and actionable practical implications beyond the current COVID-19 crisis (for future public health crises) for various stakeholders. First, this study makes it clear and informs governors that their political partisanship appears to matter to their approach to managing emergencies and crises. We studied governor political partisanship in the context of the issuance of stay-at-home orders in response to the COVID-19 pandemic, but the insights learned could easily extend beyond the pandemic to governors’ management of other disasters and tragedies, given that governors (and other high-level policymakers) can influence their citizens in other ways (e.g., Brauner et al., 2021). As a former Democratic governor, Parris Glendening, shared, “I don’t think governors are driven primarily by ideology...There are too many day-to-day challenges in running a state. You have to get things done” (Kousser & Phillips, 2012, p. 20), however, it is likely that governors could be subconsciously driven by their political partisanship under highly uncertain and emergent situations like the onset of the COVID-19 pandemic (Hambrick, 2007).

Extensive research on rater errors in assessing others’ job performance in the human resource management field suggests that making raters aware of the errors they may make can help raters make fewer errors and improve their rating accuracy (e.g., Pulakos, 1986; Roch, Woehr, Mishra, & Kieszcynska, 2012; Uggerslev & Sulsky, 2008). Thus, drawing from this line of research, we think it is necessary to inform governors of the likelihood that their emergency decision making might be subconsciously influenced by their political partisanship. In addition, we advise governors to reach out to people “in the other camp” to hear their concerns and preferences before making high-stakes decisions. In particular, with regard to public health crises or natural disasters, we recommend that governors reach out to local officials from both parties to get their input and listen to experts and scientists before making impactful decisions. Alternatively, it is possible that some governors might have acted along their party line because of strategic incentives (e.g., upcoming reelection). To be noted, we took several steps (e.g., using different control variables) to control for such a possibility. The results remain robust. In any event, we also recommend that governors with strategic motives make emergency decisions based on scientific evidence.

Second, the significant moderation effect of governing discretion suggests that having a state legislature that is controlled by a different party than the governor’s appears to mitigate the influence of governors’ political partisanship. This finding demonstrates the importance of the separation of power as well as checks and balances at the state level and suggests that voters may consider a split governing structure
when making voting decisions in future elections. Specifically, voters may choose to vote for a gubernatorial candidate who represents their political stance on various issues. However, to prevent the future governor from having too much power or discretion, voters may vote for representatives from a party that has a different political stance than the future governor.

Third, the significant moderation effect of governing demands indicates that under high governing demands, governors’ political partisanship tends to have a stronger influence on their strategic choices. For instance, we found that Republican governors took even longer time to issue statewide stay-at-home orders when the number of daily COVID deaths was high (i.e., when governing demands were high). In our robustness checks, the operationalization of governing demands with other indicators of the pandemic spread mostly supported this moderating effect: Republican governors took longer time to issue statewide stay-at-home orders when governing demands were high than when they were low. This is consistent with UET’s prediction that under high stress at work, governors may be more likely to take short-cuts that rely on their political partisanship, which reflects their values, to decide their course of action (Hambrick et al., 2005).

To help governors’ cope with the challenges of making high-stakes decisions, it is recommended that they turn to subject matter experts for advice in order to better enable data and science-driven decision making. In the case of making decisions related to combating COVID-19, it is recommended that governors consult with public health and other experts as well as refer to medical findings and statistical projections. Given that maximum pressure campaigns may unexpectedly cause governors to defensively stand their political ground, reporters and voters may consider dialogue and constructive suggestions while acknowledging the difficult position in which governors may find themselves.

To be noted, we acknowledge that there are myriad considerations along with pros and cons associated with the speed and duration of statewide stay-at-home orders and do not favor one way or another. Lockdowns tend to have short-term and long-term impacts on health, citizens, and the economy. It is unclear whether earlier lockdowns could lead to more harm for the economy than their counterfactual (i.e., late or no lockdowns). From a short-term perspective, swift and extended statewide lockdowns may slow the spread of COVID-19 but may also lead to negative consequences such as the deterioration of health or death of citizens with non-COVID-19 illnesses, substance abuse, mental health issues, unemployment, and business closures. On the other hand, slower and shorter duration statewide shutdowns might mitigate the aforementioned negative consequences but may result in more infections and death. In the long run, however, research on previous pandemics’ impacts on the economy suggests that substantial mortality and illness due to forgoing early interventions could lead to the loss of a productive workforce, which could, in turn, reduce gross state product (Lee & McKibbin, 2004). Moreover, a wider spread of COVID-19 due to forgoing early interventions may reduce labor supply and consumption, increase migration, deter visitors, and crash housing markets (Arnold, De Sa, Gronniger, Percy, & Somers, 2006; Fan, Jamison, & Summers, 2016).

