

# Does School Choice Make Segregation Better or Worse?

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## Introduction

The era of school segregation driven by government policy did not end with *Brown v. Board of Education* or the massive effort to desegregate schools in the 1960s and 1970s. To this day, a range of policies ensure that schools remain highly segregated by race and class. Many US metropolitan areas are fragmented into numerous school districts unequal in wealth. Neighborhood-based school assignment keeps students out of neighborhoods where their families cannot afford to live. Zoning laws prevent more affordable housing from being built in neighborhoods with desirable schools.<sup>1</sup> And selective schools use admissions tests that favor students who have access to greater educational opportunities at home and school.

Families are no longer prevented from attending particular schools based solely on their race, but the choices available to them remain limited by race and socioeconomic status. A system of neighborhood schools both reflects and reinforces residential segregation, itself the legacy of racist government policies.

Policies that aim to provide more educational options to families, often called “school choice,” have the potential to make segregation better or worse. By breaking the link between residence and school, choice policies could result in schools that are less segregated than neighborhoods. But to the extent that parents prefer schools that enroll students that look like their children (or other factors that are correlated with race), choice policies could increase segregation. The effect will likely depend on both policy design and context.

The goal of this paper is to review what the available research says about the effect of school choice policies on school segregation. Do these policies blunt or reinforce the segregating effects of a system of neighborhood schools? What do we still not know?

## Legal Limitations on Desegregation Efforts

In the second half of the twentieth century, the courts in the United States required local school districts to end the racial segregation of schools. The Supreme Court’s landmark



*Brown v. Board of Education* decision in 1954 ruled that the “separate but equal” doctrine was unconstitutional. Although the *Brown* decision marked the end of legally imposed segregation of schools, actual desegregation efforts did not begin until subsequent Supreme Court decisions in the following decades forced school districts to act against school segregation resulting from residential patterns. During this time, many districts were placed under court desegregation orders and school segregation decreased dramatically across the nation.<sup>2</sup>

More recent Supreme Court rulings have pushed in the opposite direction, significantly limiting the scope and duration of court-ordered desegregation plans. *Milliken v. Bradley* (1974) clarified the distinction between de jure and de facto segregation, confirming that segregation was allowed if it was not considered an explicit policy of each school district. The court held that the school systems were not responsible for desegregation across district lines unless it could be shown that they had each deliberately engaged in a policy of segregation. To be sure, in a measure of vindication following *Milliken* the Supreme Court affirmed (in a decision known as *Milliken II*) the orders of the trial court directing the State of Michigan to fund the additional educational programs that were designed to remedy the negative educational effects of imposed segregation. These decisions established incentives that partly prompted the era of anti-integrationist white flight into suburban school districts.<sup>3</sup>

*Board of Education v. Dowell* (1991) established that desegregation decrees were not permanent. It ruled that school districts could be released from oversight by demonstrating that they had complied in good faith and that vestiges of past discrimination had been eliminated, regardless of contemporaneous segregation levels. Furthermore, *Missouri v. Jenkins* (1995) overturned a district court ruling that required the State of Missouri to correct de facto racial inequality in schools by funding salary increases and remedial education programs. During this period, many of the school districts formerly under desegregation orders were subsequently released from judicial oversight. Although a small number of desegregation orders remain in place today, the vast majority of districts that were once under court oversight have been released from it. Today, most districts can choose whether or not to enact desegregation plans. Local desegregation efforts therefore depend on the views of local school boards and communities.

The courts have also limited the mechanisms school districts can use to integrate their schools. In *PICS v. Seattle School District No. 1* (2007), parents brought legal action challenging a student assignment desegregation plan that used individual racial classification to allocate slots in oversubscribed high schools. The court ruled that

the *individualized* use of race in student assignments was unconstitutional. Supreme Court justice Anthony Kennedy joined the majority opinion of the court, but he emphasized that the decision should not be understood as prohibiting local authorities from considering the racial makeup of schools in student assignment policy. Kennedy recognized that public school districts have a compelling interest in both achieving diversity and avoiding racial isolation in schools. He went on to recommend policy alternatives to achieve school integration, including allocating resources for special programs. The US Department of Education published these recommendations as part of a memorandum entitled “Guidance on the Voluntary Use of Race to Achieve Diversity and Avoid Racial Isolation in Elementary and Secondary Schools,” which has since been rescinded by the Trump administration.<sup>4</sup>

### **What Does It Mean for Choice to Affect Segregation?**

By breaking the link between residence and school, school choice policies create the potential for both more and less segregation, and whether they have a positive, negative, or no effect is likely to depend on both policy design and the preferences of parents.

Policies that are limited to specific groups, such as low-income families, may have different effects than policies that are open to everyone. And policies that appear to place all families on an equal playing field may in fact provide greater opportunities to some, such as choice systems that require parents to collect information on multiple schools or give preferences to families who attend open houses.

The effect on segregation is likely to depend on which families get access to more choices and their preferences for different kinds of schools. If additional choice is afforded to parents who want to send their children to diverse schools, then segregation is likely to fall as a result. But if choice is expanded to parents who are indifferent to the racial makeup of their child’s school, then there may be no effect or segregation may increase if parents prefer school attributes that are correlated with race.

