Vouchers and Similar Private School Choice Programs

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K-12 Education
Market-Based Schooling

Introduction

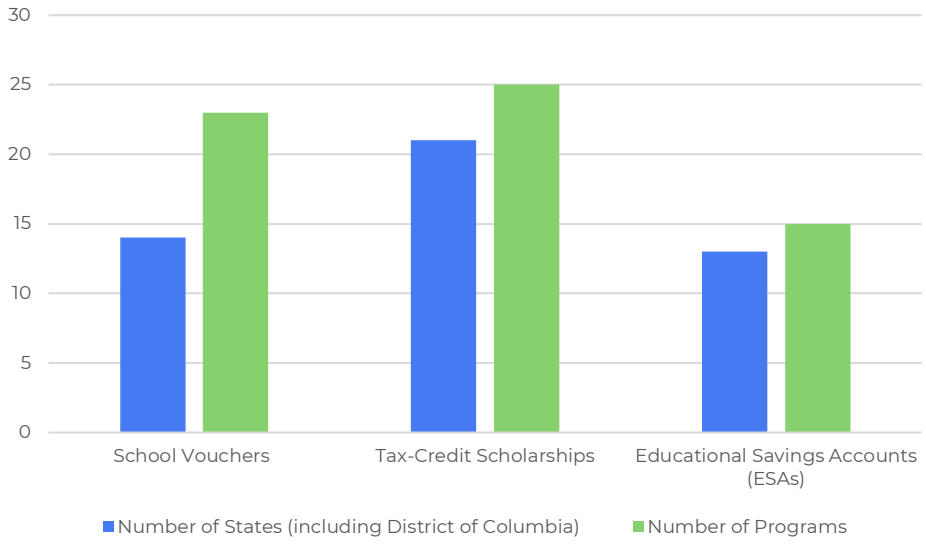
In recent decades, an array of private school choice programs has emerged in the United States. These programs create opportunities for students, as families can use government subsidies to attend private schools. However, the programs are controversial. Advocates argue that greater choice empowers parents to place their child in a school that best meets the child's needs while making the educational system more cost-effective. Critics argue that these programs deprive traditional public schools (TPSs) of public resources, may create greater stratification by race/ethnicity and ability, and raise concerns regarding the use of public resources to subsidize private organizations.

For this review, we define private school choice programs as government-initiated programs that financially assist parents in choosing a private school for their child to attend. While the concept of government-sponsored school choice programs has a long history in the United States, many point to Milton Friedman's 1955 essay "The Role of Government in Education" as a point in which the debate surrounding choice programs came to the forefront.[1] In his essay, Friedman envisioned a plan in which parents would receive "school vouchers" to pay the tuition required to enroll their child in a school of their choice. He believed that empowering parents with greater educational options would introduce competition, which would lead to improved efficiency and effectiveness in the K-12 educational sector.

Private school choice programs come in four varieties, depending on how resources are distributed to parents and what can be purchased with them. School vouchers involve government payments to parents that tend to be restricted to covering private school tuition and fees.[2,3] Donation-based tax-credit scholarships are funded by private contributions to nonprofit organizations that then provide the scholarships or vouchers to parents. These contributions qualify for a state tax credit of between 50% and 100% of their value, subject to both an individual and a statewide ceiling on the total amount that can be donated. Tax-credit scholarships typically cover only private school tuition and fees.[4] Education savings accounts (ESAs) are broader in scope, as they provide public funds to families with children to pay for a variety of educational expenses, including tutoring, therapies, educational technology, online courses, textbooks, and homeschool supplies, in addition to private school tuition and fees.[5] Tax-credit ESAs operate like government-funded ESAs do but are issued by a nonprofit

funded by private donations that are eligible for a state tax credit.[6] Figure 1 shows the number of states (including the District of Columbia) that have adopted each of these programs either statewide or for specific geographic areas as well as the total number of programs.

Figure 1: Number of School Choice Programs as of January 2025



Note: Because of the quickly changing landscape of private school choice programs, we encourage readers to obtain up-to-date information from EdChoice or Education Commission of the States.[7]

In total, 31 states plus the District of Columbia had instituted at least one of these programs by the start of 2025. Many of the early private school choice programs were voucher programs, and most of them were means tested with eligibility set at low-income thresholds or targeted certain populations such as students with special needs or students in rural areas that lacked public schools. In recent years, many school voucher programs have become accessible to a larger population, and programs in Indiana, North Carolina, and Ohio are often referred to as universal or near universal voucher programs.[8] Georgia, Montana, and Nebraska now have tax-credit scholarship programs with universal eligibility.[9] Arizona, Arkansas, Florida, Iowa, Utah, and West Virginia currently or soon will provide ESAs to any K-12 student who requests them,[10] with Alabama, Louisiana, Tennessee, and Wyoming recently being added to that list.

Most research has focused on vouchers and has examined both the direct and indirect effects. The direct effects are experienced by students who participate in these programs. The indirect effects are felt by students who do not participate in the programs through the instruments of competitive, fiscal, or student stratification effects. Below, we outline the key findings from this extensive body of research.

Key findings

Key finding #1: *The student achievement results of participants are mixed.*

Early studies using experimental designs in individual cities and norm-referenced reading tests as the outcome measure reported more positive findings than later studies using nonexperimental designs, evaluating statewide programs, and utilizing state accountability math tests as the outcome measure. Later studies have mostly reported at least some negative findings.

Key finding #2: *The non-test-score effects for students and families who use vouchers are consistently neutral to positive.*

These effects include educational attainment, parental satisfaction, and civic, crime, and mental health effects. The research base is not as deep or rigorous as the analyses of the achievement effects, though some studies use experimental or plausibly causal approaches.

