A DIFFERENT KIND OF WELCOME BACK:
HOW AND WHY SCHOOLS REOPENED DURING COVID
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i. Abstract

In late 2019, the novel coronavirus chain SARS-CoV-2, more commonly known as COVID-19, rapidly spread across the world, bringing modern life to a halt seemingly overnight. One facet of society that was most impacted by the COVID-19 pandemic was the education of the world’s youth, most of whom were sent home to quarantine by mid-March. While many schools attempted to continue education remotely, studies suggest that “students in grades 1-12 affected by the closures might expect some 3 percent lower income over their entire lifetimes” (Hanushek & Woessmann, 2020). As fall arrived and school boards attempted to determine how learning would resume, the pandemic provided Americans with an opportunity to examine how local governing bodies would handle an unprecedented public health crisis at a time of unprecedented partisan division. Leveraging the fact that all the nation’s school districts had to create some form of opening plan, this honors thesis tests several factors to determine which best predict whether a given district opened for in-person instruction in the fall of 2020. Contrary to the traditional notion that education in the United States is a non-partisan entity, this honors thesis finds evidence that partisan political leanings were the primary determining factor in whether schooling resumed in-person in the fall of 2020, with some evidence to suggest that the availability of market-based schooling options and demographics may have also impacted the decision-making process. These findings have important implications that are vital to the understanding of the future of public schooling in the United States.

Keywords: COVID-19, education policy, school sectors
ii. Acknowledgements

While the majority of this document shall be written in the traditional style of a scholarly article in the field of economics, I cannot begin this honors thesis without acknowledging the tremendous support I was fortunate enough to receive both during my time writing this thesis and as a member of the Tulane University Department of Economics. First and foremost, I would like to extend my deepest and most sincere thanks to Dr. Douglas N. Harris, who has guided me through this process and instilled in me a generous mixture of practical wisdom and a passion for research. Working under your tutelage both as a research intern and as a thesis advisee will always be one of the greatest honors of my life. I would also like to extend my deepest and most sincere gratitude to Dr. Augustine Denteh of the Tulane University Department of Economics, and Dr. J. Celeste Lay of the Tulane University Department of Political Science for their continued support and guidance throughout the thesis writing process. Finally, I would also like to thank Professor Toni Weiss and Dr. Antonio Bojanic for being world-class mentors throughout my undergraduate career.

All of this being said, this honors thesis could not have happened without the support of several incredible entities and individuals outside of the Departments of Economics and Political Science. This thesis could not have happened without the generosity of Burbio, Inc., which has let me use its exemplary dataset on how schools reopened in the fall of 2020. Finally, I could not have gotten to where I am today without the support and love of my parents and sister: Angela, Jeffrey, and Sydney Bennett, and my quarantine “bubble” here at Tulane: Jace Ambwani, Jack Kanzler, Kai Golden, and Fiona Hellerman.
1. Introduction

In late 2019, the novel coronavirus chain named SARS-CoV-2, more commonly known as COVID-19, was first identified in the city of Wuhan, China (WHO, 2020). Slightly over a year later, the COVID-19 pandemic has ravaged the globe, claiming the lives of over 2.3 million individuals worldwide, 458,000 of which have occurred in the United States (WHO, 2021). Additionally, the pandemic has spread to virtually every other facet of society, disrupting the economic and social well-being of individuals across the globe. According to a study conducted by David M. Cutler and Lawrence H. Summers, economic activity is expected to decrease by “$16 trillion in the U.S alone” (Harris, Ziedan & Hassig, 2020; Cutler & Summers 2020). Other studies also suggest that mental health and substance abuse emergencies will continue to increase during the pandemic, creating lasting emotional and social trauma for individuals throughout the world (Czeisler et al., 2020).

Another facet of life that has been significantly disrupted by the COVID-19 pandemic is the education of the world’s youth. While some schools attempted to continue to provide some kind of education to their students, one UNESCO report noted that by April of 2020, over 1.5 billion children worldwide were sent home from school because of the pandemic (Harris, Ziedan & Hassig, 2020; UNESCO, 2020). In the United States, many schools shifted towards a distanced approach to learning, such as using “Google Classroom, Canvas, and PowerSchool…video platforms… (such as) Zoom…and a wide range of tutorial and assessment programs” to keep their students engaged in learning throughout the spring of 2020 (Harris et al., 2020).
However, this change was not without drawbacks, the largest of which was that the shift to remote learning forced millions of parents out of the work force in order to oversee their children’s education from home. Specifically, by April 2020, the labor force participation rate of women in the United States had dropped by 3.58 percent, and the male participation rate had dropped by 2.16 percent (Tedeschi, 2020). Additionally, a study in late 2020 by Hanushek and Woessmann found that children learn less at home, and that “students in grades 1-12 affected by the closures (as a result of the COVID-19 pandemic) might expect some 3 percent lower income over their entire lifetimes” as a result of these learning losses (Hanushek & Woessmann, 2020).

As fall arrived, schools throughout the U.S. were tasked with figuring out the manner in which learning would resume. This problem was especially pertinent to traditional public schools (TPSs), as the number of charter and private school options throughout the United States has grown rapidly over the past decade and a half (Harris, 2020), thus increasing competition in the schooling market. Furthermore, decisions regarding how schools would conduct learning in the fall of 2020 came at a time of extreme political polarity, with “public health decisions –including whether and when to send children back into classrooms – …wrapped up in partisanship and sentiment toward the president” (Hartney & Finger, 2020; Horowitz 2020).

The aforementioned quote by Hartney and Finger seems to echo a common sentiment in contemporary American life; the idea that sharply partisan politics have infiltrated nearly every decision-making process in American life is nothing new. Indeed,
one could argue that this idea has been given new life thanks to nationwide standoffs between “anti-maskers” and “science believers,” who tend to align themselves with the Republican and Democratic parties, respectively (Pazzanese, 2020). In fact, in a survey conducted by Pew Research Center (the results of which are listed below in Figure 1), when asked what the most difficult part of the pandemic was, 27% of Republican respondents “specifically called masks unnecessary... oppressive or unfair...(and) expressed a belief that the pandemic is being used to manipulate Americans for political gain” (Van Kessel & Quinn, 2020).

![Figure 1: Results of Pew Research Center's "COVID-19 Difficulty" Survey, (Van Kessel & Quinn, 2020)](image)

However, while partisan politics typically provide a reliable Occam’s razor in these sorts of debates, are they enough? After all, education has long been considered a non-partisan entity, where Republicans and Democrats put aside their differences and see each other as “strange fellows aligned.” Yet, the American schooling market has undergone more changes over the past decade than virtually any other in the United States. Currently, charter schools make up 7 percent (NCES, 2020) of all schools
nationally, and enrollment in Traditional Public Schools has fallen to a historically low 70 percent (NCES, 2020). In light of these statistics, it seems foolish to assume that partisan politics are the only factors that dictated how America’s schools\(^2\) re-opened in the fall of 2020.