Limitations and future research directions

This study has several limitations that suggest future research directions. First, the institutional context of this research is within the American system of federalism in which power is shared between the federal government and state governments (Gerston, 2007). Specifically, the states have the responsibility to preserve public health. States’ public health authority was preserved by the 10th Amendment to the U.S. Constitution (National Conference of State Legislatures, 2014, October 29). Within states, for public health crises like COVID-19, state constitutions, statutes, or case law confer governors the authority of issuing executive orders to help avert the spread (Perkins, 2019). With this in mind, we acknowledge that our findings might not be generalizable to other countries with different political and legal systems. Since COVID-19 has caused a global pandemic, researchers in other countries or regions of the world are encouraged to replicate our model with their appropriate gubernatorial leaders.

Second, we focused on governors’ political partisanship and regarded it as an indicator of values. Future research may examine the role of governors’ other characteristics, such as their personality traits (Oh, Wang, & Mount, 2011). For instance, governors who score high on openness to experience, one of the Big-five personality traits (Costa & McCrae, 1992), may be more open to undertaking unprecedented measures such as issuing stay-at-home orders to help avert the spread of COVID-19 in their states (Zhao, Seibert, & Lumpkin, 2010).

Last, our data were collected during the COVID-19 pandemic, a public health crisis. Thus, our findings may not be generalizable to normal circumstances. Future research is needed to examine the role of governors’ political partisanship in their decision and policy making after the pandemic to corroborate our findings. As suggested by the quote from former Democratic governor, Parris Glendenning, we suspect that governors’ political partisanship may play smaller roles in their day-to-day decision making under normal situations.

Conclusion

In conclusion, our research suggests that consistent with UET’s predictions, governors’ political partisanship appears to matter to their responses to the COVID-19 pandemic in the U.S. and that their governing discretion and governing demands seem to exacerbate the role of their political partisanship.

Compliance with ethical standards

Our research complies with ethical standards. All data used in this study were from publicly available sources.

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Declaration of Competing Interest

The authors declare that they have no known competing financial interests or personal relationships that could have appeared to influence the work reported in this paper.
Appendix A

See Tables A1–A10.

Table A1
Variables and Sources.

| Variable                              | Source                                           |
|---------------------------------------|--------------------------------------------------|
| Issuance of stay-at-home orders       | State Governors’ Offices                         |
| Governor political partisanship      | The Book of the States                           |
| Governing discretion                 | The Book of the States                           |
| Governing demands                    | The COVID Tracking Project                       |
| Population                           | U.S. Census Bureau                               |
| Urbanization                         | U.S. Census Bureau                               |
| Population density                   | U.S. Census Bureau                               |
| Airport activity                     | Federal Aviation Administration                  |
| Gross state product                  | U.S. Bureau of Economic Analysis                 |
| Income inequality                    | U.S. Census Bureau                               |
| No. of physicians                    | Kaiser Family Foundation                         |
| Hospital bed utilization             | Institute for Health Metric and Evaluation       |
| Presidential swing state             | Ballotpedia                                      |
| Facing reelection                    | Ballotpedia                                      |
| Term limits                           | Ballotpedia                                      |
| Went Republican                      | Ballotpedia                                      |
| Female                                | Ballotpedia                                      |
| Governor age                          | The Book of the States                           |

Table A2
Event History Analysis of the Issuance of Stay-at-home Orders (Alternative Observation Window Start Date from Each State’s First Positive Case).