Key finding #3: *The systemwide effects of private school choice programs are generally positive or neutral.*

These findings include competitive and fiscal effects. For competitive effects, researchers have examined test scores for students who remain in public schools after private school choice programs are launched or expanded, and they generally report positive but modest-sized effects. The fiscal effects of choice programs on states and local school districts are largely a function of policy design, with positive fiscal effects for programs with modest subsidies that are limited to students who switch out of public schools and a net loss for programs with generous subsidies and universal eligibility.

Key finding #4: *Theoretically, private school choice programs can affect the stratification of students across schools by race/ethnicity, income, religion, and ability, but the results are mixed and often unreliable.*

It is difficult to summarize the effect of these programs on student stratification for two reasons. First, early versions of these programs were generally limited to low-income students and students with disabilities. Therefore, they could not attract a diverse set of students, as more advantaged students were ineligible for the programs. Second, few studies of stratification effects of private school choice programs have used rigorous designs, making it difficult to draw definitive conclusions. Among existing studies, there is no reliable evidence that these programs create greater racial/ethnic stratification or "cream skim" the best students for admission. However, there are mixed results regarding whether private schools that participate in such programs retain a representative group of students over time.

Understudied topics? Private school choice programs have evolved from voucher programs targeting disadvantaged subpopulations of students to ESAs available to all. While it is possible to draw strong conclusions on some dimensions of early private school choice and tax-credit scholarship programs, these results have less relevance

for more recently adopted programs. More research on the various effects of recently implemented universal or near universal programs, especially those that take the form of ESAs, is urgently needed.

Policy considerations. Policymakers face myriad decisions regarding how to structure and regulate private school choice programs:

- Which students and providers are eligible to participate? Are all K-12 students eligible, making the program a universal program, or does eligibility target specific disadvantaged subgroups? Are only private schools eligible to receive funds, making the program a voucher or scholarship program, or are various types of providers of education products and services eligible to be paid through the program, making the program an ESA?

- How much funding do these programs receive? Is it only the state part of the per-pupil funding formula, or are local funds included? If only the state part, what proportion? Should the funding amounts vary across students? If so, by what amounts and why?

- What rules do parents and education providers have to follow, and how are they held accountable? How are financial reporting and accountability achieved? How is service accountability achieved? If providers are required to test participating students, do they have to administer the state accountability test, or can they select a nationally normed test that they think is best aligned with their curriculum? To whom should student test scores be reported?

- What organizations should be responsible for overseeing and directly administering the program? How much should they receive as payment for doing so?

We discuss many of these issues in greater detail below.

Policy background

Private school choice programs have largely been adopted and governed by states with varying rules and regulations that could affect outcomes. Some of the key policies include:

- Student eligibility: Private school choice program eligibility has often been limited to disadvantaged student populations. For instance, some programs have targeted students with special needs or disabilities. Other programs have been restricted to families below an income threshold. Additionally, some programs allow only students who previously attended a TPS to utilize a private school choice program or reduce subsidies for existing private school students. Collectively, these "targeted" policies affect which students utilize these programs and have implications for systemic effects, including student stratification. As of June 2024, 10 states operated private school choice programs with universal student eligibility: Arizona, Arkansas, Florida, Indiana, Iowa, North Carolina, Ohio,

Oklahoma, Utah, and West Virginia.[11] Alabama, Louisiana, Tennessee, and Wyoming have enacted universal programs in the 2024–25 period.

- *Funding*: In most states, the subsidy to attend a private school includes only some or all of the state portion of student funding.[12] In other states, such as Maine,[13] Vermont,[14] and Wisconsin,[15] a portion of local funding is available in addition to state funding. For 62 out of 65 programs,[16] the maximum voucher, scholarship, or ESA amount is less than the amount that would have been spent on the student if they attended a TPS, with Ohio's autism voucher, Utah's tax-credit scholarship, and North Carolina's ESA program being exceptions.[17] Given the consensus that funding can affect student achievement,[18] the lower amount of government funding received by students in private school choice programs may have implications for participant effects on student outcomes. Furthermore, student funding amounts may affect the likelihood of participation by private schools, as these schools are more likely to participate when the subsidy amounts are higher.[19] Finally, funding arrangements could have implications for whether there are any indirect competitive or fiscal effects for TPSs. If TPSs do not experience a financial loss from students opting to attend private schools, then competitive effects are less likely.[20] Conversely, if TPSs are largely unaffected by students choosing a private school, then they should have the necessary resources to educate students who remain in TPSs.

- *Caps*: In many cases, states have instituted caps on the number of students who can participate in private school choice programs. However, over time, these caps have often been relaxed, not only allowing a larger set of students to participate but also increasing the overall cost of these programs and enrollment losses for TPSs. Capping private school choice programs reduces the possibility of competitive effects on TPSs and limits the fiscal effects of these programs for the state.

- *Geographic limits*: In some states, such as Missouri[21] and Tennessee,[22] private school choice programs currently are restricted to certain districts. In many cases, these are urban districts with many private schools and low-performing TPSs. In other cases, such as Maine[23] and Vermont,[24] these programs are restricted to districts in which no TPS exists and a private school is the only educational option.

- *Testing*: Over time and across states, there have been varying requirements for testing. All programs targeting students with special needs are exempt from testing. Some states do not require testing for participants in their private school choice programs generally. Other states require that all students in a program be tested annually and that the results be reported to parents and the state. However, they often leave it to participating private schools to choose a nationally normed test or the state criterion-referenced accountability test to administer to students. Some states require that the state test be administered to all private school choice students. The argument for testing is that public resources are being used and that there should be public accountability for performance. However, a counterargument is that testing creates incentives for private schools to emphasize tested subjects, narrowing the focus within these schools. Some private schools are philosophically opposed to administering any standardized test, and many of them view administering the state test as a deal-breaker, leading them to

decline to accept students in the program. This situation may lead to less product differentiation between private and public schools and fewer distinctive private schools from which to choose, which would reduce the ability for families to match student needs to school offerings.