This honors thesis examines what factors most heavily influenced the manner in which America’s schools reopened and operated in the fall of 2020 amidst the COVID-19 pandemic. Specifically, attention will be paid to the influence and impact on reopening of the following factors: partisan politics, the strength of teachers’ unions, the spread of COVID-19, the availability of different schooling options (traditional public schools, charter schools, and private schools), and the demographic make-up of local school districts. Unlike a recent publication by Hartney & Finger (2020), the primary focus of this thesis will not be on determining whether or not partisan politics were the leading factor in how school reopened in the fall of 2020 but will attempt to determine which of the four aforementioned factors played the largest role(s) in the national reopening process. Consequently, this thesis will also differ from the work of Hartney & Finger by allowing for the presence of competition in schooling markets to be the main factor that led to school reopening, and not one that was “overwhelmed or simply complemented the influence of local political players” (Hartney & Finger 2020, 4).

The rest of this honors thesis will proceed as follows. First, relevant literature will be reviewed, which includes an in-depth review of some of the most important literature regarding the economics of education, the COVID-19 pandemic, and the factors

\(^2\) Throughout this study, the phrases “schools,” “schooling,” “education,” etc. will be used to describe K-12 education in the United States.
that may have caused schools to reopen in the fall of 2020. This will be followed by two sections describing the empirical methods of this thesis: one describing the experimental design and regression analysis used, and the other describing the dataset being used in this thesis. Next, the results of the empirical methods described will be presented, along with a discussion of any limitations that should be considered when analyzing said results. Finally, conclusions will be drawn as to the implications of the results, and the sorts of questions they prompt that warrant further research.

2. Relevant Literature

This section of the honors thesis aims to provide an overview of the relevant literature that has already been published\(^3\) surrounding the factors that caused schools to re-open in the fall of 2020. It will be organized into four subsections. These sections, entitled *Partisan Politics, COVID-19 Spread, Unions and Union Strength*, and *School Sectors*\(^4\) will introduce the relevant literature regarding these themes and where appropriate, outlines the methods and datasets used throughout said literature to test hypotheses and formulate conclusions. They will then detail the conclusions that each piece draws regarding that particular factor. Thus, by discussing this literature, a foundational knowledge of these factors will be created upon which the analysis of this honors thesis can be built.

\(^3\) Or is currently in the process of being published.
\(^4\) Due to the lack of literature surrounding school reopenings and demographics, the discussion of these factors has been included in the *School Sectors* subsection.
Partisan Politics

Throughout his relatively short political career, President Donald Trump has become known for his part in the political polarization of the United States. While partisanship in the U.S. is nothing new, several statistics suggest that President Trump was the single most polarizing president in modern American history. Throughout his time as President, Trump maintained a larger partisan gap in his approval rating on average than any other recent president, such as Presidents Obama, W. Bush, Carter, Reagan, and Nixon (Tyson, 2018). Furthermore, early in the pandemic, President Trump introduced a partisan aspect to the issue, by threatening to withhold federal funding from schools that refused to open for in person instruction, suggesting that Democrats were pushing for remote schooling in the fall of 2020 for their electoral benefit (Baker, Green, & Weiland, 2020).

These remarks by the President can be seen as a major shift for the nation’s school districts, which are often thought of as incredibly localized, non-partisan entities. For most decisions made by locally elected school boards, such as “building use, school schedules, and school sports,” as well as more intensive and delicate decisions, such as “teacher salaries and hours, student discipline, and curriculum,” (Hartney & Finger 2020, 2) are hardly ever made along party lines, as school boards are commonly seen as arenas where Republicans and Democrats become unlikely allies, who put aside (most of) their political differences in order to best educate the nation’s youth. However, after President Trump’s partisan remarks on the issue of reopening, many have suggested that public

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5 Meaning the difference between his approval rating by members of his own party and his approval rating by members of the opposing party.
education is the latest in a long line of public sectors that has become overrun by partisan politics. This would hardly be surprising, as most individuals seem to cite partisan political beliefs as the primary driver for differences in COVID responses at all levels of government (Deane, Parker & Gramlich, 2021).

One of the main goals of this honors thesis is to expand and improve upon a recent working paper written by Hartney and Finger (2020). The paper is an important step in the right direction and was the first working paper that attempted to analyze what factors affected the ways that schools reopened. However, as mentioned in section 1. of this honors thesis, Hartney and Finger’s analysis is mainly concerned with the impact that partisan politics played in the reopening of schools in the fall of 2020. This is somewhat unsurprising, as both hold PhDs in Political Science and Government, respectively. What this honors thesis hopes to do is build upon the work and results of Hartney and Finger, and broaden the conclusions of their research, as well as the implications that follow.

In their analysis, Hartney and Finger analyzed a set of data from MCH Strategic Data entitled “COVID-19 IMPACT: School District Status Updates.” They note that “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” (Hartney & Finger 2020, 12). Their main focus was on a “politics” variable, which considered how both partisan political leanings and the strength of local teachers’ unions affected reopening. They also included measures that considered the prevalence of market-based options, specifically private schools, in order to account for the pressure to exit the schooling market put on some traditional public schools by private and charter options.
Another key benefit of Hartney and Finger’s analysis was that it brought to light a plethora of other literature that would be important to consider when designing the empirical methods carried out in this thesis. Some of the most important literature they discussed came from the field of political science, highlighting the connections between partisan politics, science, and education.

While the article by Hartney and Finger (2020) will be the primary point of comparison throughout the analysis of the results found in later parts of this honors thesis, it is not the only study that aims to analyze what factors caused schools to reopen in the fall of 2020. In particular, a new paper by Grossmann et al. (2021) seems to approach the question in a manner that is not unlike Hartney & Finger, focusing on the political forces that may have affected schools’ decisions to begin in-person instruction in the fall. Unlike Hartney and Finger, however, Grossmann and his team focused their analysis on the patterns of reopening within their home state of Michigan.

Since Grossmann et al. were primarily concerned with analyzing what factors prompted reopening in Michigan, the datasets they use varied from those discussed above. While the team did analyze state-level data across all 50 states, they dataset they used was an original one that “tracks state-level school closure decisions, recommendations or requirements for remote learning, and plans or decisions concerning instructional hours, equity, funding, and assessment” (Grossmann et al 2021, 5). Regarding Michigan, the team compiled two more original datasets; the first is a coded compilation of reopening plans that were submitted to the Michigan Department of

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6 This, again, makes sense, as Grossmann is a political science professor at Michigan State University.
Education, with an emphasis placed on how teaching would be administered (Grossmann et al. 2021, 6). The next original dataset the team compiled was focused on state-wide public opinions regarding in-person instruction in light of the ongoing pandemic, as well as “political partisanship, approval of President Trump, having children at home, and race/ethnicity” (Grossmann et al. 2021, 7).

In order to accurately analyze their data, Grossmann and his team used multiple regression equations to assess whether or not these various factors influenced whether or not schools reopened in the fall of 2020. In order to examine the relationship between “school reopening plans and partisanship, COVID-19 levels, and other factors including collective bargaining agreement strength” (Grossmann et al. 2021, 7), the team estimated a logistic regression model, which used robust standard errors that are clustered at the county level. They also used an OLS estimation and ordered logit models in order to examine what factors contributed to public opinion surrounding in-person education, such as “partisan identification, support for President Trump, race/ethnicity, and status as a parent” (Grossmann et al. 2021, 7).