| Variables                             | (1)      | (2)      | (3)      | (4)      |
|---------------------------------------|----------|----------|----------|----------|
| Population                           | −0.234   | 0.140    | −0.371   | −0.017   |
|                                       | (0.607)  | (0.759)  | (0.428)  | (0.972)  |
| Urbanization                         | −0.174   | −0.131   | −0.204   | −0.185   |
|                                       | (0.445)  | (0.584)  | (0.412)  | (0.451)  |
| Population density                   | 0.018    | −0.120   | 0.147    | −0.018   |
|                                       | (0.973)  | (0.821)  | (0.790)  | (0.974)  |
| Airport activity                     | 0.720    | 0.678    | 0.784    | 0.783    |
|                                       | (0.130)  | (0.168)  | (0.104)  | (0.117)  |
| GSP                                   | −0.303   | −0.467   | −0.544   | −0.695   |
|                                       | (0.376)  | (0.191)  | (0.151)  | (0.091)  |
| Income inequality                    | 0.503    | 0.629    | 0.657    | 0.785    |
|                                       | (0.135)  | (0.030)  | (0.039)  | (0.014)  |
| No. of physicians                    | 0.066    | −0.061   | 0.105    | 0.005    |
|                                       | (0.872)  | (0.883)  | (0.804)  | (0.991)  |
| Hospital bed utilization             | 0.795    | 0.544    | 0.424    | 0.242    |
|                                       | (0.136)  | (0.239)  | (0.430)  | (0.599)  |
| Presidential swing state             | −1.334   | −1.516   | −1.617   | −1.844   |
|                                       | (0.014)  | (0.006)  | (0.005)  | (0.005)  |
| Facing reelection                    | −0.602   | −0.887   | −1.395   | −1.609   |
|                                       | (0.459)  | (0.275)  | (0.170)  | (0.093)  |
| Term limits                           | 0.890    | 1.440    | 1.223    | 1.679    |
|                                       | (0.094)  | (0.035)  | (0.058)  | (0.032)  |
| Went Republican                      | −0.770   | 0.247    | −0.593   | 0.362    |
|                                       | (0.058)  | (0.583)  | (0.210)  | (0.462)  |
| Female                               | 0.070    | 0.151    | 0.060    | 0.129    |
|                                       | (0.907)  | (0.780)  | (0.917)  | (0.801)  |
| Governor age                          | −0.235   | −0.357   | −0.482   | −0.575   |
|                                       | (0.289)  | (0.107)  | (0.053)  | (0.025)  |
| Governing discretion                 | −1.309   | −3.902   | −1.577   | −3.982   |
|                                       | (0.007)  | (0.003)  | (0.008)  | (0.005)  |
| Governing demands                    | −0.334   | −0.236   | −1.072   | −0.976   |
|                                       | (0.698)  | (0.757)  | (0.329)  | (0.331)  |
| Democratic governor                  | 1.405    | −0.210   | 2.688    | 1.042    |
|                                       | (0.017)  | (0.710)  | (0.001)  | (0.163)  |
| Democratic governor × Governing discretion | 3.765 | 3.557   | (0.010)  | 2.601    |
| Democratic governor × Governing demands |        | 2.877   | 2.601    |
| Constant                              | −13.894  | −15.375  | −15.924  | −17.331  |
|                                       | (0.000)  | (0.000)  | (0.000)  | (0.000)  |
| Observations                          | 960      | 960      | 960      | 960      |

Note: The models provide weighted estimates using inverse-probability weights. The models are specified with robust standard errors clustered by state. Exact p-values in parentheses.
Table A3
Event History Analysis of the Issuance of Stay-at-home Orders (Alternative Observation Window End Date at April 22nd).

| Variables                        | (1)      | (2)      | (3)      | (4)      |
|----------------------------------|----------|----------|----------|----------|
| Population                       | −0.372   | 0.232    | −0.421   | 0.080    |
|                                  | (0.555)  | (0.704)  | (0.492)  | (0.894)  |
| Urbanization                     | 0.090    | 0.126    | 0.034    | 0.061    |
|                                  | (0.695)  | (0.609)  | (0.893)  | (0.814)  |
| Population density               | 0.166    | −0.013   | 0.363    | 0.168    |
|                                  | (0.618)  | (0.967)  | (0.319)  | (0.630)  |
| Airport activity                 | 0.226    | 0.088    | 0.251    | 0.169    |
|                                  | (0.654)  | (0.863)  | (0.644)  | (0.753)  |
| GSP                              | −0.463   | −0.587   | −0.635   | −0.728   |
|                                  | (0.181)  | (0.124)  | (0.884)  | (0.080)  |
| Income inequality                | 0.308    | 0.429    | 0.386    | 0.503    |
|                                  | (0.347)  | (0.142)  | (0.222)  | (0.105)  |
| No. of physicians                | 0.514    | 0.199    | 0.438    | 0.193    |
|                                  | (0.344)  | (0.709)  | (0.452)  | (0.737)  |
| Hospital bed utilization         | 0.756    | 0.638    | 0.473    | 0.412    |
|                                  | (0.264)  | (0.334)  | (0.495)  | (0.537)  |
| Presidential swing state         | −1.301   | −1.397   | −1.603   | −1.663   |
|                                  | (0.005)  | (0.003)  | (0.002)  | (0.002)  |
| Facing reelection                | 0.074    | −0.400   | −0.778   | −1.047   |
|                                  | (0.939)  | (0.703)  | (0.528)  | (0.396)  |
| Term limits                      | 0.953    | 1.494    | 1.246    | 1.622    |
|                                  | (0.068)  | (0.035)  | (0.033)  | (0.033)  |
| Went Republican                  | −1.268   | −0.322   | −1.069   | −0.246   |
|                                  | (0.009)  | (0.475)  | (0.058)  | (0.624)  |
| Female                           | −0.291   | −0.311   | −0.355   | −0.337   |
|                                  | (0.623)  | (0.547)  | (0.562)  | (0.534)  |
| Governor age                     | −0.268   | −0.417   | −0.604   | (0.039)  |
|                                  | (0.259)  | (0.101)  | (0.070)  | (0.009)  |
| Governing discretion             | −1.447   | −3.792   | −1.610   | −3.647   |
|                                  | (0.008)  | (0.004)  | (0.008)  | (0.007)  |
| Governing demands                | −0.250   | −0.222   | −0.924   | −0.809   |
|                                  | (0.793)  | (0.907)  | (0.907)  | (0.485)  |
| Democratic governor × 3.530      | 1.895    | 0.530    | 3.176    | 1.727    |
|                                  | (0.001)  | (0.317)  | (0.000)  | (0.034)  |
| Democratic governor              | 0.421    | 0.281    | 0.280    | 0.281    |
|                                  | (0.008)  | (0.008)  | (0.000)  | (0.000)  |
| Observations                     | 993      | 993      | 993      | 993      |