Which families gain new choices influences not just how choice may affect segregation but also how we interpret the resulting rise or fall in segregation. It is our view that segregation resulting from the choices of white families to limit their children’s exposure to students of color should not be interpreted with the same lens as the choices of disadvantaged families seeking higher-quality schools for their children. For example, we do not believe that charter schools that predominantly attract white students from integrated neighborhood schools should be interpreted with the same lens as charters that mainly serve black and



Hispanic students who would otherwise attend struggling neighborhood schools (even if the charters are slightly more segregated).

Two charter elementary schools in Washington, DC, provide a useful example. All students at the KIPP DC PCS Promise Academy are black or Hispanic, and the school is located in a neighborhood in which school enrollment is typically 99 percent black or Hispanic. In contrast, enrollment at the Inspired Teaching Demonstration School PCS is 40 percent black or Hispanic, but the school is located in a neighborhood in which 87 percent of children are students of color. Both schools contribute to the segregation of DC schools in that they are far from being representative of citywide demographics, but we do not believe they should be judged equally. As we will discuss in the conclusion, many studies of school choice and segregation do not distinguish between these two channels.

How to interpret the effects of choice policy on segregation also depends partly on how segregation potentially affects student outcomes such as achievement and attainment. For example, if the benefits of integration derive largely from exposing different kinds of students to one another, then choice policies that lead to greater segregation could harm student outcomes. But if the benefits of integration largely come from providing students of color with the resources allocated to schools attended by white children, then modest changes in segregation levels may matter less if the policy environment provides equitable funding to all schools.

### **How Do We Measure Segregation?**

Most studies of school segregation examine how students are distributed across schools. We maintain this focus in our review of the research but note the importance of segregation within schools. A recent study of North Carolina found that segregation by race across classrooms within the same school increases as students progress into higher grades, and accounts for up to 40 percent of all segregation at the high school level.<sup>5</sup> For example, in diverse high schools white students are more likely to be in advanced math courses, whereas black and Hispanic students are concentrated in less advanced courses.

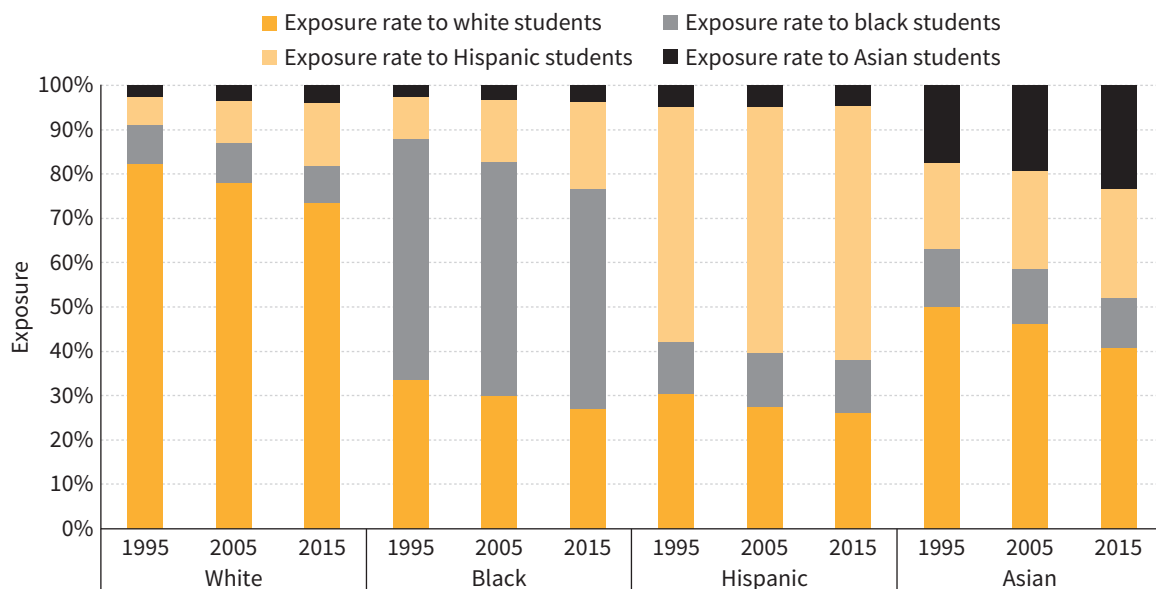
Interpreting evidence on segregation across schools, as most studies do, requires paying careful attention to measurement considerations because different methods of measuring segregation can lead to different conclusions.<sup>6</sup> The building blocks of segregation measures are almost always the shares of different racial groups at each school. These are then aggregated some way or another to arrive at a summary statistic that measures the “segregation” of a school system. Differences in the method of aggregation lead to differences in interpretation.

Measures of segregation can be placed in two broad categories: absolute and relative measures.<sup>7</sup> The most common absolute measures are exposure and isolation indices, defined as the average racial composition of peers to which students from a certain group are exposed in their school. These are computed as the average of racial shares using population weights corresponding to the enrollment count of the racial group of interest.