Throughout the literature discussed above, one clear theme emerges: partisan politics influence education. While this notion does seem to match up nicely with what Occam’s razor would dictate regarding why schools reopened in the fall of 2020, it does seem to suggest a rather uncomfortable truth. After all, the point of The System was to create a nationwide, largely standardized set of education systems, upon which local and specialized curricula could be built. However, it takes but one look into a high school

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7 Which is analogous to the strength of teachers’ unions.
8 Ordinary Least Squares
biology class to realize that this semi-standardized system of public schooling is not a reality. While many school boards\textsuperscript{9} approve biology curricula that include Darwin’s Theory of Evolution, some boards allow religious and political motives to slip in. In these districts, the teaching of the Theory of Evolution is banned, and replaced with curriculum that is “not invested in whether evolution affects the sizes and shapes of the beaks of finches in the Galápagos…(but) whether people were created in the image of God himself” (Khazan, 2019). Thus, while education is typically placed “outside” of the scope of normal politics (Iannaccone, 1967) politics did not go “away” from the realm of education. They simply moved on to a more open, subliminal system (Chub & Moe, 1990).

Indeed, Hartney and Finger find that “politics – far more than ‘markets’ or ‘science’ – appear to drive the tone and direction of school districts’ reopening plans” (Hartney & Finger 2020, 18). Furthermore, they find that the most significant indicators of a school district’s reopening plan were the percentage of the vote earned by Donald Trump in the 2016 election in school district’s county. When discussing these results, the team often looks to another article by DiSalvo and Hartney (2020), which discusses the major shifts in the policies and attitude with which the federal government, led by President Trump and Secretary of Education Betsy DeVos, approached education.

Similarly, Grossmann et al.’s state-level results indicate that there is a clear indication that the reopening of in-person instruction primarily occurred along party lines, while also noting that “the vast majority of states adopted a ‘local control’ approach to

\textsuperscript{9} Which are, keep in mind, publicly elected.
reopening,” meaning that local governing bodies (such as local governments and school boards) had more control over reopening than state agencies (Grossmann et al. 2021, 9). At the Michigan level, most of the team’s findings again seem to align themselves with those of Hartney and Finger. Specifically, the team finds that “districts in counties with higher Democratic vote share are significantly less likely to have in-person reopening plans and significantly more likely to have plans for all-remote schooling” than those with higher Republican vote shares\(^\text{10}\) (Grossmann et al. 2021, 12).

**COVID-19 Spread**

While the findings above may seem to prove Occam’s razor correct\(^\text{11}\), there is another fairly intuitive factor that may have played a large part as leaders of American schools were deciding to reopen in the fall of 2020: the continued spread of COVID-19. Regardless of one’s political beliefs, the spread was hard to ignore. Despite the fact that most people will react differently to controversial scientific issues depending on their political leanings (Hart and Nesbit, 2011), when asked about how schools should

\(^{10}\) These results are presented on the following page in **Figure 2**

\(^{11}\) That is, that partisan politics are the primary motivating factor for how and why schools reopened in the fall of 2020
determine their reopening strategy, most people\textsuperscript{12} expressed a desire for science to play a role in the decision-making process. In fact, when asked about how they went about planning their reopening process, several superintendents expressed frustration at the CDC\textsuperscript{13} for not being clear enough in their messaging regarding how schools should reopen safely (Hartney & Finger 2020, 12; Simpson 2020).

As the primary focus of this honors thesis is centered around if and how schools reopened in the face of COVID-19, it is pertinent to understand how the virus has affected education throughout the duration of the pandemic. “How America’s Schools Responded to the COVID-19 Crisis” (Harris et al., 2020)\textsuperscript{14} provides a detailed, school and district level analysis of how different schools and districts responded to the crisis, and why they reacted the way they did. The paper also cites other studies that have catalogued school closures in the face of COVID-19, such as Hamilton et al. (2020) and Henderson et al. (2020). The team also references a work by Adams-Prassl et al. (2020), which noted that BA holders were less likely to lose their jobs during the pandemic, similar to the Great Recession (Berube, 2010).

One final key study was conducted by Harris, Ziedan, and Hassig in the fall of 2020, when they analyzed the effects of school reopening on COVID-19 hospitalizations.\textsuperscript{15} This was the “first broad-scale evidence regarding the effect of school reopenings on COVID-19 health outcomes” (Harris, Ziedan & Hassig, 2020). The team used data from three sources: Education Week, an educational industry publication, and

\textsuperscript{12} Specifically, those making decisions regarding school re-openings
\textsuperscript{13} U.S. Center for Disease Control
\textsuperscript{14} I was lucky enough to be an undergraduate research intern on this project and am acknowledged in the paper.
\textsuperscript{15} Which is appropriately named “The Effects of School Reopenings on COVID-19 Hospitalizations.”
two private companies: Burbio and MCH Strategic Data. In this study, the team focused on panel data regarding hospitalizations, which both directly measures health outcomes and addresses selection biases that arise (Harris, Ziedan & Hassig, 2020).

In their study, Hartney and Finger find that there is no meaningful impact on the spread of COVID-19 and how schools reopened in the fall of 2020. However, while Grossmann and his team seem to draw similar conclusions, they come with a warning. They note that on a national level, “relatively few states offered specific requirements to guide reopening decisions” (Grossmann et al. 2021, 9). This lack of guidance may have hindered local policymakers’ ability to make evidence-based, safe decisions regarding reopening. At the Michigan level, however, Grossmann et al. do find that “COVID-19 rates at the county level are significantly associated with traditional public school district in-person reopening plans” (Grossmann et al. 2021, 12).

While the Michigan results do seem to line up with what one would expect, the national results presented by both Hartney & Finger and Grossmann et al. are fairly surprising. What is even more surprising, however is that when schools did decide to reopen and offer fully in-person instruction, COVID-19 infection levels did not increase.

Figure 3: Patterns of Reopening in Michigan Based on Political Leanings (Grossmann et al. 2021, 11)

Panel A: COVID-19 Case Levels and District Reopening

16 Relating to the spread of COVID-19
17 Figure 3 illustrates these patterns in greater detail.
After all, the most recent data from the CDC suggests that the all-time peak for new infections was in January of 2021 (CDC, 2021). In the paper by Harris, Ziedan and Hassig, the team finds that “For counties whose pre-opening total new COVID-19 hospitalization rates were below roughly 36-44 per 100,000 population per week (roughly the 75th percentile of counties during the summer), we find no effect of in-person school reopening on COVID-19 hospitalization rates” (Harris, Ziedan & Hassig, 2020). In order to solidify the accuracy of these results, the team conducted additional robustness checks. Once these checks, which included “switching more confidently from Change Healthcare to HHS data on hospitalizations, adding college reopenings, and switching from OLS to a Poisson (count data) estimation” (Harris, Ziedan & Hassig, 2020) were added, the team’s conclusions remained the same, suggesting that once schools did open in the fall of 2020, hospitalization rates did not significantly increase.