Note: The models provide weighted estimates using inverse-probability weights. The models are specified with robust standard errors clustered by state. Exact p-values in parentheses.

Table A4
Event History Analysis of the Issuance of Stay-at-home Orders (Excluding WA, NY, IL, and CA in Different Combinations).

| Variables                        | (1)      | (2)      | (3)      | (4)      | (5)      | (6)      |
|----------------------------------|----------|----------|----------|----------|----------|----------|
| Population                       | 0.176    | 0.634    | 0.083    | 0.151    | 0.442    | 0.031    |
|                                  | (0.734)  | (0.170)  | (0.880)  | (0.743)  | (0.313)  | (0.950)  |
| Urbanization                     | −0.034   | −0.027   | −0.073   | 0.057    | 0.033    | 0.014    |
|                                  | (0.893)  | (0.914)  | (0.796)  | (0.812)  | (0.894)  | (0.959)  |
| Population density               | −0.113   | −0.242   | 0.321    | −0.182   | −0.210   | 0.268    |
|                                  | (0.851)  | (0.684)  | (0.685)  | (0.756)  | (0.724)  | (0.731)  |
| Airport activity                 | 0.072    | −0.097   | 0.077    | 0.194    | 0.038    | 0.222    |
|                                  | (0.889)  | (0.845)  | (0.889)  | (0.721)  | (0.941)  | (0.703)  |
| GSP                              | −0.297   | −0.363   | −0.542   | −0.513   | −0.678   |
|                                  | (0.519)  | (0.431)  | (0.289)  | (0.320)  | (0.240)  |
| Income inequality                | 0.438    | 0.540    | 0.319    | 0.540    | 0.577    | 0.425    |
|                                  | (0.227)  | (0.094)  | (0.418)  | (0.146)  | (0.091)  | (0.295)  |
| No. of physicians                | 0.175    | 0.034    | 0.049    | 0.235    | 0.087    | 0.114    |
|                                  | (0.676)  | (0.937)  | (0.919)  | (0.558)  | (0.839)  | (0.805)  |
| Hospital bed utilization         | 1.298    | 1.230    | 0.731    | 1.200    | 1.153    | 0.580    |
|                                  | (0.063)  | (0.052)  | (0.081)  | (0.076)  | (0.753)  | (0.398)  |
| Presidential swing state         | −1.348   | −1.518   | −1.710   | −1.609   | −1.498   | −1.953   |
|                                  | (0.006)  | (0.003)  | (0.005)  | (0.023)  | (0.023)  | (0.009)  |
| Facing reelection                | −0.749   | −1.203   | −1.491   | −0.937   | −1.081   | −1.689   |
|                                  | (0.335)  | (0.132)  | (0.161)  | (0.263)  | (0.187)  | (0.130)  |
| Term limits                      | 1.073    | 1.577    | 1.425    | 1.682    | 1.681    |
|                                  | (0.042)  | (0.017)  | (0.023)  | (0.026)  | (0.029)  | (0.016)  |
| Went Republican                  | −1.121   | −0.127   | −0.887   | −1.208   | −0.215   | −0.972   |
|                                  | (0.008)  | (0.744)  | (0.100)  | (0.010)  | (0.586)  | (0.090)  |
Table A4 (continued)