The isolation index measures the extent to which students from a given group are exposed mostly to themselves. It is often defined as the school-wide percent minority experienced by the average minority student in a school system. Exposure indices are defined similarly to measure the average exposure to students of varying racial groups. Other absolute approaches simply define segregated schools as those with high proportions of students from a given racial group (or set of groups), where “high” is defined using a threshold set by the researcher. For example, some work uses terms such as “hypersegregated” to describe schools that enroll more than 90 percent of students with the same demographic characteristic.<sup>8</sup>

Figure 1 presents our estimates of national average isolation and exposure between the four largest student groups by total population over two recent decades, 1995–2015. White students have been, and continue to be, the most racially isolated group in the country,

**Figure 1. Exposure rate to different racial and ethnic groups in public schools**



**Source:** Authors’ calculations using the National Center for Education Statistics’ Common Core of Data School Universe Survey.



although this has decreased approximately from 80 percent to 70 percent over twenty years. The reduction has been driven largely by increases in exposure to Hispanic students.

Black student isolation has remained roughly constant during this period, in the 50–60 percent range. Black students' exposure to Hispanic students has also increased, while their exposure to white students has decreased correspondingly. Hispanic students have levels of isolation that are of similar magnitude to, and in recent years slightly larger than, those of black students. Their exposure to white students has decreased only slightly during this period. Finally, Asian students have seen substantial increases in isolation, accompanied by decreases in exposure to white students, increases in exposure to Hispanics, and about constant exposure rates to black students.

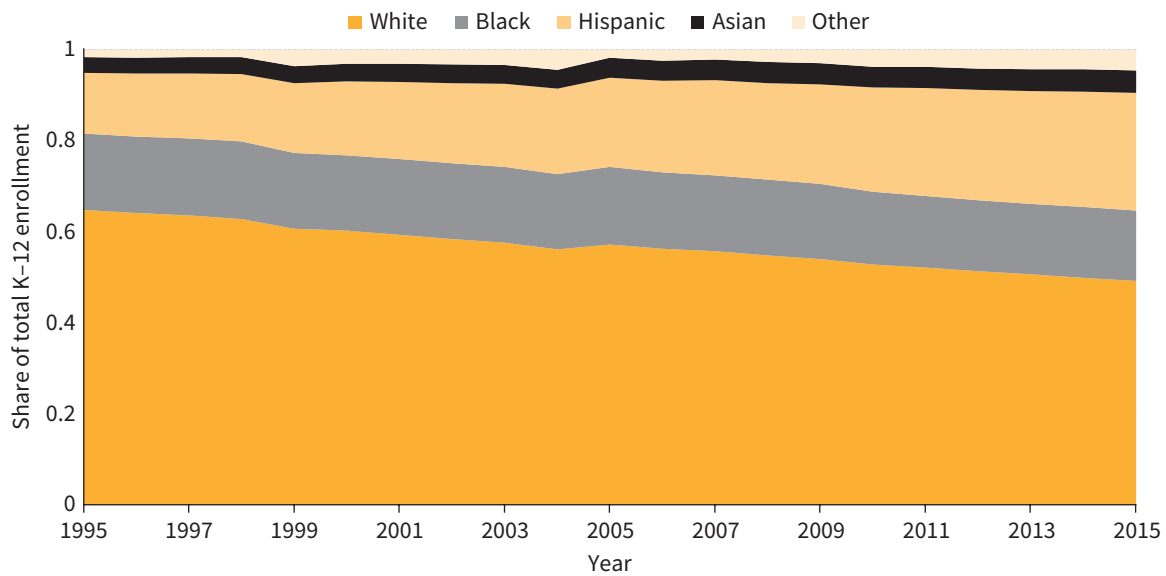
Although absolute measures are descriptively useful, their drawback is that they are partly driven by the underlying racial composition of the school system. Schools in high-minority school systems may be labeled “hypersegregated” simply for reflecting the underlying pool from which they draw students. Additionally, over time a school or school system may appear to be increasingly “segregated” simply because of increases in the local minority population. We do not think that it is desirable for changes in a segregation metric to be sensitive to changes in school system or city demographics, since segregation and demographic change are two distinct phenomena with different implications.

Recent claims in the media that schools have been resegregating have tended to rely on absolute measures, which do not account for the fact that white students make up an increasingly smaller share of all students in the United States.<sup>9</sup> As a result, it is impossible to interpret differences in absolute measures across time and place as an indicator of segregation or merely demographic transitions.

To illustrate this issue, figure 2 presents our estimates of changes in the racial composition of total K–12 enrollment over the period 1995–2015. In the mid-1990s, white students were still the majority of the population, with a total enrollment share of about 65 percent. The white share steadily decreased to 49 percent in 2015, due mostly to the rapid rise of the Hispanic share of enrollment, which went from 13 percent to 26 percent during this period. The black share of enrollment has remained essentially steady, about 15–16 percent of total enrollment, while the Asian share has increased from about 2 percent to 5 percent.

It is no coincidence that the changes in overall racial composition shown in figure 2 correspond almost exactly to the changes in isolation we described in figure 1. For instance,

Figure 2. Change in the racial composition of K-12 public schools



**Source:** Authors' calculations using the National Center for Education Statistics' Common Core of Data School Universe Survey.

we reported that white isolation was the highest in the country and that it has decreased over time. Similarly, we reported that share of total enrollment is the highest for whites and that it too has decreased over time. This is an indication of the concern we discuss above, that absolute measures of segregation can be driven by overall demographics as opposed to racial stratification.

To be sure, however, the evidence in figures 1 and 2 does suggest that schools are considerably segregated. The white share of enrollment in 2015 was approximately 49 percent. Were white students randomly allocated to schools across the country—which would imply no white stratification at all—we would expect white isolation to equal 49 percent, and by necessity white exposure rates for students of other racial groups would also equal 49 percent. In contrast, the actual isolation of white students was about 70 percent in 2015, black and Hispanic exposure to whites was less than 30 percent, and Asian exposure was about 40 percent. This means there is considerable *excess isolation* of white students in the country's schools, which can be explained only by stratification and not by demographic change.

