Executive-Legislative Policymaking Under Crisis*

Nathaniel A. Birkhead[†] Jeffrey J. Harden[‡] Jason H. Windett[§]

November 8, 2023

Abstract

Does conventional wisdom explain policymaking during a domestic crisis on a novel issue? We consider executive-legislative interactions in the American states during the COVID-19 pandemic to address key problems in the study of unilateral executive action. Empirical analyses often examine wartime presidents or localized natural disasters and confront difficulties in identifying the status quo policy. COVID-19 created a large-scale domestic crisis and a status quo policy that was known with relative certainty. We develop a canonical theoretical account of executive-legislative interaction and test it using COVID-19 executive orders issued and legislation introduced and passed during 2020–2022. Results demonstrate that governors' proposals matched expectations, but legislatures' responses did not. Instead, partisanship and ideological factors, which crystallized as the pandemic evolved, largely determined legislative policy choices. We conclude that standard theory does not adequately account for preference dynamics that might emerge due to delays between the executive's proposal and the legislature's response.

Keywords: Executive-Legislative interaction; Governors; State legislatures; COVID-19

^{*}This research was supported by the National Science Foundation (Award C-Accel #1937033). We thank Jon Rogowski and Sharece Thrower for helpful comments and Grayson Martin, MaKenna Eilert, and Alexa Scheer for research assistance.

[†]Associate Professor and University Distinguished Teaching Scholar, Department of Political Science, Kansas State University, 101D Calvin Hall, 802 Mid-Campus Drive, Manhattan, KS 66506, birkhead@ksu.edu.

[‡]Andrew J. McKenna Family Associate Professor, Department of Political Science, University of Notre Dame, 2055 Jenkins Nanovic Halls, Notre Dame, IN 46556, jharden2@nd.edu.

[§]Associate Professor, Department of Political Science, University of North Carolina at Charlotte, 450 Fretwell Hall, Charlotte, NC 28233, jwindett@uncc.edu.

As the COVID-19 pandemic spread in early 2020, governments around the world faced the challenge of rapidly mobilizing resources and policies to mitigate its effects. In the United States, governors and state agencies were best positioned to take the first steps in response. Indeed, most governors enacted COVID-19 policies within days of each other.¹ But they were certainly not the only actors involved in pandemic governance. During the next two years, legislators in every state except Iowa introduced at least one "pandemic bill" designed to alter COVID-19 policy, establish new legislative oversight on the executive branch, and/or limit the governor's emergency powers. This widespread antagonistic reaction motivates a key question: can existing accounts of executive-legislative interaction explain policymaking during a domestic crisis on a novel issue?

In this short paper, we draw from seminal studies to develop a canonical theory of policymaking during a crisis. We then test this theory using data on governors' COVID-19 executive orders (EO) and the ensuing legislative responses. The literature indicates that power concentrates in the executive during crises, but this work largely focuses on presidents and national institutions during wars or localized natural disasters. It also confronts the challenge of empirically accounting for the status quo. Examining the pandemic in the states allows insight into a domestic crisis that exhibited significant variation in reaction throughout the country. Furthermore, because no COVID-19 mitigation policies or previous rounds of negotiation existed prior to the pandemic, our empirical tests benefit from the precision of a known status quo *policy*. States' *reversion points* for failure to pass new policy likely differed based on pre-pandemic factors. But conditional on these differences, the starting point for policymaking was relatively certain in March 2020.

We find that governors' actions to address COVID-19 were consistent with a conventional "preemption" theory, in which the executive's proposal reflects sincere preferences and rational anticipation of the legislative response. However, the legislatures' subsequent decisions diverged from our expectations. They did not systematically withhold action against gubernatorial policies that could not be beaten or moderate extreme ones that could. We conclude that the presence of a temporal delay after the first mover's action allows for context to change, potentially altering

¹See the appendix for a complete timeline of governors' actions in spring 2020.

the second mover's preferences. These dynamics have meaningful consequences for interbranch policymaking and highlight a limitation of canonical theories of executive-legislative interaction.

1 Executive-Legislative Interaction

Research demonstrates that executives and legislators are rational actors who make strategic choices, often anticipating the other's actions (e.g., Howell 2003; Bolton and Thrower 2016).² For example, American presidents issue more EOs when their party controls Congress, but fewer as the majority party's control grows or when the legislature has statutory authority to respond via regulatory review (Howell 2003; Barber et al. 2019). However, executives also work with legislators, including consulting with party leaders as they develop EOs (Chiou and Rothenberg 2016). Indeed, presidents are generally only successful when moving policy in the direction of the majority median, and legislators have an incentive to accept executive action to avoid the risk of sanctions from organized interests or voters (Chiou and Rothenberg 2016; Foster 2022).

However, there are still circumstances in which executives act unilaterally to achieve policy goals against the legislature's interests.³ At the very least, they are highly attuned to the locations of the veto pivots (Deering and Maltzman 1999; Barber et al. 2019). Executives also tend to accrue power during crises, such as war, even on domestic policy (Howell and Rogowski 2012; Howell et al. 2013; Young 2013). This deference may come from increased support for decisive, unified action—the well-known "rally around the flag" effect (e.g., Hetherington and Nelson 2003). Nevertheless, policymaking during crises remains a conceptual "black box" (Lowande and Rogowski 2021). We illuminate the process here by developing a conventional theory of interbranch policymaking and leveraging empirical advantages from a significant policy problem to test it.

Specifically, studying COVID-19 policymaking offers two distinct advantages. First, instead of focusing on the limited variation provided by national institutions during wars or localized disasters (e.g., Howell and Rogowski 2012; Young 2013), we examine subnational governments' heteroge-

²Executives are also likely to engage in pandering or act according to electoral concerns (Canes-Wrone et al. 2001; Kang 2020).

³Executives often incorporate the public's priorities in their unilateral actions(Rogowski 2023).

neous responses to a novel, domestic, and widespread emergency. Second, unlike previous research (e.g., Howell 2003; Richman 2011; Lowande 2021), the status quo policy was known with relative certainty in this case; there were no COVID-19-specific restrictions in place prior to the pandemic. Thus, conditional on pre-pandemic health disparities across states —-which encoded the ex ante *outcomes* associated with failure to pass policy (Callander and McCarty 2023)—governors' and legislatures' policy choices reflected only their reactions to the immediate problem and each other, not previous policy history.

2 A Preemption Theory

We utilize a unidimensional spatial proximity model based on Howell (2003) to study the strictness of government intervention to mitigate the pandemic. The model includes a status quo policy (q), governor's ideal point (g), legislative median (m), veto-override pivot (v), and filibuster pivot (f).⁴ We adopt the standard assumption of symmetric, single-peaked preferences.⁵ As discussed above, prior to the governor's EOs, q is at the rightmost extreme—no restrictions—because no COVID-19-specific government intervention existed before the onset of the pandemic. Lastly, we assume that Republican (Democratic) governors' ideal points fall to the right (left) of the "gridlock interval" space between the pivots. See the appendix for empirical support for this assumption and a discussion of how the theory would change if we relaxed it.

2.1 The First Stage: Gubernatorial Action

Figure 1 illustrates scenarios for Republican (panel a) and Democratic (panel b) governors with the points listed above and the gridlock intervals as shaded regions. Moving from left to right indicates *decreasing* restrictiveness. If the Republican governor does nothing, they can expect the legislature to respond by passing policy at m. This outcome would reduce their utility because they prefer q to m. As such, the governor has an incentive to move policy to v. Doing so forecloses the

⁴Our predictions are unchanged if m = f, as is the case in several states (see the appendix).

⁵The relative merit of over-restrictive or under-restrictive COVID-19 policy—which might motivate asymmetric preferences—was a discussion point during the pandemic. We assume symmetry for simplicity and to align our theory with the model we seek to test (Howell 2003).

opportunity for the legislature to pass more restrictive policies.⁶ In other words, the Republican governor strategically preempts the legislature by moving policy leftward by a small margin to prevent further utility loss from the legislature's anticipated action.





For Democratic governors, taking no action would also allow the legislature to move policy to m, which they prefer over q. However, crisis justifies urgency for an executive who can make policy unilaterally and favors even more intervention than m. Rather than following the "presidential forfeiture" path, they are likely to proactively address the public threat by moving policy to v. Locating at the leftmost point of the gridlock interval allows them to position as close to their ideal point as possible without inducing a legislative response back to m.

In March 2020, all governors faced urgency and a public mandate to act on COVID-19 (Lowande and Rogowski 2021). Our preemption theory posits that their EOs reflected their own preferences as well as strategic anticipation of legislative action. We identify governors' preferences from their partisanship in Figure 1, but preferences could also come from governors' general left-right ideological positions. This first stage of our theory yields two observable implications to test.

⁶While *m* and *f* would prefer to move policy farther left, the governor could veto these alternatives and *v* would not support an override.

- H1 (a) Democratic governors' COVID-19 executive orders moved policy farther from the status quo of no intervention than did Republican governors' executive orders. (b) Governors' COVID-19 executive order strictness was negatively associated with their general ideological conservatism.
- H2 Governors' COVID-19 executive order strictness was negatively associated with the general ideological conservatism of the legislative median.

2.2 The Second Stage: The Legislative Response

After the governor's decision, the legislature could take no action or pass a statute that alters the governor's EOs. If the legislature were to change a Republican governor's policy, it would be because they did not preempt the legislature *enough*. They would have moved the policy to the left, but not far enough to prevent m from buying off v with a proposal within the gridlock interval. Such an error might occur due to the substantial uncertainty associated with attempting to quickly solve a novel and emergent problem. Consequently, the likelihood of the legislature altering the governor's actions would be highest for EOs on the far right, near q, and decrease as the governor's alternative moved left. Put differently, the stricter the Republican governor was willing to move policy, the more likely the comparatively moderate legislature would let it stand.

The optimal location for a Democratic governor to move policy was v, which falls at the edge of the gridlock interval and thus cannot be overturned. If the legislature acted in this case, it would again stem from error on the governor's part in locating the strategically best position. They would have mistakenly moved policy *left* of v, which is a plausible possibility given the substantial urgency and uncertainty that policymakers faced during the pandemic. This choice would invite legislative revision, rolling it back toward m. In other words, the likelihood of the legislature changing policy *increased* in the Democrat's EO strictness.