| Variables | (1)     | (2)     | (3)     | (4)     | (5)     | (6)     |
|-----------|---------|---------|---------|---------|---------|---------|
| Female    | −0.446  | −0.437  | −0.511  | −0.443  | −0.409  | −0.485  |
|           | (0.386) | (0.331) | (0.350) | (0.354) | (0.363) | (0.348) |
| Governor age | −0.375  | −0.532  | −0.609  | −0.396  | −0.493  | −0.635  |
|           | (0.100) | (0.033) | (0.030) | (0.104) | (0.060) | (0.029) |
| Governing discretion | −1.275 | −3.852  | −1.304  | −1.535  | −3.663  | −1.578  |
|           | (0.044) | (0.006) | (0.049) | (0.031) | (0.006) | (0.039) |
| Governing demands | −1.036  | −0.925  | −1.151   | −0.953  | −0.902  | −1.050  |
|           | (0.341) | (0.258) | (0.302) | (0.365) | (0.372) | (0.331) |
| Democratic governor | 1.934   | 0.501   | 3.616   | 2.049   | 0.654   | 3.763   |
|           | (0.001) | (0.325) | (0.003) | (0.001) | (0.244) | (0.001) |
| Democratic governor × | 3.891   |         |         |         |         |         |
|           | (0.005) |         |         |         |         |         |
| Democratic governor | 3.111   |         |         |         |         |         |
|           | (0.050) |         |         |         |         |         |
| Observations | 968     | 968     | 968     | 948     | 948     | 948     |

Note: Models 1–3 exclude WA and NY. Models 4–6 exclude WA, NY, IL, & CA. The models provide weighted estimates using inverse-probability weights. The models are specified with robust standard errors clustered by state. Exact p-values in parentheses.

Table A5
Event History Analysis of the Issuance of Stay-at-home Orders (Alternative Measures for Governing Discretion and Governing Demands).

| Variables               | (1)     | (2)     |
|------------------------|---------|---------|
| Population             | 0.468   | 0.486   |
|                        | (0.237) | (0.280) |
| Urbanization           | 0.094   | 0.193   |
|                        | (0.679) | (0.423) |
| Population density     | −0.018  | 0.092   |
|                        | (0.977) | (0.882) |
| Airport activity       | 0.051   | −0.125  |
|                        | (0.916) | (0.793) |
| GSP                    | −0.575  | −0.410  |
|                        | (0.186) | (0.308) |
| Income inequality      | 0.480   | 0.140   |
|                        | (0.073) | (0.634) |
| No. of physicians      | −0.084  | 0.087   |
|                        | (0.850) | (0.841) |
| Hospital bed utilization | 0.732   | 0.765   |
|                        | (0.087) | (0.016) |
| Presidential swing state | −1.535  | −1.787  |
|                        | (0.008) | (0.004) |
| Facing reelection      | −0.756  | −0.094  |
|                        | (0.339) | (0.874) |
| Term limits            | 1.708   | 1.257   |
|                        | (0.020) | (0.024) |
| Went Republican        | 0.016   | −1.097  |
|                        | (0.976) | (0.015) |
| Female                 | −0.300  | −0.676  |
|                        | (0.634) | (0.269) |
| Governor age           | −0.488  | −0.446  |
|                        | (0.059) | (0.084) |
| Governing discretion   | −4.604  | −0.980  |
|                        | (0.002) | (0.046) |
| Governing demands      | −0.345  | −1.523  |
|                        | (0.649) | (0.209) |
| Democratic governor    | 0.054   | 2.503   |
|                        | (0.958) | (0.000) |
| Democratic governor ×  | 4.740   |         |
|                        | (0.012) |         |
| Democratic governor ×  | 1.633   |         |
|                        | (0.015) |         |
| Constant               | −17.808 | −17.918 |
|                        | (0.000) | (0.000) |
| Observations           | 993     | 993     |

Note: Model 1 measures governing demands with a 1 if the state was not a gubernatorial swing state and a 0 otherwise. Model 2 measures governing demands with a time-varying count variable that captured the number of states that had already issued a stay-at-home order. The models provide weighted estimates using inverse-probability weights. The models are specified with robust standard errors clustered by state. Exact p-values in parentheses.