The second family of segregation measures is designed to adjust for system-wide demographics in order to focus on racial stratification.



When we are making comparisons between school systems and over time, it is more appropriate to use *relative* measures of segregation, which compare schools' racial composition to the racial composition of the school system. Common examples of these are the dissimilarity index and the variance ratio index. Both indices compute a term similar to the exposure or isolation index and adjust for the level of exposure one would expect under a "perfect integration" scenario. Perfect integration is typically defined as a hypothetical status quo in which all schools have the same composition, equal to the composition of the whole school system.

By comparing the current distribution of racial groups to a benchmark that is determined by the demographics of the school system, we see that relative segregation measures are more comparable across different locations and over time. They are also conceptually different from absolute measures in that they measure how evenly a given population of students is distributed across a school system, as opposed to summarizing the school composition experienced by the average child. Both measurement approaches have their own advantage. However, when looking at studies focusing on changes over time or comparing different school systems, we lend more credence to evidence using relative segregation measures.

Besides computational machinery, there are other decisions to make when measuring segregation that have big implications for results and are ultimately up to the discretion of the researchers.<sup>10</sup> The first is to choose how to partition students into two or more groups when answering the "who is segregated from whom" question.

Most commonly used indices require binary definitions of racial groups, which researchers often define as white and black, white and minority (black or Hispanic), or minority and nonminority. Results can differ considerably when using these varying definitions. Some research opts for succinctness and reports segregation measures for only one binary classification, while other research attempts to be exhaustive of all possible pairings of racial groups of the seven categories commonly used in government data (white, Hispanic, black, Asian, Pacific Islander, Native American, and multiracial). There are obvious trade-offs between these approaches: the former may miss important patterns in the data, while the latter risks overburdening readers with too many estimates that may be difficult to distill into clear findings.

In addition, research in some disciplines is increasingly in favor of using segregation indices that take into account multiple racial groups at the same time.<sup>11</sup> The most common among



these is the Theil index, a relative measure of segregation that compares the “diversity” (defined as multigroup entropy, a term borrowed from physics) of a school relative to the overall diversity of the school system. The Theil index can be viewed as a generalization of the dissimilarity index to handle multiple racial groups.

Although there is no objective normative difference between these different approaches, we argue that best practice in this realm should be based on a focus on where racial inequities lie. For this reason, we focus attention on research that studies the segregation of white and/or Asian students from black and/or Hispanic students, since these latter groups have considerably lower average achievement than the former.<sup>12</sup>

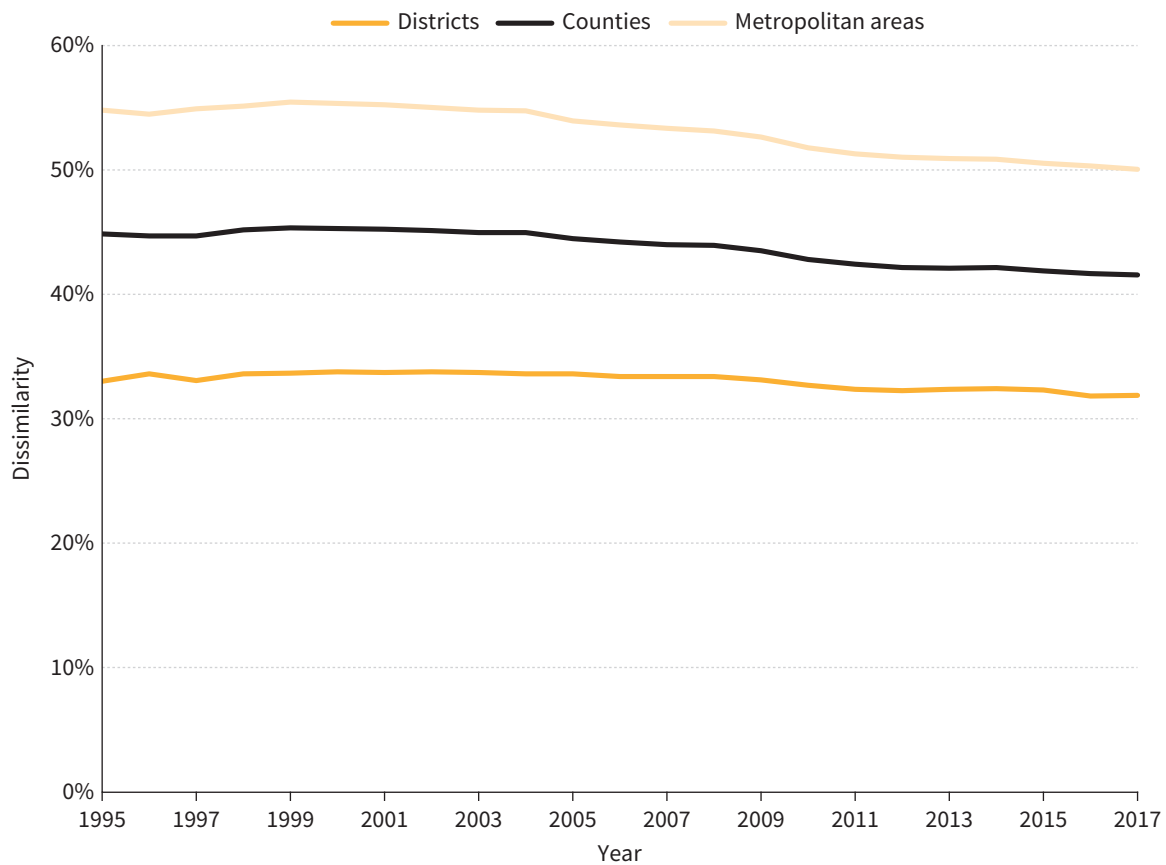
We acknowledge that lumping black and Hispanic students together when computing segregation is an oversimplification. This is common practice in a lot of the literature, which refers to the combination of these two groups as *underrepresented minorities* (URM). By doing this we do not intend to imply that these groups are alike in any respect other than average academic achievement. The crux of the matter here is that although racism and discrimination against the black population have been ubiquitous in the entire history of the country, discrimination against Hispanics is a relatively more recent phenomenon driven by immigration. The way that one treats Hispanic students in the measurement of segregation is an important determinant of our estimates of segregation. We argue that because Hispanic students attain considerably worse educational and economic outcomes than white or Asian students, it is analytically reasonable to group them with black students when using binary categorization of race into URMs and non-URMs.