Evidence

Published reviews of the literature on the effects of private school choice programs have addressed either specific programs (e.g., voucher programs) or specific dimensions of programs (e.g., direct participant effects, indirect competitive effects).[25] Each has provided insights into the findings of the literature at the time. Therefore, while summarizing the whole literature, we focus less on older studies and more on recent studies. One added benefit of this approach is that older studies evaluated programs with policy features that are less likely to be adopted in the current policy environment. Recent studies are more relevant to the design and scale of current private school choice programs.

Before providing our own assessment, we first note that evaluating private school choice programs is complicated.

- Families and students actively choose to enroll in private schools, which may make them different from students who enroll in TPSs. For instance, families and students who make the active choice to attend a private school may be more engaged than a student who passively enrolls in a TPS based on their residential assignment. They also might be more desperate for a schooling alternative than students who are satisfied with their local TPS. If these unobserved differences are not controlled for, then they can create positive or negative bias in private school choice program assessments.

- The evaluation of competitive effects can be complicated by the fact that private schools are not randomly located. For instance, a private school may locate near weaker TPSs as a strategy to attract students. If this is the case and it is not somehow controlled for, then an evaluation of competitive effects may be biased.

- Evaluations of student stratification need to identify the plausible counterfactual for where students would attend school if the private school choice program did not exist. Evaluations that merely compare the average characteristics of participating students to those of students within a public school district or state are not sufficiently rigorous to draw conclusions.

Across the analyses of student outcomes for participant and competitive effects, researchers have often employed strong research designs that have led to causal conclusions. This has been especially true for analyses of student outcomes. Therefore, for student outcomes, we focus only on studies with plausibly causal designs. However, for other outcomes, such as parental satisfaction and overall support for private school choice programs, researchers have not implemented causal research designs. For these analyses, we highlight some results but issue a strong caveat regarding the lack of support for causal claims. Finally, there are numerous studies that use a theoretical framework for drawing policy implications or understanding the politics surrounding

these programs. While we believe that these studies have been useful, we focus our review on evaluations of existing programs.[26]

Key finding #1: *The student achievement results of participants are mixed.*

Early studies of private school choice programs focused on the participant effects of privately and publicly funded voucher programs using nationally norm-referenced test scores from specific urban locations including Milwaukee, Cleveland, the District of Columbia, New York, Dayton, and Charlotte.[27] Norm-referenced tests are not tied to a specific curriculum; instead, they seek to measure general knowledge and academic skills. Such tests compare the performance of each student with the performance of all students who took the test each year, called the "national norm."

Many of these studies exploited the fact that these programs were oversubscribed and that lotteries were used to allocate available slots. Using these lotteries, researchers employed a randomized design that is considered the gold standard of evaluations, as this design allows researchers to compare the performance of students who applied for a voucher program and were randomly offered admission via lottery to a private school with that of students who also applied but were not offered private school admission through the lottery. The "treatment" and "control" students should be similar in both observed and unobserved ways, including motivation and academic ability, and therefore, the analysis of subsequent test scores should lead to reliable causal conclusions about the impact of the private school choice program.

Reviews of that initial wave of studies of test score effects reported mixed results ranging from negative to neutral and to positive.[28] A formal statistical meta-analysis[29] of only the lottery studies from this early wave plus the lottery studies of the Louisiana Scholarship Program and District of Columbia Opportunity Scholarship Program (OSP) described below reported that the average effect of the programs on reading and math scores was positive but small and statistically precise only in the case of the reading gains.[30]

More recent studies are more likely than the earlier studies to include a broader set of students and to evaluate statewide programs using state accountability tests that measure student achievement with reference to state curricular standards. Recent studies are also more likely to use quasi-experimental designs rather than experimental designs. State accountability tests likely favor the comparison group of TPS students[31] in these recent studies because test items are linked to the state's specific curriculum standards that are taught in public schools but not necessarily in private schools.[32] Because the recent vintage of private school choice programs is generally statewide and broader in nature, we argue that these newer studies are likely to be more relevant to the current debate than the earlier studies. Therefore, we discuss in greater detail recent studies that evaluated statewide voucher programs in the District of Columbia, Louisiana, Ohio, and Indiana.

The District of Columbia's OSP is the only federally financed private school choice program. It was launched in 2004 as a means-tested school voucher program with funding to serve approximately 1,800 students per year, and it retains the same structure and eligibility rules today. The most recent evaluation of the program, which

used a rigorous experimental design, reported that the program had no effect on student test score outcomes after three years.[33]

Another recent set of evaluations focused on Louisiana's statewide voucher program. It was launched in 2008 as a pilot program in New Orleans after Hurricane Katrina destroyed many TPSs, and it was expanded statewide in 2012. Now called the Louisiana Scholarship Program, the program provides public funds for students at low-performing TPSs from families with an income no more than 250% of the poverty line to attend private schools of their choice.[34] Leveraging a randomized lottery, the first of these studies found that in the first year after enrollment at a private school, students experienced lower math scores by 0.4 standard deviations (s.d.), with similar large and negative effects for reading, science, and social studies.[35] The authors speculated that the poor results may be a reflection of the lower quality of the private schools participating in the voucher program, as they charged lower tuition than other private schools in the state. Clearly, a school choice program should not be judged solely on the basis of first-year effects, especially since most programs require that students switch schools to participate. Therefore, using a similar approach but expanding the evaluation to four years after lotteries determined which applicants did and did not receive private school placements, a more recent evaluation reported that the large negative test score results in the first year diminished somewhat over time but persisted after four years.[36] The Louisiana Scholarship Program will sunset in 2025 and be replaced with a universal ESA program called Louisiana GATOR.