Collectively, this logic identifies the legislature as a moderating influence; it corrects the governor's EOs if they fall outside the gridlock interval. The likelihood of the legislature moving policy increases the further away from m the governor set policy in the first stage. Under our assumption that *g* is outside the gridlock interval, Republican governors' "errors" missed the interval to the right while Democrats missed too far left. Thus, we posit divergent relationships between EO strictness and pandemic bill passage by gubernatorial party. However, we also expect that legislative party control is a crucial moderating factor. Lawmakers in the majority likely exhibited greater reluctance to antagonize a copartisan governor versus one from the other party.

H3 (a) The likelihood of state legislatures successfully passing pandemic bills in response to Republican (Democratic) governors' policy proposals during COVID-19 decreased (increased) in executive order strictness. (b) These associations were stronger in magnitude under divided compared to unified government.

3 An Empirical Test

We test these hypotheses with novel data on governors' EOs and state legislatures' responses during 2020–2022. We summarize these data briefly here; see the appendix for complete details. First, our outcome variables measure the executive and legislative branches' COVID-19 policy actions. Governors issued numerous EOs in 2020 (e.g., mask mandates and business closures), which we reduce to a latent dimension measuring the strictness of their responses. This indicator comes from a structural equation model (SEM) of 15 policy choices made via EO (see the appendix).

Pandemic bills from state legislatures sought to (1) alter COVID-19 policy, (2) establish new oversight, and/or (3) limit the governor's emergency powers.⁷ Using information from the National Conference of State Legislatures (NCSL), we recorded a count of these bills introduced in 2020–2022, the outcome of each bill, and the proportion of introduced bills that received a vote and ultimately passed. The appendix provides further details, including examples of this legislation.

In addition to our main independent variables (discussed below), we also utilize several covariates to address the pandemic and political context faced by state governments. These variables

⁷Governors' EOs were quite specific with respect to COVID-19 mitigation, but legislative action was broader. Thus, we are constrained from analyzing specific types of policies because legislatures tended to respond to sets of EOs rather than individual EOs with individual bills. include the pre-pandemic percent of individuals at risk for serious illness, divided government, legislative term limits, legislative professionalism, gubernatorial approval or election years, and others (see the appendix for details).

3.1 Modeling and Results

We formally test H1 and H2 by regressing EO strictness on two measures of governors' preferences (party and ideology), the legislature's median ideal point in 2020 (Shor and McCarty 2011), and our covariates using ordinary least squares (OLS). Table 1 presents model specifications with gubernatorial preferences measured by (1) an indicator for Democratic governors and (2) governors' conservatism as estimated by Bonica's (2023) CFscores and scaled into the Shor and McCarty (2011) space (see the appendix for details). The data represent a cross-section of the states in 2020 and the variables are standardized to ease interpretation. The sample size varies due to missingness in governors' CFscores.

Models (1), (3), and (4) show that governors' preferences were strongly associated with EO strictness as H1a (party) and H1b (ideology) predict. When both preference measures are included (model 5), the coefficient on Democratic governors drops substantially in magnitude, the CFscores estimate remains large, and the standard errors increase.⁸ But the two estimates remain in their expected directions and are jointly statistically significant (p = 0.01). Moving to H2, we find that strategic considerations were also relevant. Controlling for governors' partisanship, ideology, or both, a standard deviation shift in legislative conservatism corresponded with a 40–50% standard deviation decrease in EO strictness (p < 0.05). Thus, conditional on their own preferences, prepandemic health risks in their states, and other factors, governors anticipated legislative action when setting pandemic policy. In short, we find support for H1 and H2. The first stage of COVID-19 policymaking unfolded as our preemption theory predicts.

Next, we examine the legislative response (H3). Here, the unit of analysis is state-year and we

⁸This pattern reflects considerable multicollinearity in a small sample. The bivariate correlation between the two variables is -0.90.

	(1)	(2)	(3)	(4)	(5)
Democratic governor	1.317*		0.565*		0.088
6	(0.214)		(0.152)		(0.197)
Governor CFscore			. ,	-1.140^{*}	-0.951
				(0.409)	(0.628)
Legislative median		-0.767^{*}	-0.520^{*}	-0.400^{*}	-0.404^{*}
		(0.096)	(0.076)	(0.075)	(0.076)
Pre-pandemic risk			0.165*	0.082	0.084
			(0.063)	(0.064)	(0.067)
Divided government			0.077	0.239	0.233
			(0.142)	(0.133)	(0.132)
Legislative term limits			-0.345^{*}	-0.200	-0.211
			(0.140)	(0.130)	(0.141)
Professionalism (1d)			0.399*	0.439*	0.440^{*}
			(0.061)	(0.049)	(0.048)
Professionalism (2d)			0.035	0.061	0.060
			(0.053)	(0.053)	(0.052)
Gubernatorial approval (2020, q1)			0.024	-0.068	-0.062
			(0.074)	(0.071)	(0.071)
Intercept	-0.632^{*}	0.000	-0.188	-0.046	-0.077
	(0.141)	(0.092)	(0.108)	(0.096)	(0.115)
N	50	50	50	40	40
Adjusted R ²	0.430	0.580	0.804	0.829	0.824

Table 1: Governor Preferences, Legislative Conservatism, and Executive Order Strictness

Note: Cell entries report standardized regression coefficients and robust standard errors (in parentheses). The outcome variable is EO strictness. * p < 0.05.

split the data into subsets for governors from each party.⁹ The independent variables of interest are EO strictness and its interaction with an indicator for divided government. We consider two outcome variables: (1) an indicator for at least one pandemic bill of any type passed, and (2) an indicator for at least one bill passed that specifically limited the governor's emergency powers. This latter category represents the strongest response, in which the legislature actively tried to overcome the separation of powers and wrest control of the pandemic from the executive branch.

We model these relationships with OLS regression, controlling for the previous and new co-

⁹We use party as our measure of gubernatorial preferences going forward due to its high correlation with CFscores (see note 8) and lack of missing data.

	Democratio	c governors	Republican governors		
	(1)	(2)	(3)	(4)	
EO strictness	-0.140	-0.012	0.126	0.121	
	(0.089)	(0.067)	(0.082)	(0.062)	
EO strictness \times	0.088	0.005	-0.219	-0.181	
Divided government	(0.122)	(0.114)	(0.199)	(0.138)	
Divided government	0.803*	0.398*	0.549	0.278	
	(0.280)	(0.177)	(0.528)	(0.375)	
Bill(s) introduced	0.178	0.049	0.364*	0.092	
	(0.100)	(0.064)	(0.095)	(0.051)	
Legislative median	-0.279	-0.061	0.139	0.065	
	(0.147)	(0.088)	(0.183)	(0.136)	
EO inside gridlock interval	-0.391^{*}	-0.299^{*}	-0.080	-0.024	
	(0.111)	(0.102)	(0.156)	(0.140)	
Legislative term limits	-0.129	-0.106	0.166	0.097	
	(0.118)	(0.103)	(0.111)	(0.084)	
Professionalism (1d)	0.046	0.045	-0.052	-0.036	
	(0.060)	(0.053)	(0.058)	(0.048)	
Professionalism (2d)	-0.017	-0.032	0.076	0.039	
	(0.053)	(0.050)	(0.052)	(0.038)	
Pre-pandemic risk	0.031	0.058^{*}	-0.106^{*}	-0.061	
	(0.052)	(0.029)	(0.050)	(0.043)	
Gubernatorial election year	-0.066	-0.018	0.009	-0.033	
	(0.080)	(0.053)	(0.099)	(0.043)	
Year Fixed Effects	1	1	1	1	
Ν	72	72	78	78	
Adjusted R ²	0.216	0.231	0.184	0.183	

Table 2: Executive Order Strictness, Governor Partisanship, and the Passage of Pandemic Bills

Note: Cell entries report standardized linear regression coefficients and robust standard errors (in parentheses). The outcome variables are indicators for at least one pandemic bill passed (models 1 and 3) and at least one pandemic bill targeting governors' emergency powers passed (models 2 and 4). * p < 0.05.

variates and year-fixed effects. We utilize all state-years and include as a covariate an indicator for whether any pandemic bills were introduced in a state-year (see the appendix for additional specifications and robustness checks). We also include indicators for governors' policies that were inside the gridlock interval (defined as falling between the lower and upper extremes of the estimated pivots' 95% confidence intervals) and gubernatorial election years. Table 2 presents the results.

Our theory predicts positive coefficients on EO strictness (H3a) and its interaction with divided

government (H3b) in the Democratic sample and negative coefficients on both of those variables among Republican governors. For Democratic governors, the coefficients on EO strictness are negative, the interaction estimates are positive, and none are statistically or substantively significant. Moving to Republican governors, the coefficients on EO strictness are again the opposite sign from our expectations. The interaction estimates are negative (as expected), but not statistically significant. In short, we do not find support for H3.

Instead, the central finding in Table 2 comes from the estimates on divided government. An average strictness set of EOs from a Democratic governor was 40–80 percentage points more likely to receive a response from a Republican legislature than from a Democratic one (p < 0.05). These estimates increased slightly in EO strictness. Democratic legislatures were more likely to respond against Republican governors compared to Republican legislatures, but that likelihood *decreased* in EO strictness and the estimates are not significant. Finally, we show in the appendix that divided government also played an agenda-setting role. Legislative leaders were more likely to allow deliberations on pandemic bills if the executive branch was controlled by the opposition.

Given the failure of our theory in the second stage, what drove legislators' behavior during the pandemic? We next consider the factors that explain legislatures' choices in the COVID-19 policy space. Table 3 reports regressions of the level of legislative strictness (model 1) and the change in strictness from the governor (model 2). Positive values on these outcomes indicate stricter legislative policy in absolute terms and relative to governors' EOs, respectively.

