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Politics, Markets, and Pandemics: Public Education's Response to COVID-19

Michael T. Hartney
Boston College

Leslie K. Finger
University of North Texas

The COVID-19 pandemic presents a unique opportunity to examine how local governments respond to a public health crisis amid high levels of partisan polarization and an increasing tendency for local issues to become nationalized. As an arena that has, in recent years, been relatively separate from national partisan divides, public schools provide a useful window into these dynamics. Leveraging the fact that all of the nation's school districts had to adopt a reopening plan for the fall, we test what factors best predict whether a district chose to return students to the classroom or educate them remotely. Contrary to the conventional understanding of school districts as localized and non-partisan actors, we find evidence that politics, far more than science, shaped school district decision-making. Mass partisanship and teacher union strength best explain how school boards approached reopening. Additionally, we find evidence that districts are sensitive to the threat of private school exit. Districts located in counties with a larger number of Catholic schools were less likely to shut down and more likely to return to in-person learning. These findings have important implications for our understanding of education policy and the functioning of American local governments.

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Michael T. Hartney[*]
Boston College

Leslie K. Finger[†]
University of North Texas

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Abstract: The COVID-19 pandemic presents a unique opportunity to examine how local governments respond to a public health crisis amid high levels of partisan polarization and an increasing tendency for local issues to become nationalized. As an arena that has, in recent years, been relatively separate from national partisan divides, public schools provide a useful window into these dynamics. Leveraging the fact that all of the nation's school districts had to adopt a reopening plan for the fall, we test what factors best predict whether a district chose to return students to the classroom or educate them remotely. Contrary to the conventional understanding of school districts as localized and non-partisan actors, we find evidence that politics, far more than science, shaped school district decision-making. Mass partisanship and teacher union strength best explain how school boards approached reopening. Additionally, we find evidence that districts are sensitive to the threat of private school exit. Districts located in counties with a larger number of Catholic schools were less likely to shut down and more likely to return to in-person learning. These findings have important implications for our understanding of education policy and the functioning of American local governments.

Keywords: Local politics, education policy, COVID-19

[*] Assistant Professor of Political Science, hartneym@bc.edu
[†] Assistant Professor of Political Science, leslie.finger@unt.edu

Motivation

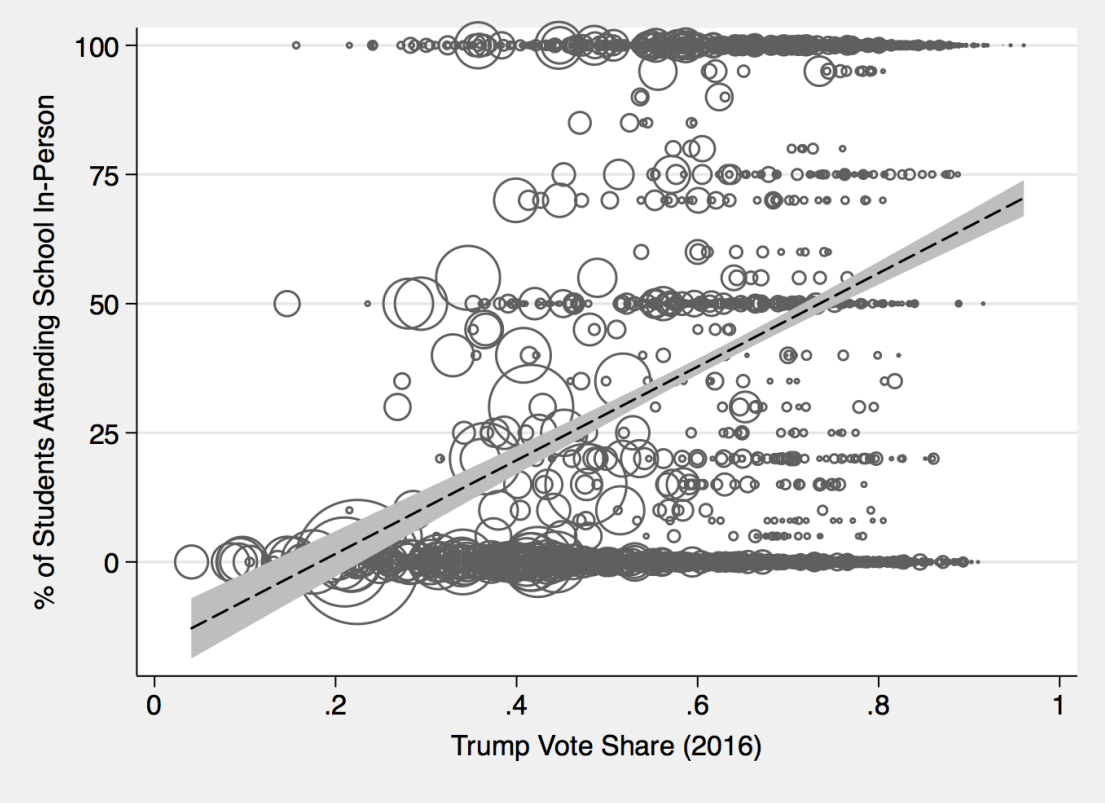
During the COVID-19 pandemic, perhaps no American institution has been more burdened than the humble public school. Functioning as childcare for parents, employer to nearly 7 million adults, and the primary provider of schooling for 90% of children ages 5 to 17 (NCES 2018), America's education system has been challenged to adapt and respond like never before to meet the needs and preferences of diverse stakeholders (Chubb and Moe 1990). With the fall school-year beginning alongside the continued spread of the virus, parents have been torn between wanting to keep their children and families healthy, on the one hand, and the practical need to ensure that their children are learning and cared for during work hours, on the other (Hirt, Nichols, and Brugal 2020). Not surprisingly, most American families desire some form of in-person instruction (Horowitz 2020), yet education employees have raised important concerns about the potential health risks of returning to school buildings. Teachers unions have vigorously resisted putting their members back in the classroom, filing lawsuits and issuing strike threats to compel school districts to delay the return to in-person learning (Richards 2020).

Districts have had to navigate these unprecedented challenges while remaining sensitive to the fact that they risk losing students to the competitive forces of exit – to private schools or even homeschooling – should they fail to provide a high-quality learning experience. In fact, some reports indicate that the number of private school applications have soared (Reilly 2020), and many affluent families have turned to "pandemic pods" where multiple families pool their resources to employ private instructors (Meckler and Natanson 2020). Policymakers and equity advocates are concerned that these developments will leave the most disadvantaged children, including many students of color, farther behind their well-to-do peers (Gross and Opalka 2020).

Of particular interest to political scientists is the fact that the battle over re-opening schools has occurred in a highly polarized political environment, where public health decisions – including whether and when to send children back into classrooms – appear to be wrapped up in partisanship and sentiment toward the president (Horowitz 2020).

President Trump has directly politicized the issue, publicly threatening to withhold funding to schools that fail to hold in-person classes and arguing that Democrats want schools remote for their electoral benefit (Baker, Green, and Weiland 2020). This is a major shift for school districts, which historically have been highly localized and divorced from the partisan rancor accompanying national political disputes. Decisions on building use, school schedules, and school sports, for instance, have hardly been matters of partisan interest, while more substantive education issues, like teacher salaries and hours, student discipline, and curriculum, may have been contentious in negotiations with teachers unions or in state policymaking but have been largely unrelated to national partisan divides. Yet, public education's response to the COVID-19 crisis appears to have become another manifestation of technocratic decision-making being swallowed up by our polarized and nationalized political debates (Hopkins 2018). School board meetings, ordinarily mundane affairs that tend to suffer from a lack of intense community engagement, have in certain instances become hostile arenas for fights over mask mandate policies (e.g., Huber 2020). Moreover, the most critical decision facing the nation's school boards – whether or not to re-open in person and to what degree – appears to be closely related to the partisanship of a local school district. As Figure 1 shows, the decision to return students to in-person classes this fall was strongly correlated with the county-level share of the vote won by Donald Trump in 2016.

Figure 1: The Partisan Politics of Returning Students to the Classroom



Note. Figure shows the descriptive county-level relationship between the percentage of K-12 students attending school in-person this fall and support for President Trump in 2016. The size of each bubble corresponds with the population size of each county and the line shows the best fit (with 95% confidence). School reopening data taken from Burbio's school opening tracker (available at: https://cai.burbio.com/school-opening-tracker) and elections data taken from MIT's Election Data and Science Lab (available at: https://electionlab.mit.edu/data).

This study examines whether partisan polarization across the U.S. has become so intense that it shapes pandemic and public health policy in one of the most localized, nonpartisan arenas of local government: public education. Schools are a tough test for the relative influence of public health needs and politics, since they are (mostly) non-partisan governmental agencies, and their core constituency are kids, who are not partisan actors. Yet we know that local politics has been increasingly nationalized (Hopkins 2018), with partisan polarization creeping into virtually every aspect of American life (Iyengar and Westwood 2015). To what extent has this nationalization and polarization dominated local school districts' responses to COVID-19? Has it

overwhelmed or simply complemented the influence of local political players like teachers' unions and the presence of private school competition?