In Ohio, student eligibility to participate in the voucher program is partially based on attending a low-performing TPS. To evaluate this program, researchers used a creative matching approach in which voucher students were matched on observable characteristics to nonvoucher students from TPSs that were slightly above the performance cutoff for student eligibility.[37] Overall, much like the results for Louisiana, the authors found large negative effects in math test scores in the first year of approximately -0.5 s.d., which diminished somewhat to approximately -0.3 s.d. by the third year.

Finally, researchers examined Indiana's voucher program, which has expanded the income threshold for participation over time.[38] At the time of the analysis, Indiana had a relatively high income threshold. Presently, almost all families are eligible. The authors used a matching approach and found achievement losses of 0.15 s.d. in math during students' first year of attending a private school compared with matched students who remained in a public school, and this loss persisted even after four years of attending a private school. The effects in reading were null.

Key finding #2: *The non-test-score effects for students and families who use vouchers are consistently neutral to positive.*

Evaluators have studied the direct effects of private school choice programs on various non-test-score or "character" outcomes for both students and parents. We summarize their findings here.

Attainment

The effects of program participation on educational attainment, a measure of how far students advance in their schooling, are consistently neutral to positive. A study of initial participants in the DC OSP reconstructed the records of the voucher lotteries and estimated that the impact of the OSP on college enrollment was null.[39] Researchers examined the impact of the Louisiana Scholarship Program on the rate at which participating students enrolled in college. Benefiting from the award of scholarships by lottery, the study determined that the causal effect of the LSP on college enrollment was null for the overall sample of students but positive for the subsample of participants who started the program in high school.[40] The Indiana Scholarship Program was evaluated based on whether it affected measures of college and career readiness, including college enrollment within a year of high school graduation. Controlling for students' demographic background, this observational study, which makes it more difficult to rule out selection bias, reported that students in the voucher program were significantly less likely than TPS students ever to have failed a course or to be suspended and that they were 8 percentage points more likely to matriculate in college within a year of graduating from high school.[41] To date, no researchers have reported on the effects of the Ohio EdChoice program on educational attainment.

Chronic absenteeism

The most recent study of the DC OSP investigated the program's impacts on chronic absenteeism. Drawing on the rigor of random assignment, the study concluded that program participation reduced the likelihood of a student being chronically absent from school by over seven percentage points.[42] The program's impact on reducing chronic absenteeism was twice as large for older and lower-performing students than for the typical participant.[43]

Parent and student satisfaction and perceptions of safety

Most evaluations of private school choice programs in the U.S. have surveyed parents about their satisfaction with their child's school either across program and comparison groups or before and after starting the program. Out of 33 such studies, 31 report positive effects of school choice programs on parent satisfaction, while one reports no effects, and two report negative effects.[44] While these subjective responses by parents could be biased, as parents are likely to look more favorably on the performance of a school that they were responsible for choosing, an experimental study of parent satisfaction in the early years of the DC OSP found that levels of parent satisfaction with program participation were strongly associated with individual student test score gains.[45] The latest report on the DC voucher program indicated that after three years, the program had no impact on parent satisfaction but improved students' levels of satisfaction with their schools.[46] The same pattern of results held for parent and student perceptions of school safety.

Civic preparation

Schools of all types are charged with preparing the next generation of citizens. Recently, a research team conducted a statistical meta-analysis of the association between private schooling or private school choice programs and student and parent civic outcomes in the general areas of political tolerance, political participation, civic

knowledge and skills, and community engagement. Drawing from 57 qualified studies, mostly from the U.S., the team reported 531 findings, of which 32% indicated an advantage for private schooling, 60% demonstrated no difference between private and public schooling, and only 8% showed a public schooling advantage. For the seven experimental studies in the meta-analysis, the private schooling civic outcomes were similar to those of the public schooling control group, meaning that student self-selection cannot be ruled out as a possible driver of the private schooling civic advantage reported in the study.[47]

Among recent evaluations of large, statewide school voucher programs, only one study of the Louisiana Scholarship Program examined the program's impact on any civic outcome. It found no effect of the program on measures of student political tolerance after two years, but the authors cautioned that the data analyzed in the study were limited.[48]

Crime and mental health

Finally, several studies have examined the participant effects of private school choice programs on crime and mental health outcomes. None of them used experimental designs; hence, the results may not be causal. Two studies of the effect of the Milwaukee Parental Choice Program on crime outcomes report findings that range from no effect to some positive effects of this program, especially for students who attended private schools consistently throughout high school and on property crime, drug crime, and paternity suit outcomes.[49] A national study reports that state adoption of a school voucher program is not associated with differences in teen suicide rates; however, adults who were educated in private schools report lower rates of mental health problems as adults.[50]

Summary of student outcomes

Overall, there have been dozens of studies evaluating the participant effects of private school choice programs over time. However, most of these studies have evaluated small, geographically targeted, means-tested voucher programs with mixed results, at least regarding achievement effects. More recent studies of statewide programs with higher income thresholds have not been as positive on the test score side, though several findings on educational attainment have been positive. There is a disconnect in the school choice literature between the short-term effects of programs on student test scores and their long-term effects on educational attainment.[51] Because the set of studies is limited, it is too early to draw any strong conclusions about the effects of recent programs. However, these recent studies raise concerns regarding whether the latest vintage of private school choice programs is improving student outcomes. It is impossible to know whether the negative drift in the test score effects found in many recent private school choice evaluations is due to the use of state accountability tests in place of more neutral norm-referenced tests, problems in growing such programs to scale, broader student populations beyond the original set of disadvantaged students served by targeted programs, or the shift in studies from experimental to quasi-experimental approaches.