Table A6
Event History Analysis of the Issuance of Stay-at-home Orders (Alternative Measures for Governing Demands that Captured the Severity of the Spread).

| Variables               | (1)     | (2)     |
|------------------------|---------|---------|
| Population             | 0.042   | 0.029   |
|                        | (0.918) | (0.945) |
| Urbanization           | 0.053   | 0.054   |
|                        | (0.847) | (0.821) |
| Population density     | 0.520   | 0.023   |
|                        | (0.666) | (0.963) |
| Airport activity       | 0.175   | 0.261   |
|                        | (0.727) | (0.525) |
| GSP                    | −0.422  | −0.447  |
|                        | (0.289) | (0.200) |
| Income inequality      | 0.308   | 0.337   |
|                        | (0.310) | (0.232) |
| No. of physicians      | −0.067  | 0.210   |
|                        | (0.897) | (0.565) |
| Hospital bed utilization | 0.311   | 0.482   |
|                        | (0.087) | (0.565) |
| Presidential swing state | −1.729  | −1.341  |
|                        | (0.002) | (0.013) |
| Facing reelection      | −0.024  | −0.145  |
|                        | (0.971) | (0.826) |
| Term limits            | 1.336   | 0.950   |
|                        | (0.015) | (0.074) |
| Went Republican        | −1.215  | −1.372  |
|                        | (0.009) | (0.002) |
| Female                 | −0.458  | −0.392  |
|                        | (0.412) | (0.432) |
| Governor age           | −0.394  | −0.243  |
|                        | (0.075) | (0.278) |
| Governing discretion   | −1.497  | −1.394  |
|                        | (0.011) | (0.006) |
| Governing demands      | −1.183  | −0.746  |
|                        | (0.198) | (0.681) |
| Democratic governor    | 2.192   | 1.568   |
|                        | (0.000) | (0.000) |
| Democratic governor ×  | 2.230   | 3.281   |
|                        | (0.019) | (0.119) |
| Observations           | 993     | 993     |

Note: Model 1 measures governing demands using positive cases, Model 2 measures governing demands using the test positivity rate, and Model 3 measures governing demands using the pandemic severity composite measure. The models provide weighted estimates using inverse-probability weights. The models are specified with robust standard errors clustered by state. Exact p-values in parentheses.
The models provide weighted estimates using inverse-probability weights. The values in parentheses.

| Variables | (1) | (2) | (3) | (4) |
|-----------|-----|-----|-----|-----|
| Population | 0.034 | 0.394 | 0.107 | 0.010 |
| Urbanization | 0.024 | 0.082 | 0.008 | 0.002 |
| Population density | 0.099 | 0.002 | 0.273 | 0.081 |
| Airpot activity | 0.159 | 0.069 | 0.210 | 0.163 |
| GSP | -0.388 | -0.575 | -0.607 | 0.072 |
| Income inequality | 0.338 | 0.416 | 0.403 | 0.003 |
| No. of physicians | 0.115 | 0.005 | 0.138 | 0.166 |
| Hospital bed utilization | 1.026 | 0.833 | 0.679 | 0.166 |
| Presidential swing state | -1.381 | -1.559 | -1.724 | 0.166 |
| Term limits | 1.139 | 1.720 | 1.462 | 0.166 |
| Went Republican | -1.115 | -1.124 | -0.893 | 0.166 |
| Female | -0.542 | -0.588 | -0.613 | 0.215 |
| Governor age | -0.314 | -0.445 | -0.569 | 0.215 |
| Governing discretion | -1.366 | -3.972 | -1.550 | 0.215 |
| Governing demands | -0.601 | -0.478 | -1.315 | 0.215 |
| Democratic governor | 1.965 | 0.474 | 3.322 | 0.215 |
| Democratic governor × Presidential swing state | 3.822 | (0.001) | 0.000 | 0.000 |
| Democratic governor × Governing discretion | 2.815 | (0.004) | 0.000 | 0.000 |
| Constant | -15.347 | -16.750 | -17.450 | -18.205 |
| Observations | 993 | 993 | 993 | 993 |

Note: Models 1 and 2 include governor salary and governor tenure as controls. The models provide weighted estimates using inverse-probability weights. The models are specified with robust standard errors clustered by state. Exact p-values in parentheses.