To answer this question, we examine a dataset of over 10,000 (or ~75%) of the nation's public school districts and their re-opening plans. We combine this data with information on Trump vote share, teachers union strength, the presence of private school exit options, and measures of virus intensity taken from the COVID-19 Pandemic Vulnerability Index from Johns Hopkins University (see Dong, Du, and Gardner 2020; Marvel et al. 2020) to consider the extent to which science, market forces, or politics are driving school re-opening plans. We find strong, consistent evidence that politics - both union strength and district partisanship - are the two strongest and most substantively powerful predictors of whether a school district holds in-person classes or not. We also find that the presence of private school competition increases the likelihood that districts open in-person, but little consistent relationship between the acuity of the pandemic and district responses.

Beyond examining how much partisan polarization has come to shape local, community-level policymaking, this study informs what we know about local government and education politics and policy. According to Chubb and Moe (1990), local control and technocratic student-centered efforts to improve school quality do *not* drive school policymaking. Instead, school boards, as democratically elected agencies, respond to the preferences of heterogeneous stakeholders. Chubb and Moe famously made the case that the way to get around these political forces was to allow markets to determine where children and money go; school choice, meaning the availability of funds to send children to whatever school parents wish - private or public - should govern how schools function, thereby improving the entire system and removing it from the grip of interest groups, they suggest. To some extent, scholars have found that aspects of

Chubb and Moe's theory bears out, showing that competition from private schools can benefit public schools (e.g., Figlio and Hart 2010). The COVID-19 pandemic presents a unique opportunity to test longstanding theories about the political economy of schooling because all districts needed to deal with the same basic policy dilemma in the fall of 2020: how to balance the pandemic with the political and competitive pressures to reopen schools.

The remainder of the article proceeds as follows. We first review the relevant literature and lay out our basic theoretical expectations concerning how politics, market competition, and public health concerns are likely to influence the approach that local school district governments take to re-opening America's public schools. We then discuss our data and empirical approach to theory testing, after which we present our results. The paper concludes with a brief discussion of the implications of our findings for the study of education politics and policy and our understanding of local governments in the increasingly "united" United States (Hopkins 2018).

Relevant literature and theoretical expectations

Politics

One might argue that politics should not play much of a role in school reopenings. Historically, owing to Progressive era reforms at the turn of the century, education was placed outside of "normal" politics (Iannaccone 1967). The widespread use of oddly timed, non-partisan, staggered school board elections, for example, are thought to insulate local education officials from the electoral pressures that confront state and federal political authorities. However, while the Progressives succeeded in altering the structure of education governance, scholars have long since debunked the myth that their reforms divorced education from politics

(Kirst 2004; Tyack 1974). Politics did not go away; it simply went elsewhere.[3] In other words, public schools are "open systems" - agencies of government that are responsive to the environmental demands placed upon them by democratic politics (Chubb and Moe 1990; Meier, Polinard, and Wrinkle 2000; Smith and Meier 1994). In *Politics, Markets, and America's Schools*, John Chubb and Terry Moe remind us that, even though schools remain outside of "normal" partisan politics, because they are public governmental agencies, schools face tremendous pressure to appease a diverse group of stakeholders (e.g. families, taxpayers, homeowners, employees, religious and racial minority groups, to name just a few). Parents and students, they explain (1990, 31-32), are just one *small* constituency in public education:

> "The myth that parents and students are uniquely special in all this—that the schools are somehow supposed to be what parents and students want them to be—goes hand-in-hand with the myth of local control, and it is equally misleading. The proper constituency of even a single public school is a huge and heterogeneous one … Parents and students are but a small part of this constituency."

Since public school districts serve "huge and heterogeneous" constituencies, we should expect that those groups that are the most highly organized and politically active will have the greatest influence on school districts' decision-making, including the decision on when and how to reopen schools during the COVID-19 pandemic. Based on both theory and prior research, one group that is sure to matter then are organized teacher interests, whose activism in local district politics tends to far outpace other groups like parents, business, and reform coalitions (Hess and

[3] As Chubb and Moe (1990, 5) explain: "The winners [of Progressive era reforms to education] were elements of business, the middle class, and education professionals—especially the latter, for they would be running the new bureaucratic system."

Leal 2005; Moe 2011). In short, we expect that districts with stronger teachers unions will, all else equal, tend to be more sensitive to the demands of unions to use remote-only instruction.

Beyond interest group politics, we might expect mass partisanship to infiltrate and influence the decision-making of non-partisan local school district governments. Some evidence suggests that school districts will not be wholly immune to nationalized political disputes. Henig (2013), for example, has shown that not only is the public school system shaped by local democratic forces, but that changes like mayoral control and increased state involvement have taken education policy beyond localism and into "general purpose" political arenas, like states legislatures, mayor's and governor's offices, and the courts. Still, until recently, these developments were relatively separate from the broader polarized, partisan U.S. context. The main forces driving education politics had been state and local entities, like state teachers unions, local teachers union affiliates, local businesses groups, community activists and school boards (Henig et al. 1999). To the extent that more nationalized interests had gotten involved in education politics, it had been in the form of philanthropists, education nonprofits, or national affiliates of local groups (e.g., Reckhow 2013).

Importantly, education policy appeared to be moving in an increasingly bipartisan direction up through the Obama presidency, with the two parties converging in their support for standards and accountability, charter schools, and teacher quality reforms (Wolbrecht and Hartney 2014). Yet there has been a shift in more recent years. The election of Donald Trump brought Betsy DeVos into the administration as Secretary of Education. A major Republican donor and fervent advocate for private school choice policies, Devos' appointment has resulted in school choice becoming "toxic on much of the progressive left" (Petrilli 2018, 2). The bipartisan coalition for education reform that endured during the Obama years has frayed

(DiSalvo and Hartney 2020) with the politics of education re-polarizing and becoming every bit as nationalized as traditional issue cleavages in the American politics (Hopkins 2018).

In sum, partisan politics should matter in local education decision-making today, more than ever. There has been evidence that COVID policies, an arena that we might expect would be removed from politics due to the primacy of public health considerations, has itself been infected with politics. Adolph et al. (2020), for example, find that the strongest predictor of state mask mandates is governor partisanship, not COVID death rates. Building on Dan Hopkins work (2018) that shows an increasingly nationalized local politics as well as mounting evidence that COVID has itself been politicized, we expect that partisanship will influence school reopenings.

Markets

An important factor that shapes public schools and which we might think would affect COVID responses is competition from private schools. The choice to leave one's public school for a private school represents a real threat to public schools during the pandemic. In normal times, exit from the public school system is costly because citizens that forgo public schooling have to pay twice (taxes plus private tuition) which is economically infeasible for the average American family (Hirschman 1970). However, the pandemic changes that equation by reducing what public school parents in districts that are fully remote get access to. There is evidence that parents respond to the schooling market. Parents have been shown to respond to lagging school performance by exiting failing schools (Holbein 2016). We also know that more school choice among public schools makes parents less likely to choose private schools (Hoxby 2000). These findings suggest that where public schools are less available or their instruction is less desirable, private schools become increasingly attractive. This need not be the case for all parents to affect

public schools. Competition can kick into gear even if only a small portion of informed parents exit (Teske et al. 1993).

There is evidence that exit to private schools impacts public schools (Figlio and Hart 2010; Hoxby 1994, 2003). While existing work has looked at how the exit threat influences student achievement in public schools, it seems equally plausible that the threat of losing students would likewise cause public school districts to think twice about shuttering their doors and going to remote-only learning in response to the pandemic. The simple fact is that many private schools are in an easier position to re-open because they are not restricted by the same bureaucratic protocols and labor contracts. Moreover, privates are often in a better position to provide a safe environment to students and teachers since they have "the advantage of small class sizes and large outdoor spaces that make social distancing easier, in addition to endowments and donations that have made it possible to upgrade air filtration systems, revamp nurses' offices, set up tented classrooms outside, secure COVID-19 testing and hire more staff" (Reilly 2020). Indeed, some previously committed public school families have opted for private options or turned to homeschooling and COVID pods. Some private schools have also reported an increase in student applications, mostly coming from public school families (Reilly 2020).

How have school districts dealt with these pressures? Some school districts have crafted new programs to ensure children stay in the public system, like by offering supplemental "pods" for low-income children (Schimke and Aldrich 2020), or by providing childcare for the children of essential workers and others who need it (Chang et al. 2020). In a handful of cases, states and counties have restricted private school re-opening. This has occurred in New Jersey, California, and Milwaukee, WI. In one extreme example, the county health officer of Montgomery, MD, where the public schools will be remote until the end of 2020, mandated that private schools

could not open at the start of the school year. The response of parents to this order made clear the threat private schools pose to remote-only districts. A Facebook group formed, gaining 4,000 members and organizing parent protests. Thousands of letters flooded into the governor's office. Six families with kids in private schools filed a lawsuit. A protest organizer explained why the parent reaction was so severe, "One of the reasons that, as parents, we chose to send our kids to independent or religious schools, is because they are smaller, more nimble, and they don't have to abide by the rules of a public state school" (Gerber 2020). Parents further asserted that this was a direct effort to keep children in the public school system through the state's enrollment deadline at the start of October, since the enrollment numbers are used to determine funding. While officials have pointed to health risks of school openings, critics have called these kinds of actions an attack on private schools and an effort to stem competition (Adhikusuma 2020; "School-Opening Extortion" 2020). The reaction in Montgomery was telling. Here we saw wealthy, largely white parents prioritizing getting kids in school over the health risks of the virus. It suggests that competition could be a real threat to keeping the most privileged families in public school districts if they remain remote.