The results underscore the importance of legislative preferences, which crystallized over time. A standard deviation increase in legislative conservatism corresponded with 39% (level) and 54% (change from governor) standard deviation decreases in legislative strictness (p < 0.05). Divided government and EO strictness itself were also relevant. But Table 3 clearly reflects the growing "backlash" to COVID-19 restrictions that developed as the pandemic wore on. State legislatures with relatively conservative medians confronted the first-mover stickiness of the governor's proposal, but strongly reverted back toward the status quo policy of no restrictions when it did overcome institutional obstacles.

	(1) Strictness level	(2) Change from EO strictness
Legislative median	-0.391*	-0.535^{*}
C	(0.120)	(0.164)
Divided government	-0.372*	-0.509*
-	(0.156)	(0.213)
EO strictness	0.441*	-0.521^{*}
	(0.119)	(0.163)
Pre-pandemic risk	-0.024	-0.032
-	(0.053)	(0.072)
Democratic governor	0.039	0.053
2	(0.167)	(0.229)
EO inside gridlock interval	0.210	0.287
-	(0.164)	(0.225)
Legislative term limits	-0.023	-0.031
	(0.118)	(0.161)
Professionalism (1d)	-0.081	-0.110
	(0.114)	(0.156)
Professionalism (2d)	0.109	0.149
	(0.099)	(0.136)
Gubernatorial election year	-0.014	-0.018
	(0.126)	(0.172)
Year Fixed Effects	1	\checkmark
Ν	150	150
Adjusted R ²	0.593	0.238

Table 3: The Determinants of State Legislatures' COVID-19 Strictness

Note: Cell entries report standardized linear regression coefficients and standard errors (in parentheses). The outcome variables are level of legislative strictness (model 1) and change in strictness from the governor's proposal (model 2). * p < 0.05.

4 Conclusions

This paper demonstrates that governors in office during COVID-19 largely operated as expected under the logic of canonical explanations of executive-legislative interactions. However, lawmakers' behavior in response is not well explained by our preemption theory. Previous empirical studies support the perspective we develop—that these actors sincerely pursue optimal strategies in policymaking (e.g., Kousser and Phillips 2012; Boehmke et al. 2015). However, previous work does not confront a key feature of our empirical setting: a meaningful delay between the executive's proposal and the legislative response. Governors' EOs were implemented in spring 2020, but the legislative responses came later that year or during the subsequent years. By then, the context of the crisis had changed: public opinion had polarized, vaccines and therapies were developed, health outcomes were observed, and elections came and went. Legislators' goals likely changed in this time, leading to new priorities that they wanted to "show off" to voters (Judd 2017).

Indeed, because of this temporal lag in legislative response, COVID-19 represents a particularly advantageous case for advancing theories of interbranch politics. Canonical models implicitly assume that the overarching goal of solving a societal problem with policy is shared by both sides of the negotiation and remains constant during the bargaining process. In reality, the context of the crisis may change over time, leading policymakers to alter their objectives. Incorporating this potential for drift in actors' goals is important for the generalizability of theory and evidence in the study of executive-legislative interactions. Consolidation of authority or even honest bargaining by both sides are not inevitable in inter-branch policymaking. Instead, the dynamics of a crisis can yield a situation in which the two competitors are on the same field, but playing different games.

References

- Barber, Michael, Alexander Bolton, and Sharece Thrower. 2019. "Legislative Constraints on Executive Unilateralism in Separation of Powers Systems." *Legislative Studies Quarterly* 44(3): 515–548.
- Boehmke, Frederick J., Tracy L. Osborn, and Emily U. Schilling. 2015. "Pivotal Politics and Initiative Use in the American States." *Political Research Quarterly* 68(4): 665–677.
- Bolton, Alexander, and Sharece Thrower. 2016. "Legislative Capacity and Executive Unilateralism." *American Journal of Political Science* 60(3): 649–663.

Bonica, Adam. 2023. "Database on Ideology, Money in Politics, and Elections: Version 3.0.".

- Callander, Steven, and Nolan McCarty. 2023. "Agenda Control under Policy Uncertainty." Forthcoming, *American Journal of Political Science*. https://doi.org/10.1111/ajps.12781.
- Canes-Wrone, Brandice, Michael C. Herron, and Kenneth W. Shotts. 2001. "Leadership and Pandering: A Theory of Executive Policymaking." *American Journal of Political Science* 45(3): 532– 550.
- Chiou, Fang-Yi, and Lawrence S. Rothenberg. 2016. "Presidential Unilateral Action: Partisan

Influence and Presidential Power." Public Choice 167(1): 145–171.

- Deering, Christopher J., and Forrest Maltzman. 1999. "The Politics of Executive Orders: Legislative Constraints on Presidential Power." *Political Research Quarterly* 52(4): 767–783.
- Foster, David. 2022. "Anticipating Unilateralism." Journal of Politics 84(2): 1176–1188.
- Hetherington, Marc J., and Michael Nelson. 2003. "Anatomy of a Rally Effect: George W. Bush and the War on Terrorism." *PS: Political Science & Politics* 36(1): 37–42.
- Howell, William G. 2003. *Power without Persuasion: The Politics of Direct Presidential Action*.Princeton, NJ: Princeton University Press.
- Howell, William G., and Jon C. Rogowski. 2012. "War, the Presidency, and Legislative Voting Behavior." *American Journal of Political Science* 57(1): 150–166.
- Howell, William G., Saul P. Jackman, and Jon C. Rogowski. 2013. *The Wartime President: Executive Influence and the Nationalizing Politics of Threat*. Chicago: University of Chicago Press.
- Judd, Gleason. 2017. "Showing Off: Promise and Peril in Unilateral Policymaking." *Quarterly Journal of Political Science* 12(2): 241–268.
- Kang, Myunghoon. 2020. "Presidential Unilateral Action as a Tool of Voter Mobilization." *Presi*dential Studies Quarterly 50(1): 107–128.
- Kousser, Thad, and Justin H. Phillips. 2012. *The Power of American Governors: Winning on Budgets and Losing on Policy*. New York: Cambridge University Press.
- Lowande, Kenneth. 2021. "Presidents and the Status Quo." *Quarterly Journal of Political Science* 16(2): 215–244.
- Lowande, Kenneth, and Jon C. Rogowski. 2021. "Executive Power in Crisis." *American Political Science Review* 115(4): 1406–1423.
- Richman, Jesse. 2011. "Parties, Pivots, and Policy: The Status Quo Test." *American Political Science Review* 105(1): 151–165.
- Rogowski, Jon C. 2023. "Public Opinion and Presidents' Unilateral Policy Agendas." *American Journal of Political Science* 67(4): 1134–1150.
- Shor, Boris, and Nolan McCarty. 2011. "The Ideological Mapping of American Legislatures." *American Political Science Review* 105(3): 530–551.
- Young, Laura. 2013. "Unilateral Presidential Policy Making and the Impact of Crises." *Presidential Studies Quarterly* 43(2): 328–352.

Executive-Legislative Policymaking Under Crisis

Appendix

Contents

A1 Pandemic Bill Details and Examples	1
A2 Mapping the COVID-19 Policy Space	2
A2.1 Measuring Executive Order Strictness	2
A2.2 Measuring the Legislative Response	3
A2.3 Setting the Gridlock Intervals	5
A2.4 The COVID-19 Policy Space in the States	7
A3 Additional Theoretical Considerations	9
A3.1 Testing the Assumption that g is Outside the Gridlock Interval	10
A3.2 Different Status Quo Locations	11
A3.3 States without Filibusters	15
A4 Data Description	16
A4.1 Temporal Variation in COVID-19 Responses	16
A4.2 Geographic Variation in COVID-19 Responses	17
A4.3 Variable Summaries	18
A5 Agenda Control	19
A5.1 Hypothesis	20
A5.2 Results	20
A6 Additional Pandemic Bill Models	22
A6.1 Count of Pandemic Bills Passed	22
A6.2 State-Years with Pandemic Bill Introductions	24

A1 Pandemic Bill Details and Examples

State legislatures' responses to governors' COVID-19 policies varied widely in topic and approach, but several patterns were consistent across states. As noted in the main text, the legislation we refer to as "pandemic bills" come from the National Conference of State Legislatures' (NCSL) database. These bills can be broadly categorized as targeting one or more of three objectives, with many including multiple objectives. Specifically, they addressed the following:

- Alter COVID-19 policy in some way;
- Establish new legislative oversight on the governor and/or executive branch with respect to current and/or future pandemic policy;
- Limit, reduce, or rescind the governor's emergency powers and/or capacity to declare a current and/or future state of emergency.

Table A1 lists examples from each of these categories. During our period of study legislators introduced at least one bill in 49 states, held at least one floor vote in 31 states, and passed at least one pandemic bill in 24 states.

Category	State	Year	Bill	Description
Alter COVID-19 policy Alter COVID-19 policy	WY KS	2021	HB-127 SB-14	Provides that any order that restricts individuals' movements or their ability to engage in any activity, that applies to individuals not under an isolation or quarantine order and that is designed to prevent or limit the transmission of a contagious or possibly contagious disease shall be effective for a period of not more than ten (10) days. Providing certain limitations and restrictions; authorizing the expanded use of telemedicine in response to the COVID-19 public health emergency and impos- ing requirements related thereto; relating to limitations on business liability as- sociated with the COVID-19 public health emergency.
Establish new oversight Establish new oversight	СО	2020 2021	HB-1426 SB-22	Concerns legislative engagement in the management of state operations; sets forth requirements for the receipt of information from the Executive Branch during a declared disaster emergency; provides for reporting on expenditures from the Disaster Emergency Fund and the reporting of federal funds. Establishes legislative oversight of certain orders and rules issued by the execu- tive branch, including by establishing the Ohio Health Oversight and Advisory Committee.
Limit emergency powers	KY NY	2020 2021	SB-150 SB-5357	Provides that the Governor shall declare, in writing, the date upon which the state of emergency in response to COVID-19, declared on March 6, 2020, by Executive Order 2020-215, has ceased. In the event no such declaration is made by the Governor on or before the first day of the next regular session of the General Assembly, the General Assembly may make the determination. Provides that the legislature may terminate by concurrent resolution a state disaster emergency issued under section 28 of the executive law.