**Unions and Union Strength**

When analyzing the conclusions of each of the articles outlined at the beginning of this section, one of the most surprising results was the lack of elaboration on and rigorous testing of the effects of teachers’ unions and their strength on school reopening in the fall of 2020. During Hartney and Finger’s analysis, for example, union strength was ‘rolled into’ a more general “politics” variable, that considered both the political leanings of the area surrounding schools and union strength. Somewhat unsurprisingly, the team found that the statistically significant effect of the size of a district (which they used as a proxy for the strength of that district’s teachers’ union) mirrored their results regarding the partisan politics of an area. Specifically, Hartney and Finger state that “districts with stronger unions are less likely to re-open, even after accounting for the
intensity of the pandemic itself” (Hartney & Finger 2020, 20), which is illustrated in Figure 4.

**Figure 4:** Marginal Effects of Union Strength on School Districts’ Reopening Decisions (Hartney & Finger, 2020, 124)

These findings, while consistent with the messaging of the National Education Association and the American Federation of Teachers\(^\text{18}\), are actually inconsistent with the findings of Grossmann and his team. This is particularly interesting, especially since this team used unions’ “collective bargaining agreement restrictiveness” (Grossmann et al. 2021, 2) as their metric for union strength, not district size\(^\text{19}\). At the national level, they find that “Union collective bargaining rules…were not strongly related to reopening guidance” (Grossmann et al. 2021, 9). Furthermore, at the Michigan level, while there was some evidence to suggest that union strength did impact reopening decision, “decisions were more tied to local politics” (Grossmann et al. 2021, 17). It is within this discrepancy between the two articles that there is significant room for improvement and specification, which this honors thesis hopes to provide.

**School Sectors**

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\(^{18}\) The two largest teachers’ unions in the United States

\(^{19}\) The metric used by Hartney and Finger.
Typically, when one thinks of the word “education,” several images come to mind. Some may imagine students in a traditional public school (TPS), facing a teacher at the front of a classroom that, barring some technological advancements such as Chromebooks and SMART boards, is eerily similar to those classrooms used by their parents some decades earlier. Some others may think of private schools. Unlike most TPSs, these schools pride themselves on discipline, extraordinary results, and (often) religious affiliation. One image, however, that typically does not come to mind when discussing education in America is that of a market. After all, most individuals prefer to think of schools and schooling as a stable entity, one that is outside of the control of Adam Smith’s fabled “invisible hand.” However, in order to fully understand and analyze how different factors, specifically the availability of schooling options besides TPS, (such as charter and private schools), affected schools’ reopening strategies, the economics of education must be considered.

In his book Charter School City, Douglas N. Harris of Tulane University gives an in-depth analysis of the economics in education, by analyzing the “revolution” in post-Katrina New Orleans. The book opens by painting New Orleans as a typical “rust belt” city, which includes an education system that had little to boast but some of the worst test scores and ratings in the nation (Harris 2020, 5). He then proceeds to describe the New Orleans Public School system, and all other public schooling systems throughout the country, as a part of “the One Best System,” or just “the System,” for short. The System is defined as “schools funded and governed by locally elected school boards, superintendents hired by those boards to manage schools, attendance zones that assign students to schools based on where they live, and state laws regarding teacher
preparation, certification and tenure to ensure that those who educate children are well prepared” (Harris 2020, 6-7). For the purposes of this honors thesis, The System can be used to describe any schools that follow a TPS model.

Harris then addresses that, regardless of popular perception, schools is, in fact, a market (Harris 2020, 12). By definition, schooling is a service that has a supply side, which consists of schools, and a demand side that consists of families. He also points out that, while families who use the System to educate their children do not directly choose schools, they indirectly choose them by participating in highly competitive housing markets. Similarly, traditional public schools often try to hire the best teachers they can through immensely competitive labor markets. Harris does note, however, that the market the System exists within is a unique one. It is a “hybrid” market that still “sits on the government side of the spectrum” (Harris 2020, 12).

The focus of the book, however, is not on The System, but rather the various schooling sectors and how New Orleans changed its approach to schooling from government operated schools to government governed schools (charter schools), that would hire “autonomous private organizations to run them under contracts” (Harris 2020, 14). In theory, this market-based approach would put “control…back in the hands of those who know the children they (the schools) are serving: the parents” (Harris 2020, 36). However, any theory in economics is based on several core assumptions: “Choices of individuals do not affect other people, good information, many options, no transaction or switching costs, flexible demand, flexible supply, (and the notion that)

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20 Or any theory, for that matter.
21 In order for consumers to make informed decisions, all information must be public. Or, as Harris puts it: “the market is only as efficient as the information is complete and accurate” (Harris 2020, 37).
efficiency is the goal” (Harris 2020, 37). Almost immediately, it is easy to see that, in any schooling market, several of these assumptions are violated. Specifically, Harris points out that “schooling choices do affect other people,” most people have imperfect information when choosing a school, and often times it is equity, not efficiency, that is the primary goal of schooling (Harris 2020, 38-43). In fact, regarding this last point, Harris goes so far as to say that “the factors that make the education market fail, make it fail worse for disadvantaged children” (Harris 2020, 45) when equity is not a primary focus of education.

Had the COVID-19 crisis occurred 30 years ago, the effect of school sectors on reopening plans probably would not have been studied. It is only in the recent past that market-based charter school options have become available, and as such, the impact of these options should be analyzed. Private schools, for example, largely needed to reopen amidst the COVID-19 pandemic, in order to not lose students to the swaths of online schooling options being offered by traditional public schools (Miller, 2020). Charter schools faced a similar pressure, as less families enrolled meant less revenue for the school. However, charter schools didn’t put the same pressure on parents as private schools, as the costs for attending a charter school are covered by the state, while the cost to attend a private school is covered in the parents’ tuition payments.

In general, the effectiveness of charter schools seems to be a mixed bag. In urban centers like New Orleans, where the System is failing, a market-based system seems to be the correct approach. However, Charter School City suggests that charter schools work

\[22 \text{ As they did in New Orleans, for example}\]
best when government action is taken to address the many flaws of the education market (Harris 2020, 239). In other places, however, such as the suburban Midwest, it may be best to maintain the System.

Before the effects of school sectors on reopening can be analyzed, it is worth mentioning that school sectors *did* play a vital role in the manner in which learning was conducted as the pandemic began in the spring of 2020. During their analysis of actions taken early in the pandemic, Harris et al. noticed that clear shifts could be seen in the manner in which learning was being delivered and graded. While several schools severely altered the manner in which students were assessed, private and charter schools were much more likely to rigorously monitor work and maintain pre-pandemic academic standards (Harris et al., 2020). The data also shows that private schools were quicker to move to remote learning and that once they did, they typically did so in a way that best fit the children attending the school (Harris et al., 2020). Finally, the data also suggested that special education programs received special attention from schools, which may have been prompted by early fears that these students would not receive adequate services from schools (Harris et al., 2020; Hess, 2020).