We would expect that Catholic schools might be the lowest level entry market for families exiting the public school system since they are widespread. They enroll just over 37% of all children attending private schools, making Catholic schools the most popular religious private schools (NCES 2019a). They are also cheaper than other private school alternatives (NCES 2019b). This may explain why Catholic schools exert the largest competitive pressures on public schools (Hoxby 1994). There is evidence to suggest that Catholic schools may currently be exerting such pressures: in Nashville, enrollment in Catholic schools increased during the first few weeks of the school year, while public schools were online (Zimmermann 2020). In the

greater Boston area, Catholic schools, most of which are offering fully in-person instruction, have seen enrollment skyrocket. According Boston Archdiocese school superintendent, when the Massachusetts Teacher Association began calling for remote-only classes, "our phone(s) started ringing off the hook all across all of our 100 schools...I joke that we should send a thank you note to the school districts, because of their tone deafness, in terms of what the parents were looking for" (Jung 2020). Because private schools generally, and Catholic schools in particular, offer a viable alternative to parents wanting to get their kids in school, we expect public school districts in areas with more Catholic schools to be more likely to remain open.

Science (Public Health)

Science has become increasingly polarized. Hart and Nesbit (2011) find people react to news on controversial science issues differently based on partisanship. However, they examine climate change, which has been polarized since at least the early 2000s (Tesler 2018). Since COVID is a new and dire issue, we might think that the science would be less polarized and matter more in policymaking decisions, especially given the scale of the health crisis, and the fact that crises are often key to getting policies on the agenda (Kingdon 2003). Indeed, scientists have quickly set their sights on understanding COVID and helping policymakers proceed accordingly. For example, scholars have modelled various school reopening scenarios to determine which approaches would be most successful at preventing another outbreak (Panovska-Griffiths et al. 2020). The Center for Disease Control (CDC) has offered guidelines to schools and districts to ensure safe school re-openings, though these guidelines are suggestive and do not tie specific actions to specific numbers of COVID cases. Indeed, some school superintendents have complained that they are not receiving clear guidance from health authorities (Simpson 2020). Still, the scientific community has offered various suggestions,

suggesting, for example, that school officials take into account the share of cases and the proportion of tests coming back positive (Simpson 2020).

Public opinion suggests that people *want* expert voices involved in decision-making. Pew data from early August indicated that when considering what factors should be taken into account when making school re-opening plans, respondents were most likely to say that the coronavirus risks to teachers and students should be considered, though there were differences by party. Within parties, however, respondents living in coronavirus hotspots were more likely than their co-partisans to indicate that schools should be completely remote (Horowitz 2020). While getting back to school is important because of the potential for learning loss, we might hope that decisions about reopening would be guided by public health concerns. And although many scientific issues are increasingly polarized in the U.S., public opinion and the depth of the crisis suggest that COVID policy might be guided, at least partly, by science and the advice of experts. To the extent that public health decisions drive policy, particularly in times of crisis, we would expect there to be a relationship between the intensity of the COVID outbreak and school re-opening policy.

Research design

To test our theoretical expectations and examine how politics, markets, and public health concerns simultaneously influenced school districts' responses to the pandemic, we draw on a massive database monitoring school reopening plans provided by MCH Strategic Data entitled, "COVID-19 IMPACT: School District Status Updates." The MCH database is impressive. It includes detailed reopening plan data for over 10,000 (or ~75%) of the nation's 13,000+ public school districts, classifying each district's approach to reopening into one of three potential categories: (1) traditional in-person learning (2) hybrid learning (3) or fully remote learning. The

majority of schools in the sample (53%) offer hybrid instruction, with a mix of remote and in-person learning. Among the rest, 24% of districts were remote, while 23% were fully in-person.[4] Using this MCH data, we estimate a series of regression models that take the following form:

$$Plan_{ds} = \mu_s + Politics_{ds}\beta 1 + Markets_{ds}\beta 2 + Science_{ds}\beta 3 + X_{ds}\beta 4 + \varepsilon_{ds} \qquad (1)$$

Where $Plan_{ds}$ denotes an outcome of interest (a particular reopening decision) made by district *d* located in state *s*. We then model a school district's choice of reopening plan as a function of (1) local political conditions ($Politics_{ds}$), (2) the supply of private schooling alternatives available to families living in a district ($Markets_{ds}$), and finally, (3) the intensity of the COVID pandemic in a district ($Science_{ds}$). In addition to these key predictors of interest, we include X_{ds} which represents a vector of district-level control variables that account for community resources and other district-level demographic factors that may influence a school district's choice in reopening plan. Specifically, we include measures of (log) per-pupil spending, (log) median family income, and the percentage of white students to account for the expectation that, on average, wealthier and whiter communities enjoy resource advantages that may enable them to make adjustments to their buildings, like better ventilation and the use of outdoor space for social distancing, enabling students in advantaged districts to return to traditional (in-person) schooling more quickly.[5] Finally, we include dummy variables to account for the specific geographic locale that the National Center for Education Statistics (NCES) has assigned to each school district, since the

[4] These and other descriptive statistics are provided with more detail in Table A1 of the Supplementary Appendix.

[5] To hold in-person classes safely, many districts needed to make unanticipated facilities expenditures such as upgraded ventilation systems in old buildings (Burnette 2020).

relative urbanicity of a district is closely related to population density, which should impact the feasibility of social distancing within a district. Below, we discuss the specific indicators that we use to measure our three key explanatory variables of interest – politics, markets, and science.

We consider two different types of political conditions in our analysis, both of which we expect to influence districts' reopening decisions. First, we examine the degree to which the partisan politicization of the COVID-19 pandemic has influenced the ostensibly apolitical reopening decisions of what are (mostly) non-partisan school district governments. Specifically, we use the share of the vote won by President Trump in a school district's parent county in 2016 to measure the general partisan political orientation of each local district. Second, we examine whether the dominant organized interest group in US education politics – teachers unions – impact the type of reopening plan chosen by a district. We measure the strength of a district's local union in two ways. Our first measure of union strength is district size (student enrollment), as prior studies find that unions are significantly stronger in larger districts (Moe 2005; Rose and Sonstelie 2010). We prefer this measure, only because our second measure of union strength – whether the district bargains collectively – is available for fewer than 20 percent of the districts in our sample.[6] Nonetheless, we run and report separate models using each measure of union strength and find similar results irrespective of measure.

[6] According to the US Department of Education's National Center for Education Statistics (NCES), larger school districts are much more likely to engage in collective bargaining with teachers unions. NCES' most recent *Schools and Staffing Survey* (SASS0, for example, found that districts with fewer than 250 pupils bargain less than 30 percent of the time. Conversely,

Since we anticipate that market forces and the fear of student exit will create incentives for some public school districts to reopen as quickly as possible (Hirschman 1970), our models include measures of the prevalence of private school options available to families in each district. More specifically, in measuring exit threat, we focus on the number of Catholic schools (per-capita) located in each district's parent county. Catholic schools are the most affordable private school option (e.g., Garnett 2010) and should therefore represent the most realistic threat to public schools if families seek to avoid remote learning by pursuing a private exit option.[7] Conversely, we do not expect that private non-religious schools, where tuition prices are typically much higher, will present much of an exit threat to local public school districts since all but the wealthiest families will be unable to afford this type of private school option. Therefore, as a placebo test, we include the same per-capita measure of secular private schools alongside our Catholic school measure under the term $Markets_{ds}$ in equation 1.

There are many potential ways to measure the intensity of the public health crisis arising from COVID-19 in a local community. Most measures can be divided into two types of indicators: (1) measures of the cumulative effects of the pandemic on a community and (2) recency indicators that measure the real-time acuteness and/or intensity of the spread of the virus within a community. We prefer to focus on the latter type of measure, specifically the "average

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roughly 6 out of every 10 large districts (enrollments above 1,000) engage in bargaining. SASS survey available at: https://nces.ed.gov/surveys/sass/tables/sass1112_2013311_d1n_007.asp

[7] The NCES provides detailed data on enrollment and tuition figures for Catholic and secular private schools in its annual *Digest of Education Statistics*. See, for example, Table 205.5, which is available at: https://nces.ed.gov/programs/digest/d19/tables/dt19_205.50.asp.

daily case rate" in the 14-day period prior to the time (late August) when school districts needed to issue an official reopening decision for parents and the general public. The acuteness of the pandemic in the last two weeks of August should be more theoretically relevant to policymakers (including school district officials) tasked with making decisions about the safety of returning students to in-person instruction at the start of the fall school year.[8] Our measure of the average daily case rate in a county during the 14-day period preceding August 31st was obtained from the COVID-19 Pandemic Vulnerability Index, a project which relied on data compiled by public health researchers at Johns Hopkins University (see Dong, Du, and Gardner 2020; Marvel et al. 2020).[9] While we prefer to focus on the average daily case rate per 100,000 residents, our findings are fully robust to substituting cumulative measures of the pandemic's net impact on a local community at the time (late August) when school districts had to issue a formal reopening decision. In fact, we find no evidence that the number of cumulative cases or total deaths per-capita predict the type of reopening plan districts chose to pursue.[10] Instead, to the extent that we

[8] Focusing on the acuteness of the pandemic rather than cumulative case/death counts ensures that we are taking account of the most relevant real-time public health considerations that school districts confronted when they had to make a reopening decision at the end of August. Because certain communities were hit harder by the pandemic early on (e.g. New York City) but recovered far sooner than other regions of the country (e.g. Florida), it could be misleading to rely on cumulative case counts that accrued mostly at earlier points in the pandemic.