Key finding #3: *The systemwide effects of private school choice programs are generally positive or neutral.*

Systemic effects

At the level of the overall school system, private school choice programs could have positive or negative effects on both TPS student outcomes and TPS fiscal wellbeing. Theoretically, the main source of systemic effects is either through competitive pressure school choice programs create on existing TPSs or by denying TPSs the resources, including dedicated students and parents, that they need to stave off decline. One common argument against private school choice programs is that vouchers will divert money from TPSs and could ultimately adversely affect student learning at such schools. Systemic effects studies not only address whether these choice programs have a positive effect on TPS outcomes through competitive effects but also examine whether these programs have an adverse effect on those schools.

Most empirical studies conclude that competition from the launch or expansion of private school choice programs has neutral or positive effects on the test score outcomes of students who remain in affected TPSs. This conclusion suggests that these programs are at least not having adverse effects, as critics feared.[52] A recent statistical meta-analysis of the effect of school choice competition on test scores in TPSs concluded that any form of choice-based competition, whether from other TPS, charter schools, private schools or private school choice programs, had small positive effects on school-level measures of student performance. However, the study reported that the effects of competition were significantly higher if the source was a private school choice program.[53]

Research on large, statewide school voucher or tax-credit scholarship programs in Florida, Indiana, Louisiana, and Ohio mostly reports positive competitive effects of those initiatives on student test scores in TPSs, with effects that are modest in size. Since 2010, six studies have focused on Florida, with three examining its statewide voucher programs for students with disabilities or in low-performing public schools[54] and three analyzing its tax-credit scholarship program for low-income students.[55] Most of the findings reported by the six studies are of positive competitive effects of Florida's private school choice programs on the test scores of students in affected TPSs. However, one study reported negative competitive effects of the statewide program for students in low-performing schools but only in reading and only in some of the tested grades.[56] In contrast, the most recent study of the competitive effects of the private school choice programs in Florida reports achievement "gains for virtually all students," especially those from disadvantaged backgrounds.[57]

Recently, Ohio's statewide EdChoice voucher program has been the second most studied private school choice program regarding competitive effects. Since 2010, three separate research teams have released studies, all reporting positive effects of competition from the program on TPS test score outcomes.[58] The most recent study, drawing from data from the launch of the program in 2008 through 2019, concludes that competition from the statewide private school voucher program produced modest gains in the test score outcomes of TPS students.[59]

Less evidence regarding the competitive effects of the Indiana and Louisiana statewide voucher programs has been produced. One recent study of Indiana reported small positive competitive effects of the program limited to low-income students,[60] while a second study concluded that short-term competitive effects of the program are positive but that the long-term effects are negative.[61] The only competitive effects study of the Louisiana voucher program reports neutral to positive effects on TPS test score outcomes.[62]

Fiscal effects

The fiscal effects of a private school choice program on a specific school district are a function of how many students transfer out of the district, how much school funding is enrollment driven, the delay between the time a student transfers from a district and the time the district loses the funding (i.e., the "hold harmless" period), and the economies of scale that the school realizes due to its higher previous enrollment levels. There are few studies on this question. One study concluded that contextual factors, such as the student population served by a school, have a major effect on the fiscal implications of a universal ESA program, such as the program recently adopted in Arkansas. The report noted that approximately half the districts in the state will experience fiscal benefits from the program, while the other half will experience fiscal harm.[63]

The fiscal effects of a private school choice program on a state are a function of how much less the voucher, scholarship, or ESA is relative to what the state would spend on the student in their TPS (i.e., the funding differential), the value of the voucher, scholarship, or ESA to students who do not or will not attend a public school (i.e., the private schooler subsidy), and the proportion of students entering the program from public schools (i.e., the "switcher rate"). Targeted programs (e.g., means tested programs) tend to generate fiscal savings for the state, especially if students must switch out of a public school to be eligible (i.e., the "switcher rate" is 100%). One study estimates that the 40 targeted private school choice programs that operated through fiscal year 2018 "generated an estimated $12.4 billion to $28.3 billion in cumulative net fiscal savings for state and local taxpayers."[64] Programs in which most students switch out of public schools tend to generate fiscal benefits, while programs in which most participants are current private school students tend to generate additional fiscal costs to the state.

Thus, the fiscal effects of a private school choice program are dependent on key aspects of policy design that vary across programs, including the value of the voucher, scholarship or ESA relative to per-pupil funding in public schools, the proportion of program participants who switch from public to private schools, and any policies in place that soften or delay the financial impact from enrollment losses in public school districts.

Key finding #4: *Theoretically, private school choice programs can affect the stratification of students across schools by race/ethnicity, income, religion, and ability, but the results are mixed and often unreliable.*

Theoretically, private school choice programs could affect the stratification of students across schools by race/ethnicity, income, religion, and ability. To best evaluate the effect

of these programs on student stratification, it is important to identify an appropriate counterfactual—what the distribution of students would be without the existence of the program. From this perspective, an evaluation that simply compares the racial makeup of students participating in a private school choice program relative to a statewide or districtwide average is not appropriate, as participating students are not a random sample of students from a district or state. Examples of appropriate evaluations include analyses that compare the racial makeup of the private school that a student enters relative to the TPS that the student exited. The TPS that a student exits represents a reasonable counterfactual for the student. For instance, to examine whether a choice program is leading private schools to cream skim the best students from a TPS, an appropriate evaluation would examine whether a student exiting the TPS is above average relative to the students enrolled in the TPS that the student exited. Finally, to understand systemic effects rather than taking a micro perspective of the differences for individual students, we can examine the differences in racial makeup for nearby TPSs before and after private schools admit students from a choice program. In our review, we focus on studies that have appropriate counterfactuals. Studies of religious stratification in school choice programs are especially limited by the lack of an appropriate counterfactual, as TPSs are prevented by law from collecting information about students' or parents' religion.

Early voucher programs targeted students with special needs, low-income students, or students attending low-performing public schools. They were designed to attract a distinctive but not a diverse population. Nevertheless, previous summaries of the literature concluded that the evidence regarding the student stratification effects of private school choice programs is mixed.[65] Among more recent studies of statewide programs, the results are again mixed.