Interestingly, the strongest predictors of school response were the demographics of students’ families. Specifically, in areas where the average level of students’ parents was higher, schools were quicker to switch to remote forms of learning (Harris et al., 2020). This seems to make sense, because highly educated parents are better equipped to help and offer support to their children while they learn at home. Furthermore, the team

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23 The most widely used internet tools used to Zoom, Google Classroom, and Khan Academy were the most widely used internet tools
found a large and significant partial connection between the personalization and engagement of remote instruction and the availability of internet in area. This seems to establish and/or confirm the presence of a “Digital Divide” (Harris et al., 2020), which suggests that students with less access to the internet seem to have less opportunities for personalized distanced learning than those with reliable internet service.

Regarding the effect of school sectors on reopening, the so-called “mixed bag” of results discussed above seems to carry over. While Hartney and Finger do not analyze the effects of charter school options on reopening patterns, they do note that districts were incredibly “sensitive to the fact that they risk losing students to the competitive forces of exit… (such as) private schools” (Hartney & Finger 2020, 1). Specifically, they “find a statistically significant relationship between the number of Catholic schools per student and the likelihood that the local public school district fully reopens…and avoid(s) turning entirely to fully online/remote learning” (Hartney & Finger 2020, 21-22). Furthermore, Grossmann et al. found that while “traditional public-school districts in Michigan with a higher proportion of Black students are significantly less likely to have plans to begin the school year in-person…(they) do not find a significant relationship for Black or Hispanic student enrollment and charter school reopening plans” (Grossmann et al. 2021, 13-14).

24 The team notes that this divide is probably twofold: it both influenced what services schools could provide and likely affects how well students can access these services (Harris et al., 2020).
25 Such as those living in poor or rural areas (Harris et al., 2020)
3. Data

In order to examine how partisan politics, COVID-19 spread, school sectors, union strength, and various demographics affected how America’s schools reopened in the fall of 2020 amidst the ongoing COVID-19 pandemic, this honors thesis will draw on a large compilation of data. The foundation for this compilation will be an extensive dataset compiled by Burbio, Inc. Within this dataset, Burbio has compiled a massive amount of data, detailing information on 1183 school districts across the United States. Included in this dataset is each district’s name, home county\(^\text{26}\) and state, website,\(^\text{27}\) start date, and learning plans. Furthermore, each district’s learning plans are split into three categories: elementary school (grades K-5), middle school (grades 6-8), and high school (grades 9-12). For each of these three categories, the dataset then assigns a value of either T (taught), H (hybrid), or V (virtual), which correlates to each district’s learning plans. For districts whose learning plans varied by grade, the dataset used a string of letters to indicate each grade’s learning plan\(^\text{28}\).

While this dataset is a good start, it does not contain all the information needed to create a regression analysis that can accurately measure the impact that each of the factors highlighted above had on patterns of reopening in the fall of 2020. For example, one key aspect of the analysis in this honors thesis is determining how the political leanings of each district’s home county affected patterns of reopening. Not only is there no “politics” section of the Burbio data but assigning this factor a numerical value is

\(^{26}\) Or Parish or Burrough, where appropriate. The dataset also includes each county’s name and FIPS code, which is used in US Census data.

\(^{27}\) If one is available.

\(^{28}\) For example, if a middle school entry read “VVH,” this indicates that grades 6 and 7 used a virtual learning plan, while grade 8 used a hybrid learning plan.
challenging. In order to do this, this honors thesis will present said value as the percentage of each county’s vote won by former President Donald Trump in the 2016 presidential election²⁹. Unlike the Burbio data, which I was given written permission to use, this county-level election data is readily available to the public³⁰.

Another factor being observed in this thesis is the effect that the availability of various school sectors had on how schools reopened in the fall of 2020. Similar problems arise when attempting to quantify and observe this figure. In Grossmann et al. (2021), they accounted for this dilemma by creating a subsection of their data set for each of the school sectors, so that the team could directly measure the impact that the availability of charter school options in Michigan had on reopening plans statewide. Additionally, compiling the data this way meant that the team could also directly compare the reopening plans of different school sectors. In Hartney & Finger (2020), they do not consider charter school options, but do consider how private school options could affect reopening plans. To do this, they noted the proximity of Catholic schools³¹ to traditional public schooling options. In this honors thesis, analysis will be conducted based on the percentage of schools in a district’s home county are charter or private. However, this honors thesis will include measures that account for the effect that both private and charter schools had on the reopening of traditional public schools during the fall of 2020.

²⁹ This is the same measure used by both Hartney & Finger (2020) and Grossmann et al. (2021)
³⁰ The data I will be using comes from POLITICO (2016).
³¹ They note that they “do not expect that private non-religious schools, where tuition prices are typically much higher… (to) present much of an exit threat to local public school districts” (Hartney & Finger 2020, 15).
Furthermore, two other variables that shall be considered are those that aim to measure how the spread of COVID-19 and the strength of teachers’ unions affected the reopening strategies of schools in the fall of 2020. These data shall be considered in the same ways that they were considered by Grossmann et al. (2021) and Hartney and Finger (2020). In order to determine the effect of the spread of COVID-19 in schools’ reopening plans, this honors thesis will consider the number of COVID-19 cases per 100,000 residents in the school district’s home county on September 1st. In their analysis, Hartney and Finger (2020), use the population of a district’s home county (in millions) as a proxy for union strength, as counties with higher populations typically have stronger teachers’ unions. Similar to the 2016 election data, these population and COVID spread data can be found freely online and were accessed via the National Institute of Environmental Health Sciences “COVID-19 Pandemic Vulnerability Index.”

However, while the population of a district’s home county can be used as a proxy for union strength, it is not a great one. A better proxy for union strength is a binary variable based on the responses of districts to the 2000 Schools and Staffing Survey’s (SASS) question regarding the bargaining power that teachers’ unions have within their district. In this case, if a district’s union can collectively bargain, a value of 1 is assigned to the binary variable, otherwise, a value of 0 is assigned. However, this approach is not without drawbacks. The National Center for Education Statistics has only released a portion of the data from the 2000 SASS for public use, and as such, using this data as a proxy for union strength generates a smaller dataset, with just over half of the original districts being analyzed. In order to get a more complete sense of whether or not union
strength affected how schools reopened in the fall of 2020, both measures of union strength will be considered.

The other important factors that will be considered in this analysis are concerned with how the availability of other schooling markets affected patterns of reopening in the fall of 2020. As previously mentioned, Hartney & Finger do not actually account for the availability of charter schools, but account for the presence of private school options by the number of Catholic school options in each county (Hartney & Finger, 2020). Similarly, while they include the availability of charter and private school options in their analysis, Grossmann et al. do not spend a significant amount of time on the analysis of these factors. In this honors thesis, the effect of the availability of different school sectors will be an important piece of the analysis and will be based on the percentage of schools in each county that are private or chartered. This data is publicly available online and was gathered from the Common Core of Data (CCD).

