Political Science Quarterly, 2023, **Vol. 00**, **No. 0**, 1–24
https://doi.org/10.1093/psquar/qqac002
Advance access publication 27 March 2023
Original Article

Polarized Politics: Protest Against COVID-19 Containment Policies in the USA

Katharina Gabriela Pfaff[1], Thomas Plümper[2,*], and Eric Neumayer[3]

[1]Department of Government, University of Vienna, Vienna, Austria
[2]Department of Socioeconomics, Vienna University of Economics and Business, Vienna, Austria
[3]Department of Geography & Environment, London School of Economics and Political Science (LSE), London, UK

*Corresponding author: Email: thomas.pluemper@wu.ac.at

Abstract

Protest against containment policies in U.S. states is fueled by two drivers: the stringency of containment policies and the partisan control over the governorship and legislatures in each state. In our analysis of the period from March 2020 to March 2022, we find more protest events in states fully controlled by Democrats than in Republican controlled states both in a sample consisting of all states and a balanced sample in which we constrain observations to those red and blue states with on average similarly stringent containment policies. Protest was therefore politicized, and we find that partisanship exerts a roughly equal substantive effect on the number of protest events as the stringency of containment policies. If we assume no direct effect of partisanship on protest but allow for causal heterogeneity along partisan lines in the effect of containment policies, we find that the same increase in the stringency of policies evokes a stronger protest response in blue states than in red states.

Keywords: protest, partisan control, politicization, polarization, containment policies, COVID-19, SARS-CoV-2

When the Sars-CoV-2 virus and the ensuing coronavirus 2019 (COVID-19) pandemic reached the United States in early 2020, the country had suffered for many years already from a deep polarization between political camps and parties.[1] Although the notion that U.S. politics is polarized can be traced back least to

Katharina Gabriela Pfaff is a postdoctoral researcher at the Department of Government, University of Vienna. She is part of the Austrian digitalization project, *Digitize!*, and examines the advancement of digital techniques for data collection and data analysis in political science. Thomas Plümper is Professor of Quantitative Social Research at the Vienna University of Economics. He has, together with Eric Neumayer, published frequently on social science methodology and the political economy of natural disasters. Eric Neumayer is Pro Director (Pro Vice-Chancellor) Planning and Resources and Professor at the London School of Economics and Political Science. He has, together with Thomas Plümper, published *Robustness Tests for Quantitative Research*, Cambridge University Press 2017.

[1] John Sides and Daniel J. Hopkins, eds., *Political Polarization in American Politics* (London: Bloomsbury, 2015); Michael Barber and Nolan McCarty, "Causes and Consequences of Polarization," in *Political Negotiation: A Handbook*, Jane Mansbridge and Cathie Jo Martin, eds., (Washington, DC: The Brookings Institution, 2015), 37–90. Jeffrey M. Stonecash and Mack D. Mariani, "Republican Gains in the House in the 1994 Elections: Class Polarization in American Politics," *Political Science Quarterly* 115 (Spring 2000): 93–113; Kelsey L. Hinchliffe and Frances E. Lee, "Party Competition and Conflict in State Legislatures," *State Politics & Policy Quarterly* 16 (June 2016): 172–97; Justin Gest, Tyler Reny, and Jeremy Mayer, "Roots of the Radical Right: Nostalgic Deprivation in the United States and Britain," *Comparative Political Studies* 51 (November 2018): 1694–719.

Poole and Rosenthal,[2] Layman and Carsey suggest that politicians have increasingly become polarized on social welfare, racial, and cultural issues since the 1970s.[3] The pandemic and the containment policies implemented to keep the pandemic under control divided the country even further.[4] Democrat-controlled, or "blue," states adopted more stringent containment policies,[5] adopted these earlier,[6] and kept restrictions in place for longer than Republican-controlled, or "red," states. However, protest against containment policies was not only policy-driven. It was also partisan in the sense that blue states experienced significantly more protest events than red states. Containment policies have strong redistributive consequences and may thus trigger political conflict even in countries in which political camps are not particularly antagonistic. In deeply divided countries such as the United States, the pandemic further antagonizes political parties and, we will show, instigates politicized protest.

We argue in this article that protest in the United States against containment policies follows a threefold logic: On the surface, protest is policy-oriented in the sense that protesters demand the abolition of containment policies where these run counter to the protesters' self- interests. According to this logic, protest is simply more likely to occur where and when containment measures are more stringent. Because blue states adopt more stringent policies, they will experience more protest than red states. The second logic is ideological in the sense that containment policies cut deeply into personal freedom. Protesters wish to leave the protection against an infection with Sars-CoV-2 to the individual. In their view, containment policies have little effect on the epidemiological situation but cause various unwanted side effects. Because this ideological debate is associated with a partisan divide in which Democrats are seen as set upon sacrificing individual freedom with intrusive public health policies, this logic predicts more protest in states governed by Democrats. More importantly, inasmuch as protest aligns with and is motivated by preexisting ideological cleavages, more protest occurs in states governed by the Democrats than in states governed by Republican—independent of the stringency of their adopted containment policies. Protest against these policies is thus politicized and partisan. It is not only the case that blue states see more protest events because they have more stringent containment measures but also because they are governed by Democrats. The third and final logic is also partisan but

[2] Keith T. Poole and Howard Rosenthal, "The polarization of American politics," *The Journal of Politics* 46 (November 1984): 1061–79.

[3] Geoffrey C. Layman and Thomas M. Carsey, "Party Polarization and 'Conflict Extension' in the American Electorate," *American Journal of Political Science* 46 (October 2002): 786–802.

[4] Gordon Pennycook, Jonathon McPhetres, Bence Bago, and David G. Rand, "Beliefs About COVID-19 in Canada, the UK, and the USA: A Novel Test of Political Polarization and Motivated Reasoning," *Personality and Social Psychology Bulletin* 48 (May 2022): 750–65.

[5] Hunt Allcott, Levi Boxell, Jacob Conway, Matthew Gentzkow, Michael Thaler, and David Yang, "Polarization and Public Health: Partisan Differences in Social Distancing During the Coronavirus Pandemic," *Journal of Public Economics* 191 (November 2020): 104254; Christopher Adolph, Kenya Amano, Bree Bang-Jensen, Nancy Fullman, and John Wilkerson, "Pandemic Politics: Timing State-Level Social Distancing Responses to COVID-19," *Journal of Health Politics, Policy and Law* 46 (April 2021): 211–233; Christopher Adolph, Kenya Amano, Bree Bang-Jensen, Nancy Fullman, Beatrice Magistro, Grace Reinke, and John Wilkerson, "Governor Partisanship Explains the Adoption Of State-Wide Mask Mandates in Response to COVID-19," *State Politics & Policy Quarterly* 22 (March 2022): 24–49.

[6] Laura Hallas, Ariq Hatibie, Saptarshi Majumdar, Monika Pyarali, and Thomas Hale, "Variation in US States' Responses to COVID-19 2.0," *Blavatnik School of Government Working Paper* (December 2020).

focuses on the November 2020 elections. According to this logic, one would expect to see more protest before the election and more protest in states that are expected to have a narrow electoral race.

In our empirical analysis of monthly protest events at the state level between March 2020 and March 2022, we find evidence that protest was higher where containment policies were more stringent and thus more likely to conflict with personal self-interest of potential protesters. More importantly, we find that states governed by the Democratic party are more likely to become the target of protesters, controlling for the stringency of containment policies in place against which protest is mounted, which holds even if we adopt a similar balance in which blue and red states have on average adopted similarly stringent containment policies. The partisanship of state control is of similar importance in terms of substantive effect size on the number of protest events as the stringency of the policies the protesters object to. If we adopt a different model specification by assuming that partisan effects only work via heterogeneity in response to containment policies, we find that the same level of containment policies adopted by blue states generates substantively more protest than if they are adopted by red states. Finally, we find no evidence that more protest events took place in states in which the office of state governor was up for election or in swing states where elections tend to be close.