In an evaluation of Louisiana's voucher program, researchers examined whether a move of a student utilizing a voucher made the receiving and sending schools more representative of the racial mix of the metropolitan area. They found that voucher students made the TPSs that they exited more racially representative but made the private schools that they entered less representative.[66] The most common moves involved racial or ethnic minority students leaving majority-minority public schools for majority-minority private schools. In a follow-up study of Louisiana, researchers examined whether there is evidence of private-school cream skimming by comparing the characteristics of those who applied and those who used the vouchers. They found that program applicants were more disadvantaged than the average TPS student and that an applicant's family background and prior test scores did not influence whether the applicant would use or decline the voucher.[67] They reported that students with disabilities were less likely to take up a voucher if offered one, a consistent finding regarding means-tested school choice programs that gave rise to dozens of programs specifically targeting students with disabilities. Finally, they found no evidence of private schools pushing out low-performing students.

For Ohio's statewide programs, researchers found that relative to pupils who are eligible for vouchers but choose not to use them, voucher users are slightly higher achieving and less economically disadvantaged.[68] Finally, in a study of Indiana's voucher program, researchers examined whether there is evidence consistent with the claim that the voucher program was cream skimming the best students from TPSs and

pushing out the lowest-performing students. For the cream skimming analysis, the authors examined whether students entering the voucher program had above-average test scores, had fewer disciplinary incidents, or were less likely to be classified as either an English language learner or a special education student relative to their previous voucher-eligible peers in TPSs. To analyze whether private schools are pushing out low-performing students, the authors examined whether students exiting the voucher program had below-average test scores or were more likely to be classified as either an English language learner or a special education student relative to their former voucher peers in the private schools that they exited. The authors did not report evidence consistent with the claim of cream skimming; however, they reported evidence indicating private schools may be pushing out the lowest-achieving voucher students.[69]

The evidence on student stratification by race is different from that on stratification based on other characteristics, including ability. For racial stratification due to private school choice programs, studies using rigorous designs are lacking. Among the rigorous studies, there is little evidence that these programs create greater racial stratification. Regarding stratification across other dimensions, there is slightly more evidence. One consistent result among studies is that students with disabilities are less likely to utilize programs that are not specifically designed for them. However, there is little evidence that these programs are cream skimming across other student characteristics, and there is mixed evidence on whether private schools are pushing out low-performing students. Overall, it is difficult to draw strong conclusions regarding the student stratification effects of private school choice programs, as more rigorous research, especially on recently implemented statewide and/or universal programs, is needed.

Studies of student stratification by religion in private school choice programs are rare, largely due to data limitations that prevent researchers from making careful comparisons with the level of religious diversity in TPSs. A few studies of religious stratification in means-tested urban voucher programs report a substantial amount of student religious diversity in religious private schools, not only because Catholic schools constitute the largest single type of private school in most cities but also because religious schools representing a variety of faith traditions have a distinctive school "brand" that is attractive even to people of other faiths.[70]

Conclusions

Given the evidence of mixed achievement effects for students who participate in private school choice programs, some positive attainment and character effects, and small competitive effects, as well as the general dearth of reliable evidence on student stratification, what are we to make of the overall performance of private school choice programs? Our view is that neither the hopes of advocates nor the fears of critics have been totally realized. Much of one's view may be a function of one's expectations. If one expects private school choice programs to be a "silver bullet," as some advocates have claimed, then their actual performance, especially regarding participant test score outcomes, could be seen as a disappointment. If, instead, one expects that providing public support for parents to choose private schools will undermine the ability of public

schools to educate students effectively, as some critics claim, then the evidence so far regarding positive competitive effects could be seen as a pleasant surprise.

Endnotes and references

[1]Friedman, Milton. 1955. The Role of Government in Education. In Economics and the Public Interest. Edited by Robert A. Solo. Binghamton, NY: Vail-Ballou Press, Inc. 124–144.
[2]Wolf, P. J. 2008. Vouchers. In *The International Encyclopedia of Education*. Edited by G. McCulloch and D. Crook. London: Routledge. 635–636.
[3]Stanford, Libby, Mark Lieberman, and Victoria A. Ifatusin. Which States Have Private School Choice? Education Week. Last modified January 31, 2024. Updated September 12, 2024.
[4]Ibid.
[5]Ibid.
[6]Erwin, Ben. 2024. 50-State Comparison: Private School Choice. Education Commission of the States. January 24. Education Level: K-12.
[7]EdChoice. School Choice in America. Accessed November 18, 2024. Education Commission of the States. Private School Choice: Vouchers 2024. Accessed September 22, 2024.
[8]Ibid.
[9]Ibid.
[10]Ibid.
[11]Aldis, Alli. 2024. One Million Students in School Choice Programs, by the Numbers. EdChoice, June 18.
[12]Erwin (2024).
[13]EdChoice. Maine Town Tuitioning Program. Last updated December 2023. Accessed September 22, 2024.
[14]EdChoice. Vermont Town Tuitioning Program. Last updated December 2023. Accessed September 22, 2024.
[15]EdChoice. Wisconsin Milwaukee Parental Choice Program. Last updated December 2023. Accessed September 22, 2024.
[16]EdChoice. 2023. *2024 ABCs of School Choice*. November.
[17]Ibid.
[18]Jackson, C. Kirabo, and Claire L. Mackevicius. 2024. What Impacts Can We Expect from School Spending Policy? Evidence from Evaluations in the United States. *American Economic Journal: Applied Economics* 16(1): 412–464. See also McGee, J. B. 2023. Yes, Money Matters, But the Details Can Make All the Difference. *Journal of Policy Analysis and Management* 42(4): 1125–1132.
[19] DeAngelis, C. A., L. M. Burke, P. J. Wolf, and A. K. Dills. 2023. "The Effect of Regulations on Private School Choice Program Participation: Experimental evidence from the United States". *Research in Educational Administration & Leadership* 8(1): 142–186.
[20] Greene, J. P., and M. A. Winters. 2006. *An Evaluation of the Effects of D.C.'s Voucher Program on Public School Achievement and Racial Integration after One Year* (Education Working Paper No. 10). Center for Civic Innovation, Manhattan Institute. January.
[21]EdChoice. Missouri Empowerment Scholarship Accounts Program. Last updated December 2023. Accessed September 22, 2024.
[22]EdChoice. Tennessee Education Savings Account Pilot Program. Last updated May 2023. Accessed September 22, 2024.
[23]EdChoice. Maine Town Tuitioning Program.
[24]EdChoice. School Choice in America Dashboard. Accessed September 22, 2024.
[25]Zimmer, R., and E. Bettinger. 2015. Beyond the Rhetoric: Surveying the Evidence on Vouchers and Tax Credits. In *Handbook of Research in Education Finance and Policy*, 2nd Edition. Edited by Helen Ladd and Margaret Goertz. London: Routledge; Egalite, A. J., and P. J. Wolf. 2016. A Review of the Empirical Research on Private School Choice. *Peabody Journal of Education* 91(4): 441–454; Epple, D., R. E. Romano, and M. Urquiola. 2017. School Vouchers: A Survey of the Economic Literature. *Journal of Economic Literature* 55(2): 441–492; Shakeel, M. D., K. P. Anderson, and P. J. Wolf. 2021. The Participant Effects of