This honors thesis will also expand upon the work of Hartney & Finger (2020) and Grossmann et al. (2021) by including analysis of how the percentage of children who qualify for free and reduced-price lunches (FRL) in each school district affected reopening. Finally, this honors thesis will attempt to determine whether the racial and ethnic makeup of each district is related to the way they reopened, by analyzing the percentage of each district’s student body that is Black and Latinx. As was the case for several other variables discussed above, this data was gathered from the CCD. For clarity, the factors being observed have been listed in Figure 5, along with how this

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32 Neither of the aforementioned papers included this variable in their analysis.
33 These will be two different, distinct variables.
honors thesis will measure their effects on the reopening plans of American schools in the fall of 2020. Furthermore, Table 1 and Table 2 include a detailed summary of this data, including each factor’s mean, standard deviation, minimum and maximum.

**Figure 5:** Factors to Be Considered in this Honors Thesis & Their Respective Method of Measurement

<table>
<thead>
<tr>
<th>Factors</th>
<th>Method of Measurement</th>
</tr>
</thead>
<tbody>
<tr>
<td>Partisan Politics</td>
<td>Percentage of the 2016 presidential vote won by Donald J. Trump in a district’s home county.</td>
</tr>
<tr>
<td>COVID-19 Spread</td>
<td>Number of COVID-19 cases per 100,000 residents in a district’s home county as of September 1st, 2020.</td>
</tr>
<tr>
<td>Teachers’ Union Strength</td>
<td>Population of a district’s home county in millions as of September 1st, 2020. OR Ability of teachers in a district to collectively bargain.</td>
</tr>
<tr>
<td>School Sectors</td>
<td>The percentage of schools in a district’s home county that are private OR charter.</td>
</tr>
<tr>
<td>Free and Reduced Lunches</td>
<td>Percentage of students in each district who qualify for free or reduced-price lunches.</td>
</tr>
<tr>
<td>Race/Ethnicity</td>
<td>Percentage of students in each district that are Black OR Latinx</td>
</tr>
</tbody>
</table>
Table 1: Descriptive Statistics of Variables Being Considered in this Honors Thesis Using County Population (Millions) as a Proxy for Union Strength.

<table>
<thead>
<tr>
<th>Variables</th>
<th>Mean</th>
<th>Standard Deviation</th>
<th>Min</th>
<th>Max</th>
</tr>
</thead>
<tbody>
<tr>
<td>% County Trump Vote</td>
<td>47.458</td>
<td>13.595</td>
<td>4.10</td>
<td>85.30</td>
</tr>
<tr>
<td>COVID Cases/100,000 Residents</td>
<td>1591.671</td>
<td>907.598</td>
<td>79</td>
<td>5890.8</td>
</tr>
<tr>
<td>County Pop. (Millions)'</td>
<td>0.630</td>
<td>0.940</td>
<td>0.009</td>
<td>10.106</td>
</tr>
<tr>
<td>% of Schools in County that are Charter</td>
<td>5.733</td>
<td>5.948</td>
<td>0</td>
<td>41.304</td>
</tr>
<tr>
<td>% of Schools in County that are Private</td>
<td>19.483</td>
<td>8.900</td>
<td>0</td>
<td>57.196</td>
</tr>
<tr>
<td>% of Students Who Qualify for FRL</td>
<td>45.729</td>
<td>15.246</td>
<td>9</td>
<td>99</td>
</tr>
<tr>
<td>% of Students in a District that are Black</td>
<td>12.065</td>
<td>11.923</td>
<td>0</td>
<td>77.2</td>
</tr>
<tr>
<td>% of Students in a District that are Latinx</td>
<td>19.194</td>
<td>18.758</td>
<td>0</td>
<td>96.0</td>
</tr>
</tbody>
</table>

Notes: Results are based on Burbio, Inc.'s Tracked-Districts-1-22-21 Dataset (2021) and other primary source data (see References). The sample size is 1,180.

Table 2: Descriptive Statistics of Variables Being Considered in this Honors Thesis Using Ability of Unions to Collectively Bargain as a Proxy for Union Strength.

<table>
<thead>
<tr>
<th>Variables</th>
<th>Mean</th>
<th>Standard Deviation</th>
<th>Min</th>
<th>Max</th>
</tr>
</thead>
<tbody>
<tr>
<td>% County Trump Vote</td>
<td>46.962</td>
<td>14.816</td>
<td>4.10</td>
<td>85.30</td>
</tr>
<tr>
<td>COVID Cases/100,000 Residents</td>
<td>1676.62</td>
<td>905.522</td>
<td>132.4</td>
<td>5890.8</td>
</tr>
<tr>
<td>Union Strength</td>
<td>0.692</td>
<td>0.0462</td>
<td>0</td>
<td>1</td>
</tr>
<tr>
<td>% of Schools in County that are Charter</td>
<td>6.085</td>
<td>6.516</td>
<td>0</td>
<td>41.304</td>
</tr>
<tr>
<td>% of Schools in County that are Private</td>
<td>19.467</td>
<td>8.99</td>
<td>0</td>
<td>57.196</td>
</tr>
<tr>
<td>% of Students Who Qualify for FRL</td>
<td>45.272</td>
<td>15.415</td>
<td>14</td>
<td>99</td>
</tr>
<tr>
<td>% of Students in a District that are Black</td>
<td>13.577</td>
<td>13.484</td>
<td>0</td>
<td>77.2</td>
</tr>
<tr>
<td>% of Students in a District that are Latinx</td>
<td>19.579</td>
<td>18.640</td>
<td>0</td>
<td>96.0</td>
</tr>
</tbody>
</table>

Notes: Results are based on Burbio, Inc.'s Tracked-Districts-1-22-21 Dataset (2021) and other primary source data (see References). The sample size is 697.
4. **Empirical Methods**

As has been stated several times before, this honors thesis aims to build and improve upon several of the results presented by Hartney & Finger and Grossmann et al. One of the most important ways this will be done is by analyzing the effects of charter schools and non-Catholic private school options on the reopening plans of TPSs in the fall of 2020. This will be done by including two control variables: one that will consider the effects of charter school options on reopening plans, and another that will consider the effects of private school options on reopening plans.

Furthermore, instead of considering a single “politics” variable, two distinct variables regarding politics will be considered: one which measures the effects of partisan political preference on reopening plans, and another which measures the effects of the strength of teachers’ unions on reopening plans. Furthermore, instead of only considering the population of a district’s home county as a proxy for union strength, this honors thesis will also run a separate regression using the ability of a district’s teachers’ union to collectively bargain as a measure of union strength. Additionally, since spending did not seem to correlate with the methods by which schools closed in the spring of 2020 (Harris et al. 2020, 6), including an additional variable to account for “community resources and other demographic features” as Hartney and finger do in their analysis (Hartney & Finger 2020, 13). Finally, the regression in this honors thesis will include the analysis of the impact on the percentage of children in each district who qualify for FRL, which neither Hartney & Finger (2020) nor Grossmann et al. (2021) discuss.
Using the data discussed in section 3., and considering the several improvements discussed above, this honors thesis estimates an OLS\(^{34}\) regression equation that takes the following form:

\[
\%T\text{aught}_ds = \mu_s + P.Politics_{ds}\beta_1 + COVID_{ds}\beta_2 + Union_{ds}\beta_3 + %\text{charter}_{ds}\beta_4 + \\
%private_{ds}\beta_5 + %FRL_{ds}\beta_5 + %\text{Black}_{ds}\beta_5 + %\text{Latinx}_{ds}\beta_5 + \epsilon_{ds} (1)
\]