Our research contributes to an emerging literature on protest against nonpharmaceutical containment measures. While survey research has tried to identify the attitudes and political preferences of those participating in protest events,[7] we follow a complementary research interest and analyze when and where protest events take place. In a comparative study of European countries, we have shown that the number of protest events is high where trust in government is low and civil rights are well developed.[8] The strong polarization of U.S. society entails that there is a sizeable group of people who have no trust at all in whichever party governs the state, and the high level of civil liberties in the United States guarantees that protest is not forcibly suppressed by state actors. In what seems to be the first qualitative study on protest against containment policies in the United States, Brennan suggests that protest against lockdown policies stressed the relevance of defending individual liberties against the priority of protecting the good of the common health.[9] Brennan also finds that protest against containment measures in the United States exacerbates "an already entrenched partisan divide,"[10] an argument for which we will provide further empirical evidence. In another related study of Germany,[11] we found that protest events are much more likely to occur in districts

[7] Oliver Nachtwey, Robert Schäfer, and Nadine Frei, "Politische Soziologie der Corona-Proteste," unpublished manuscript (December 2020), accessed at https://doi.org/10.31235/osf.io/zyp3f, 21 July 2022; Johannes Pantenburg, Sven Reichardt, and Benedikt Sepp, "Corona-Protest und das (Gegen-)Wissen Sozialer Bewegungen," *Aus Politik und Zeitgeschichte* 70 (April 2021): 22–27.

[8] Eric Neumayer, Katharina Gabriela Pfaff, and Thomas Plümper, "Protest against Covid-19 Containment Policies in European Countries," *Journal of Peace Research* (forthcoming).

[9] Elliot Brennan, "Coronavirus and Protest: How Covid-19 has Changed the Face of American Activism," *United States Studies Centre at the University of Sydney Report* (May 2020): 1–22, accessed at https://www.ussc.edu.au/analysis/coronavirus-protest-how-covid-19-has-changed-the-face-of-american-activism, 21 July 2022.

[10] Brennan, "Coronavirus and Protest".

[11] Thomas Plümper, Eric Neumayer, and Katharina G. Pfaff, "The Strategy of Protest Against COVID-19 Containment Policies in Germany," *Social Science Quarterly* 102 (September 2021): 2236–50.

in which mainstream parties are weak, thus exacerbating any partisan divide between mainstream parties and those outside the political mainstream, particularly those on the extreme right, rather than exacerbating a partisan divide between mainstream parties, as we find in this study. Political polarization and income inequality are not independent of each other.[12] Along these lines, Iacoella, Justino, and Martorano find more protest against containment policies when these are more stringent but only in U.S. counties that are more economically unequal.[13] We control for income inequality in our own estimations at the state level and, consistent with their study, find that more income inequality in a state correlates with an elevated number of protest events.

Protest Against COVID-19 Containment Measures in the United States

Containment policies have strong redistributive effects; they intervene in personal freedom and thus stretch the legitimacy of public policies; and the attitudes people have towards them is often correlated with partisan preferences. It is therefore not surprising that protest against COVID-19 containment policies unifies dissenters with very different motives—ranging from economic interests to ideological motives and partisanship. In this section, we identify three main motives for protest against COVID-19 containment policies. The first motive is self-interest: containment policies have redistributional effects which tend to be stronger the more severe the pandemic and the higher the stringency of containment policies. The second motive is ideological and partisan: containment policies reduce personal freedoms and intervene sharply into the lives of citizens. In the United States, the protection of a particular kind of personal freedom is associated with the Republicans, while Democrats tend to lean towards a strong interventionist government. The third motive is strategic and partisan: protesters may try to influence elections by protesting against a government's imposition of containment policies and particularly so in swing states where traditionally election outcomes have been close.

Protest And Self-Interest

Political protest is a legitimate expression of discontent with public policies, the effectiveness of political institutions, or the legitimacy of political power. As Kitschelt and coauthors have argued, democracies depend on the political participation and processes that affect its legitimacy.[14] Protest offers minorities that feel underrepresented by the political system an opportunity to gain visibility[15] and to bring an issue close to the core of the political agenda.[16] Yet, protest does not only

[12] Torben Iversen and David Soskice, "Information, Inequality, and Mass Polarization: Ideology in Advanced Democracies," *Comparative Political Studies* 48 (November 2015): 1781–813.

[13] Francesco Iacoella, Patricia Justino, and Bruno Martorano, "Do Pandemics Lead to Rebellion? Policy Responses to COVID-19, Inequality, and Protests in the USA," *WIDER Working Paper 2021/57* (March 2021), accessed at https://doi.org/10.35188/UNU-WIDER/2021/995-2, 22 July 2022.

[14] Herbet Kitschelt, Zdenka Mansfeldova, Radoslaw Markowski, and Gabor Toka, *Post-Communist Party Systems: Competition, Representation, and Inter-Party Cooperation* (Cambridge: Cambridge University Press, 1999).

[15] Christopher J. Anderson and Silvia M. Mendes, "Learning to Lose: Election Outcomes, Democratic Experience and Political Protest Potential," *British Journal of Political Science* 36 (January 2006): 91–111.

[16] Ondřej Císař and Kateřina Vráblíková, "National Protest Agenda and the Dimensionality of Party politics: Evidence from four East-Central European democracies," *European Journal of Political Research* 58 (March 2019): 1152–71.

aim at influencing policies, protesters also often challenge the legitimacy of political institutions or attack the legitimacy of the incumbent government.[17] However, the more redistributive policies are, the more likely they prompt protest.

The distributional effects of the pandemic itself and of the policies aimed at its containment are significant and manifold. On the one hand, the main beneficiaries of containment policies are those that are most likely to die or to be seriously harmed by COVID-19, namely the old and those with medical preconditions.[18] At the other end of the spectrum, relatively young and healthy people do not feel threatened by COVID-19 because they are unlikely to die if they catch the virus. At the same time, they bear the brunt of the economic costs of containment policies.

Nonpharmaceutical policy interventions have strong economic repercussions that predominantly make the younger and poorer working population worse off, particularly those with jobs requiring personal customer contact and those with jobs that cannot be performed online from the comfort and safety of one's own home. Likewise, containment policies have led to a rapid increase in public debt, which is a burden for some generations to come. In sum, the policy response to the virus redistributes utility from the young to the old and from the poor to the rich.

Economic incentives for protest against containment policies would be strongest where and when containment policies are strict[19] and where containment policies and their negative economic consequences exacerbate existing economic cleavages. Since the psychological work of Crosby,[20] who stressed the relevance of relative deprivation, social scientists have argued and shown that political protest is one of the consequences of relative deprivation.[21] People who feel deprived become more likely to engage in political action and particularly protest.[22] This would suggest more protest activity in states that are more economically unequal.

[17] Emilie M., Hafner-Burton, Emilie M., Susan D. Hyde, and Ryan S. Jablonski, "When Do Governments Resort to Election Violence?" *British Journal of Political Science* 44 (January 2014): 149–79.

[18] Amitava Banerjee, Laura Pasea, Steve Harris, Arturo Gonzalez-Izquierdo, Ana Torralbo, Laura Shallcross, Mahdad Noursadeghi, Deenan Pillay, Neil Sebire, Chris Holmes, Christina Pagel, Wai Keong Wong, Claudia Langenberg, Bryan Williams, Spiros Denaxas, and Harry Hemingway, "Estimating Excess 1-Year Mortality Associated with the COVID-19 Pandemic According to Underlying Conditions and Age: A Population-Based Cohort Study," *The Lancet* 395 (May 2020): 1715–25; Marília R. Nepomuceno, Enrique Acosta, Diego Alburez-Gutierrez, José Manuel Aburto, Alain Gagnon, and Cássio Turra, "Besides Population Age Structure, Health and Other Demographic Factors Can Contribute to Understanding the COVID-19 Burden," *Proceedings of the National Academy of Sciences* 117 (June 2020): 13881–83; Arthur E. Mesas, Iván Cavero-Redondo, Celia Álvarez-Bueno, Marcos Aparecido Sarriá Cabrera, Selma Maffei de Andrade, Irene Sequí-Dominguez, and Vicente Martínez-Vizcaíno, "Predictors of In-Hospital COVID-19 Mortality: A Comprehensive Systematic Review and Meta-Analysis Exploring Differences by Age, Sex and Health Conditions," *PLoS One* 15 (Nov 2020): e0241742.

[19] Frederic Boissay, Daniel Rees, and Phurichai Rungcharoenkitkul, "Dealing with COVID-19: Understanding the Policy Choices," Bank for International Settlements, *BIS Bulletins* 19 (May 2020): 1–7; Plümper, Neumayer, and Pfaff, "The Strategy of Protest Against COVID-19 Containment Policies in Germany."

[20] Faye Crosby, "A Model of Egoistical Relative Deprivation," *Psychological Review 83* (March 1976): 85–113; Faye Crosby, "Relative Deprivation Revisited: A Response to Miller, Bolce, and Halligan," *American Political Science Review* 73 (March 1979): 103–12.