[9] All data is publicly available for download at: https://covid19pvi.niehs.nih.gov/

[10] In Table A3 of the supplementary appendix, we show that all of our results are robust to using either the total (cumulative) number of COVID cases or deaths (per 100,000 residents) in a

do uncover any statistically significant relationships between the intensity of the pandemic in a locality and school district behavior, those relationships are confined to the acuteness in the case rate in the two weeks preceding September 1, the traditional "back to school" month across nearly all of the United States.

Empirical strategy

By far, the most important feature of our analytic approach is the inclusion of state fixed effects, or state dummies represented by μ_s in equation 1 above. These unit fixed effects account for any time-invariant state-level characteristics that may simultaneously influence local school district governments' choice of reopening plans. The inclusion of state fixed effects is an essential element of our research design because it enables us to isolate the within-state differences across school districts that are associated with a district's choice in reopening plan. Without this important step, we would essentially be estimating cross-state differences in school district reopening rates. Such cross-state differences, although interesting in their own right, tell us very little about the relative influence of political, market, and scientific forces on government decision-making in response to the COVID-19 crisis. Although state political conditions are undoubtedly a relevant factor shaping local government decision-making to the pandemic, the market for K-12 private schooling options and the intensity of the pandemic itself play out at the local community (district) level.

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county as of August 31, 2020 (in lieu of our preferred measure: the number of *new* cases that arose in a county (per 100,000 residents) in the two weeks preceding August 31, 2020.

Results

We begin with a series of four separate regressions based on equation 1 above the results of which are displayed in Columns 1-4 of Table 1 (below). Column 1 estimates the probability that a school district's reopening plan consists entirely of traditional (in-person) classes (1=yes, 0=no, either hybrid or fully remote learning). In Column 2 the outcome of interest is reversed so that the probability being estimated is that of a school district chose a reopening plan that consists entirely of "fully remote" classes (1=fully remote, 0=either hybrid or in-person learning plans). Column 3 estimates an ordered probit model where these three possible outcomes are turned into an ordinal variable where the highest value 2=fully-in person learning and the lowest value 0=fully remote learning (with a value of 1 indicating a district chose hybrid learning). All three estimations (Columns 1-3) include the same set of control variables on the right-hand side of the model.

We find, that politics – far more than "markets" or "science" – appear to drive the tone and direction of school districts' reopening plans. Both the percentage of the vote earned by Donald Trump in the 2016 general election in school district's parent county along with the size of a school district (a proxy of teacher union strength) are the two most consistent and powerful predictors of a district's choice in reopening strategy. Consistent with the partisan politicization observed in national political debates surrounding the optimal level of aggressiveness that governments should adopt to address the pandemic, local school board governments that represent citizens in heavily Republican school districts were, all else equal, far more likely than boards in Democratic-leaning districts to adopt traditional in-person classes at the start of the fall school year. These effects, which are both statistically ($p<.01$) and substantively meaningful cannot be explained by mere differences in the intensity of COVID case rates, district

demographics or urbanicity, or the range of resources available to district leaders in Republican versus Democratic-leaning school districts, as all of these potential cofounders are controlled for in each of the regression models presented in Table 1. Moreover, our inclusion of state fixed effects in these models mean that the robust association we uncover between partisanship and school district reopening decisions cannot be driven by unobserved cross state differences in state-level political or economic factors that may impact a district's decision-making. In other words, the finding that Republican districts are significantly more likely to choose in person classes (Column 1) and Democratic districts are significantly more likely to choose fully remote learning (Column 2) are based on within-state estimates of how districts that must follow the same state regulatory reopening restrictions and guidelines behave on account of their differences in partisanship.

In addition to finding a strong relationship between district partisanship and school reopening plans, we also find evidence that another type of political factor explains district decision-making: the strength of organized teacher union interests in a school district. Recall that, based on prior literature, teachers unions in larger school districts tend to be far stronger than unions in smaller districts. Even after controlling for district urbanicity, partisanship, and the COVID case rate in a district, we find that larger districts where unions are more likely to be powerful in politics and collective bargaining are far less likely to hold in-person classes (Column 1) and far more likely to remain remote at the start of the fall school year (Column 2).

Table 1: Effects of Politics, Markets, and Science on School District Decision-making

	(1) In-person classes	(2) Fully remote classes	(3) Ordinal	(4) Ordinal (*IV*)
District size	-0.252***	0.152***	-0.203***	-0.068***
	(0.031)	(0.035)	(0.031)	(0.015)
Per-pupil spending	0.182*	0.039	0.139*	0.053
	(0.105)	(0.153)	(0.082)	(0.035)
Median income	0.374***	-0.324**	0.397***	0.144***
	(0.104)	(0.129)	(0.107)	(0.038)
Percent white	0.683***	-1.332***	1.053***	0.384***
	(0.137)	(0.155)	(0.139)	(0.057)
Partisanship (Trump vote)	2.511***	-3.337***	2.785***	1.071***
	(0.439)	(0.324)	(0.226)	(0.088)
COVID case rate	-0.002**	0.003	-0.003*	-0.001**
	(0.001)	(0.002)	(0.001)	(0.001)
Catholic schools	0.043***	-0.028*	0.037***	0.033*
	(0.012)	(0.017)	(0.011)	(0.019)
Priv. (secular) schools	0.009	-0.007	-0.003	-0.002
	(0.011)	(0.028)	(0.013)	(0.005)
Constant	-5.853***	3.811*	--	-1.508***
	(1.253)	(2.080)		(0.479)
Locale Effects?	Yes	Yes	Yes	Yes
State Effects?	Yes	Yes	Yes	Yes
Cut Point #1	--	--	4.771***	--
			(1.323)	
Cut Point #2	--	--	7.222***	--
			(1.355)	
N	9,092	9,158	8,949	8,902
Pseudo R^2 or R^2	0.31	0.49	0.34	0.48

Note: Dependent variable listed above each column. Cell entries are probit (Columns 1-2), ordered probit (Column 3), and OLS regression coefficients (Column 4) with standard errors clustered by state reported beneath in parentheses. All measures are two-tailed tests. ** $p<0.1$, ** $p<0.05$, *** $p<0.01$*

The finding that districts with stronger unions are less likely to re-open, even after accounting for the intensity of the pandemic itself, is entirely consistent with the strong public positions taken by the nation's two largest teachers unions and their affiliates in opposing districts' efforts to push them back into the classroom at the start of the fall school year. Although we are confident that district size does an adequate job proxying the likely strength of teachers unions across

school districts, we acknowledge that the size of a school district itself is also likely to present different logistical challenges which itself may shape a district's practical choice in a reopening plan. Consequently, we perform an additional test with a different measure of union strength later in the paper to ensure the robustness of this finding.

How important are market forces and public health concerns relative to politics in shaping school districts' reopening plans in response to the pandemic? The indicator for COVID intensity – the county case rate per 10,000 residents – is a significant predictor for whether a district chooses to begin the year in-person (Column 1), but it is not a significant predictor for whether a district chose to begin the year entirely in an online/remote setting (Column 2). Moreover, the magnitude of the coefficient for COVID intensity is miniscule, compared to the aforementioned political factors. In contrast to the strong relationship between district politics and the decision to rely on fully remote learning, the intensity of the spread of the disease in a local community is divorced from a district's decision-making as it pertains to entirely remote learning.