 Table A1: Example Pandemic Bills

A2 Mapping the COVID-19 Policy Space

Here we describe the construction of our COVID-19 policy space and present the full set of estimates across all 50 states. Creating the space involves bringing together governors' EOs, legislatures' responses to gubernatorial actions, and setting the legislative gridlock intervals. We discuss each of these elements in sequence.

A2.1 Measuring Executive Order Strictness

Our first step was initializing the space by measuring EO strictness. We used the data on each governor's actions in 2020 collected by Raifman et al. (2020), but rather than modeling each action by the governors individually, we combined 15 actions in a single variable measuring latent strictness with a structural equation model (SEM). This model is summarized in Table A2 below, with variable loadings in the top panel and variances in the bottom. The variable is scaled using the curfew variable, which fixes its loading at one. Larger (smaller) values of the latent factor indicate more (less) strictness.

Some of the strongest loadings are the duration of public mask mandates (0.84), and the number of days that various institutions (non-essential businesses, restaurants, gyms, movie theaters, and bars) were closed. We also note that two variables have strong negative standardized loadings: EOs prohibiting schools and local governments from passing their own mask ordinances (-0.534) and orders that—during the brief period that a public mask order was in effect—did not have a legal enforcement mechanisms in place (-0.478). The weak loadings, including religious exemptions to social distancing mandates (standardized estimate of -0.001, p > 0.9), closing nursing homes to visitors (standardized estimate 0.066, p > 0.8), and even the duration of the state of emergency (standardized estimate of -0.040, p > 0.7) tend to reflect the overwhelming homogeneity of some policies across the American states. The overall test of the model RMSEA is comfortably below 0.04. We generated factor scores from the model reported above to use as our measure of governors' EO strictness.

	Loadings						
Outcome	Estimate	SE	Z	р	Std. estimate		
Curfew	1				0.384		
Schools and Local Gov't Mask Mandates Banned	-1.181	0.489	-2.416	0.016	-0.534		
Nursing Homes Closed	0.168	0.371	0.453	0.650	0.066		
Stay at Home Order w/o Enforcement	0.040	0.225	0.176	0.860	0.026		
Relig. Exemption to Soc. Dist.	-0.001	0.359	-0.003	0.997	-0.001		
No Legal Enf. of Mask Mandate	-1.173	0.564	-2.080	0.038	-0.478		
No. of Days State of Emergency	-31.906	115.908	-0.275	0.783	-0.040		
No. of Days Day Cares Closed	56.205	29.438	1.909	0.056	0.335		
No. of Days Stay at Home Order	182.776	70.952	2.576	0.010	0.666		
No. of Days Non-Essential Business Closed	58.482	21.277	2.749	0.006	0.748		
No. of Days Public Mask Mandates in Place	897.888	288.895	3.108	0.002	0.844		
No. Days Restaurants Closed	83.440	31.749	2.628	0.009	0.799		
No. Days Gyms Closed	227.947	85.011	2.681	0.007	0.747		
No. Days Movie Theaters Closed	137.463	88.707	1.550	0.121	0.402		
No. Days Bars Closed	371.584	124.833	2.977	0.003	0.638		
			Variances				
Outcome	Estimate	SE	Variances Z	р	Std. estimate		
Outcome Schools and Local Gov't Mask Mandates Banned	Estimate 0.129	SE 0.020	Variances Z 6.330	p 0.000	Std. estimate 0.714		
Outcome Schools and Local Gov't Mask Mandates Banned Curfew	Estimate 0.129 0.213	SE 0.020 0.024	Variances Z 6.330 9.018	p 0.000 0.000	Std. estimate 0.714 0.853		
Outcome Schools and Local Gov't Mask Mandates Banned Curfew Nursing Homes Closed	Estimate 0.129 0.213 0.237	SE 0.020 0.024 0.015	Variances Z 6.330 9.018 15.491	p 0.000 0.000 0.000	Std. estimate 0.714 0.853 0.996		
Outcome Schools and Local Gov't Mask Mandates Banned Curfew Nursing Homes Closed Stay at Home Order w/o Enforcement	Estimate 0.129 0.213 0.237 0.088	SE 0.020 0.024 0.015 0.033	Variances Z 6.330 9.018 15.491 2.643	p 0.000 0.000 0.000 0.008	Std. estimate 0.714 0.853 0.996 0.999		
Outcome Schools and Local Gov't Mask Mandates Banned Curfew Nursing Homes Closed Stay at Home Order w/o Enforcement Relig. Exemption to Soc. Dist.	Estimate 0.129 0.213 0.237 0.088 0.215	SE 0.020 0.024 0.015 0.033 0.024	Variances Z 6.330 9.018 15.491 2.643 8.895	p 0.000 0.000 0.000 0.008 0.000	Std. estimate 0.714 0.853 0.996 0.999 1.000		
Outcome Schools and Local Gov't Mask Mandates Banned Curfew Nursing Homes Closed Stay at Home Order w/o Enforcement Relig. Exemption to Soc. Dist. No Legal Enf. of Mask Mandate	Estimate 0.129 0.213 0.237 0.088 0.215 0.172	SE 0.020 0.024 0.015 0.033 0.024 0.036	Variances Z 6.330 9.018 15.491 2.643 8.895 4.792	P 0.000 0.000 0.000 0.008 0.000 0.000	Std. estimate 0.714 0.853 0.996 0.999 1.000 0.772		
Outcome Schools and Local Gov't Mask Mandates Banned Curfew Nursing Homes Closed Stay at Home Order w/o Enforcement Relig. Exemption to Soc. Dist. No Legal Enf. of Mask Mandate No. of Days State of Emergency	Estimate 0.129 0.213 0.237 0.088 0.215 0.172 23397.809	SE 0.020 0.024 0.015 0.033 0.024 0.036 3030.139	Variances Z 6.330 9.018 15.491 2.643 8.895 4.792 7.722	P 0.000 0.000 0.000 0.008 0.000 0.000 0.000	Std. estimate 0.714 0.853 0.996 0.999 1.000 0.772 0.998		
Outcome Schools and Local Gov't Mask Mandates Banned Curfew Nursing Homes Closed Stay at Home Order w/o Enforcement Relig. Exemption to Soc. Dist. No Legal Enf. of Mask Mandate No. of Days State of Emergency No. of Days Day Cares Closed	Estimate 0.129 0.213 0.237 0.088 0.215 0.172 23397.809 921.366	SE 0.020 0.024 0.015 0.033 0.024 0.036 3030.139 136.709	Variances Z 6.330 9.018 15.491 2.643 8.895 4.792 7.722 6.740	P 0.000 0.000 0.000 0.008 0.000 0.000 0.000 0.000	Std. estimate 0.714 0.853 0.996 0.999 1.000 0.772 0.998 0.888		
Outcome Schools and Local Gov't Mask Mandates Banned Curfew Nursing Homes Closed Stay at Home Order w/o Enforcement Relig. Exemption to Soc. Dist. No Legal Enf. of Mask Mandate No. of Days State of Emergency No. of Days Day Cares Closed No. of Days Stay at Home Order	Estimate 0.129 0.213 0.237 0.088 0.215 0.172 23397.809 921.366 1545.344	SE 0.020 0.024 0.015 0.033 0.024 0.036 3030.139 136.709 711.556	Variances Z 6.330 9.018 15.491 2.643 8.895 4.792 7.722 6.740 2.172	P 0.000 0.000 0.000 0.008 0.000 0.000 0.000 0.000 0.000 0.030	Std. estimate 0.714 0.853 0.996 0.999 1.000 0.772 0.998 0.888 0.557		
Outcome Schools and Local Gov't Mask Mandates Banned Curfew Nursing Homes Closed Stay at Home Order w/o Enforcement Relig. Exemption to Soc. Dist. No Legal Enf. of Mask Mandate No. of Days State of Emergency No. of Days State of Emergency No. of Days Day Cares Closed No. of Days Stay at Home Order No. of Days Non-Essential Business Closed	Estimate 0.129 0.213 0.237 0.088 0.215 0.172 23397.809 921.366 1545.344 99.026	SE 0.020 0.024 0.015 0.033 0.024 0.036 3030.139 136.709 711.556 21.345	Variances Z 6.330 9.018 15.491 2.643 8.895 4.792 7.722 6.740 2.172 4.639	P 0.000 0.000 0.000 0.008 0.000 0.000 0.000 0.000 0.030 0.000	Std. estimate 0.714 0.853 0.996 0.999 1.000 0.772 0.998 0.888 0.557 0.440		
Outcome Schools and Local Gov't Mask Mandates Banned Curfew Nursing Homes Closed Stay at Home Order w/o Enforcement Relig. Exemption to Soc. Dist. No Legal Enf. of Mask Mandate No. of Days State of Emergency No. of Days State of Emergency No. of Days Day Cares Closed No. of Days Stay at Home Order No. of Days Stay at Home Order No. of Days Non-Essential Business Closed No. of Days Public Mask Mandates in Place	Estimate 0.129 0.213 0.237 0.088 0.215 0.172 23397.809 921.366 1545.344 99.026 12009.034	SE 0.020 0.024 0.015 0.033 0.024 0.036 3030.139 136.709 711.556 21.345 3960.081	Variances Z 6.330 9.018 15.491 2.643 8.895 4.792 7.722 6.740 2.172 4.639 3.033	P 0.000 0.000 0.008 0.000 0.000 0.000 0.000 0.000 0.030 0.000 0.000	Std. estimate 0.714 0.853 0.996 0.999 1.000 0.772 0.998 0.888 0.557 0.440 0.288		
Outcome Schools and Local Gov't Mask Mandates Banned Curfew Nursing Homes Closed Stay at Home Order w/o Enforcement Relig. Exemption to Soc. Dist. No Legal Enf. of Mask Mandate No. of Days State of Emergency No. of Days State of Emergency No. of Days Stay at Home Order No. of Days Stay at Home Order No. of Days Non-Essential Business Closed No. of Days Public Mask Mandates in Place No. Days Restaurants Closed	Estimate 0.129 0.213 0.237 0.088 0.215 0.172 23397.809 921.366 1545.344 99.026 12009.034 145.464	SE 0.020 0.024 0.015 0.033 0.024 0.036 3030.139 136.709 711.556 21.345 3960.081 48.867	Variances Z 6.330 9.018 15.491 2.643 8.895 4.792 7.722 6.740 2.172 4.639 3.033 2.977	P 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.030 0.000 0.000 0.002 0.003	Std. estimate 0.714 0.853 0.996 0.999 1.000 0.772 0.998 0.888 0.557 0.440 0.288 0.362		
Outcome Schools and Local Gov't Mask Mandates Banned Curfew Nursing Homes Closed Stay at Home Order w/o Enforcement Relig. Exemption to Soc. Dist. No Legal Enf. of Mask Mandate No. of Days State of Emergency No. of Days Stay at Home Order No. of Days Stay at Home Order No. of Days Non-Essential Business Closed No. of Days Public Mask Mandates in Place No. Days Restaurants Closed No. Days Gyms Closed	Estimate 0.129 0.213 0.237 0.088 0.215 0.172 23397.809 921.366 1545.344 99.026 12009.034 145.464 1513.047	SE 0.020 0.024 0.015 0.033 0.024 0.036 3030.139 136.709 711.556 21.345 3960.081 48.867 926.926	Variances Z 6.330 9.018 15.491 2.643 8.895 4.792 7.722 6.740 2.172 4.639 3.033 2.977 1.632	P 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000	Std. estimate 0.714 0.853 0.996 0.999 1.000 0.772 0.998 0.888 0.557 0.440 0.288 0.362 0.441		
Outcome Schools and Local Gov't Mask Mandates Banned Curfew Nursing Homes Closed Stay at Home Order w/o Enforcement Relig. Exemption to Soc. Dist. No Legal Enf. of Mask Mandate No. of Days State of Emergency No. of Days Stay at Home Order No. of Days Day Cares Closed No. of Days Non-Essential Business Closed No. of Days Public Mask Mandates in Place No. Days Restaurants Closed No. Days Gyms Closed No. Days Movie Theaters Closed	Estimate 0.129 0.213 0.237 0.088 0.215 0.172 23397.809 921.366 1545.344 99.026 12009.034 145.464 1513.047 3619.569	SE 0.020 0.024 0.015 0.033 0.024 0.036 3030.139 136.709 711.556 21.345 3960.081 48.867 926.926 1397.677	Variances Z 6.330 9.018 15.491 2.643 8.895 4.792 7.722 6.740 2.172 4.639 3.033 2.977 1.632 2.590	P 0.000 0.000 0.008 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000	Std. estimate 0.714 0.853 0.996 0.999 1.000 0.772 0.998 0.888 0.557 0.440 0.288 0.362 0.441 0.839		