| Variables | (1) | (2) | (3) | (4) |
|-----------|-----|-----|-----|-----|
| Population | 0.187 | 0.187 | 0.187 | 0.187 |
| Urbanization | 0.013 | 0.013 | 0.013 | 0.013 |
| Population density | 0.118 | 0.118 | 0.118 | 0.118 |
| Airpot activity | 0.180 | 0.180 | 0.180 | 0.180 |
| GSP | -0.285 | -0.338 | -0.402 | -0.440 |

Note: The models provide weighted estimates using inverse-probability weights. Standard errors in parentheses. Exact p-values in italics. For the variable income inequality in Model 4, we encountered a negative variance in the diagonal of the resulting matrix.

| Variables | (1) | (2) | (3) | (4) |
|-----------|-----|-----|-----|-----|
| Population | 0.441 | 0.520 | 0.339 | 0.416 |
| Urbanization | -0.030 | -0.030 | -0.030 | -0.030 |
| Population density | 0.201 | 0.187 | 0.336 | 0.298 |
| Airpot activity | 0.004 | -0.035 | 0.011 | 0.013 |
| GSP | -0.285 | -0.338 | -0.402 | -0.440 |

Note: The models provide weighted estimates using inverse-probability weights. Standard errors in parentheses. Exact p-values in italics. For the variable income inequality in Model 4, we encountered a negative variance in the diagonal of the resulting matrix.
Reopening dataset and analysis

In the reopening dataset and analysis, we observed all fifty U.S. governors and their respective states from April 15th, 2020 until a state exited the dataset upon initiating their reopening. The date of April 15th as the start date was selected to maintain consistency with state exited the dataset upon initiating their reopening. The date of governors and their respective states from April 15th, 2020 until a state had entered the phases. For comparability across states and to facilitate analysis, States set their own criteria for what was required to progress through each of the phases. The guidance and timelines each of the states provided to their citizens regarding reopenings are both symbolically and substantively meaningful. In particular, the move for states to relax restrictions in some way and release a reopening plan represented a move at the time by the governors that some safety measures could be lifted. Consistent with this, we included all of the states and follow the reopening timelines data provided by The New York Times. The analysis includes the same set of independent and control variables specified for the “closing” dataset. In other iterations of testing this sample, we included additional dummy variables with a 1 indicating whether the state had issued a stay-at-home order at all, whether the state issued the order relatively early, or whether the state issued the order relatively late and 0 otherwise. We included these variables in different combinations and the results with these controls added were consistent. We also conducted analyses while excluding the 8 states that did not issue stay-at-home orders and find similar results. However, we retain these states in the analyses presented. Particularly, it appears meaningful that the governors of all 8 of these states hold Republican Party membership (i.e., 8 out of 26 Republican governors or 31% of the observations in one of the treatment groups). Along on a value of 1 and the state exits the dataset. All states, even if they had not issued a stay-at-home order, initiated a reopening that relaxed restrictions they had in some way and detailed protocols for moving forward in reopening. The guidance and timelines each of the states provided to their citizens regarding reopenings are both symbolically and substantively meaningful. In particular, the move for states to relax restrictions in some way and release a reopening plan represented a move at the time by the governors that some safety measures could be lifted. Consistent with this, we included all of the states and follow the reopening timelines data provided by The New York Times. The analysis includes the same set of independent and control variables specified for the “closing” dataset. In other iterations of testing this sample, we included additional dummy variables with a 1 indicating whether the state had issued a stay-at-home order at all, whether the state issued the order relatively early, or whether the state issued the order relatively late and 0 otherwise. We included these variables in different combinations and the results with these controls added were consistent. We also conducted analyses while excluding the 8 states that did not issue stay-at-home orders and find similar results. However, we retain these states in the analyses presented. Particularly, it appears meaningful that the governors of all 8 of these states hold Republican Party membership (i.e., 8 out of 26 Republican governors or 31% of the observations in one of the treatment groups). Along
these lines, excluding these observations would bias results and as such, we believe it prudent to include them.

The findings suggest a relationship between governor's political partisanship and “reopening” decisions. Particularly, we find that Democratic governors were slower to take steps toward reopening and that these relationships are strengthened by governing discretion and governing demands, which is reflective of the concern for social welfare and preventing harm that is a central philosophy of the Democratic Party (see Table A10).

References

Allyn, B. (2020, March 29). To fight virus, Trump extends social distancing guidelines for 30 more days. NPR. Retrieved from https://www.npr.org/2020/03/29/821976925/coronavirus-cases-soar-across-the-u-s-and-officials-say-worse-is-yet-to-come.

Annas, W., Bendahan, S., Jacquart, P., & Lalive, R. (2010). On making causal claims: A review and recommendations. *The Leadership Quarterly*, 21(6), 1086–1120.