Where \(\%T\text{aught}_ds\) denotes the percentage of classes in a district \(d\) in state \(s\) were taught in-person in the fall of 2020. To account for hybrid schooling options, where learning takes place both in-person and online, \(\%T\text{aught}_ds\) is the sum of the percentage of classes that are fully taught in-person, and the percentage of classes that are hybrid, divided by two.\(^{35}\) The function then models this percentage as a function of local political leanings (\(P.Politics_{ds}\)), COVID-19 spread (\(COVID_{ds}\)), teachers’ union strength (\(Union_{ds}\)), non-TPS schooling options (\(\%private_{ds}\) and \(\%\text{charter}_{ds}\)), the percentage of children in each district who qualify for FRL programs (\(\%FRL_{ds}\)), and demographic information (\(\%\text{Black}_{ds}\) and \(\%\text{Latinx}_{ds}\)). For a detailed explanation of how the explanatory variables will be measured, see 3. Data and/or Figure 5. Finally, a state fixed effect variable, denoted \(\mu_s\) is included in the function, in order to account for “any time-invariant state-level characteristics that may simultaneously influence local school district governments’ choice of reopening plans” (Hartney & Finger 2020, 17). The inclusion of this variable is important, as it allows the model to account for unobserved factors that affected school reopening that may be correlated with the factors being

\(^{34}\) Ordinary Least Squares

\(^{35}\) This assumes that half of all instruction was given in-person, and the other half was given online.
analyzed. This step is vital, because without it, “we would essentially be estimating cross-state differences in school district reopening rates” (Hartney & Finger 2020, 17).

5. Results

Using OLS regressions, each with a state fixed effect variable, the results in Table 3 were found, which generated slightly low $R^2$ values of 0.4947 and 0.5546. This means that there is some variability in the data that cannot be described by the model generated in the preceding section. It should be noted that the regression in column (2), which used the ability of teachers’ unions to collectively bargain, did generate a higher $R^2$ value. While some of the findings of this honors thesis align themselves with the those of Hartney & Finger (2020) and Grossmann et al. (2021), there are also several distinctions that separate the findings of this honors thesis from these works.

In general, the findings of this honors thesis seem to concur that the political leanings of a school district’s home county are a driving force behind exactly how and why districts reopened, while the spread of COVID-19 was statistically insignificant. Specifically, this honors thesis finds that, holding other things constant, each additional percent of a district’s home county’s popular vote won by Donald Trump in 2016 corresponds to a 0.64 or 0.61 percent increase in the number of classes that were held in-person in the fall of 2020, depending on the measure for union strength being used36.

However, unlike Hartney & Finger (2020), this honors thesis finds that district union strength, regardless of the proxy used, is also statistically insignificant, with coefficients

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36 Since analysis using county population as a proxy for union strength is in column (1) of Table 3, results from this regression will always be presented first, followed by the results from the regression using the ability of teachers’ unions to collectively bargain as a proxy for union strength.
that generate p-values of 0.396 and 0.651. Furthermore, this honors thesis finds that, for the percentage of the total share of schools in a district’s home county occupied by charter schools is statistically significant, regardless of the regression being analyzed. Regarding private schools, this honors thesis does not find a statistically significant relationship between that the availability of private schooling options and the percentage of classes in a district that were offered in-person, contrary to the findings of Hartney & Finger.

Finally, the findings of this honors thesis seem to suggest that the demographic make-up of each district mattered when districts decided how learning would commence in the fall of 2020. While there is no statistically significant relationship between the percentage of children who qualify for FRL and how classes were taught, this honors thesis does find a statistically significant relationship between both the percentage of Black students and the percentage of Latinx students and their home districts’ reopening plans. Specifically, for every additional percentage of a district’s population made up of Black and Latinx youth, there was a decrease in in-person instruction by 0.279 percent or 0.22 percent and 0.276 percent or 0.278, respectively. These findings are similar to those of Grossmann et al. (2021) discussed in section 2.

As discussed above, the results in columns (1) and (2) of Table 3 include a state fixed effect variable, which works to account for unobserved differences across each state that may affect the results of this data, such as state-level education policies. When an F-test is run on the absorbed indicators used to produce the results in column (1) and column (2) of Table 3, values of 12.690 and 8.757, respectively, are produced, both of which generate a corresponding p value of 0.000. This means that the role of the main
covariates are correlated with other unobserved factors that vary by state. Therefore, adding the state fixed effects variable has some influence on the results. As noted above, removing this variable from the regression equation would, in essence, change the equation from observing county-level differences to state-level differences. When this is done, the results listed in column (3) of Table 3, are obtained. This time, a significantly lower $R^2$ value of is 0.2087 is produced, meaning there is a relatively large amount of variability in the data that is not accounted for by the model used in this regression. However, as one can see in column (3) of Table 3, the significance of the explanatory variables changes slightly.
**Table 3. OLS Estimation of Factors That Caused Schools to Reopen in Fall, 2020**

Dependent Variable: % of Classes Taught In-Person Fall, 2020

<table>
<thead>
<tr>
<th></th>
<th>(1)</th>
<th>(2)</th>
<th>(3)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Constant</td>
<td>23.642***</td>
<td>31.506***</td>
<td>-17.24711*</td>
</tr>
<tr>
<td></td>
<td>(8.020)</td>
<td>(10.957)</td>
<td>(7.053446)</td>
</tr>
<tr>
<td>% County Trump Vote</td>
<td>0.636***</td>
<td>0.614***</td>
<td>1.336277***</td>
</tr>
<tr>
<td></td>
<td>(0.103)</td>
<td>(.131)</td>
<td>(0.0903838)</td>
</tr>
<tr>
<td>COVID Cases/100,000 Residents</td>
<td>0.002</td>
<td>0.001</td>
<td>0.0056912***</td>
</tr>
<tr>
<td></td>
<td>(0.159)</td>
<td>(.002)</td>
<td>(0.0014784)</td>
</tr>
<tr>
<td>Union Strength</td>
<td>0.912</td>
<td>2.617</td>
<td>2.203572*</td>
</tr>
<tr>
<td></td>
<td>(1.073)</td>
<td>(5.794)</td>
<td>(1.248403)</td>
</tr>
<tr>
<td>% of Schools in County that are Charter</td>
<td>0.505**</td>
<td>0.111**</td>
<td>0.9616006***</td>
</tr>
<tr>
<td></td>
<td>(0.238)</td>
<td>(0.268)</td>
<td>(0.1969171)</td>
</tr>
<tr>
<td>% of Schools in County that are Private</td>
<td>0.186</td>
<td>0.066</td>
<td>0.734859</td>
</tr>
<tr>
<td></td>
<td>(0.317)</td>
<td>(0.712)</td>
<td>(0.131812)</td>
</tr>
<tr>
<td>% of Students Who Qualify for FRL</td>
<td>-0.110</td>
<td>-0.191</td>
<td>-0.3012116***</td>
</tr>
<tr>
<td></td>
<td>(0.092)</td>
<td>(0.122)</td>
<td>(0.0933146)</td>
</tr>
<tr>
<td>% of Students in a District that are Black</td>
<td>-0.279*</td>
<td>-0.218*</td>
<td>0.221597*</td>
</tr>
<tr>
<td></td>
<td>(0.151)</td>
<td>(0.182)</td>
<td>(0.1232366)</td>
</tr>
<tr>
<td>% of Students in a District that are Latinx</td>
<td>-0.276**</td>
<td>-0.278*</td>
<td>-0.1041205</td>
</tr>
<tr>
<td></td>
<td>(0.124)</td>
<td>(0.158)</td>
<td>(0.0916019)</td>
</tr>
<tr>
<td>Sate Fixed Effect Variable Included?</td>
<td>YES</td>
<td>YES</td>
<td>NO</td>
</tr>
<tr>
<td>R-squared</td>
<td>0.4947</td>
<td>0.5546</td>
<td>0.2087</td>
</tr>
<tr>
<td>Measure for Union Strength</td>
<td>County Pop. (Millions)</td>
<td>Collective Bargaining Ability (1: Yes, 0: otherwise)</td>
<td>County Pop. (Millions)</td>
</tr>
<tr>
<td>Observations</td>
<td>1,180</td>
<td>697</td>
<td>1,180</td>
</tr>
</tbody>
</table>