[21] Stephen G. Brush, "Dynamics of Theory Change in the Social Sciences: Relative Deprivation and Collective Violence," *Journal of Conflict Resolution* 40 (December 1996): 523–45; Rima Wilkes, "First Nation Politics: Deprivation, Resources, and Participation in Collective Action," *Sociological Inquiry* 74 (November 2004): 570–589; John D. Griffin, Chad Kiewiet de Jonge, and Vania Ximena Velasco-Guachalla, "Deprivation in the Midst of Plenty: Citizen Polarization and Political Protest," *British Journal of Political Science* 51 (July 2021): 1080–96.

[22] Marco Giugni and Maria T. Grasso, "How Civil Society Actors Responded to the Economic Crisis: The Interaction of Material Deprivation and Perceptions of Political Opportunity Structures," *Politics & Policy* 44

The Politicization of Protest

Protest against containment policies became rapidly politicized, which is no wonder since from its inception the pandemic itself became more politicized in the United States than in most other developed countries because of various reasons. One reason is that the country's political culture had already become highly polarized many years before the pandemic began.[23] Cleavages triggered by the pandemic, one might say, fell on fertile ground. But secondly, political frictions were also further amplified by the redefinition of the role of the state during the pandemic. Many protesters fear that the pandemic will have a lasting effect such that the United States will become a less individualistically free country with a more interventionist and more regulatorily intrusive government. The partisan response to this specific pandemic matches long-established partisan differences in views about the role of the state in looking after the health of American citizens.[24] Adolph and his coauthors have shown that the political or partisan logic has dominated the epidemiological logic for state-wide adoption of social distancing policies.[25] Finally, the pandemic started with a historical quirk in that, at first, coastal and other states governed by Democrats were more affected than states governed by Republicans that experienced lower incidence and death rates initially.[26] Thus, the pandemic itself started with a partisan bias, and this twist tempted politicians to exploit the pandemic for partisan purposes, a temptation that many politicians did nothing to resist.[27] Former President Trump's stance towards containment measures as expressed in his tweets are likely to have encouraged his supporters to protest against social distancing policies.[28] Many Republicans led by Trump downplayed the seriousness of the disease.[29] An attitude of "it's just a flu," laissez-faire, influenced large parts of the Republican party and its supporters, at least early on in the pandemic. The great political divide—the strong polarization of American politics

(June 2016): 447–72; Maria T. Grasso and Marco Giugni, "Protest Participation and Economic Crisis: The Conditioning Role of Political Opportunities," *European Journal of Political Research* 55 (July 2016): 663–80.

[23] Nolan McCarty, *Polarization. What Everyone Needs to Know* (Oxford: Oxford University Press, 2019).

[24] Thomas R. Oliver, "Health Care Market Reform in Congress: The Uncertain Path From Proposal to Policy," *Political Science Quarterly* 106 (Autumn 1991): 453–77; Colleen M. Grogan and Elizabeth Rigby, "Federalism, Partisan Politics, and Shifting Support for State Flexibility: The Case of the US State Children's Health Insurance Program," *Publius: The Journal of Federalism* 39 (Winter 2009): 47–69; Leonardo Baccini and Abel Brodeur, "Explaining Governors' Response to the COVID-19 Pandemic in the United States," *American Politics Research* 49 (March 2021): 215–20.

[25] Adolph et al., "Pandemic Politics"; Christopher Adolph, Kenya Amano, Bree Bang-Jensen, Nancy Fullman, Beatrice Magistro, Grace Reinke, Rachel Castellano, Megan Erickson, and John Wilkerson, "The Pandemic Policy U-Turn: Partisanship, Public Health, and Race in Decisions to Ease COVID-19 Social Distancing Policies in the United States," *Perspectives on Politics* 20 (June 2022): 595–617.

[26] Brian Neelon, Fedelis Mutiso, Noel T. Mueller, John L. Pearce, and Sarah E. Benjamin-Neelon, "Associations Between Governor Political Affiliation and COVID-19 Cases, Deaths, and Testing in the U.S.," *American Journal of Preventive Medicine* 61 (July 2021): 115–19.

[27] Adolph et al., "Pandemic Politics"; Christopher Adolph, Kenya Amano, Bree Bang-Jensen, Nancy Fullman, Beatrice Magistro, Grace Reinke, and John Wilkerson, "Governor Partisanship Explains the Adoption of State-Wide Mask Mandates in Response to COVID-19," *medRxiv* 2020.08.31.20185371 (March 2021).

[28] Owen Dyer, "COVID-19: Trump Stokes Protests Against Social Distancing Measures," *BMJ* 369 (April 2020): 1–2; Brennan, "Coronavirus and Protest." Giuliana Viglione, "Four ways Trump has Meddled in Pandemic Science-and Why It Matters," *Nature*, 3 November 2020, accessed at https://www.nature.com/articles/d41586-020-03035-4, 21 July 2022.

[29] Umut Akovali and Kamil Yilmaz, "Polarized Politics of Pandemic Response and the COVID-19 Connectedness Across the U.S. States," *Covid Economics, Vetted and Real-time Papers 2020* (November 14, 2020), accessed at http://dx.doi.org/10.2139/ssrn.3730712, 21 July 2022.

and society—had reached the pandemic long before the pandemic's first wave had peaked.

The most obvious ideological protest motive is therefore related to the age-old trade-off between individual freedom on the one hand and government interventions and public good provision on the other hand. Is it the responsibility of every individual person to protect themselves from a possible infection or is it the responsibility of the state to step in and reduce civil liberties of individuals for the public good and benefit of all?

Proponents of stringent containment policy have argued that keeping the number of active infections low is a public good that directly or indirectly benefits all. Critics of containment policies have often doubted that these policies are effective and generate public benefits, let alone benefits that are best produced by restricting the freedom of the individual. Also, anticoronavirus policies have a strong and direct link to the ideological question of the regulatory role of the state. Those who favor a libertarian minimal state will not suddenly change their view just because they feel personally threatened by a virus. Whereas those who support an active role of the state, big government, will not suddenly favor lax containment policies simply because these policies impose restrictions on their social and commercial activities.

Anticoronavirus policies imply a very strong government intervention restricting and encroaching into personal freedom, a value which is strongly held across the political spectrum in the United States but particularly so on the conservative side.[30] Ideology motivates protest because of the belief people have on the political consequences of containment policies. Many protesters may well fear that containment policies redefine the role of the state and lead to a sustained change in the political culture, with fewer individual freedoms and more intrusive government intervention. Protesters may fear that some of these changes to the political culture and to the political institutions are there to stay—and that containment policies just provide the blueprint for lasting redefinitions of individual freedom and the role of the state. Occasionally, protesters who are open to conspiracy theories believe that the pandemic was deliberately generated to bring about these profound changes to contemporary political culture.

Thus, politicization adds an important dimension to the logic of protest based on self-interest. Protest no longer only depends on the stringency of policies and its economic and social consequences but also on the government that implemented the policies. In a purely politicized world, a world where protest does not result from the nature of the pandemic, protest would entirely depend on which is the incumbent party. Clearly, protest events are not exclusively determined by politicization, but qualitative evidence suggests protest in the United States has been fuelled by ideology more than by economic interests and by worldviews rather than by medical preconditions.[31] Early protest events against lockdown policies had been planned by loosely organized groups that before the pandemic had few stakes in health policies. These protest events remained relatively small, and protesters demanded that governments "reopen" the state to allow

[30] Brennan, "Coronavirus and Protest."

[31] Scott C. Flanagan and Aie-Rie Lee, "The New Politics, Culture Wars, and The Authoritarian-Libertarian Value Change in Advanced Industrial Democracies," *Comparative Political Studies* 36 (April 2003): 235–70; Brennan, "Coronavirus and Protest."

normal business operations and personal activities. The organizers of protest events and their political supporters firmly rested in the conservative spectrum of the country or were at least associated with right-wing groups and attitudes by the media and the public. For example, writing for the UK's *The Guardian* newspaper, Jason Wilson claimed that protesters are supported "by street-fighting rightwing groups like the Proud Boys, conservative armed militia groups, religious fundamentalists, antivaccination groups, and other elements of the radical right."[32] Other observers likewise characterized protesters and their supporters as right-wing and pro-Trump.[33]

At the macro-level, politicization changes the spatial and the temporal patterns of protest against containment policies. Because protesters are politically biased towards the right side of the political spectrum, we expect that the majority of protest events occur in states governed by the Democrats. This should also hold if we only compare states with similarly stringent containment policies. It also implies that for any given stringency of containment policies, the level of protest is on average higher in states governed by the Democratic party than in states governed by the Republican party—with states that have a divided government likely to fall in between unified governments. Note that it is not necessarily irrational or purely based on partisan resentment if protesters who lean toward the right of the political spectrum mount more protest against containment policies of the same or similar stringency in blue than in red states. Instead, protesters may worry that restrictions to individual freedom and a bigger regulatory role of the state are more likely to stay in blue than in red states even when the pandemic recedes. If so, it is perfectly rational for these protesters to react more strongly to containment policies in blue than in red states.