A second, but perhaps even more important, additional consideration when measuring segregation is how to define the school system. This is especially important for relative segregation measures, which make an adjustment for system demographics. Most work focuses on the segregation of school districts, which is natural to a certain extent. School districts are the government entities that have the power to change student assignment rules, build new schools, or determine school choice policy. They are also the entities that faced federal court oversight of desegregation effort in the 1970s.

But another legacy from this era is extensive white flight into suburban districts, such that the bulk of school segregation of metropolitan areas is driven by differences between, not within, school districts. Thus, some scholars advocate that school segregation needs to be measured using metropolitan areas to define the school system. But critics of this approach



Figure 3. National trends in public school segregation



**Source:** Authors' calculations using the National Center for Education Statistics' Common Core of Data School Universe Survey. Note: Metropolitan areas are defined by 2010 US Census Bureau core-based statistical areas.

claim that this implicitly assumes that students could easily move schools from one edge of the metropolis to another, which is almost always invalid.

Figure 3 shows how different school system definitions greatly affect our estimates of the average *level* of school segregation in the United States (using the dissimilarity index) but not the *trend* in segregation.<sup>13</sup> Average segregation in school districts has remained at a steady 30 percent over the period 1995–2015. Intuitively, this means that in the average district in the United States, about 30 percent of URM students would need to move schools to attain perfect integration, relative to the number that would need to move starting from a perfectly segregated state of affairs.<sup>14</sup>

When we instead define school systems using counties, national average segregation levels are higher by about ten percentage points. Counties were about 45 percent segregated in

1995 and about 40 percent in 2015. Finally, when metropolitan areas are treated as school systems, segregation is about ten percentage points higher (compared to counties), with mean segregation levels between 50 percent and 55 percent over this period.

Notably, although there are differences in levels across these definitions, there is very little difference in trends. Segregation has been remarkably steady over this period, and if anything, it may have decreased slightly. Schools remain highly segregated, but the narrative of a “resegregation” of schools is a myth born of inappropriate measures.

This evidence shows that how one chooses to group schools when defining segregation matters a great deal for conclusions on segregation levels (but not trends) and limits our ability to compare results across studies that use different definitions. Since there are multiple trade-offs in choosing this definition, most of our analysis attempts to remain agnostic regarding the correct definition of a school system.

Finally, there is an emerging literature that focuses on measuring socioeconomic segregation as opposed to racial or ethnic. The measurement of segregation by income is complicated by the fact that income is continuous and not categorical, as with race and ethnicity. This means that the common approaches to segregation measurement described here would not apply in general to segregation by income. However, most existing studies of school segregation by income use the receipt of a free or reduced-price lunch as a proxy for low-income status. Thus, most existing work uses the type of metrics we have discussed.

Participation in the subsidized lunch program has always been a noisy indicator of disadvantage, as it is binary and captures only families that choose to participate in the program. Over the last decade, the quality of this measure has worsened as states implemented the “community eligibility” provision, through which all students in certain schools receive a free lunch.<sup>15</sup> This limits the ability of researchers to compare free lunch shares across states, which vary in how they collect and report free lunch data, and has rendered it useless for the purpose of accurately tracking economic segregation over time.

### **How Do We Measure the Impact of Choice Policy on Segregation?**

Accurately measuring the effect of school choice policy on segregation requires defining and estimating a counterfactual: What would the world look like if the choice policy had not been implemented? Descriptive studies of school choice and segregation do not have a well-defined counterfactual, and as a result they are of limited usefulness for assessing the impact of school choice on segregation. For example, some studies simply compare



the demographic makeup of charter and traditional public schools, documenting that, nationally, charter schools tend to be more racially isolated than traditional public schools.<sup>16</sup> Although this type of descriptive evidence can be useful, simple comparisons like these tell us little about the counterfactual world where charter schools do not exist—and how students would sort across schools in such a world.