Table A2: Structural Equation Model of Governors' COVID-19 Actions

Note: Cell entries report factor loadings and variances from a structural equation model (SEM) of the 14 variables. N = 51; RMSEA = 0.038

A2.2 Measuring the Legislative Response

The next objective was placing state legislatures' response on the scale of the EO strictness factor scores generated above. This step necessitated the strongest assumptions because state legislatures (1) were not required to respond and (2) could respond by targeting individual policies or with broader bills on COVID-19. In practice, many states chose the latter, and thus there is not a one-toone correspondence between policies set by the governor and individual bills from the legislature. In short, governors addressed COVID-19 with a scalpel while legislatures used sledgehammers.

Nonetheless, the pandemic bill text provides information we used to infer the legislatures' positioning on the 15 actions that comprise the EO strictness variable described above. We began

with the assumption that a failure to *pass* a pandemic bill signaled keeping policy at the governor's chosen action for that policy item. We then read and coded the bills that passed to assess whether they signaled an intention to change each action from the governor or not. In some cases, this step was straightforward while in others it required some researcher judgment (see the replication materials for our complete coding notes).

Table A3 provides an example of this process for three states: Florida, New Jersey, and Wyoming. The first row for each state denotes the coding of EOs in 2020. The next three rows indicate the legislature's response to these EOs (if any) with pandemic bills. As an example, the Florida legislature passed no pandemic bills in 2020, and thus the entries on that row are identical to the row above it with the governor's EOs. However, in 2021 the legislature placed limits on the governor's ability to declare states of emergency and codified its own ability to terminate states of emergency. We interpreted these choices as strong steps against all COVID-19 mitigation efforts, and thus replaced the coding for the 12 policy items that signified positive steps toward mitigation with 0s in 2021 and 2022. For the three items that placed barriers on mitigation—no legal enforcement of mask mandates, mask bans in K-12 schools, and bans on local governments requiring masks—we matched the coding from the governor's EO.¹

State	Year	Branch	Curfew	Rel. ex.	No mask enforce.	Mask K-12	Day cares	Nurs. homes	Stay home	Non-ess. business	Mask mand.	Mask ban K-12	Local gov.	Restau.	Gyms	Movies	Bars
FL FL FL	2020 2020 2021	E L L		1 1 0	1 1 1 1	0 0 0	0 0 0	1 1 0	45 45 0	45 45 0	0 0 0	1 1 1	1 1 1	45 45 0	45 45 0	63 63 0	80 80 0
NJ NJ NJ NJ NJ	2022 2020 2020 2021 2022	E L L L L		0 0 0 0 0	0 0 0 0 0	1 1 1 1	89 89 89 89 89	1 1 1 1 1	80 80 80 80 80	58 58 58 58 58	415 415 415 415 415	0 0 0 0 0	0 0 0 0	91 91 91 91	169 169 169 169	172 172 172 172 172	91 91 91 91 91
WY WY WY WY	2020 2020 2021 2022	E L L L		0 0 0 0	0 0 0 0	0 0 0 0	43 43 10 10	0 0 0 0	0 0 0 0	43 43 10 10	97 97 10 10	0 0 0 0	0 0 0 0	57 57 10 10	43 43 10 10	57 57 10 10	57 57 10 10

 Table A3: Legislative Response Example Coding

Note: Cell entries report coding examples for three states. The rows denoted E indicate the governor's and/or executive branch's actions and L indicates legislative action. The binary coding indicates presence or absence of the policy and the numerical coding greater than one indicates duration in days.

New Jersey is a more straightforward example. Although 12 pandemic bills were proposed ¹This choice interprets the legislature's response as a revealed preference for less restriction. Results are not significantly changed if we simply "zero-out" all of the 15 policy items. during 2020–2022 in that state, none of them reached a floor vote or passed. Thus, the coding for the legislature remained the same as that of the governor in all three years. Finally, Wyoming provides an intermediate example between Florida and New Jersey. No pandemic bills passed in 2020, so we again see identical coding in that year for the governor and legislature. But in 2021 the legislature passed the bill summarized in Table A1 that limited restrictions on individuals' movement to no more than 10 days. We coded this action as changing the policies that related to duration (e.g., mask mandates and gym closings), but not the binary policies such as religious exemptions to mask mandates and day care closings.

After completing these coding choices, we then removed the governors' rows from the data and generated out-of-sample predictions from the SEM reported in Table A2. This process produced scores on the scale of the EO strictness variable for the legislature in each year. In cases where there was no change to the coding (e.g., Florida and Wyoming in 2020; New Jersey in all years), this prediction is equal to the point where the governor placed policy. But in cases where the coding changed due to a pandemic bill, the model generates a new value representing the estimated point in the space for the legislature in that year.

A2.3 Setting the Gridlock Intervals

Our last task was to place each state legislature's gridlock intervals in the policy space. To do so, we used Shor and McCarty's (2011) legislator-level ideal point estimates for 2020.² We identified three ideal points in each state from these data: (1) upper chamber median, (2) upper chamber filibuster pivot, and (3) upper chamber veto pivot. The median ideal point is, of course, the 50th percentile of the upper chamber. We determined the pivots by consulting the chamber rules in each state for the proportion of the chamber needed to cut off debate and override a veto. We follow previous work in focusing only on upper chambers, but this choice is not empirically

²This choice requires the assumption that the underlying dimension in those ideal points is comparable to the EO strictness measure. We contend that this assumption is reasonable because both generally reflect preferences for more or less government intervention in society.

consequential.³

Finally, we mapped these ideal points onto the scale of the EO strictness measure generated by the SEM. We followed a common approach in the literature and used a linear projection (e.g., Windett et al. 2015). We regressed the EO strictness variable on the upper chamber median, then computed predicted values from this model for each of the three quantities (median, filibuster pivot, and veto pivot).⁴ Figure A1 graphs the regression line (in blue) that we used for this step.

Figure A1: Linear Model Used to Map State Legislative Ideal Points to the EO Strictness Measure



Note: The graph plots upper chamber median ideal points from Shor and McCarty (2011) on the x-axis against the EO strictness measure (y-axis). The regression line used to project ideal points onto the strictness measure is in blue. Shading denotes 95% confidence intervals.

³Specifically, we follow the tradition of Krehbiel (1998), Brady and Volden (2006) and Woon (2009), who also focus on upper chambers only. However, in recent years it has become more common (e.g., Gray and Jenkins 2019) to use the Common Space scores developed by Carroll et al. (2011) to estimate the veto pivot from the more extreme of either the House *or* the Senate. This measurement approach correlates with our upper chamber only approach at +0.99. Thus, our analysis relies on estimates from the upper chamber only.

⁴Another option would be to estimate a separate model for each quantity. Our approach eliminated the possibility of a nonsensical result, such as a median falling outside the gridlock interval. With these projections complete, we had all of the data needed to create our COVID-19 policy space. To summarize, the space was initialized on the scale of the latent strictness measure generated by the SEM of governors' EOs. We used out-of-sample prediction from the SEM to place legislatures' pandemic bills on that scale. Then we mapped Shor and McCarty's (2011) ideal points in to complete the space.

A2.4 The COVID-19 Policy Space in the States

Figure A2 presents five states in a COVID-19 policy space that locates the preferences of governors and legislatures together. The filled circles indicate governors' EO positions, open squares indicate legislative responses, and shading denotes gridlock intervals. Red (blue) represents Republican (Democratic) governors and legislatures.



Figure A2: Example States in the COVID-19 Policy Space

Note: Filled circles indicate governors' EO positions, open squares indicate legislative responses, and shading denotes gridlock intervals. The colors represent partisanship and the notation for the pivots remains the same as above.