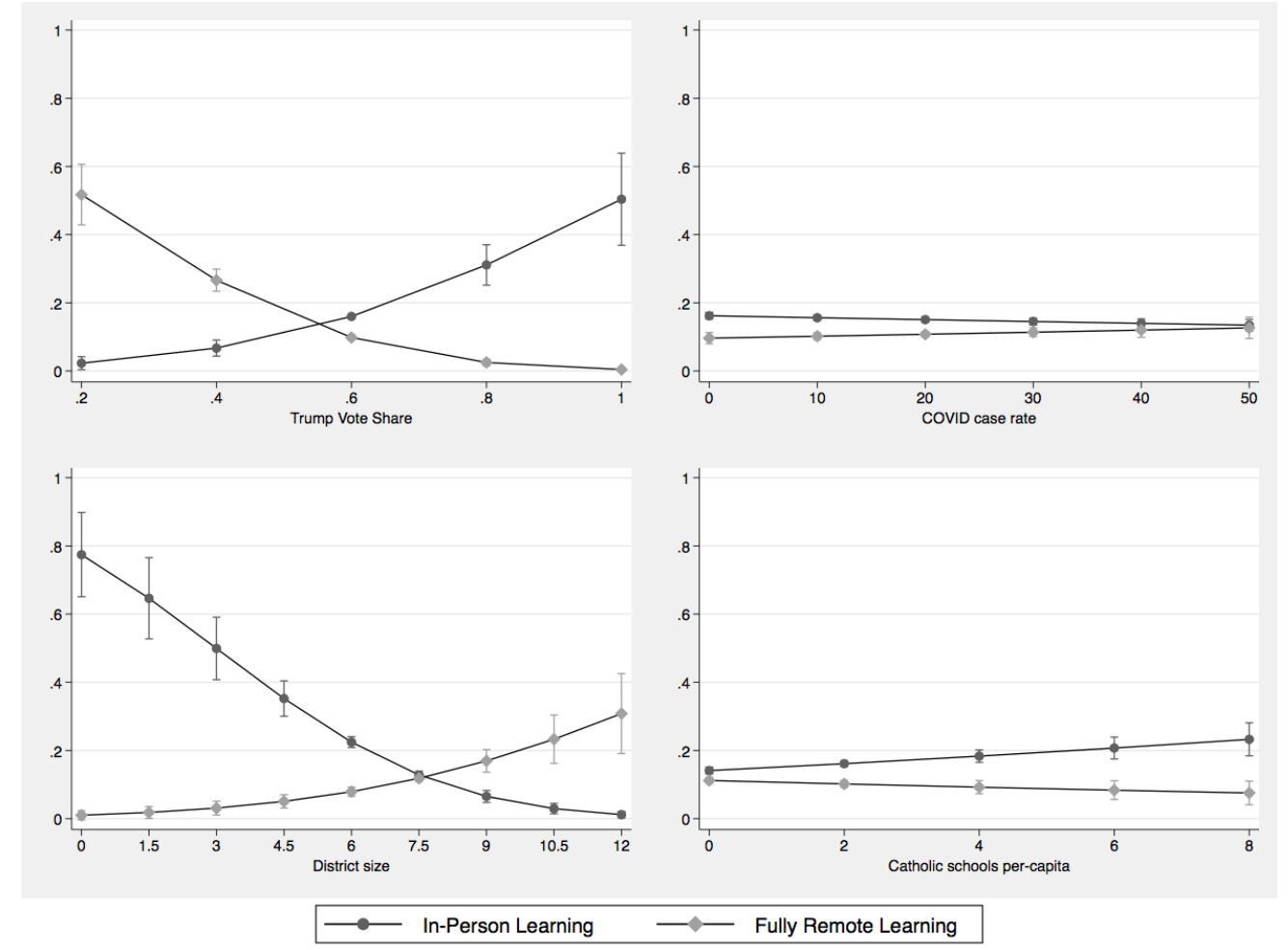
Finally, what role do market forces play in shaping the decision of local school district governments in selecting a reopening plan? Recall that we measure market forces by examining the exit options available to parents in the form of the density of two types of private schooling options in a local county: catholic schools and secular private schools. Because of the relative affordability of parochial schools and the expense of private secular schools, we hypothesized that – to the extent market forces incentivized public schools to avoid closures and reopen as quickly as possible – Catholic schooling options would drive this competitive response behavior. That is precisely what we find. Specifically, we find a statistically significant relationship between the number of Catholic schools per student and the likelihood that the local public

school district fully reopens (Column 1) and avoid turning entirely to fully online/remote learning (Column 2). In contrast, and consistent with our expectations about the political economy of exit surrounding school choice for the average American family, we find no relationship between the density of private secular schooling options in a locality and public school district reopening behavior. In Column 4, we test the robustness of our finding that Catholic school market competition in a local community influences the behavior of public school district officials in deciding whether (or not) to reopen schools for in-person learning.

Since the number of Catholic schools that are geographically proximate to a public school district may correlate with other unobserved factors that influence school districts' reopening behavior, we follow Hoxby's (1994) approach to addressing a similar endogeneity problem by instrumenting for the prevalence of Catholic schools in a county using historical data on the number of Catholic churches (per-capita) in the same county in much earlier decades of the 20th century. The assumption behind the instrument is relatively straightforward: there should be no relationship between the number of Catholic churches in a US county in 1952 and the decision of a school district that overlaps with that county in 2020 (nearly 70 years later) to choose a particular reopening plan in response to the COVID-19 pandemic, other than through the path dependent historical artifact that more Catholic schools were established in communities where there was a geographical surplus of Catholic churches to help fund school construction in the early and mid-20th century. Our IV results, which are presented in Column 4 of Table 1, confirm the findings in Columns 1-3, uncovering a positive and statistically significant relationship between Catholic school density and a public school district's tendency to vote for an in-person reopening over fully-remote learning in the fall of 2020.

Setting aside statistical significance, just how substantively important are these competing political, market, and public health (scientific) factors in shaping the decision of districts in how to reopen schools? Figure 2 (below) graphs the marginal effects of the four main explanatory factors on the likelihood that a school district elects to fully reopen (black dot markers) or remain closed (gray diamond markers). In each of these figures, changes in the explanatory variable are shown on the x-axis for values that (roughly) represent a standard deviation increase from one hash mark to the next while setting all other variables in the model at their mean value. In other words, the visual representation of the effects of politics and markets on district decision-making in Figure 2 *control for the intensity of COVID* in each local community and therefore can be interpreted as the separate effect that politics and markets have on the decision-making of school district governments beyond the public health crisis itself. Beginning with partisanship in the upper left-hand quadrant of Figure 2, we can see that the percentage of the vote won by Donald Trump in a county in 2016 has a substantively powerful effect on school reopening behavior. Moving from a district where Trump won just 40 percent of the vote to a district where he won a strong majority (60 percent) is associated with a decrease in the likelihood that a school district shuts its physical doors and chooses remote learning by 17 percentage points (27 versus 10 percent probability of fully remote learning). Conversely, that same shift from 40 to 60 percent support for Trump is associated with a 9-percentage point *increase* in the likelihood that a school district elects to return to in-person schooling in the fall (16 versus just 7 percent probability).

Figure 2: Marginal effects of politics, markets, and science on school districts' reopening decisions



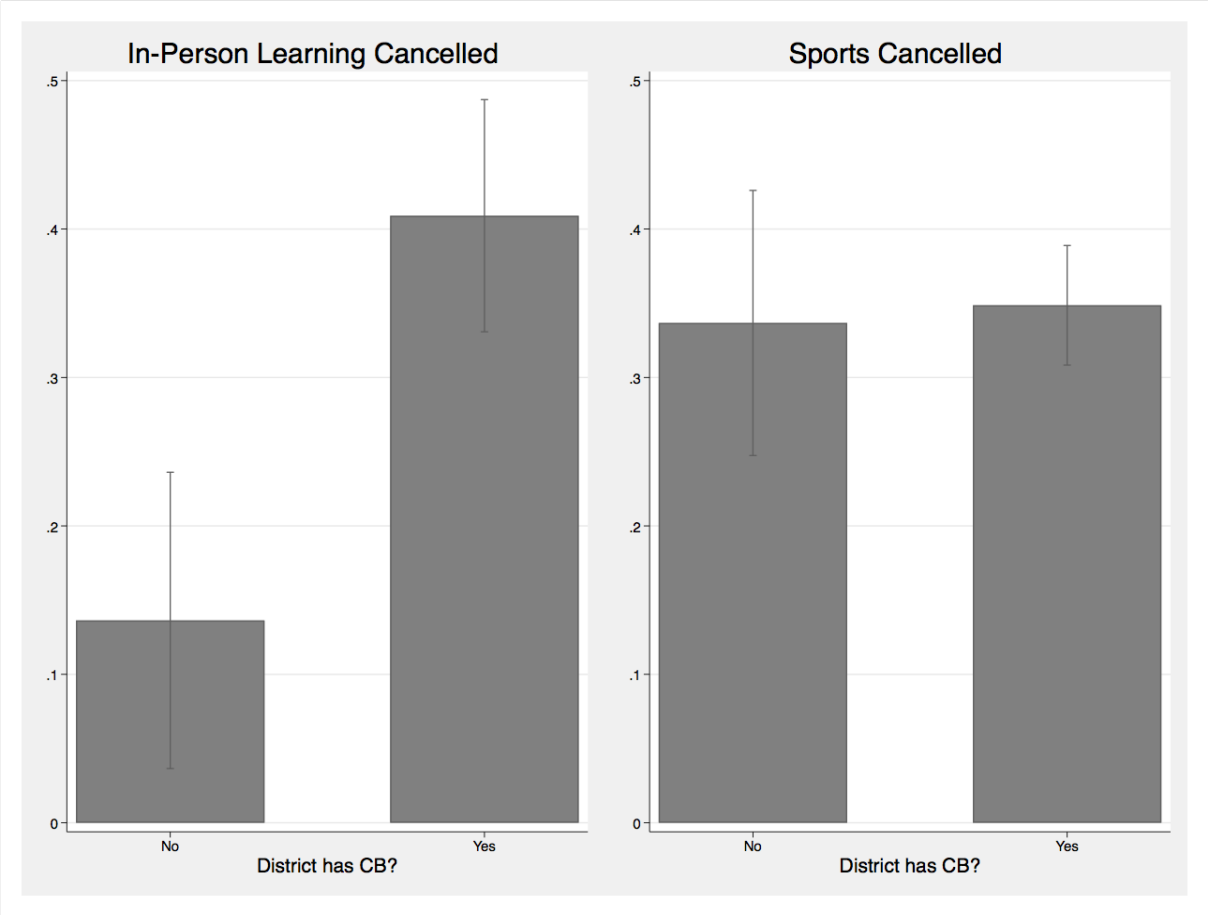
Note. Each figure plots the marginal effects of separate explanatory variables of interest on the likelihood that a local school district opted for fully in-person or fully-remote schooling. These effects are derived from the regression models presented in Columns 1 and 2 of Table 1 in the paper. In each instance, all other variables in the model are set at the mean value.