Arnold, R., De Sa, J., Gronniger, T., Percy, A., & Somers, J. (2006). Partisanship and welfare and preventing harm that is a central philosophy of the Democratic Party. *Business and Politics*, 8(2), 161–181.

Barabak, M. Z. (2020, April 25). Who knows best? Mayors collide with governors over coronavirus lockdown. Los Angeles Times. Retrieved from https://www.latimes.com/politics/story/2020-04-25/tension-between-governors-mayors-over-coronavirus-lockdown.

Barreilleux, C., & Rainey, C. (2014). The politics of need: Examining governors’ decisions to oppose the “ObamaCare” Medicaid expansion. *State Politics & Policy Quarterly*, 14(4), 437–460.

Baum, B. (2010). Red state, blue state, flux state: Media self-selection and partisan gaps in swine flu vaccinations. *Journal of Health Politics, Policy, and Law*, 36(6), 1021–1059.

Beyte, T. L., & Muchmore, B. R. (1983). Governors in the American federal system. In Th. ad, Beyle & Lynn R. Muchmore (Eds.), Being governor: The view from the office. Durham, NC: Duke University Press.

Birx, D. (2020, March 30). Members of the coronavirus task force hold a press briefing [Video]. YouTube. Retrieved from https://www.youtube.com/watch?v=white house+briefing+382290.

Box-Steffensmeier, J. M., & Jones, B. S. (2004). Event history modeling: A guide to cluster-robust inference. *Cambridge University Press*.

Bredemeier, K. (2020, April 14). Trump downplayed coronavirus throughout February. Voice of America. Retrieved from: https://www.voanews.com/science-health/coronavirus-outbreak/trump-downplayed-coronavirus-threat-throughout-february.

Cameron, A. C., Gelbach, J. B., & Miller, D. L. (2012). Robust inference with multiway clustering. *Journal of Business & Economic Statistics*, 30(2), 238–249.

Cameron, A. C., & Miller, D. L. (2015). A practitioner’s guide to cluster-robust inference. *Journal of Human Resources*, 50(2), 317–372.

Chen, M. K., Hambrick, D. C., & Treviño, L. K. (2013). Political ideologies of CEOs: The influence of executives’ values on corporate social responsibility. *Administrative Science Quarterly*, 58(2), 197–232.

Costa, P. T., Jr., & McCrae, R. R. (1992). *The NEO Five Factor Inventory (NEO-FFI) professional manual*. Odessa, FL: PAR.

Culpepper, J. A., & Starr, D. (1973). Notes on the measurement of inequity. *Journal of Economic Theory*, 6, 180–187.

Devarakonda, V. S., & Reuer, J. J. (2018). Knowledge sharing and safeguarding in R&D collaborations: The role of steering committees in biotechnology alliances. *Strategic Management Journal*, 39(7), 1912–1934.

Fan, V., Jamison, D., & Summers, L. (2016). The inclusive cost of pandemic infection risk. *NBER Working paper*, no 22137.

Fergusson, M. R. (2003). Chief executive success in the legislative arena. *State Politics and Policy Quarterly*, 2(1), 158–182.

Finkelstein, S., Hambrick, D. C., & Cannella, A. A., Jr. (2009). Strategic leadership: Theory and research on executives, top Management teams, and boards. New York: Oxford University Press.

Francis, P. L., Green, J. C., Herrnson, P. S., Powell, L. W., & Wilcox, G. (2005). Loximine liberals and corporate conservatives: The financial constituencies of the democratic and republican parties. *Social Science Quarterly*, 86(4), 761–778.

Gershman, J. (2020, April 28). A guide to state coronavirus reopenings and lockdowns. The Wall Street Journal. Retrieved from https://www.wsj.com/articles/s-a-state-by-state-guide-to-coronavirus-lockdowns-11584749351.

Gerston, L. N. (2007). *American federalism: A concise introduction*. Armonk, New York: M. E. Sharpe.

Goelzhauser, G., & Konsky, D. M. (2019). The state of American federalism 2018–2019: Litigation, policy, and participation, and the administrative presidency. *Publius*, 49(3), 379–406.

Goelzhauser, G., & Rose, S. (2017). The state of American federalism 2016–2017: Policy reversals and partisan perspectives on intergovernmental relations. *Publius*, 47(3), 285–313.

Grynbaum, M. M. (2020, March 27). Trish Regan, Fox Business host who dismissed virus concerns, departs. The New York Times. https://nyti.ms/3hpxrZp.