To properly assess the causal impacts of choice on segregation, we must first state the research question properly: For example, would the introduction of charter schools lead to more segregation relative to a world of pure neighborhood schools? What would happen to segregation if magnet schools were to close but all other elements of the school system stayed the same? The researcher must then make econometric assumptions in order to estimate segregation levels in the counterfactual world (because it is never directly observed).

We thus group studies broadly into two categories. The first are “descriptive studies,” which tell us the state of affairs under choice, including those documenting segregation levels in traditional versus choice schools, those describing the composition of student flows from traditional to choice schools (and vice versa), and those comparing existing segregation levels under choice with a mechanical neighborhood schools arrangement. We contrast this type of evidence with “design-based studies,” which make a serious attempt at convincingly arguing that the variation used to identify the impact of choice is “exogenous” to all other confounding factors that may also drive segregation.

### *Descriptive Studies*

Most descriptive studies of school choice and segregation come in three varieties. First are those that simply document the average racial composition, isolation, and exposure of racial groups in residentially assigned schools and choice schools. These studies make comparisons between sectors to tell us how choice schools differ from other schools.<sup>17</sup>

Second are studies that document and classify student flows between traditional and choice schools. They measure what happens to segregation when students move from a neighborhood-based school to a school of choice (or vice versa). The implicit counterfactual in these studies is generally a system of neighborhood schools, or the system of schools that students attended before they switched to new schools following the adoption of a choice policy. However, these studies do not usually attempt to estimate how students in receiving schools (or the schools themselves) may react to these inflows

and outflows, or what the moving students would have done in the absence of choice schools.

Many of these papers examine what happens to the minority share of sending and receiving schools when students switch from a district school to a choice school. For example, Egalite, Mills, and Wolf study the Louisiana voucher program and measure what share of school switches (from public to voucher school) increase (or decrease) the segregation of the sending and receiving schools, by seeing how the flows change how schools compare to the encompassing school system.<sup>18</sup>

These studies of school switchers provide useful information about the demographics of children who switch, compared with the demographics of sending and receiving schools. But these studies assume that the switches would not have happened without the policy and ignore effects beyond the individual moves. For example, a choice policy could affect schools both through switching behavior among current students and by impacting which new students attend (or do not attend) those schools in the future.

A third approach to this kind of descriptive exercise is to simulate what happens to measures of segregation if students attending schools of choice were instead to attend their neighborhood schools. Such a static counterfactual comparison may serve as a useful benchmark for policy makers. Furthermore, there is evidence that neighborhood schools counterfactuals—in which one assumes that students would otherwise attend the school closest to their home—can accurately predict the composition of school assignments in a majority of contexts, although there are important exceptions.<sup>19</sup>

An example of this simulation approach is Glazer and Dotter's study comparing current levels of segregation in Washington, DC, where about 75 percent of students attend a school other than their zoned school (which they access through a centralized enrollment lottery), with what segregation would be if all students attended their zoned school.<sup>20</sup>

These simulation studies provide useful descriptive evidence and comparisons to static benchmarks but miss any broader effects such as those that occur through families' choice of residence. In other words, these simulations assume that students would attend their neighborhood school in the absence of a choice policy when in fact their families might move to a different part of the city if they did not have access to those choices.



### *Design-Based Studies*

Design-based studies attempt to overcome some of the limitations of more descriptive approaches by examining well-defined policy interventions, such as the introduction of a voucher program or the growth of charter schools. If designed and implemented well, these studies can estimate credible counterfactuals that capture systemic effects such as changes in the residential decisions of families that may result from choice policy.

The simplest design-based studies examine whether segregation increases or decreases after a choice policy is implemented. For example, Ritter et al. compare the composition of traditional public schools before and after growth in the charter sector in Little Rock, Arkansas.<sup>21</sup>

Before-and-after analysis can help identify the effect of a policy on segregation but can be biased by preexisting trends or other policies that were implemented at the same time. For example, if segregation was increasing prior to the adoption of a choice policy, it's hard to say that the choice policy was responsible for the continued increase in segregation. Likewise, if a choice policy was adopted at the same time as effort to encourage more diverse schools, it would be inappropriate to credit the choice policy with a reduction in segregation.

More sophisticated design-based studies use detailed data on multiple jurisdictions over time to try to isolate the effect of a choice policy. For example, in prior work with Brian Kisida, we use detailed data on school enrollment by grade, race or ethnicity, and year to measure the impact of growth in the charter sector on segregation at the system level.<sup>22</sup> We took advantage of the fact that within school systems, charters grow faster at some grade levels than others. Our research design measured whether those grade levels saw greater increases in segregation than grade levels that experienced smaller increases in charter enrollment.

Studies like ours do a better job of accounting for preexisting trends in school segregation than simple before-and-after comparisons. But they still can be biased by other policies implemented at the same time as choice and capture only the immediate effects of the policy. They associate changes in choice (charter enrollment, in our example) with changes in segregation that happen more or less immediately (the same year). For example, if charter growth leads to a short-term increase in segregation (as families within districts switch schools) but a long-term decrease (as families desiring diverse schools move into the district), this approach will capture the former but not the latter.

There is no perfect approach to measuring the impact of choice on segregation. But by understanding the strengths and limitations of different approaches, we can interpret existing studies with an understanding of their quality and relevance to future policy decisions.