What about the political power of organized teacher union interests? Do they also have a substantively powerful independent effect on district reopening behavior? The answer is a clear yes. As the bottom left-hand quadrant of Figure 2 shows, larger school districts where unions are undoubtedly stronger on average are far more likely to heed the preferences of unions to keep in-person schooling closed and rely on fully remote (online) models of teaching and learning. The smallest districts in the sample – where unions have few members and tend to be less of a power broker in school board politics (Moe 2005; Rose and Sonstelie 2010) have a near 80-percent probability of conducting classes in-person, despite the protestations by unions against such a course of action. Conversely, even after controlling for the relative urbanicity of a district (population density), we estimate that the largest school districts– those where unions are more likely to have large membership rolls and bigger resources to compete in politics – have a roughly 30 percent probability of starting the year off remotely (as preferred by the unions).

To ensure that these findings are not simply an artifact of our decision to use district size as a proxy for union strength, we take an additional step of re-estimating the likelihood that a district cancelled in-person classes as a function of whether the local school district engages in collective bargaining with their local teachers union (or not). Using this more finely grained measure of teacher union strength in a district, we are able to confirm that union power is associated with an increased likelihood of remote learning. Figure 3 displays the marginal effects of moving from a non-bargaining district to a bargaining district conditional on the same set of controls in our baseline specification of equation 1 presented earlier in Column 2 of Table 1. As can be seen in Figure 3, districts with collective bargaining are 40 percent likely to remain in remote learning whereas non-CB districts are less than 15 percent likely to reopen in a fully remote setup. As a placebo test, we examine MCH data on whether a school district voted to

cancel athletics in the fall since unions (and the majority of the employees they represent) are far less likely to have a direct stake in after school extracurricular compared to classroom teaching. If we were to find that unions affected athletic decisions too, it is far more likely that the relationship we have uncovered between union strength and district decision-making is spurious, rather than an accurate assessment of the power of organized political interests to influence COVID reopening plans. As the near equal bars in the right-hand quadrant of Figure 3 indicate, the results of this placebo test are null. The full results of these estimations are available in Table A2 of the supplementary appendix.

Figure 3: Marginal effects of unions/collective bargaining on reopening decisions



Note. Each figure shows the marginal effect of collective bargaining (teacher union strength) on the likelihood that a local school district cancelled in-person classes and athletics in the fall of 2020. The full regression models can be found in Table A2 of the Supplementary Appendix.

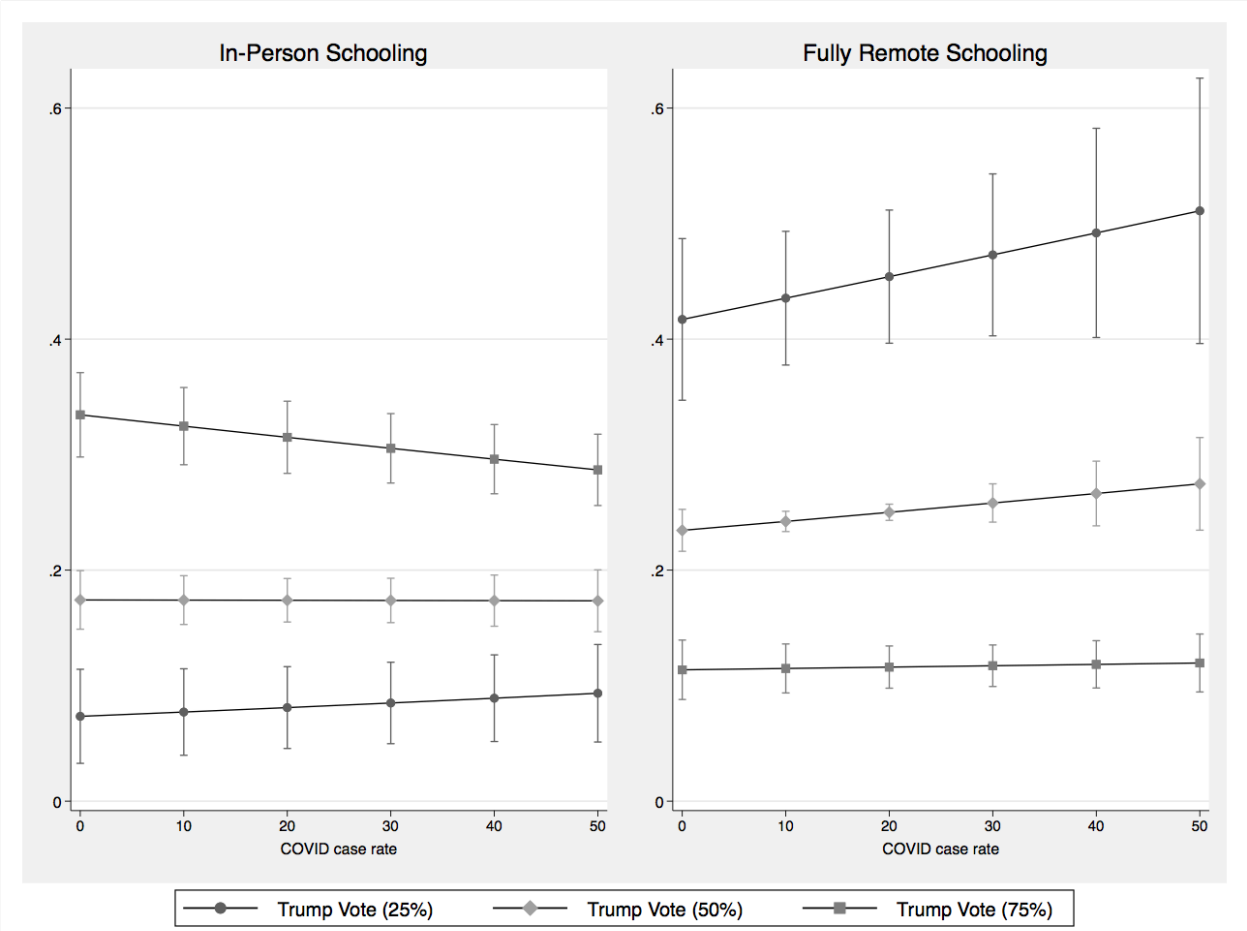
Returning to Figure 2, we can proceed to examine the substantive effects of market forces (private school exit options) along with public health considerations (the intensity of the pandemic) on districts' reopening decisions. As the very flat lines in both visuals on the right-hand side of Figure 2 makes clear, markets and science are far *less* substantively important factors than politics in shaping the reopening decisions made by local school district governments. The COVID case rate, while statistically significant, is substantively trivial in its effect on a district's course of action. For example, leaping from a district where there are approximately zero new COVID cases per 10,000 residents to a district that has seen an average of 20 new cases per 10,000 residents over the previous two weeks is associated with a paltry 1-percentage point increase in the likelihood of a district reopening remotely.

While less powerful than politics, the market forces associated with additional Catholic schools per-capita are a non-trivial factor in predicting how public school districts will respond. As the bottom right hand portion of Figure 2 reveals, moving from a school district anchored in a community where there are no Catholic schools to one in which there are four Catholic schools per 10,000 students is associated with a 4-percentage point increase in the likelihood that the local public school district reopens in full with in-person classes. By the same token, school districts are 3-percentage points less likely to close schools and resort to fully remote online learning when there are the same robust supply of Catholic schooling options available to families in their district. These findings suggest that, at least at the margins, public school districts are sensitive to the market forces induced by affordable private school options, at least when public schools are subjected to the possibility of having to remove all forms of in-person learning and families are in a different position to reconsider the relative advantages of exercising exit to obtain in-person schooling.

So far, we have told a story in which politics looms larger than any other factor in predicting how ostensibly non-partisan government agencies – public schools – responded to the COVID-19 pandemic. However, it is worth pushing our analysis further to consider the extent to which politics and public health considerations clash with one another. More specifically, we might want to know whether partisanship yields to public health concerns (i.e., yields to science) at a point when the pandemic becomes especially acute in a local community. Moreover, we can also ask whether the conditional relationship between partisan politics and scientific public health concerns operate asymmetrically with Republican and Democratic-leaning communities responding differentially based on the acuteness of the public health crisis in their community.