While not a formal test, this graph demonstrates the utility of our data: precisely locating the restrictiveness of, for instance, Gavin Newsom (D-California) relative to John Bel Edwards (D-Louisiana), but also the relationship between the governors and state legislatures. Importantly, because we know the status quo, we can be certain that the actors' policy decisions graphed here entirely reflect their reactions to the immediate problem (the pandemic) and each other. That is, their proposals as shown in Figure A2 are unaffected by a previous set of policy choices or round

of prior bargaining that might confound our measurement of their decisionmaking.

The graph demonstrates substantively meaningful variation in pandemic policy actions. Though Newsom and Andrew Cuomo (D-New York), enacted similar restrictions, Cuomo diverged more from the legislature's preferences than Newsom, leading to a strong response. Despite facing divided government, Edwards' policies remained intact, perhaps because he was able to locate policy within the gridlock interval. Similarly, Doug Ducey (R-Arizona) set policy just to the right of the veto pivot and did not suffer backlash. By contrast, Mike DeWine (R-Ohio) located policy too far to the left, overshooting the legislature, and received backlash.

Figure A3 presents the full COVID-19 policy space by partisan control of state government. Closed circles denote the governor's position and open squares represent legislatures. The gridlock intervals are shaded. Note that there is a great deal of variation in the size of the gridlock intervals across states. In several cases the median (m) is equal to the filibuster pivot (f) and/or veto pivot (v). This pattern reflects the variation in chamber rules; some state legislatures adopt rules similar to the U.S. Senate for filibusters and veto overrides, while others require only a simple majority to cut off debate and/or stop vetoes.

Three trends stand out in these graphs. First, consistent with the canonical expectations of pivotal politics, when the governor relocated policy from the status quo to within the gridlock interval, they were resistant to revision by the legislature in some states (e.g., North Carolina, Louisiana, and Wisconsin). However, there was variance in this pattern. Idaho Governor Brad Little (top left panel), for example, located policy within the interval (nearly at m), but his policies were unwound by the legislature—and contra expectations from the preemption theory—were moved well to the right.

Second, governors were generally sensitive to the legislative medians of their states—the two actors' strictness measures correlate at +0.69. But there is still notable variation in where governors located policy. Kansas Governor Laura Kelly (bottom left panel) moved policy to the *right* of *m*, while Michigan Governor Gretchen Whitmer moved it well to the *left* of *v*, despite facing generally similar legislative situations. Nevertheless, both governors saw their policies unwound by



Figure A3: The COVID-19 Policy Space

Note: The graphs present the COVID-19 policy space for different configurations of partisan control of state governments. Closed circles denote the governor's position and open squares represent legislatures. The gridlock intervals are shaded.

the legislatures despite this variation in policy placement.

Third, while Republican legislatures were the most likely to pass pandemic bills against governors, Democratic legislatures passed their own pandemic bills in New Hampshire—despite Governor Chris Sununu locating policy in the gridlock interval—and New York. Thus, while there is a strong asymmetric partisan trend, it was not a uniformly asymmetric trend.

A3 Additional Theoretical Considerations

Here we consider alternative versions of our theoretical framework. First, we test our assumption about governors' preferences relative to the legislature. Then we evaluate the implications of altering the status quo location. Finally, we demonstrate the robustness of our theory to states that do not permit filibusters, and thus do not have filibuster pivots.

A3.1 Testing the Assumption that g is Outside the Gridlock Interval

Our theoretical framework as described in the main text assumes that Republican (Democratic) governors' preferences (g) fall to the right (left) of the gridlock interval. This assumption is consistent with the canonical pivotal politics models by Krehbiel (1998) and others. Assessing the validity of this assumption is difficult. Shor and McCarty (2011) do not estimate ideal points for governors in the manner that McCarty and Poole (1995) do, and there is no analog to the Congressional Quarterly presidential positions on specific roll call votes for governors in all fifty states.⁵

The only other way of assessing the validity of this assumption is through the common-space campaign finance scores (CFscores) introduced by Bonica (2023). As Warner (2023), notes, there are limitations to these data. But they still offer the most comprehensive source of information for placing legislators and governors in the same space. Nonetheless, while there is generally sufficient data coverage to estimate gubernatorial ideal points, there is sufficient missingness in the CFscores of state legislators to prevent reliable estimation of pivots. To put governors and state legislative pivots on the same common-space, we drop estimates based on fewer than 20 contributions to reduce noise, and use fuzzy matching to merge CFscores for legislators with ideal point estimates from Shor and McCarty (2022). We then use linear projection to place the governor CFscores onto the Shor-McCarty common space.

Of the 40 governors with estimates, we find that the majority of Democratic (Republican) governors are to the left (right) of the gridlock interval, in keeping with our assumption. Figure A4 adds estimates of *g*, the governor's preferences, to the graphs from Figure A3. We see that in states with Republican governors (top panels), governors are indeed to the right of the gridlock interval in nearly all states: only Missouri's Mike Parsons, Texas' Greg Abbott and Alabama's Kay Ivey are estimated to be to the *left* of the legislature. Among Democratic governors, (bottom panels) New

⁵Though note, as Treier (2010) does, some of the challenges in using these positions as a reliable method of assessing the president's ideal point.

York's Andrew Cuomo and Montana's Steve Bullock are the only Democratic governors estimated to be to the right of the legislature. Without standard errors for CFScores, it is difficult to assess whether these exceptions are mostly signal or mostly noise. But the broad trends do suggest that the assumption is reasonably supported.

We report these estimates of *g* for the purpose of generally assessing the assumption that governors are outside the gridlock interval, but caution against a narrow interpretation of the CFscore projection. We find that it is a dubious assumption that Greg Abbott—who has recently bussed Venezuelan refugees to the Vice President's residence, supports a Constitutional Convention of the States, and has instructed state agencies to treat gender-affirming care as child abuse—is among the more moderate Republican governors. Similarly, while Steve Bullock may be more moderate than many of his Democratic peers—notably opposing gun control restrictions for much of his tenure—the likelihood that he is *more* conservative than 13 Republican state senators seems generally implausible. Nevertheless, this analysis represents our best effort at empirically assessing the assumption from our model. The reliability of projecting CFscores onto the Shor-McCarty space is a worthwhile endeavor in future research.

If Republican (Democratic) governors are not right (left) of the legislature, some elements of the preemption model are changed: Republican (Democratic) governors would not attempt to position the status quo near (at) *v*. Rather they would attempt to place it at their location within the gridlock interval, knowing that no coalition would be able to move the policy within this zone. Nevertheless, a central element of our theoretical logic still holds: governors attempt to preemptively move policy in the direction of the legislative median.

A3.2 Different Status Quo Locations

Our models of legislative bargaining focus on the utility of the status quo relative to the alternative policy, as is customary in similar models (Krehbiel 1998; Howell and Rogowski 2012). Nevertheless, as Callander (2011) and Callander and McCarty (2023) indicate, lawmakers face uncertainty in how policies will be translated into outcomes. For example, the status quo outcomes in two states may differ after implementation of the same public health policy due to other factors,





such as the baseline health of the population, population density, access to medical care, and others. Thus, there is potential for variation in the utility function and the status quo location, which could alter our predictions.

In the main text, we assume the status quo is located on the far right of the policy space, as there were no government policies regarding population masking, stay-at-home orders, or other interventions prior to the COVID-19 pandemic. Nonetheless, perhaps variation in adjacent policies, state characteristics, or other factors altered the status quo *outcome* in some states. Accordingly, we consider changes to the status quo for our theoretical model. In Figure A5, we introduce variation in the location of the status quo and assess the implications for our expectations listed in the main text. To conserve space, we illustrate these changes for a Republican governor, but the con-

Figure A5: The Spatial Logic of COVID-19 Executive Action with Alternative Status Quo Locations for Republican Governors



Note: The graphs depict spatial logic for executive action by Republican governors with a moderate status quo (panel a), status quo inside the gridlock interval (panel b), and strict status quo (panel c). Conclusions are unchanged with Democratic governors. The notation is as follows: q = status quo policy; g = governor's ideal point; m = legislative median; v = veto-override pivot; f = filibuster pivot. Shading indicates the gridlock intervals.

clusions we draw are unchanged for Democratic governors.

In panel (a) of Figure A5, the status quo is still to the right of the gridlock interval, but not at the rightmost extreme, as it is assumed to be in the main text. While there were still no virus-related government interventions at the start of the pandemic, the state's vulnerability to COVID-19 may have been lower due to other factors. Though q is not on the extreme, the governor would still undergo the same preemption logic outlined in the main text. Without executive action, the

legislature would respond by passing a policy at m, and the governor would face greater utility loss than if they were to preempt the legislature and move the policy to v. Thus, if the status quo is anywhere to the right of the gridlock interval, the governor is expected to initiate policy change and move q to v through unilateral tools.

Panel (b) depicts a status quo *inside* the gridlock interval. In this case, despite the very low expected utility for the governor, they have no tools available to change the policy: any unilateral changes will be overridden by the legislature, and the policy will revert to q. Thus, we should expect no action: the governor should not expend any political capital to initiate a new policy, only for the legislature to reverse it. Similarly, the legislature would not have a sufficient coalition to initiate change.

In panel (c), the status quo falls to the *left* of the gridlock interval. In this case, there is little the government can do to move policy to the right: there are already no virus-related government interventions to start with, so it is impossible to reduce the scale of programs that do not exist. The only way for the government—either governor or legislature—to shift COVID-19 policy to the right in this instance would be to restrict access to healthcare. Moving policy further to the left reduces the utility from the positions even more than the status quo does currently. Thus, we expect no change to the location of q in this scenario.