### **What Is the Impact of Choice Policy on Segregation?**

“School choice” is not a single policy but rather a category of policies that seek to expand the educational options available to families, often with a focus on families that previously had limited choices. In this section, we summarize what research tells us about the effects of different kinds of choice policies on school segregation. We will focus on studies that we regard as high quality and discuss their strengths and limitations.

Our goal is not to perform a comprehensive meta-analysis but to summarize lessons learned from the highest-quality studies. We begin with charter schools, one of the most widespread forms of school choice and one that has produced a number of studies on school segregation.

#### ***Charter Schools***

Charter schools are publicly funded but privately operated, generally by nonprofit organizations. Unlike in most district schools, enrollment in charter schools is open to any students who wish to attend them. Charter schools that are oversubscribed must admit students by lottery. Six percent of US students (about three million) currently attend charter schools.<sup>23</sup>

To our knowledge, all of the design-based evidence supports the claim that charter schools have led to increases in the segregation of schools. The two differences-in-differences studies on the impact of charter enrollment growth on segregation have similar findings: charter schools have led to discernable but modest increases in school segregation.<sup>24</sup> Both of these studies estimate that so far the charter school movement has led to increases in segregation on the order of a 0.1 percentage point increase in segregation (measured as the school district variance ratio for black or Hispanic students) for each 1 percentage point increase in the charter share of total enrollment. For the average district in the country, this represents about a 5 to 6 percent increase in segregation. Although these results are modest in magnitude, extrapolating them out to high levels of charter enrollment share suggests sizable rises in segregation.



An important limitation of both studies is that they focus on average segregation levels and do not differentiate between segregation resulting from the choices of disadvantaged families and that resulting from opportunities seized by more advantaged families. However, we note that charter schools, on average, are more likely to serve black and Hispanic students than are district-operated schools in the same school districts.<sup>25</sup> This suggests that the choice of white families to place their children in charter schools is unlikely to be the principal driver of the charter impact on segregation.

Studies of particular cities produce results that sometimes deviate from the national findings. Weixler et al. find null results on segregation in New Orleans schools following the introduction of an all-charter system in the aftermath of Hurricane Katrina.<sup>26</sup> This finding is based on a difference-in-differences analysis that uses nearby counties as a comparison group, but we suspect the results may not extrapolate more broadly given that Katrina had a number of other effects beyond school choice, including depopulation and demographic change.

Other studies that use less persuasive methodologies (in terms of their ability to estimate causal effects) come to similar conclusions as the national studies: charter schools tend to increase segregation. These include papers based on data from Arizona<sup>27</sup> and North Carolina.<sup>28</sup> But a study of charter growth in Little Rock, Arkansas, found that charters in that city are less likely to be hypersegregated than district schools and that transfers to charters improve integration at district schools.<sup>29</sup>

It is difficult to tell how much of the variation in findings across studies reflects differences in methodology as compared with differences in effects across context. The only study, to our knowledge, that applies the same methodology in multiple states is our work with Brian Kisida. We find wide variation in the impact of charter growth on segregation across states, ranging from null effects in states such as Arizona, Georgia, and New Jersey to effects indicating large increases in segregation in states such as Louisiana, North Carolina, and New Mexico.

In sum, the best available evidence indicates that growth in the charter sector leads to modest increases in segregation, on average. At best, there is no effect, and, at worst, the effect is sizable. There is little compelling evidence that charter schools reduce school segregation.

### ***Private School Choice***

Policies that provide students with public funds to attend private schools, in the form of vouchers or tax credit scholarships, are growing in popularity. These programs are



generally enacted and managed by states, but they also exist in cities such as Milwaukee and Washington, DC (the latter being run by the federal government).

There is little evidence on the effect of these policies on school segregation in the United States. The most credible evidence, to our knowledge, that directly addresses this question is Egalite, Mills, and Wolf's study of the Louisiana voucher program.<sup>30</sup> The authors use data from 2011 to identify whether student transfers from public to private schools tend to move the sending and receiving schools closer to or further from the demographic composition of the surrounding area. They find that transfers tend to lead to greater integration in the sending schools but that receiving schools are slightly more likely to become more segregated.

Other studies have explored voucher impacts on segregation in Milwaukee, Cleveland, and Washington, DC, using a similar empirical approach, with somewhat mixed findings.<sup>31</sup>

There is some international evidence on the effect of voucher policies on segregation. A study of Sweden's 1992 introduction of vouchers finds increases in school segregation between immigrant and native students above and beyond what would be expected from concurrent increases in neighborhood segregation. But the estimated increases are relatively small, considering segregation of other European countries.<sup>32</sup> Likewise, a study of Chile's 1981 introduction of vouchers led to increases in segregation by socioeconomic status, income, and test scores.<sup>33</sup>

### ***Magnet Schools***

Magnet schools are like charters in that they are usually not tied to a physical attendance zone, but they have been in existence for much longer than charters. Many magnets were created to stem white flight to the suburbs. But unlike charters, magnets often use admissions processes to screen students on factors relevant to the school's area of specialization, such as academics or the arts. For example, elite magnet schools in New York City require students to sit for an admissions test, and the Duke Ellington School of the Arts in Washington, DC, requires an audition.