The Electoral Strategy of Protest

As we have discussed previously, politicization and polarization of protest against COVID-19 containment policies were fueled both by an uneven response of the Republicans and the Democrats to the pandemic and by the ideological background of the protesters. Protesters against containment policies were not just mobilized by their opposition against stringent containment measures, they also had political motives that go beyond protesters' hopes or expectations to be able to influence state governments to abolish or at least relax containment policies.

One can take the partisan logic of protest one step further and also ask whether protesters tried to influence the November 2020 elections in the United States. Politically motivated protesters may hope or expect to influence the broader public with their views, arguments, and opposition manifested on the streets—and particularly so in an election year. After all, 44 U.S. states held state elections on November 3, 2020, 11 states elected a new governor, and the United States also elected a new president and new members of the U.S. House of Representatives and the Senate.

[32] Jason Wilson, "The Rightwing Groups Behind Wave of Protests Against COVID-19 Restrictions," The Guardian, 17 April 2020, accessed at https://www.theguardian.com/world/2020/apr/17/far-right-coronavirus-protests-restrictions, 22 July 2022.

[33] BBC, "Coronavirus Lockdown Protests: What's Behind the US Demonstrations?" 21 April 2020, accessed at https://www.bbc.com/news/world-us-canada-52359100, 22 July 2022.

Ex post, we do not find much prima facie evidence that the 2020 election outcomes were influenced by the protest events since, at least at the state level, the elections brought about surprisingly little political change. Partisan control in virtually all states has been confirmed. Of course, this is not proof of the absence of such an effect because we do not know the electoral results in the absence of these protests. However, consistent with democratic elections during times of deep crisis, the state elections seem to show a moderate "rally around the flag effect," which appears to exist independently of the implemented containment measures and the number of protest events against these policies. Crucially, however, the fact that protests remained seemingly inconsequential says little about the motives and intentions of protesters. Just like a failed revolution does not imply that the revolutionaries did not try to topple the government and change the political order, the absence of visible success of protest does not imply that the protesters were not driven by partisan political aims and goals.

A strategic theory of protest events, one that argues that protesters wish to influence elections,[34] predicts that protest events are more frequent where protest matters most: in swing states in which, traditionally, results tend to be close and that are therefore hotly contested. We will test this prediction in the empirical analyses. Note, however, that any strategic theory of protest organization has to make a strong assumption about the beliefs protesters have regarding the electoral effect of protest events. It is by no means clear that protest against containment policies in potential swing states governed by the Democratic party shortly before the elections increases the electoral chances of the Republican candidate. Only if protesters are strategic and believe that protest can attract more voters for the Republican candidate, does it make sense to organize a disproportionate number of protest events in swing states. However, while protest may be popular with the average Republican voter, it is unclear whether it increases the Republican vote share in traditionally contested swing states.

The Politicization of Containment Policies in the United States: Some Descriptive Evidence from Balanced and Unbalanced Samples

As previously noted, the debate about the best strategy to contain the pandemic emerged when the country was already in the middle of strongly polarized and intense political conflict between conservatives and liberals, the political right and the political left.[35] As much as protest against containment policies was a project of the conservative end of the political spectrum, the implementation of containment policies was mainly a project of states controlled by the Democratic party. Blue states, in which both the legislature and the governorship are held by Democrats, as well as states with a divided government in which either the legislature or the governorship of the state was held by Democrats, responded earlier to the pandemic and the containment policies they implemented were, at least

[34] See for example, Timothy Frye and Ekaterina Borisova, "Elections, Protest, and Trust in Government: A Natural Experiment from Russia," *The Journal of Politics* 81 (July 2019): 820–32.

[35] Christopher Hare and Keith T. Poole, "The Polarization of Contemporary American Politics," *Polity* 46 (July 2014): 411–29; McCarty, *Polarization*.

initially, more stringent than in red states. The considerable analytical challenge is therefore to disentangle the higher occurrence of protest in blue states that is due to these states adopting more stringent policies than red states from any partisan effect on protest activity independently of or controlling for these partisan differences in the adoption of containment policies. In this section, we start with descriptive evidence before the next section provides multivariate regression analyses.

Containment Policies and the Partisan Logic of Protest: Data and Data Sources

We base the descriptive statistics and the multivariate regression analyses on two samples: one is a full or unbalanced sample that includes all of the 50 states with state legislatures and governorships, including those with divided state control and another constrained or "balanced sample" that only contains blue and red states that are not too dissimilar in the stringency of their adopted containment policies. Specifically, the latter is based on an approach in which we select, separately for each month, only states controlled by Democrats that do not have more stringent containment policies than the most stringent state controlled by Republicans and only states controlled by Republicans that do not have less stringent containment policies in place than the state controlled by Democrats with the least stringent policy. Thus, we constrain the balanced sample to a selection of Republican and a selection of Democrat controlled states with similar stringency of containment measures.

The partisanship data are based on the National Conference of State Legislatures,[36] based on the party affiliation of the governor and the majority party in the legislatures before the November 3, 2020, elections, inasmuch as these elections may to some extent be endogenous to protest events.[37] The information on containment policies draws on the "containment and health index" from Oxford University's government response tracker data.[38] This index is based on an ordinal coding of the extent to which policies and regulations, which have been issued by state and substate governments, result in the following measures: school closing, workplace closing, the cancellation of public events, restrictions on gathering size, the closing of public transport, stay at home requirements, restrictions on

[36] National Conference of State Legislatures, "State Partisan Opposition," 6 January 2022, accessed at https://www.ncsl.org/research/about-state-legislatures/partisan-composition.aspx, 22 July 2022.

[37] However, this coding decision makes no real difference given that these elections only changed the party hold on the governorship in one state, Montana, and on the party hold on the legislatures in one other state, New Hampshire, which both went from Democrats to Republicans. Nebraska is the only state with a unicameral legislature that is officially non-partisan but in which Republican political groups hold the majority in its legislature. Minnesota is the only state in which control of the bicameral legislature is divided between Republicans and Democrats, with Republicans holding a slim majority in the senate and Democrats holding a larger majority in the house of representatives. Given the larger majority in the lower house and given the lower house is likely to be more important for the passing of COVID-19 containment policies and regulations, we coded this state legislature as Democrat controlled.

[38] Thomas Hale, Noam Angrist, Rafael Goldszmidt, Beatriz Kira, Anna Petherick, Toby Phillips, Samuel Webster, Emily Cameron-Blake, Laura Hallas, Saptarshi Majumdar, and Helen Tatlow, "A Global Panel Database of Pandemic Policies (Oxford COVID-19 Government Response Tracker)," *Nature Human Behaviour* 5 (March 2021): 529–38. Data can be accessed at https://www.bsg.ox.ac.uk/research/research-projects/coronavirus-government-response-tracker. For a detailed description of the data source as well as an overview of the variation in US states' responses to Covid-19 up until the end of 2020, see Hallas et al., "Variation in US States' Responses to COVID-19 2.0."

internal movement, restrictions on international travel, adopting public information campaigns, testing policies, contact tracing, face covering requirements, vaccination policies and regulating long term care facilities, including access by visitors. It is normalized to range between 0, which indicates the absence of any COVID-19 containment policies, and 100, which indicates the most stringent of policies. Comparing the average stringency score in blue versus red states demonstrates why our balancing approach is important: blue states have an average containment score of 50.7 over the sample period, whereas red states have an average score of 41.4 (states with divided control score an average of 47.9). The average can of course be distorted by a few outliers within each group, but the median is almost identical with the mean in all three categories.

Data on organized protest events against governmental policy measures responding to the COVID-19 pandemic are extracted from the Armed Conflict Location & Event Data Project (ACLED).[39] We capture all events in which protesters criticize the handling of the pandemic by all layers of government, express their opposition towards COVID-19 containment policies, or demand more economic support as compensation for loss from containment policies. We exclude protests opposing working conditions and hygiene measures addressing private companies in order to exclusively focus on protest events directed against political actors, usually against governments. The United States also saw a small number of protest events where participants call for stricter containment policies. We similarly exclude these events, which results in a total of 5,635 protest events *against* containment measures in total in our sample period of March 2020 to March 2022. California, New York, Florida, Pennsylvania, and Washington saw the most protest events, whereas Vermont, Delaware, Alaska, and North and South Dakota saw the fewest.