Private School Vouchers Around the Globe: A Meta-analytic and Systematic Review. *School Effectiveness and School Improvement* 32(4): 509–542; Jabbar, H., C. J. Fong, J. Germain, D. Li, J. Sanchez, W. Sun, and M. Devall. 2022. The Competitive Effects of School Choice on Student Achievement: A Systematic Review. *Educational Policy* 36(2): 247–281.

[26]See Epple et al. (2017) for a review of this literature, as well as Betts, J. 2005. Understanding the Economic Theory of School Choice. In *Getting Choice Right: Ensuring Equity and Efficiency in Education Policy*. Edited by J. Betts and T. Loveless. Washington, DC: Brookings Institution Press. 14–39.

[27]Greene, J. P., P. E. Peterson, and J. Du. 1997. *Effectiveness of School Choice: The Milwaukee Experiment.* Cambridge, MA: Program on Education Policy and Governance, Harvard University; Rouse, C. E. 1998. Private School Vouchers and Student Achievement: An Evaluation of the Milwaukee Parental Choice Program. *Quarterly Journal of Economics* 113: 553–602; Witte, J. F., P. J. Wolf, J. M. Cowen, D. Carlson, and D. F. Fleming. 2014. High Stakes Choice: Achievement and Accountability in the Nation's Oldest Urban Voucher Program. *Educational Evaluation and Policy Analysis* 36(4): 437–456; Belfield, C. R. 2006. The Evidence on Educational Vouchers: An Application to the Cleveland Scholarship and Tutoring Program. New York: National Center for the Study of Privatization in Education. Teacher College; Wolf, P., B. Gutmann, M. Puma, B. Kasida, L. Rizzo, N. Eissa, and M. Carr. 2010. *Evaluation of the D.C. Opportunity Scholarship Program: Final Report* (NCEE 2010-4018). Washington, D.C.: National Center for Education Evaluation and Regional Assistance, Institute for Education Sciences, U.S. Department of Education; Howell, W. G., P. J. Wolf, P. E. Peterson, and D. E. Campbell. 2001. Vouchers in New York, Dayton, and D.C. *Education Next* 1(2): 46–54; Greene, J. P. 2001. Vouchers in Charlotte. *Education Next* 1(2): 55–58.

[28]Zimmer and Bettinger (2015); Egalite, Anna J., Jonathan N. Mills, and Patrick J. Wolf. 2016. The Impact of the Louisiana Scholarship Program on Racial Segregation in Louisiana Schools. Education Research Alliance for New Orleans. Accessed 23 September 2024; Epple et al. (2017); Jabbar et al. (2022).

[29] Jabbar et al. (2022).

[30] Shakeel, M. Danish, and Paul E. Peterson. A Half Century of Student Progress Nationwide. Education Next, Fall. 2022. Accessed 23 September 2024.

[31]Wolf, P. J. 2019. What Happened in the Bayou? Examining the Effects of the Louisiana Scholarship Program. *Education Next* 19(4): 48–56.

[32]Ibid.

[33]Webber, A., N. Rui, R. Garrison-Mogren, R. B. Olsen, B. Gutmann, and M. Bachman. 2019. *Evaluation of the DC Opportunity Scholarship Program: Impacts Three Years After Students Applied* (NCEE-2019-4006). Washington, D.C.: National Center for Education Evaluation and Regional Assistance, Institute for Education Sciences, U.S. Department of Education.

[34]Wolf, P. J., J. N. Mills, Y. Sude, H. H. Erickson, and M. L. Lee. 2019. *How Has the Louisiana Scholarship Program Affected Students? A Comprehensive Summary of Effects after Four Years.* School Choice Demonstration Project, University of Arkansas, Fayetteville, AR. April.

[35]Abdulkadiroglu, A., P. P. Pathak, and C. R. Walters. 2015. School Vouchers and Student Achievement: Evidence from the Louisiana Scholarship Program (NBER Working Paper No. 21839).

[36]Erickson, H. H., J. N. Mills, and P. J. Wolf. 2021. The Effects of the Louisiana Scholarship Program on Student Achievement and College Entrance. *Journal of Research on Educational Effectiveness* 14(4): 861–899.