The scenarios in panels (b) and (c) yield different predictions compared to the main text. However, we contend that they are highly unlikely cases. In our view, it does not appear plausible that moderate and/or strict health measures to contain a respiratory virus were preferred by a large coalition of lawmakers and in place when no such pandemic had occurred in a century. Furthermore, the behavior of state governments supports our perspective. Governors in all 50 states declared states of emergency in 2020, thus paving the way for more restrictive policies, and legislatures in 49 states responded with attempts to pass pandemic bills. Panel (b) may help understand the logic of South Dakota's decision to pass no substantive COVID-19 restrictions beyond the declaration of state of emergency. Though Governor Kristi Noem declared a state of emergency, she famously resisted passing COVID-19 restrictions through unilateral actions in her state, nor did the legislature act independently to do so. Panel (a) is thus the most plausible of the alternative scenarios here, where governors may have held varied assessments of the ex ante status quo outcome related to public respiratory health. But even in this case, we would still have expected these executives to move policy to the left with their EOs.

A3.3 States without Filibusters

The spatial logic in the main text includes a filibuster pivot, which reflects these models' origins in the study of the U.S. Congress. However, in many states a simple majority is sufficient to cut off debate (Boehmke et al. 2015). Figure A6 presents a revised version of our model depicting the scenarios in which the chamber median is functionally the filibuster pivot.

The expected preemption behavior for the Republican governor is unchanged. The goal is still to move the status quo as close as possible to the veto pivot (v) to prevent a coalition from moving the policy nearer to the chamber median (m). If the legislature acts, the expected policy change should still be to move policy to the *left*, as the governor did not preempt the legislature enough.

The behavior for the Democratic governor scenario is similarly unchanged. They should still attempt to move policy to v, effectively hastening the decisionmaking process of the legislature. If the legislature intervenes, the expected policy change should still be to move policy to the *right*, and closer to m, as the governor miscalculated on how responsive to the chamber they needed to be. Thus, the logic outlined in the main text is consistent in states with and without filibuster rules.



Figure A6: The Spatial Logic of Gubernatorial Action in States with no Filibuster Pivot

Note: The graphs depict spatial logic for executive action by Republican (panel a) and Democratic (panel b) governors in states without filibusters. The notation is as follows: q = status quo policy; g = governor's ideal point; m = legislative median; v = veto-override pivot. Shading indicates the gridlock intervals.

A4 Data Description

Here we present descriptive information about our data, including temporal and geographic variation in COVID-19 response policies and summary statistics for the variables used in the analyses.

A4.1 Temporal Variation in COVID-19 Responses

Figure A7 presents the temporal variation in governors' COVID-19 related policy actions. Democratic governors tended to adopt policies slightly sooner than Republican governors, but the differences tend to be quite modest. The only policy with real variation in the timing of implementation is a public masking mandate, with less clustering among states. Otherwise, rather than enacting policies as COVID-19 infections spread into their own state, governors tended to work in concert with one-another, closing bars or issuing stay at home orders within the same 5-10 day period.



Figure A7: Temporal Variation in State COVID-19 Responses

A4.2 Geographic Variation in COVID-19 Responses

Figure A8 presents geographic variation in governors' and legislatures' COVID-19 responses. They reveal notable regional variation in the strictness of gubernatorial EOs (top-left), strictness of legislatures points in the COVID-19 policy space (top-right), count of pandemic bills introduced (bottom-left), and count of pandemic bills passed (bottom-right). This heterogeneity across the entire country that took place at approximately the same time represents one reason that COVID-19 in the states provides a useful empirical setting for understanding executive-legislative bargaining.



Figure A8: Geographic Variation in State COVID-19 Responses

A4.3 Variable Summaries

Table A4 reports descriptions, data sources, and means and standard deviations (SD) for each variable. The summary statistics reflect the state-year data (N = 150) that we use for most of our analyses except for the EO strictness measure, which is computed on the cross-section of data representing governors' policies at the beginning of our timeframe (2020). All statistics come from the unstandardized versions of each variable.

Variable	Description	Source	Mean	SD
	Outcomes			
EO strictness	Governors' executive order strictness	Authors' computation (see Sec-	-0.004	0.217
Pandemic bill passed	Indicator for at least one pandemic bill	National Conference of State Leg- islatures	0.207	0.406
Bill targeting emergency pow- ers	Indicator for at least one pandemic bill that targets the governor's emergency	National Conference of State Leg- islatures and Authors' coding	0.100	0.301
Proportion pandemic bills re-	Proportion of introduced pandemic bills	National Conference of State Leg-	0.149	0.299
Proportion pandemic bills	Proportion of introduced pandemic bills	National Conference of State Leg-	0.097	0.243
Legislative policy strictness	Strictness of legislature's policy prefer- ences in the COVID-19 policy space	Authors' computation (see Sec- tion A2.2)	-0.091	0.264
	Covariates			
Democratic governor	Indicator for Democratic governor in	Authors' collection	0.480	0.501
Governors' CFscores	Campaign finance-based measure of gubernatorial conservatism	Bonica (2023)	-0.029	0.209
Legislative median	Mean of median ideal points for lower and upper chambers in a state in 2020; High values are conservative, low val-	Shor and McCarty (2011)	0.083	0.809
Pre-pandemic COVID-19 risk	ues are liberal Share of adults with pre-existing health conditions posing elevated COVID-19 risk, based on 2018 Behavioral Risk	Koma et al. (2020)	38.266	3.573
Divided government	Factor Surveillance System data Indicator for state-years in which leg- islative majority party is different from governor's party	Authors' collection	0.260	0.440
Legislative term limits	Indicator for legislative term limits in effect	Authors' collection	0.300	0.460
Professionalism (1d)	First dimension of legislative profes- sionalism	Bowen and Greene (2014)	0.025	1.441
Professionalism (2d)	Second dimension of legislative profes- sionalism	Bowen and Greene (2014)	0.156	0.775
Gubernatorial approval (2020, q1)	Relative approval of the governor in the first quarter of 2020: $\frac{Positive}{Positive+Negative} \times 100$	Singer (2023)	56.026	10.856
Gubernatorial election year	Indicator for state-year in which an election for governor occurred	Authors' collection	0.340	0.475
Bill(s) introduced	Indicator for state-year in which the legislature introduced at least one pan- demic bill	National Conference of State Leg- islatures	0.667	0.473
EO inside gridlock interval	Indicator denoting that the governor's EO strictness falls inside the gridlock interval defined by the pivots' ideal points or is within the 95% confidence interval of one of the pivots	Shor and McCarty (2011)	0.180	0.385

Table A4: Variable Descriptions and Summary Statistics

Note: Cell entries report variable descriptions, data sources, and means and standard deviations (SD).

A5 Agenda Control

Although not directly implied by our preemption theory, we expect that legislative party agenda control was relevant to COVID-19 policymaking. A considerable amount of scholarship considers

the role of parties in the internal politics of legislatures in the United States, including roll call voting, polarization, and agenda control (e.g., Cox and McCubbins 2005; Lawrence et al. 2006; Shor and McCarty 2011; Lee 2015; Shor and McCarty 2022). Although legislator *preferences* may play a larger role than some scholars acknowledge (Krehbiel 1993), the existing work suggests that partisanship may have conditioned the legislative responses to governors' COVID-19 policy choices.

A5.1 Hypothesis

In the main text we predicted that lawmakers in the majority generally exhibited greater reluctance to antagonize a copartisan governor versus one from the other party. Thus, the associations described in H3a were likely to be stronger in magnitude under divided government. This expectation was ultimately not supported by our data. Nonetheless, we consider additional analysis on the role of legislative party here. A copartisan majority might have sought to shield the governor from a response to their policy proposals altogether. Under a unified state government we would expect the majority party leadership to exercise more negative agenda control to soften the legislative response compared to divided government. This logic leads us to one additional hypothesis.

H4 The proportion of introduced COVID-19 pandemic bills (1) receiving a floor vote and (2) passing were larger under divided compared to unified government.

A5.2 Results

Table A5 reports results from OLS models of the proportion of introduced pandemic bills that received votes on the floor (models 1 and 2) and passed the lower chamber of the legislature (models 3 and 4). The unit of analysis is again state-year and we control for the same set of covariates and year fixed effects. The key independent variable is an indicator for divided government, which we expect is associated with an increase in the proportion of bills receiving votes and passing.

The results in Table A5 support H4, especially with respect to pandemic bills receiving votes on the floor. Including all state-years (model 1), we estimate a statistically significant increase in the proportion of pandemic bills that received votes of about 18 percentage points under divided

	Received votes		Pas	sed
	(1)	(2)	(3)	(4)
Divided government	0.183*	0.300*	0.116*	0.199*
	(0.056)	(0.088)	(0.051)	(0.088)
Democratic governor	-0.020	-0.049	-0.038	-0.085
	(0.061)	(0.097)	(0.055)	(0.092)
EO strictness	-0.058	-0.111	-0.030	-0.053
	(0.054)	(0.076)	(0.048)	(0.068)
Bill(s) introduced	0.242^{*}		0.191*	
	(0.051)		(0.048)	
Legislative median	-0.009	-0.066	-0.0003	-0.032
	(0.045)	(0.064)	(0.042)	(0.062)
EO inside gridlock interval	-0.097	-0.170	-0.115^{*}	-0.190^{*}
	(0.058)	(0.091)	(0.047)	(0.075)
Legislative term limits	0.063	0.109	0.031	0.052
	(0.051)	(0.078)	(0.042)	(0.064)
Professionalism (1d)	-0.011	-0.008	-0.021	-0.026
	(0.029)	(0.043)	(0.025)	(0.037)
Professionalism (2d)	0.027	0.043	0.017	0.028
	(0.019)	(0.030)	(0.017)	(0.026)
Gubernatorial election year	0.003	0.006	0.015	0.026
	(0.057)	(0.090)	(0.049)	(0.078)
Pre-pandemic risk	0.024	0.045	0.003	0.005
	(0.030)	(0.047)	(0.026)	(0.039)
Year Fixed Effects	1	1	1	1
Ν	150	100	150	100
Adjusted R ²	0.201	0.157	0.136	0.111

Table A5: Divided Government and Pandemic Bill Agenda Control

Note: Cell entries report linear regression coefficients and standard errors (in parentheses). The outcome variables are the proportion of introduced pandemic bills that received votes (models 1 and 2) and passed the lower chamber (models 3 and 4). Models (1) and (3) include an indicator for at least one pandemic bill introduced and models (2) and (4) subset the data to state-years with at least one pandemic bill. * p < 0.05.

government (compared to unified government). Subsetting to only those state-years in which pandemic bills were introduced (model 2) increases that estimate to 30 percentage points (p < 0.05). A similar pattern emerges for the proportion of bills passed in models (3) and (4), although the estimates are somewhat reduced in magnitude. In brief, majority party agenda control mattered in the response to COVID-19. Legislative leaders were much more likely to allow deliberation if the executive branch was controlled by the opposition.