Containment Policies and the Partisan Logic of Protest: Descriptive Statistics

To provide some descriptive evidence, figure 1 reports the average number of protest events in blue and red states in each month between March 2020 and March 2022 before and after balancing, alongside the average containment score in blue and red states before and after balancing (to keep the figure simple, we ignore the 13 states with divided partisan control).[40]

Figure 1 identifies a number of patterns: First, the difference in the stringency of containment policies between blue and red states in the full sample never fell below 10 points on the stringency scale between May 2020 and June 2021, whereas after August 2021 the difference in the stringency score never exceeded 5 points. Second, our balancing strategy almost completely eliminates this partisan gap in the stringency of containment measures. After balancing, the difference in stringency varies between −2.2 in June 2020 and 3.1 in March 2020. Additionally, the average difference over the entire sample period is only 0.8, whereas the average difference in the full sample is 9.3. Third, states controlled by Democrats saw more protest than their Republican counterparts in 25 out of 25 months in the full sample and in 23 out of

[39] Clionadh Raleigh, Andrew Linke, Håvard Hegre, and Joakim Karlsen, "Introducing ACLED: An Armed Conflict Location and Event Dataset: Special Data Feature," Journal of Peace Research 47 (September 2010): 651–60.

[40] See appendix 1 for the full data underlying figure 1.

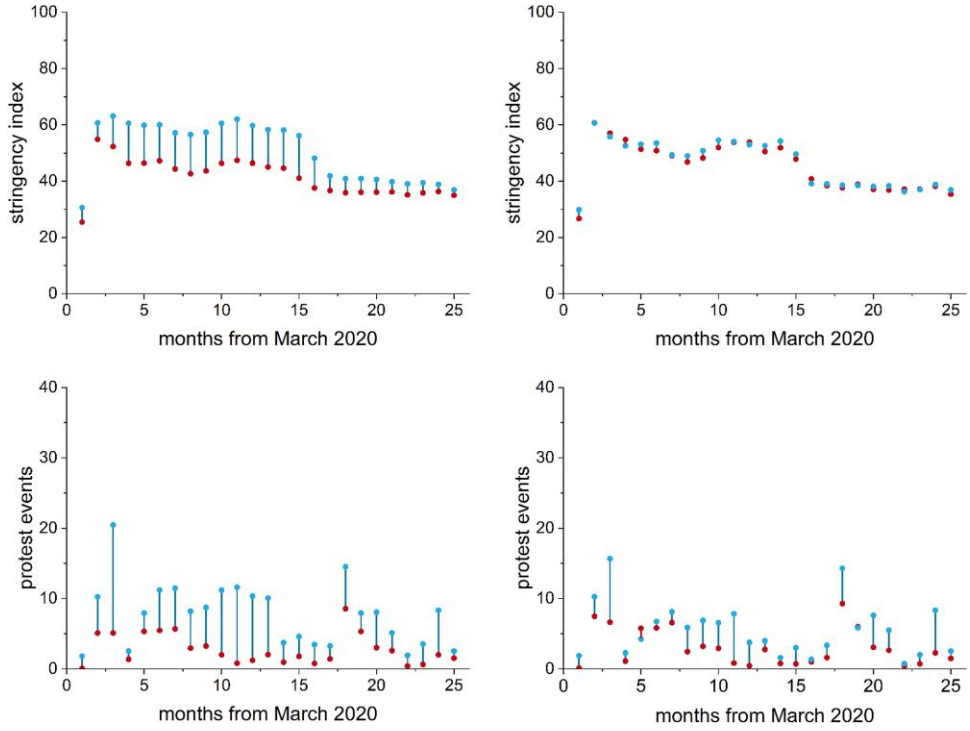

Figure 1. Average Stringency Score and Number of Protests for Red and Blue States in Full Sample (Left) and Balanced Sample (Right)

25 months in the balanced sample, that is after balancing the stringency of containment policies. On average across the 25 months, blue states see 4.9 more protest events in the full and 2.6 more protest events per month in the balanced sample. And fourth, an increase in protest activity in the run-up to the November 3, 2020, elections in either red or blue states cannot be detected based on these data.

The Estimated Effect of Stringency and Partisanship on Protest Against Containment Policies

In this section, we use two multivariate regression approaches to disentangle the effects of stringency of containment policies and partisanship on protest. Our dependent variable is the monthly number of protest events in a U.S. state over the period of March 2020 to March 2022. Contrary to Table 1, we do not drop states with divided control from the full sample, in which we therefore have three categories of partisan state control; we include in the estimations of two dummy variables, namely one for the 15 states that are fully controlled by Democrats and one for the 13 states with divided control, leaving 22 states fully controlled by Republicans as the omitted reference category.[41] Appendix 2 provides an overview of the categorization of states.

[41] In a nonreported robustness test, we replaced the dummy variables for blue, red and divided control of states with a dummy variable for when the governor is Republican and for the Republican share of seats in the

Table 1. Estimation Results, Full and Balanced Samples

	Full sample	Balanced sample
Democratic state control	2.530**	2.594**
	(0.700)	(0.589)
Divided state control	1.532*	
	(0.712)	
Presidential race swing state	0.221	0.483
	(0.550)	(0.633)
State House elections competitive	−0.856	−0.894
	(0.471)	(0.494)
Gubernatorial elections	0.230	0.242
	(0.544)	(0.560)
Stringency C-19 containment policies	0.0797**	0.101*
	(0.0220)	(0.0396)
C-19 mortality rate	−0.837	−1.030
	(0.524)	(0.538)
Population (ln)	3.250**	3.039**
	(0.385)	(0.342)
GDP per capita	2.49e−05	−9.12e−06
	(2.20e−05)	(2.27e−05)
Population density	−0.00232**	−0.00264**
	(0.000859)	(0.000678)
Gini coefficient	0.134*	0.116*
	(0.0621)	(0.0459)
χ^2 (p-value)	1.83	
Democratic vs. Divided state control	(0.1757)	
Number of states	50	37
Observations	1,248	626
Pseudo R-squared	0.189	0.193

Note: Reported results are average marginal effects for continuous variables and average effects from the discrete change from the base level for the dummy variables (presidential race swing state, State House elections competitive, and gubernatorial elections). Standard errors clustered on states in parentheses. Month fixed effects included.
**Statistically significant at .05 level, * statistically significant at .01 level.

To test for partisan strategic motives relating to the November 2020 elections, we include three variables. The first one is a dummy variable based on Schultz and Jacob, who identify 13 states as swing states in U.S. Presidential races.[42] The second one measures how close to equal the two parties are represented in the House of Representatives of their state. Specifically, we calculate the absolute difference in the number of seats between the two parties and divide this by the total number of seats. In our reporting, we take a cutoff point of ≤0.15 on this variable to identify 13 states with competitively close state elections, but our

state House of Representatives. We arrive at qualitatively similar results, namely there are statistically significantly fewer protest events in states with a Republican governor and in states with a lower Republican share of seats in the State House of Representatives.

[42] David A. Schultz and Rafael Jacob, eds., *Presidential Swing States* (Lanham: Lexington Books, 2019).

results are unaffected if we take higher cutoff points. The third variable is a dummy variable for the 11 states that saw gubernatorial elections in November 2020, given that governors played a larger decision-making role with respect to containment policies than state parliaments. The first two variables are correlated with each other but not to an extent to cause inefficient estimates due to high collinearity.

We control for the natural log of a state's population size as of 2019 inasmuch as larger states are likely to see more protest events and for a state's population density. Both sets of data are sourced from the United States Census Bureau.[43] We also control for the state's gross domestic product (GDP) of the first quarter 2020, which we standardize by the state's population size. Current-dollar GDP data are taken from the U.S. Bureau of Economic Analysis.[44] We measure economic inequality within a state by the Gini coefficient of incomes in each state as of 2018, with data based on individual tax filings.[45] Lastly, we control for the average COVID-19 mortality rate in a state month, with data taken from the Centers for Disease Control and Prevention.[46] In prior research, we have found that higher COVID-19 mortality rates tend to dampen protest activity in European countries.[47] Appendices 3A and 3B provide summary descriptive variable statistics for the full and balanced samples, respectively.