Notes: Standard errors in parentheses. Results are based on Burbio, Inc.’s Tracked-Districts-1-22-21 Dataset (2021) and other primary source data (see References).

* p < 0.10; ** p < 0.05; *** p < 0.010
6. Conclusions

When he was inaugurated in January of 2021, President Joe Biden repeated a phrase that had been integral to his campaign: “America – requires more than words. It requires that most elusive of things in a democracy: Unity. Unity” (Biden, 2021). However, the patterns of reopening in America’s public schools amidst the COVID-19 pandemic seem to confirm what many Americans already know to be true: that the United States is a deeply divided place. The analysis in this honors thesis demonstrates that partisan politics, not science, dictated how and where American schools reopened for instruction during the fall of 2020, with the percentage of the vote won in a district’s home county by Donald Trump in 2016 being statistically significant, while the COVID-19 cases per 100,000 residents of a district’s home county was not. This honors thesis also finds that districts surrounded by more charter school tended to reopen more than those isolated from them, and that the demographic make-up of school districts mattered.

The implications of these results are important, especially within the context of the ever-changing landscape of American education. First and foremost, they seem to echo the sentiment that much of the conventional wisdom regarding local education politics and policy in the United States has been upended (Hartney & Finger 2020, 30). Since its inception, the American TPS model has largely been regarded as a non-partisan entity, where Republicans and Democrats put aside their differences to educate the nation’s youth. Now, however, with partisan political forces beginning to influence large portions of the decision-making process, children’s welfare may fall to the wayside in favor of actions that may earn career politicians easy “political points.” On the other hand, this notion that local school boards are highly responsive to the desires of their constituents
may suggest that some form of accountability is alive and well in the nation’s “ten thousand little democracies” (Berkman and Plutzer 2006).

Furthermore, the fact that districts surrounded by charter schools tended to open more classes to in-person education is also important. This seems to suggest that, for better or worse, market-based schooling options do affect the choices made by the governing bodies of public schools. Like the results discussed above, this may serve as a form of Rorschach test regarding education policy in the United States. On one hand, these findings seem to suggest a more active role of markets in American education, with districts providing schooling options that were not guided by science, but by the fear of losing families to nearby charter schooling options. To many who defend the System and its often severely underpaid teaching staff, this could be seen as affirmatively negative, as districts are offering up teachers as “sacrifices” to ensure they do not lose students to charter schools.

On the other hand, these findings may help to reinforce Harris’s claim that, in the case of the debate regarding charter schools and TPS districts, “the truth is somewhere in the middle” (Harris 2020, 244). By introducing market-based competition into the American education system, TPS districts were forced to adapt to the changing times. This may have allowed for innovations in teaching, such as increasing the use of technology as a teaching aid. Furthermore, the availability of these various schooling options may have allowed different families who wanted different schooling options a multitude of options for all three. For example, if two different families living in Houston County, Georgia, had different concerns regarding COVID-19, and as such wanted to send their children to different types of schools that offered different types of
instruction, they could. The family desiring virtual instruction could send their child to WIN Academy Virtual High School (a charter schooling option), and the family desiring an in-person instruction could send their children to Houston County Schools, which opened for in-person education in the fall of 2020.

Finally, the implications of trends regarding reopening and demographic make-up are also important, but they may be slightly more obscure. There is a myriad of reasons why districts with higher percentages of Black and Latinx students were less likely to open in person, and none are exactly positive. For example, a recent statistic from the CDC noted that, once infected, Black and Latinx individuals were 1.9 and 2.3 times more likely to die from the virus than their White counterparts, respectively (CDC, 2021). Other factors, such as racial biases and poverty rates may also play a role in these decisions, but these are sensitive issues that are beyond the scope of this thesis.

Of course, this is not to say that the analysis provided in this honors thesis is without shortcomings, the largest of which is the relatively rudimentary analysis that has been provided. While an ordinary least squares estimation is a good step in the right direction, other econometric models, such as a principal components model or robust OLS regression, may have provided a better fit for this data. These forms of analysis are beyond the scope of this honors thesis and may be important to consider should this project be continued post-graduation. Furthermore, the measurements for union strength used in this honors thesis have significant drawbacks. While using the population of a district’s home county allows for easy data collection, as this information is easily accessible for every school district and county in the United States, it is not actually a great proxy for the strength of teachers’ unions. On the other hand, while responses to
the 2000 SASS regarding the ability of teachers’ unions to collectively bargain is a much better proxy for union strength, there is a limited number of district responses to this survey that are available for public use. Should the studies and analysis in this honors thesis be continued, a better or more complete measure for union strength should be used. Additionally, the dataset used is relatively small, and further analysis would benefit from a compilation of more data from more school districts across the country.

Furthermore, this honors thesis focuses on variables regarding partisan politics, union strength, COVID-19 spread, the availability of market-based schooling options, and demographics. While these are certainly the most important factors to analyze, it may be worthwhile to analyze the patterns of reopening considering other factors, such as median family income in a district’s home county, the percentage of single parent homes in a district, and the geography of the district (i.e., urban, suburban, or rural)\textsuperscript{37}. These and other investigations, however, are left for future analysis, either by the thesis writer or other scholars.

\textsuperscript{37} Especially considering the “digital divide” found by Harris et al. (2020) that persisted when schools shut down in the spring of 2020.
References


https://www.pewresearch.org/fact-tank/2020/08/05/republicans-democrats-differ-over-factors-k-12-schools-should-consider-in-deciding-whether-to-reopen/


Khazan, O. (2019, September 19). I was never taught where humans came from: Many American students, myself included, never learn the human part of evolution. The Atlantic.

Miller, C. C. (2020, July 16). In the same towns, private schools are reopening while public schools are not. The New York Times.


https://covid19pvi.niehs.nih.gov/