There is limited evidence about the impacts of magnet schools, which are often aimed to reduce white flight by providing an educational option that is appealing to more advantaged families. San Diego is one such city, where "the goal of the magnet program was to attract students from primarily white areas to primarily non-white areas by offering specialized curricula and additional resources such as reduced teacher-student ratios, teaching labs, field trips, and so on." A study of that program found that the magnet program led to detectable



increases in integration, although the effect was smaller than that of a program whose primary purpose was to increase integration.<sup>34</sup>

### ***Open Enrollment and Centralized Assignment***

Urban school systems around the country sometimes allow students to attend district schools outside their neighborhood, and are increasingly using centralized lotteries to assign students to schools in a fair and transparent manner. For example, Washington, DC, uses a centralized lottery to assign students to non-neighborhood district schools and to all charter schools. Louisiana runs a similar lottery that also includes private schools that participate in the state's voucher program.

Most studies of intradistrict choice use data on where students live and where they go to school to compare the observed level of segregation with what would happen if all students attended their zoned school. A study of Richmond, Virginia, found that many students opt out of school boundaries that were designed to promote integration.<sup>35</sup> Bifulco, Ladd, and Ross come to a similar conclusion using data from Durham, North Carolina: school enrollments are more segregated than attendance zones, with larger differences for class than for race.<sup>36</sup>

A study of Washington, DC, found that middle schools are actually less segregated by race than would be the case if all students attended their zoned school, but they are more segregated by income.<sup>37</sup> Koedel et al. find greater segregation along most dimensions resulting from a state-mandated open enrollment program that requires San Diego students to find their own transportation to school.<sup>38</sup>

Across these four studies, policies that layer choice on top of neighborhood schools generally lead to greater segregation (with the exception of racial segregation in DC's middle schools) compared with a system of neighborhood schools. But most of these studies assume that, absent school choice, families would choose the same residence as they do under current policy. To the extent that school choice leads to more integrated neighborhoods, it may have less of a segregating impact than is suggested by these studies.

### ***Choice between Districts***

A number of states have policies that allow students to cross district lines to attend school. These policies are always optional for students (who can remain in their home districts if they prefer) and are generally optional for districts in terms of whether they want to accept

interdistrict transfers (and how many). For example, METCO (Metropolitan Council for Educational Opportunity) is a state policy in Massachusetts specifically aimed at decreasing racial isolation and imbalance by allowing students to attend school in other districts.

We are not aware of any high-quality evidence on the effect of interdistrict choice on school segregation. To the extent that these voluntary programs involve relatively small numbers of students, their effects on system-wide segregation are likely to be negligible.

## Conclusion

The research we have reviewed in this paper proves that school choice’s biggest boosters and strongest critics are both wrong. The charge that choice reforms such as charters and vouchers are leading to the resegregation of US schools is not borne out by the evidence. At the same time, many studies are finding that more choice can lead to modest increases in segregation, and very few are showing the opposite.

But school choice is not a monolith, and neither is its impact on segregation. San Diego is an instructive example, where two choice-based programs aimed at promoting integration had the intended effect and one open enrollment program without that goal had the opposite effect.<sup>39</sup> And the impact of charter growth on segregation varies widely across states, from null effects to large effects—although in no state does the charter sector appear to have contributed to integration.<sup>40</sup>

Choice policies often have multiple goals that can be in conflict with each other. For example, charter schools that are created to serve disadvantaged students in segregated neighborhoods are unlikely to increase integration, whereas “diverse-by-design” schools are more likely to be located in (or near) more integrated neighborhoods and are not going to serve as many disadvantaged students—by design.

We suspect that policy design likely matters more generally—choice policies will support integration only if they are designed to do so. For example, district leaders in San Antonio have worked to increase integration (mostly by income, since the district is 91 percent Latino and 6 percent black) by creating schools of choice with programs such as dual language that attract more advantaged families from surrounding districts.<sup>41</sup>

Choice policies that are not designed with the goal of integration in mind will, more likely than not, lead to more segregation (as our review of the research shows). How to turn this conclusion into policy is likely to be grounded more in theory than in empirical evidence.



But it seems clear that a choice policy that provides equitable access to a centralized lottery, support for families in navigating the system, and transportation to schools of choice is much more likely to have an integrating (or at least neutral) impact than a program that requires inside knowledge of how to navigate the system and requires families to find their own transportation to school.

We also suspect that context matters. In a system with school attendance boundaries that tend to segregate students, a choice policy may lead to greater integration by weakening the link between residence and school attended. But in a city where attendance boundaries (or other policies, such as busing) tend to integrate students, a choice policy may have the opposite effect.

There is still much we do not know. There are a number of studies on the effect of charter schools on segregation, but there is much less evidence on other forms of choice such as private school vouchers, magnet schools, open enrollment, and interdistrict choice. Evidence on the effects of these programs, and why different programs have different kinds of effects, is needed to inform policy efforts that seek to use choice as a tool for education equity.

District and state policy makers could accelerate the production of such evidence by mandating the collection of data and other evidence on how education policies, including school choice, affect segregation. For example, states could require charter authorizers to collect this information and consider it when evaluating applications to create or renew charter schools. States could also encourage the creation of diverse-by-design schools, for example, by allowing such schools to continue to open even if the number of charters has reached the state-imposed cap.

State and district policy makers will have to weigh evidence on segregation alongside other factors. In our view, they should resist the implicit tendency of the research literature to treat all forms of segregation equally. Increases in segregation that primarily result from efforts by white families to isolate themselves are lumped into a segregation index in the same fashion as the decisions of families of color to seek better educational opportunities for themselves—even if they are found in schools where more students look like them.

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