We estimate our models with negative binomial regression, which account both for the count data nature of our dependent variable and, contrary to Poisson, for the considerable overdispersion in the data. About 26.5 percent of our state months record no protest events at all, which means they are still infrequent enough that we do not have to consider zero-inflated or hurdle estimation models. Standard errors are clustered on states.

In Table 1, we present results based on both a full sample of all 50 states and the balanced sample in which only blue and red states with sufficiently similar stringency of their COVID-19 containment policies enter the sample. In nonlinear estimation models, coefficients do not represent effects that depend on the values of control variables and thus generally differ from observation to observation so that there is a distribution of effect sizes even if most researchers typically compress the distribution into one single effect size, typically the average. We report average marginal effects for continuous variables and the average effect of the discrete change from the base level for dummy variables, keeping all other variables at their

[43] U.S. Census Bureau, "Population, Population Change, and Estimated Components of Population Change: April 1, 2010 to July 1, 2019 (NST-EST2019-alldata)," 2021, accessed at https://www.census.gov/data/tables/time-series/demo/popest/2010s-state-total.html, 22 July 2022; U.S. Census Bureau, "State Area Measurements and Internal Point Coordinates, 2010," 2021, accessed at https://www.census.gov/geographies/reference-files/2010/geo/state-area.html, 22 July 2022.

[44] U.S. Bureau of Economic Analysis, "Gross Domestic Product by State," 2021, accessed at https://www.bea.gov/data/gdp/gdp-state, 22 July 2022.

[45] Frank, Mark W., "U.S. State-Level Income Inequality Data," January 2021, accessed at https://www.shsu.edu/eco_mwf/inequality.html, 22 July 2022.

[46] Centers for Disease Control and Prevention, "United States COVID-19 Cases and Deaths by State over Time (April 16, 2022). COVID-19 Case Surveillance Public Data Access, Summary, and Limitations", April 16 2022, accessed at https://data.cdc.gov/Case-Surveillance/United-States-COVID-19-Cases-and-Deaths-by-State-o/9mfq-cb36, 22 July 2022.

[47] Eric Neumayer, Katharina Gabriela Pfaff, and Thomas Plümper, "Protest Against COVID-19 Containment Policies in European Countries"; Plümper, Neumayer, and Pfaff, "The Strategy of Protest Against COVID-19 Containment Policies in Germany."

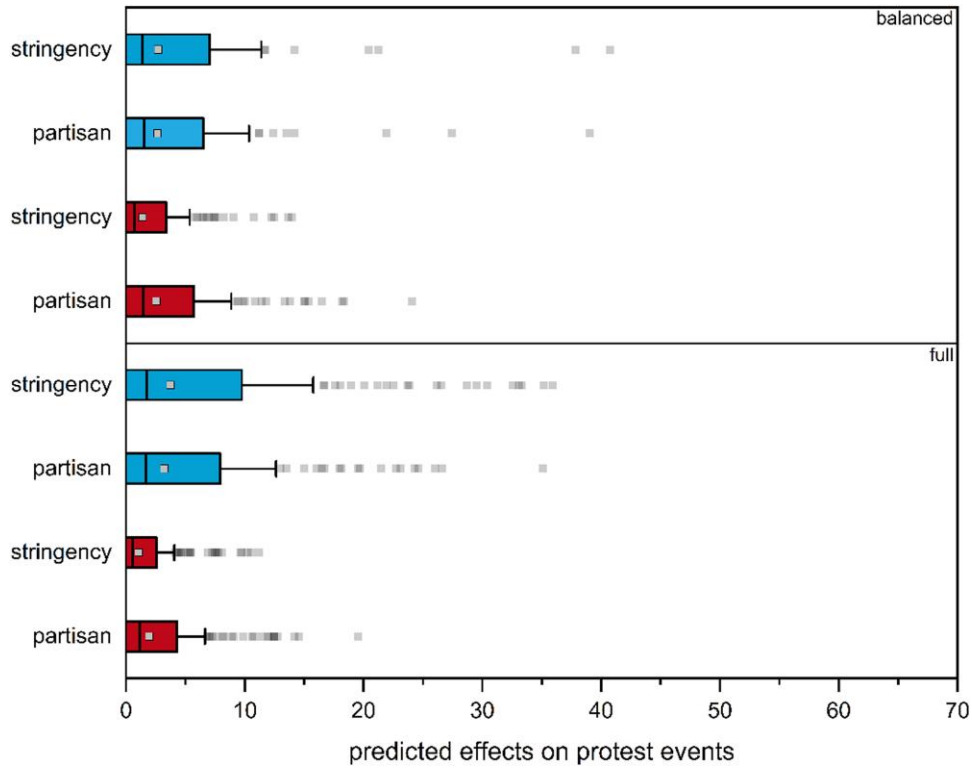

Figure 2. Predicted Counterfactual Effect Sizes for Partisanship and Policy Stringency, Red and Blue States, Full and Balanced Sample
Note that for Red States, the Negative Effect Sizes of Partisanship have been Reverted to Allow for a Direct Comparison in Terms of Absolute Magnitude to the Positive Effect Sizes of Partisanship in Blue States.

observed values, but we base our inferences on a more appropriate analysis of the full distribution of predicted counterfactual effect sizes in figure 2.

Table 1 suggests that on average states controlled by Democrats experience more protest events than red states, controlling for the stringency of COVID-19 containment policies. There is no evidence of more protest events occurring in states with gubernatorial elections in November 2020, in states with competitively close elections to the state House of Representatives, or in states typically regarded as swing states in presidential elections. We come to the same results if we only include one or permutations of two of these three variables at a time or if we temporally restrict the sample up to the November 2020 election month (results not reported). As it turns out, no matter how we test this hypothesis we find no evidence that protest activity against coronavirus measures was driven by partisan strategic motives relating to the November 2020 elections as opposed to general partisan motives. With respect to the control variables, we note that more protest events are correlated with states of larger population size, less densely populated states, and states with greater economic inequality as measured by the Gini coefficient.

Average effects compress a distribution of effect sizes into one value and thereby lose much information. Additionally, marginal effects typically do not represent

meaningful counterfactual changes in variables. For our two variables of central interest—partisanship and the stringency of COVID-19 containment policies—we therefore calculate predicted counterfactual effects, which represent the change in predicted effects if one of the explanatory variables of interest counterfactually took on a different value, leaving all other variables at their values as observed in the sample. We split up the analysis of effect sizes by red and blue states in order to check whether our approach has helped in balancing the value of all control variables, not just the stringency of COVID-19 containment policies. Note that the only reason why the absolute counterfactual effect size of partisanship would be different in red and blue states is if they had systematically different control variable values.

In order to estimate the effect size of partisanship in blue states, we take the predicted effects of the estimation model and subtract from these actual predicted effects the predicted effects that would result if one counterfactually turned blue states into red states. Similarly, for estimating the effect of partisanship in red states, one subtracts the effect sizes of counterfactually turning red states into blue states from the actual predicted effects in red states, only that one needs to revert the sign of the predicted counterfactual effect to make it directly comparable in terms of (absolute) effect size magnitude.[48]

Contrary to partisanship for which there is a clear counterfactual, for the stringency of containment policies it is not entirely clear what counterfactual value one would assume. One could take the value of zero, which would represent the complete absence of any policies—but no state adopted absolutely no COVID-19 containment policies. We thus base our effect size estimate on counterfactually assuming that all states only adopted the minimum of the containment score observed in the two samples over the entire period. For the full sample, the minimum of the containment score was observed in Georgia with a value of 16.2 in March 2020. For the balanced sample, the minimum is reached in Hawaii at a value of 20.5 in March 2020. Again, all other variables are kept at values as observed in the sample.

Figure 2 displays the predicted counterfactual effect sizes of partisanship and stringency as defined previously for both red and blue states and for both the full and the balanced samples. We show various important aspects for the entire distribution of effect sizes: the box displays one standard deviation above the mean of the size of the effect on protest events, which is indicated by the gray dot inside the box; the end of the whisker marks two standard deviations above the mean; and the black line inside the box is the median effect size. Apparently, the mean effect is larger than the median effect. Finally, we mark by gray squares the effect size of observations (state months) where the predicted counterfactual effect size is beyond two standard deviations above the mean effect size. As one would expect, we find notably more observations with effect sizes beyond two standard deviations above the mean in the full sample than in the balanced sample, which only includes blue and red states with similarly stringent containment policies.

[48] Since in table 2 blue states are estimated to experience more protest events than red states, the predicted counterfactual effect of partisanship for blue states is positive. Conversely, the partisanship effect in red states is negative since red states experience fewer protest events than blue states.