A6 Additional Pandemic Bill Models

Here we report supplementary models for our tests of H3 (the legislative response). We consider counts of pandemic bills as well as a subset of the sample to only state-years in which pandemic bills were introduced.

A6.1 Count of Pandemic Bills Passed

In the main text we model the passage of at least one pandemic bill as the outcome (Table 2). However, several states passed multiple such bills during 2020–2022. Table A6 presents the same set of models, but with the *count* of pandemic bills as the outcome. We maintain OLS regression as our modeling choice for consistency, although our substantive conclusions remain the same with a model for count outcomes.⁶

Recall that our theory predicts positive coefficients on EO strictness (H3a) and EO strictness \times Divided government (H3b) in the Democratic sample and negative coefficients on both of those variables among Republican governors. The results shown in Table A6 diverge from those expectations, with negative estimates among Democrats and a positive and negative estimate in the Republican governors sample. Additionally, none of these estimates are statistically significant. In short, we find no evidence in support of our expectations on legislative pandemic bills using a count of bills passed as the outcome.

⁶Additionally, we focus only on the count of any pandemic bills rather than those targeting emergency powers because of low variation on the latter outcome. Most states targeted emergency powers with one or two bills at most.

	Democratic	Republican
EO strictness	-0.180	0.095
	(0.198)	(0.150)
EO strictness \times	-0.251	-0.012
Divided government	(0.498)	(0.388)
Divided government	1.688^{*}	1.260
	(0.699)	(1.097)
Bill(s) introduced	0.441	0.519*
	(0.268)	(0.156)
Legislative median	-0.511	0.583
	(0.360)	(0.532)
EO inside gridlock interval	-1.045^{*}	0.548
	(0.399)	(0.772)
Legislative term limits	-0.086	0.081
	(0.349)	(0.343)
Professionalism (1d)	0.008	0.037
	(0.134)	(0.149)
Professionalism (2d)	-0.033	0.152
	(0.087)	(0.102)
Pre-pandemic risk	0.062	-0.107
	(0.109)	(0.081)
Gubernatorial election year	-0.066	0.025
	(0.253)	(0.151)
Year Fixed Effects	1	1
Ν	72	78
Adjusted R ²	0.210	0.092

Table A6: Executive Order Strictness, Governor Partisanship, and the Count of Pandemic Bills Passed

Note: Cell entries report standardized linear regression coefficients and standard errors (in parentheses). The outcome variable is the count of pandemic bills passed by the legislature. * p < 0.05.

A6.2 State-Years with Pandemic Bill Introductions

We next consider the possibility that legislatures that introduced pandemic bills in a given year are a unique group. Rather than include an indicator for bill(s) introduced as in the main text and Table A6, we subset the data to only those state-years with legislatures that introduced at least one pandemic bill.⁷ We replicate the main text analysis on this reduced sample in Table A7.

The results largely mirror those in the main text, although with reduced statistical power. The estimates on EO strictness and EO strictness \times Divided government are mostly negative in the Democratic governors sample (H3 predicts positive coefficients). And the coefficients for states with Republican governors are positive and negative (H3 predicts negative estimates). Thus, this subset of the data reflects the lack of support for our theoretical model as described in the main text.

⁷We also considered a two-stage selection model, in which we modeled the decision to introduce a pandemic bill first, then whether or not at least one passed. Results align with what we report here, but the model was fairly sensitive to specification, likely due to the relatively small sample size.

	Democrati	c governors	Republican governors		
	(1)	(2)	(3)	(4)	
EO strictness	-0.143	-0.003	0.126	0.136	
	(0.106)	(0.082)	(0.123)	(0.086)	
EO strictness \times	0.086	-0.017	-0.555	-0.503^{*}	
Divided government	(0.169)	(0.167)	(0.424)	(0.246)	
Divided government	1.020^{*}	0.551*	1.144	0.694	
-	(0.329)	(0.233)	(1.055)	(0.747)	
Legislative median	-0.342^{*}	-0.097	0.122	0.027	
-	(0.179)	(0.101)	(0.314)	(0.286)	
EO inside gridlock interval	-0.530^{*}	-0.396*	-0.202	-0.146	
-	(0.158)	(0.138)	(0.366)	(0.327)	
Legislative term limits	-0.137	-0.143	0.271	0.145	
-	(0.165)	(0.140)	(0.200)	(0.168)	
Professionalism (1d)	0.053	0.062	-0.057	-0.029	
	(0.075)	(0.068)	(0.117)	(0.093)	
Professionalism (2d)	-0.019	-0.030	0.141	0.058	
	(0.066)	(0.062)	(0.084)	(0.064)	
Pre-pandemic risk	0.042	0.078	-0.178^{*}	-0.112	
-	(0.077)	(0.042)	(0.069)	(0.070)	
Gubernatorial election year	-0.005	0.037	-0.190	-0.141	
-	(0.124)	(0.080)	(0.224)	(0.121)	
Year Fixed Effects	✓	1	✓	1	
Ν	55	55	45	45	
Adjusted R ²	0.201	0.282	0.003	0.153	

Table A7: The Passage of Pandemic Bills Only in States that Introduced Pandemic Bills

Note: Cell entries report standardized linear regression coefficients and standard errors (in parentheses). The outcome variables are indicators for at least one pandemic bill passed by the legislature (models 1 and 3) and at least one pandemic bill targeting the governor's emergency powers (models 2 and 4). * p < 0.05.

References

Boehmke, Frederick J., Tracy L. Osborn, and Emily U. Schilling. 2015. "Pivotal Politics and Initiative Use in the American States." *Political Research Quarterly* 68(4): 665–677.

Bonica, Adam. 2023. "Database on Ideology, Money in Politics, and Elections: Version 3.0.".

- Bowen, Daniel C., and Zachary Greene. 2014. "Should We Measure Professionalism with an Index? A Note on Theory and Practice in State Legislative Professionalism Research." *State Politics & Policy Quarterly* 14(3): 277–296.
- Brady, David W., and Craig Volden. 2006. *Revolving Gridlock Politics and Policy from Jimmy Carter to George W. Bush.* New York: Routledge.
- Callander, Steven. 2011. "Searching for Good Policies." *American Political Science Review* 105(4): 643–662.
- Callander, Steven, and Nolan McCarty. 2023. "Agenda Control under Policy Uncertainty." Forthcoming, *American Journal of Political Science*. https://doi.org/10.1111/ajps.12781.
- Carroll, Royce, Jeff Lewis, James Lo, Nolan McCarty, Keith Poole, and Howard Rosenthal. 2011. "DW-NOMINATE Scores with Bootstrapped Standard Errors." voteview.com/dwnomin.htm.
- Cox, Gary W., and Mathew D. McCubbins. 2005. *Setting the Agenda: Responsible Party Government in the U.S. House of Representatives*. New York: Cambridge University Press.
- Gray, Thomas R., and Jeffery A. Jenkins. 2019. "Pivotal Politics and the Ideological Content of Landmark Laws." *Journal of Public Policy* 39(1): 115–142.
- Howell, William G., and Jon C. Rogowski. 2012. "War, the Presidency, and Legislative Voting Behavior." *American Journal of Political Science* 57(1): 150–166.
- Koma, Wyatt, Tricia Neuman, Gary Claxton, Matthew Rae, Jennifer Kates, and Josh Michaud. 2020. "How Many Adults Are at Risk of Serious Illness If Infected with Coronavirus? Updated Data." Kaiser Family Foundation. https://www.kff.org/518cbd9/.
- Krehbiel, Keith. 1993. "Where's the Party?" *British Journal of Political Science* 23(2): 235–266.Krehbiel, Keith. 1998. *Pivotal Politics*. Chicago: University of Chicago Press.
- Lawrence, Eric D., Forrest Maltzman, and Steven S. Smith. 2006. "Who Wins? Party Effects in

Legislative Voting." Legislative Studies Quarterly 31(1): 33-69.

- Lee, Frances E. 2015. "How Party Polarization Affects Governance." *Annual Review of Political Science* 18(1): 261–282.
- McCarty, Nolan M., and Keith T. Poole. 1995. "Veto Power and Legislation: An Empirical Analysis of Executive and Legislative Bargaining from 1961 to 1986." *The Journal of Law, Economics, and Organization* 11(10): 282–312.
- Raifman, Julia, Kristen Nocka, David Jones, Jacob Bor, Sarah Lipson, Jonathan Jay, Philip Chan, M. Brahim, Carolyn Hoffman, and Claire Corkish. 2020. "COVID-19 U.S. State Policy Database." Boston University. https://statepolicies.com/.
- Shor, Boris, and Nolan McCarty. 2011. "The Ideological Mapping of American Legislatures." *American Political Science Review* 105(3): 530–551.
- Shor, Boris, and Nolan McCarty. 2022. "Two Decades of Polarization in American State Legislatures." *Journal of Political Institutions and Political Economy* 3(3–4): 343–370.
- Singer, Matthew. 2023. "Dynamics of Gubernatorial Approval: Evidence from a New Database." Forthcoming, *State Politics & Policy Quarterly*. https://doi.org/10.7910/DVN/I6VZ9Y.
- Treier, Shawn. 2010. "Where Does the President Stand? Measuring Presidential Ideology." *Political Analysis* 18(1): 124–136.
- Warner, Seth B. 2023. "Measuring Executive Ideology and Its Influence." *State Politics & Policy Quarterly* 23(1): 97–116.
- Windett, Jason H., Jeffrey J. Harden, and Matthew E. K. Hall. 2015. "Estimating Dynamic Ideal Points for State Supreme Courts." *Political Analysis* 23(3): 461–469.
- Woon, Jonathan. 2009. "Change We Can Believe In? Using Political Science to Predict Policy Change in the Obama Presidency." *PS: Political Science & Politics* 42(2): 329–333.