To investigate these possibilities, we re-estimated the models predicting whether a district reopened (Column 1) or whether a district opted for fully remote learning (Column 2 presented earlier in Table 1. However, in the present analysis we include a new variable that interacts district partisanship (Trump vote share) with the acuity of the public health crisis as measured by the 14-day new COVID case rate per capita. If this interaction variable is positive and significant for the fully open outcome, it would indicate that when the acuity of the crisis also grows more intense, partisanship becomes more influential in shaping district decision-making - pro-Trump areas are even more likely to keep schools open while anti-Trump areas are not. Such a result for the fully remote outcome would indicate that with more COVID intensity, the effect of partisanship attenuates. In neither model do we find a statistically significant relationship (though the model for fully opening is close, p=.11). For ease of interpretation, we graph these conditional relationships in Figure 4 below. The plain takeaway from the figure is that both Democratic and Republican districts appear, for the most part, to be wholly unmoved by the severity of the pandemic in their community.

Figure 4: Effects of partisan politics not mitigated by intensity of public health crisis



Note. Each figure shows the marginal effect of COVID case rates in a given community on the likelihood that the local school district selected fully in-person or fully-remote schooling, separately for districts that are strongly Democratic, politically competitive, or strongly Republican. The full results of these regression models are available in Table A4 of the Supplementary Appendix.

In the strongest and the most anti-Trump districts, there is little movement toward the reopening decision that would be consistent with the public health conditions on the ground (i.e., reopening more in communities with few cases and reopening less in communities with more cases). In sum, we find clear and convincing evidence that mass partisanship tends to translate into divided policymaking from school districts irrespective of the public health facts on the ground. The largely (flat) lines in Figure 4 denoting (separately) strongly Democratic (anti-Trump) districts, competitive districts, and strongly Republican (pro-Trump) districts are indicative of two

politicized approaches to school reopening in America, where scientific facts about the severity of the pandemic in one's local community is largely divorced from school policymaking.

Discussion and conclusion

"All politics is local." -Former House Speaker Tip O'Neill

There may not be a Democratic or Republican way to "clean the streets," but, according to our findings, there are two distinctly partisan approaches to reopening America's schools. Altogether, we find little evidence that the reopening plans adopted by the nation's 13,000+ school boards were linked to the public health conditions on the ground in their local community. This is a starkly important finding that has large implications, both for education policy and the nationalization of local politics in the US more generally. Though no one disputes the reality that schools have always been subject to democratic forces (Chubb and Moe 1990), nonpartisan local school district governments are far more institutionally insulated from partisan and nationalizing influences and freer to make policy decisions based on the best scientific evidence and public health concerns than are public officials in many other political institutions.

As such, one might expect that in communities where the pandemic has been well-managed and new case rates remains low, schools would be more likely to resume traditional modes of learning. Similarly, school districts in communities where case rates remain stubbornly high and public health conditions poor should be more likely to take a cautious approach, relying on fully remote learning to start the fall school year. The simple fact that we *do not* find any strong and consistent evidence of a relationship between public health conditions on the ground and school district policymaking – *but we do find a clear and substantial connection between politics and district re-opening plans* - upends much conventional wisdom about local education politics and policy in the United States. Nearly all of America's public schools are governed by

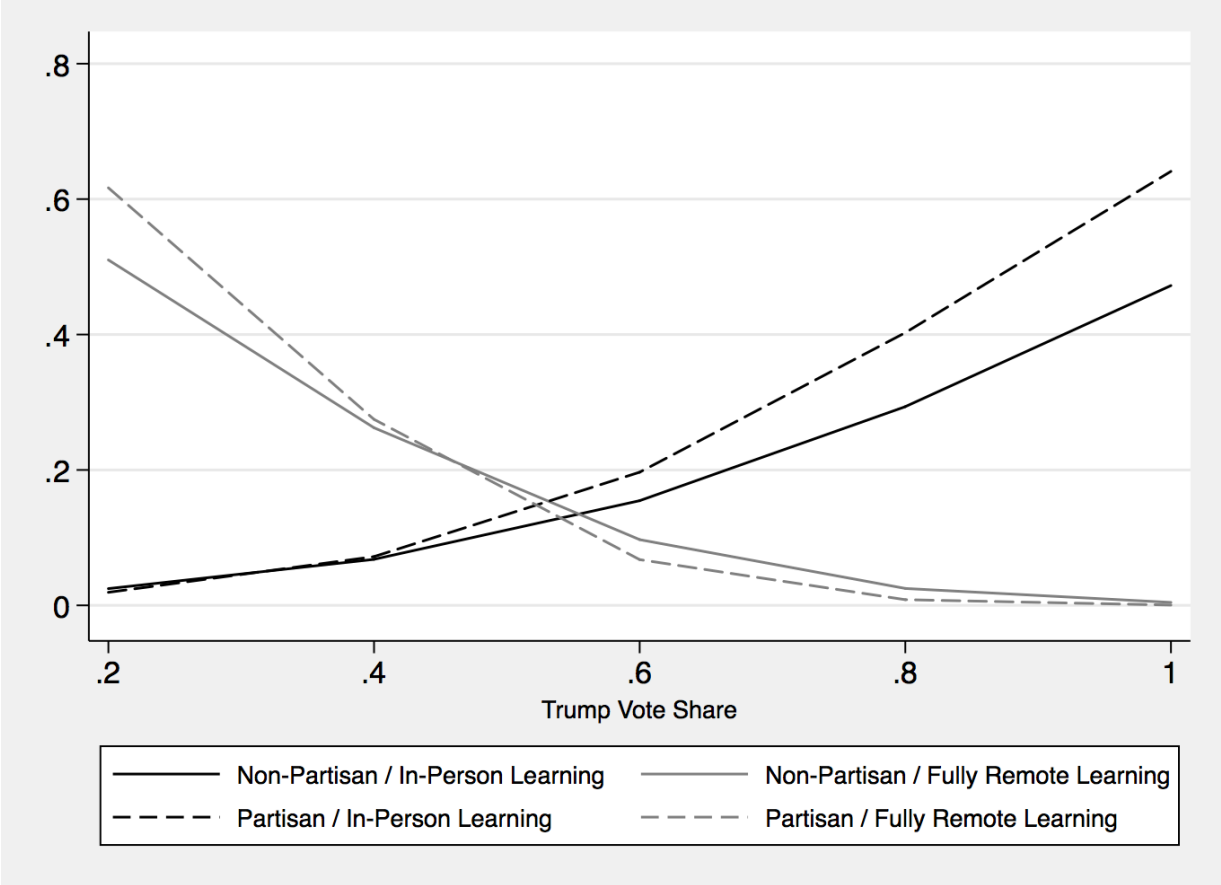
lay boards (essentially volunteers) that run for office in low-turnout, nonpartisan elections. These single purpose nonpartisan governments almost always rely on a professional expert (superintendent) to manage the most important day-to-day operational decisions about how to best educate and guard the safety and welfare of their community's children. And yet, even in the face of an unprecedented pandemic, the decision-making of our least nationalized, and least partisan governments is utterly dominated by partisanship (Trump vote share) and special interest group politics (union strength).

What are the broader implications of local education governance being absorbed into national and partisan disputes? On the one hand, our findings represent something of a Rorschach test. Critics will argue that partisan politics are weakening our nonpartisan local political institutions, leading these actors to shun expertise and avoid the best available scientific evidence in favor of making partisan appeals anchored in national debates that are divorced from the specific needs of their local community. On the other hand, to the extent that Republicans and Democrats in the electorate are themselves strongly divided over the optimal policy approach to managing the pandemic, including schools (Horowitz 2020), the fact that school district governments appear to be highly responsive to their constituents' partisanship suggests that democratic accountability – for better or worse - is alive and well in the nation's "ten thousand little democracies" (Berkman and Plutzer 2006). Similarly, advocates of school choice can point to the role played by private schools to argue that markets can, in certain communities, bring important pressure to bear on public schools, by ensuring that public schools are meeting the needs and desires of families to offer a high quality learning experience. Yet, just as the threat of exit has appeared to push school districts to not be cavalier about shuttering their doors and relying to much on remote learning, the pandemic has also illustrated that exit is highly unequal.

By all accounts, the largest, most racially diverse, and lowest-income school districts kept their doors closed to students this fall, leaving the most vulnerable families unable to find alternative forms of exit to supplement their children's educational loss (Gross and Opalka 2020).

One final and more general implication for local politics in the US pertains to the type of institutions that Americans use to govern their local communities. In the case of education, the vast majority of schools are governed by nonpartisan elected school boards. But there is a handful of states, including two – Georgia and North Carolina – where there is considerable within-state variation in the use of partisan versus nonpartisan school board elections. We wondered whether institutional differences tend to exacerbate our finding that mass partisanship trumped public health considerations in response to COVID-19. To find out, we re-estimated the main models presented earlier in Table 1 of the paper, but added a dummy variable for whether a district elects boards using partisan elections. We then interacted this variable with our measure of mass partisanship (Trump vote share) to see whether partisan elections exacerbate the degree to which school re-opening decisions are linked to politics. Figure 5, below, which is based on the statistical model shown in Table A5 of the Supplementary Appendix, reveals that partisan school board elections *do* in fact exacerbate the degree to which school boards make reopening decisions on the basis of politics versus public health. As the dashed black upward sloping line in the figure indicates, the relationship between support for Trump and the likelihood of a school board voting to hold in-person classes is much stronger in districts that elect their boards on a partisan basis. Notably, these models include state fixed-effects, which means that they are relying on variation within states, to tease out the degree to which local electoral institutions incentivize a Republican or Democratic way to "address a pandemic."