This visualization of effect sizes clarifies two noteworthy results of our estimates, which are not detectable from the average marginal effects of the regression in Table 1. Firstly, figure 2 demonstrates the effectiveness of our simple balancing algorithm, particularly for the effect of partisanship. In the full sample, we see relatively large differences in effect sizes of partisanship between red and blue states. In the full sample, a red state experiences on average 1.96 fewer protest events per month than if it counterfactually were a blue state. By contrast, a blue state experiences on average 3.23 more protest events per month than if it counterfactually were a red state. These differences result partly from the more stringent containment policies states governed by the Democrats have implemented during the pandemic but also result from systematic differences in control variables. Balancing the sample with respect to the stringency of containment policies reduces this heterogeneity not just in the stringency of COVID-19 policies but also in control variables, of which population size is the substantively most important one. As a consequence, the effect sizes of partisanship in red and blue states become much more similar. In fact, we find a counterfactual average effect size of 2.56 protest events per month for red states and 2.65 protest events per month in blue states. Figure 2 also shows that the distribution of partisanship effect sizes becomes much more similar between red and blue states in the balanced sample than in the full sample.

Secondly, if we compare the size of effects of partisanship to the size of effects of the stringency of COVID-19 containment policies, we find that the effect size of the stringency of policies tends to be slightly larger than the effect size of partisanship in blue states and vice versa in red states. Despite these small differences, the effect of partisanship is roughly of similar size as the effect of the stringency of COVID-19 policies, and this holds both on average and across the entire distribution of effects in both full and balanced samples. Partisanship has a substantive effect size that is very similar to the substantive effect size of the stringency of policies that protesters are ostensibly protesting against.

The models for which results were presented in Table 1 *assume* that the same increase in the stringency of containment policies increases the number of protest events evenly in red and blue states. In the next step of our analyses, we relax this assumption and explicitly study the potentially heterogeneous responsiveness of protest events to stringency in containment policies and allow for systematic differences between states as a function of partisan control. Specifically, in the models for which average marginal effects are reported in Table 2, we exclude the partisan state control variables as such from the estimation model but allow for causal heterogeneity by each of the state party control categories in the effect that the stringency of COVID-19 containment policies has on protest. These models therefore assume that there is no direct partisanship effect on protest activity and instead allows partisanship to impact protest activity indirectly via its impact upon the effect of the stringency of containment policies on protest events, which is allowed to differ between red, blue, and divided states. Note that we do not claim that this model is correctly specified or better specified than the previous model for which results were presented in Table 2, only that it allows for a different way of letting partisanship impact upon protect activity.

The reported average marginal effects in Table 2 suggest that the same increase in the stringency of COVID-19 containment policies has a larger average marginal

Table 2. Causal Heterogeneity in the Effect of Stringency of COVID-19 Policies by Type of Partisan State Control

	Full sample	Balanced sample
Stringency C-19 policies in states with Democratic control	0.0995**	0.139**
	(0.0210)	(0.0424)
Stringency C-19 policies in states with divided control	0.0759**	
	(0.0240)	
Stringency C-19 policies in states with Republican control	0.0444*	0.0821*
	(0.0216)	(0.0389)
Presidential race swing state	0.260	0.498
	(0.540)	(0.635)
State House elections competitive	−0.827	−0.905
	(0.461)	(0.489)
Gubernatorial elections	0.223	0.165
	(0.535)	(0.543)
C-19 mortality rate	−0.929	−1.159*
	(0.513)	(0.515)
Population (ln)	3.295**	3.046**
	(0.377)	(0.336)
GDP per capita	2.08e−05	−1.39e−05
	(2.18e−05)	(2.32e−05)
Population density	−0.00225**	−0.00268**
	(0.000869)	(0.000693)
Gini coefficient	0.130*	0.119*
	(0.0627)	(0.0469)
χ^2 (p-value)	18.96	22.98
C-19 Policies in Democratic vs. Republican state control	(0.0000)	(0.0000)
χ^2 (p-value)	3.78	
C-19 Policies in Democratic vs. Divided state control	(0.052)	
χ^2 (p-value)	6.99	
C-19 Policies in Divided vs. Republican state control	(0.0082)	
Number of states	50	37
Observations	1,248	626
Pseudo R-squared	0.190	0.195

Note: Reported results are average marginal effects for continuous variables and average effects from the discrete change from the base level for the dummy variables (presidential race swing state, State House elections competitive, and gubernatorial elections). Standard errors clustered on states in parentheses. Month fixed effects included.
**Statistically significant at .05 level, *statistically significant at .01 level.

effect in blue states than in red states. In other words, if a state controlled by the Democrats and a state controlled by the Republicans increase the stringency of their policies by the same absolute amount, the blue state will experience a larger rise in protest events than the red state. This result suggests that states governed by the Democrats experience, on average, more protest because they respond

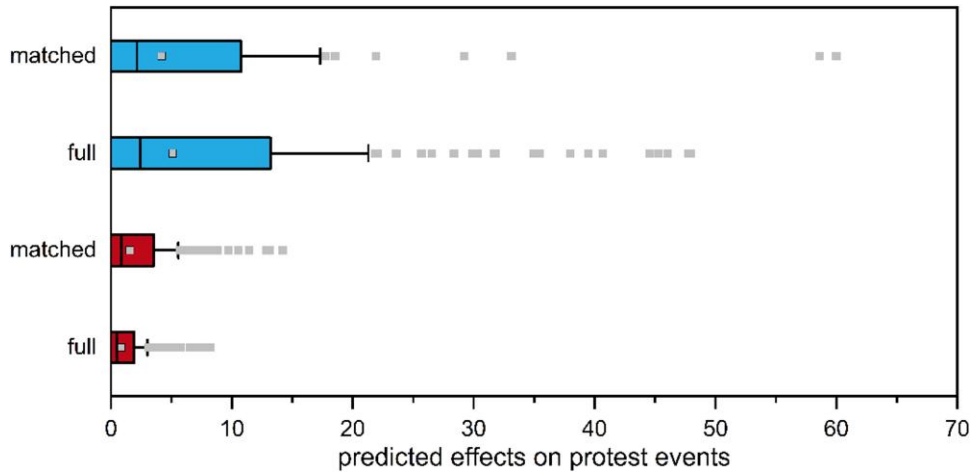

Figure 3. Predicted Counterfactual Effect Sizes for Stringency, Red and Blue States

more to the pandemic *and* protesters respond more to containment policies when they are implemented by Democrats. This holds for both the full and the balanced sample.

Figure 3 displays the distribution of predicted counterfactual effects of the stringency containment policies on protest events explicitly conditioned by partisanship in red and blue states both for the full and the balanced sample. All elements of the graphs are set up as thus: the box displays the effect sizes one standard deviation from the mean, the mean effect size is indicated by the light gray squared dot in the box, the line within the box represents the median effect size, the whiskers display two standard deviations above the mean effect size, and the gray squared dots are observations with estimated effects sizes beyond two standard deviations above the mean. As before, we take the same minimum observed levels of stringency separately for the full and the balanced sample across all categories and over the entire period as the presumed counterfactual, keeping all other variables as observed in the data.

Figure 3 offers an alternative interpretation of the impact of partisanship on protest against containment policies: in our first analysis of figure 2, we assumed that Democratic party state control has a direct effect on protest activity, controlling for the stringency of containment policies. In this analysis, we assume that any given level of stringency of containment policies leads to more protest in states governed by the Democrats than in states governed by the Republicans. Figure 3 demonstrates that these differences in the effect of the stringency of containment policies on protest between blue and red states are substantively large. The mean and the median predicted counterfactual effect as well as the effect sizes at one and two standard deviations above the mean are all at least twice as large in blue than in red states.

Conclusion

In democracies, a partisan divide over support for the demands of those protesting on the streets against government policies is fairly common. To some extent, protest takes political opposition from the parliament to the street, and thus the parliamentary opposition may support or even join protesters against government policies. In federal countries, the partisan politics of protest can take an additional twist because the opposition party at the federal level can and often will be the incumbent party in some or even in the majority of states and vice versa. If the goals of the protesters are in line with the partisan preferences of one party and opposed to the partisan preferences of the other party, then partisan preferences of the protesters can become intermingled with the genuine interests of the protesters to change federal or state governmental policy or both.

Protest against COVID-19 containment policies has taken an unusual twist in the United States. Various factors led to a high degree of politicization of its COVID-19 containment policies. Perhaps most importantly, containment policies change the role of the state, especially in what political scientists call liberal-market economies.[49] The more people perceive this as an unwelcome change to the United States' political culture; and the more they believe that the changed role of the state in the economy is there to stay, the more they are inclined to protest. Likewise, in the United States the pandemic evolved in a society that was already highly polarized. In many respects, the pandemic merely added yet another cleavage to existing polarization without changing its very nature. And finally, the pandemic happened to begin with a partisan bias because the majority of states that were most heavily affected in the beginning of the pandemic happened to be governed by Democrats.

In most developed countries, protesters have received little support from mainstream opposition parties independently of the color of the parties forming the government and independently of whether protest took place in federal or unitary countries. The United States is an outlier, as both the adoption of COVID-19 containment policies and protest against these policies has proven to be highly partisan. We can only speculate whether this strong politicization has prevented Republican states from implementing the necessary measures to keep the pandemic better under control. Nineteen out of the top twenty state months with the highest COVID-19 mortality rates during waves of infections after the initial Spring 2020 wave occurred in red states.

Here, we have argued and shown that partisanship strongly influenced protest against COVID-19 containment policies and that these results are robust to changes in model specification and sample. Blue states experience more protest events than red states even after controlling for the stringency of containment policies and even if we restrict the sample to only contain blue and red states with similarly stringent policies in place in each month. Partisanship appears to have had a substantive effect of roughly the same size as the stringency of containment policies against which protest was formed. When we assumed no direct impact of partisanship on protest events but allowed for causal heterogeneity in the response to the

[49] Peter A. Hall and David Soskice, eds., *Varieties of Capitalism: The Institutional Foundations of Comparative Advantage* (Oxford: Oxford University Press Oxford, 2001).

stringency of containment policies, we found that the same increase in stringency will evoke a larger protest response in blue states than in red states.

Whether protests influenced containment policies is an altogether different question. In the vast majority of developed countries, protest against containment measures seems to have had little if any immediate impact on policies, and the United States does not appear to be an outlier in this particular respect. Our estimations uncovered no evidence that protest was concentrated where governors were up for election or in so-called swing states where traditionally elections have been more closely contested between the two parties in elections. Protest has perhaps helped stimulate a public debate on whether superior alternatives to classical containment policies exist. Containment measures only mitigate the spread of the virus but do not, in the absence of a rigid and enforced quarantine regime, contain the pandemic permanently. Containment policies are not popular. At best, they were and are grudgingly accepted until the combination of a successful roll-out of vaccination. Coupled with the emergence of newly dominant variants of the virus which, like Omicron, pose less severe a threat to the health of infected people, containment measures will put an end to the pandemic as we got to know it. The end of the pandemic, however, will not end the great divide in U.S. politics.

Appendix 1 Partisan Control, Stringency of Containment Policies, and Protest in Full and Balanced Samples

State	Red				Blue				Difference	
Variable	Stringency	Protest	Stringency	Protest	Stringency	Protest	Stringency	Protest	Protest	Protest
Sample	Full	Full	Balanced	Balanced	Full	Full	Balanced	Balanced	Full	Balanced
Y:M										
2020 March	25.4	0.1	26.7	0.1	30.6	1.8	29.8	1.9	1.7	1.8
April	54.8	5.1	60.7	7.5	60.7	10.3	60.7	10.3	5.2	2.8
May	52.2	5.1	57.0	6.6	63.1	20.5	55.8	15.7	15.4	9.0
June	46.4	1.4	54.8	1.1	60.6	2.5	52.6	2.3	1.2	1.2
July	46.4	5.3	51.3	5.8	59.9	7.9	53.1	4.3	2.6	-1.5
August	47.2	5.5	50.8	5.8	60.0	11.2	53.5	6.8	5.7	0.9
September	44.3	5.7	49.0	6.6	57.2	11.5	49.3	8.1	5.8	1.6
October	42.7	3.0	46.8	2.5	56.5	8.2	49.0	5.9	5.2	3.4
November	43.6	3.3	48.2	3.2	57.3	8.7	50.8	6.9	5.5	3.7
December	46.3	2.0	51.9	2.9	60.6	11.2	54.6	6.6	9.2	3.6
2021 January	47.4	0.8	53.8	0.8	62.0	11.6	54.1	7.8	10.8	7.0
February	46.4	1.2	53.8	0.5	59.7	10.3	53.0	3.8	9.1	3.3
March	45.0	2.0	50.5	2.8	58.3	10.1	52.5	4.0	8.0	1.2
April	44.6	1.0	51.8	0.8	58.1	3.7	54.2	1.6	2.8	0.8
May	41.1	1.8	47.9	0.7	56.2	4.6	49.6	3.0	2.8	2.3
June	37.6	0.8	40.8	1.0	48.2	3.5	39.1	1.4	2.7	0.4
July	36.6	1.4	38.4	1.6	41.9	3.3	39.0	3.3	1.9	1.7
August	35.9	8.5	37.6	9.3	40.9	14.5	38.5	14.3	6.0	5.0
September	36.1	5.3	38.9	6.0	40.9	7.9	38.5	5.8	2.6	-0.2
October	36.1	3.0	37.1	3.1	40.6	8.1	38.1	7.6	5.1	4.6
November	36.2	2.6	36.8	2.7	39.8	5.1	38.4	5.5	2.5	2.9
December	35.2	0.4	37.2	0.4	39.0	1.9	36.3	0.8	1.5	0.3
2022 January	35.8	0.6	37.1	0.7	39.4	3.5	37.0	2.0	2.9	1.3
February	36.3	2.0	38.2	2.3	38.8	8.3	38.8	8.3	6.3	6.0
March	35.0	1.5	35.3	1.5	36.9	2.5	36.9	2.5	1.0	1.1
average	41.4	2.8	45.3	3.0	50.7	7.7	46.1	5.6	4.9	2.6

Appendix 2 Party Control Categorization

State	Party control	State	Party control
Alabama	red	Montana	divided
Alaska	red	Nebraska	red
Arizona	red	Nevada	blue
Arkansas	red	New Hampshire	divided
California	blue	New Jersey	blue
Colorado	blue	New Mexico	blue
Connecticut	blue	New York	blue
Delaware	blue	North Carolina	divided
Florida	red	North Dakota	red
Georgia	red	Ohio	red
Hawaii	blue	Oklahoma	red
Idaho	red	Oregon	blue
Illinois	blue	Pennsylvania	divided
Indiana	red	Rhode Island	blue
Iowa	red	South Carolina	red
Kansas	divided	South Dakota	red
Kentucky	divided	Tennessee	red
Louisiana	divided	Texas	red
Maine	blue	Utah	red
Maryland	divided	Vermont	divided
Massachusetts	divided	Virginia	blue
Michigan	divided	Washington	blue
Minnesota	divided	West Virginia	red
Mississippi	red	Wisconsin	divided
Missouri	red	Wyoming	red

Appendix 3A Summary Descriptive Variable Statistics (Full Sample)

Variable	Obs	Mean	SD	Min	Max
Protest events	1,248	4.52	8.50	0	125
Democrat state control	1,248	0.30	0.46	0	1
Divided state control	1,248	0.26	0.44	0	1
Republican state control	1,248	0.44	0.50	0	1
Presidential race swing state	1,248	0.26	0.44	0	1
State House elections competitive	1,248	0.26	0.44	0	1
Gubernatorial elections	1,248	0.22	0.41	0	1
Stringency C-19 policies	1,248	45.88	11.83	16.17	76.07
C-19 mortality rate	1,248	0.37	0.35	0	2.60
Population (ln)	1,248	15.20	1.02	13.27	17.49
GDP per capita	1,248	61,380	11,650	39,345	91,409
Population density	1,248	202.68	263.87	1.28	1,208
Gini coefficient	1,248	60.61	3.46	54.50	69.51

Appendix 3B Summary Descriptive Variable Statistics (Balanced Sample)

Variable	Obs	Mean	SD	Min	Max
Protest events	626	4.12	6.93	0	63
Democratic state control	626	0.41	0.49	0	1
Republican state control	626	0.59	0.49	0	1
Presidential race swing state	626	0.22	0.42	0	1
State House elections competitive	626	0.21	0.41	0	1
Gubernatorial elections	626	0.19	0.39	0	1
Stringency C-19 policies	626	44.11	9.68	20.51	70.85
C-19 mortality rate	626	0.38	0.33	0.00	2.60
Population (ln)	626	15.27	1.02	13.27	17.49
GDP per capita	626	61,084	11,269	39,345	91,409
Population density	626	194.58	271.64	1.28	1,208
Gini coefficient	626	60.83	3.67	54.50	69.51