Figure 5: Partisan school board elections strengthen the relationship between between mass partisanship and a district's choice of reopening plan



Note. Figure shows the marginal effect of district (mass) voter partisanship on the likelihood that the local school board chooses fully in-person or fully-remote schooling, separately for districts that have partisan school board elections and non-partisan board elections. The full results of these regression models are available in Table A5 of the Supplementary Appendix.

While there is hardly a groundswell of support for returning to the type of partisan school board elections that existed prior to the Progressive era in the US, these findings do suggest that in other arenas of local government (e.g., county and municipal governments), policymakers may find that electoral institutions can create incentives that make it harder for local officials when they are confronted with issues where technocratic expertise clashes with nationalized, partisan disputes. Though neither type of school board – partisan or nonpartisan – is immune from these forces, it does appear that partisan elections are an important institution that can further politicize and nationalize policymaking in American local government.

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Supplementary Appendix for: Politics, Markets, and Pandemics: Public Education's Response to COVID-19

Table A1: Descriptive Statistics

Variable	N	Mean	Std.Dev.	Min	Max
Fully Remote Learning	10,585	.24	.42	0	1
Fully In-Person Learning	10,585	.23	.42	0	1
District cancelled sports	8,291	.35	.48	0	1
District size (log enrollment)	10,392	7.0	1.56	0	13.1
District has collective bargaining	1,513	.69	.46	0	1
Log per-pupil spending	10,289	9.4	.34	6.2	11.7
Log median family income	9,544	10.9	.31	9.8	12.3
Percent white students	10,378	.68	.28	0	1
Trump vote share	10,541	.57	.17	.08	.96
COVID Case Rate (per 100k pop.)	10,273	17.603	17.1	0	283.6
COVID Total Deaths (per 100k pop.)	10,580	40.164	48.2	0	461.6
COVID Total Cases (per 100k pop.)	10,580	1,395.5	1,063.1	0	14,295.9
Catholic private schools (per 10k students)	10,585	1.0	1.7	0	27.8
Catholic churches in 1952 (per 10k pop.)	10,488	1.5	1.5	0	21.6
Secular private schools (per 10k students)	10,585	.95	1.7	0	39.5

Table A2: Full Regression Results for Figure 3
District Collective Bargaining Status and School Reopening Plans

	(1) Fully remote classes	(2) Athletics cancelled
District size	0.168***	-0.170
	(0.062)	(0.108)
Per-pupil spending	0.774**	0.548
	(0.359)	(0.456)
Median income	-0.394	-0.164
	(0.308)	(0.312)
Percent white	-1.243***	-1.030***
	(0.358)	(0.386)
Trump vote	-3.529***	-1.573**
	(0.609)	(0.673)
COVID case rate	0.003	0.011***
	(0.004)	(0.004)
Catholic schools	-0.058	-0.062
	(0.047)	(0.053)
Priv. secular schools	0.038	0.065
	(0.075)	(0.067)
Collective bargaining	**0.867*** **	**0.055**
	(0.334)	**(0.307)**
Constant	-2.741	-1.228
	(4.805)	(5.948)
Locale Effects?	Yes	Yes
State Effects?	Yes	Yes
Cut Point #1	--	--
Cut Point #2	--	--
N	1,357	967
Pseudo R^2	0.47	0.40

Note: Dependent variable listed above each column. Cell entries are probit regression coefficients with standard errors clustered by state reported beneath in parentheses. All measures are two-tailed tests. * *p<0.1,* ** *p<0.05,* *** *p<0.01*

Table A3: Results of main models in Table 1 are fully robust to different measures of COVID Intensity

	(1) In-person classes	(2) Fully remote classes	(3) Ordinal (0-2)	(4) In-person classes	(5) Fully remote classes	(6) Ordinal (0-2)
District size	-0.256***	0.160***	-0.203***	-0.257***	0.160***	-0.203***
	(0.032)	(0.035)	(0.030)	(0.032)	(0.035)	(0.030)
Per-pupil spending	0.218**	0.044	0.135	0.215*	0.046	0.131
	(0.109)	(0.157)	(0.084)	(0.110)	(0.156)	(0.084)
Median income	0.346***	-0.391***	0.403***	0.358***	-0.403***	0.409***
	(0.105)	(0.122)	(0.100)	(0.110)	(0.126)	(0.100)
Percent white	0.713***	-1.284***	1.054***	0.680***	-1.247***	1.037***
	(0.136)	(0.139)	(0.133)	(0.148)	(0.162)	(0.140)
Partisanship (Trump vote)	2.498***	-3.356***	2.775***	2.486***	-3.356***	2.779***
	(0.430)	(0.334)	(0.234)	(0.422)	(0.318)	(0.222)
COVID deaths per 100k	**-0.000**	**0.001**	**-0.001**	--	--	--
	(0.001)	**(0.001)**	**(0.001)**			
COVID cases per 100k	--	--	--	**-0.000**	**0.000**	**-0.000**
				(0.000)	**(0.000)**	**(0.000)**
Catholic schools	0.041***	-0.022	0.035***	0.042***	-0.022	0.036***
	(0.012)	(0.015)	(0.011)	(0.012)	(0.015)	(0.011)
Priv. (secular) schools	0.015	-0.003	-0.001	0.014	-0.002	-0.001
	(0.011)	(0.024)	(0.012)	(0.011)	(0.023)	(0.012)
Constant	-5.874***	4.462**	--	-5.953***	4.520**	--
	(1.211)	(1.989)		(1.233)	(2.092)	
Locale Effects?	Yes	Yes	Yes	Yes	Yes	Yes
State Effects?	Yes	Yes	Yes	Yes	Yes	Yes
Cut Point #1	--	--	4.771***	--		4.826***
			(1.323)			(1.336)
Cut Point #2	--	--	7.222***	--		7.279***
			(1.355)			(1.359)
N	9,352	9,419	9,109	9,352	9,419	9,109
Pseudo R^2	0.31	0.49	0.34	0.31	0.49	0.34

Note: Dependent variable listed above each column. Cell entries are probit (Columns 1-2, 4-6) and ordered probit (Columns 3 and 6) regression coefficients with standard errors clustered by state reported beneath in parentheses. All measures are two-tailed tests. * *p<0.1,* ** *p<0.05,* *** *p<0.01*

Table A4: Full Regression Results for Figure 4
Effects of District Partisanship Not Mitigated by Pandemic Intensity

	(1) In-person classes	(2) Fully remote classes
District size	-0.252***	0.152***
	(0.031)	(0.035)
Per-pupil spending	0.178*	0.038
	(0.105)	(0.153)
Median income	0.376***	-0.317**
	(0.104)	(0.127)
Percent white	0.689***	-1.330***
	(0.138)	(0.157)
Trump vote	2.790***	-3.106***
	(0.514)	(0.438)
COVID case rate	0.007	0.010
	(0.006)	(0.008)
Catholic schools	0.043***	-0.028*
	(0.012)	(0.017)
Priv. secular schools	0.010	-0.006
	(0.011)	(0.028)
Trump vote*COVID case rate	**-0.014**	**-0.011**
	(0.009)	**(0.013)**
Constant	-5.982***	3.622*
	(1.274)	(2.062)
Locale Effects?	Yes	Yes
State Effects?	Yes	Yes
N	9,092	9,158
Pseudo R^2	0.311	0.494

Note: Dependent variable listed above each column. Cell entries are probit regression coefficients with standard errors clustered by state reported beneath in parentheses. All measures are two-tailed tests. ** $p<0.1$, ** $p<0.05$, *** $p<0.01$*

Table A5: Full Regression Results for Figure 5
Effects of District Partisanship Not Mitigated by Pandemic Intensity

	(1) In-person classes	(2) Fully remote classes
District size	-0.253***	0.153***
	(0.031)	(0.035)
Per-pupil spending	0.180*	0.042
	(0.104)	(0.153)
Median income	0.374***	-0.325**
	(0.104)	(0.128)
Percent white	0.676***	-1.322***
	(0.136)	(0.154)
Trump vote	2.468***	-3.253***
	(0.456)	(0.346)
COVID case rate	-0.002**	0.003
	(0.001)	(0.002)
Catholic schools	0.043***	-0.029*
	(0.012)	(0.017)
Priv. secular schools	0.009	-0.009
	(0.011)	(0.027)
Trump vote*Partisan elections	**0.661**	**-1.182****
	(0.862)	**(0.537)**
Constant	-5.817***	3.745*
	(1.245)	(2.061)
Locale Effects?	Yes	Yes
State Effects?	Yes	Yes
N	9,092	9,158
Pseudo R^2	0.31	0.49

Note: Dependent variable listed above each column. Cell entries are probit regression coefficients with standard errors clustered by state reported beneath in parentheses. All measures are two-tailed tests. *$p<0.1$, **$p<0.05$, ***$p<0.01$