[37]Figlio, D., and K. Karbownik. 2016. *Evaluation of Ohio's EdChoice Scholarship Program: Selection, Competition, and Performance Effects.* Washington, DC: Thomas B. Fordham Institute.

[38]Waddington, R. J. and M. Berends. 2018. Impact of the Indiana Scholarship Program: Achievement Effects for Students in Upper Elementary and Middle School. *Journal of Policy Analysis and Management* 37(4): 783–808.

[39]Chingos, M., and B. Kisida. 2023. School vouchers and College Enrollment: Experimental Evidence From Washington, DC. *Educational Evaluation and Policy Analysis* 45(3): 422–436.

[40]Erickson et al. (2021).
[41]Austin, M. J., and M. Pardo. 2021. Do College and Career Readiness and Early College Success in Indiana Vary Depending on Whether Students Attend Public, Charter, or Private Voucher High Schools? (REL 2021-071). Regional Educational Laboratory Midwest, National Center for Education Evaluation and Regional Assistance, Institute for Education Sciences, U.S. Department of Education.
[42] Webber et al. (2019).
[43]Ibid.
[44]EdChoice. *123s of School Choice*. July 10, 2023.
[45]Kisida, B., and P. J. Wolf. 2015. Customer Satisfaction and Educational Outcomes: Experimental Impacts of the Market-Based Delivery of Public Education. *International Public Management Journal* 18(2): 265–285.
[46] Webber et al. (2019).
[47]Shakeel, M. D., P. J. Wolf, A. H. Johnson, M. A. Harris, and S. R. Morris. 2024. The Public Purposes of Private Education: A Civic Outcomes Meta-Analysis. *Educational Psychology Review, Online First*.
[48]Mills, J. N., A. Cheng, C. E. Hitt, P. J. Wolf, and J. P. Greene. Measures of Student Non-Cognitive Skills and Political Tolerance After Two Years of the Louisiana Scholarship Program. Education Research Alliance for New Orleans and School Choice Demonstration Project, February 22, 2016.
[49]DeAngelis, C. A., and P. J. Wolf. 2019. Private School Choice and Crime: Evidence from Milwaukee. *Social Science Quarterly* 100(6): 2302–2315; DeAngelis, C. A., and P. J. Wolf. 2020. Private School Choice and Character: More Evidence from Milwaukee. *Journal of Private Enterprise* 35(3): 13–48.
[50]DeAngelis, C. A., and A. K. Dills. 2020. The Effects of School Choice on Mental Health. *School Effectiveness and School Improvement* 32(2): 326–344.
[51]Wolf, P. J., C. Hitt, and M. Q. McShane. Exploring the Achievement-Attainment Disconnect in the Effects of Private School Choice Programs. Learning from the long-term effects of school choice in America. Program on Education Policy and Governance, Harvard University, Cambridge, MA. April 19, 2018. See also Hitt, C., P. J. Wolf, and M. Q. McShane. 2018. Achievement versus Attainment: Are School Choice Evaluators Looking for Impacts in the Wrong Place? In *School Choice at the Crossroads: Research Perspectives*. Edited by M. Berends, R. J. Waddington, and J. A. Schoenig. New York: Routledge. 173–185.
[52]Studies since 2010 include Bowen, D. H., and J. R. Trivitt. 2014. Stigma Without Sanctions: The (Lack of) Impact of Private School Vouchers on Student Achievement. *Education Policy Analysis Archives* 22(87): 1–19; Carr, M. 2011. The Impact of Ohio's EdChoice on Traditional Public School Performance. *Cato Journal* 31(2): 257–284; Chakrabarti, R. 2013. Vouchers, Public School Response, and the Role of Incentives: Evidence from Florida. *Economic Inquiry* 51(1): 500–526; Egalite, A. J., and D. Catt. Competitive Effects of the Indiana Choice Scholarship Program on Traditional Public School Achievement and Graduation Rates (Working Paper 2020-3). *EdChoice*; Egalite, A. J., and J. N. Mills. 2021. Competitive Impacts of Means-tested Vouchers on Public School Performance: Evidence from Louisiana. *Education Finance and Policy* 16(1): 66–91; Figlio, D. N., and C. M. D. Hart. 2014. Competitive Effects of Means-tested School Vouchers. *American Economic Journal: Applied Economics* 6(1): 133–156; Figlio, D. N., C. M. D. Hart, and K. Karbownik. 2020. Effects of Scaling up Private School Choice Programs on Public School Students (Working paper 26758). National Bureau of Economic Research, Cambridge, MA; Figlio, D. N. and K. Karbownik. 2016. *Evaluation of Ohio's EdChoice Scholarship Program.* Washington, DC: Thomas B. Fordham Institute; Garen, J. 2023. Enhancing Economic Freedom via School Choice and Competition: Have State Laws Been Enabling Enough to Generate Broad-Based Effects? *American Journal of Economics and Sociology*, Online First: 1–24; Gray, N. L., J. D. Merrifield, and K. A. Adzima. 2016. A Private Universal Voucher Program's Effects on Traditional Public Schools. *Journal of Economics and Finance* 40(2): 319–344; Mader, N. S. 2010. School Choice, Competition, and Academic Quality: Essays on the Milwaukee Parental Choice Program. Unpublished

Dissertation. Madison, WI: University of Wisconsin; Rouse, C., J. Hannaway, D. Goldhaber, and D. N. Figlio. 2013. Feeling the Florida Heat: How Low Performing Schools Respond to Voucher and Accountability Pressure. *American Economic Journal: Economic Policy* 5(2): 251–281.

[53] Jabbar et al. (2022).

[54] Winters, M. A., and J. P. Greene. 2011. Public School Response to Special Education Vouchers: The Impact of Florida's McKay Scholarship Program on Disability Diagnosis and Student Achievement in Public Schools. *Educational Evaluation and Policy Analysis* 33(2): 138–158; Chakrabarti, Rajashri. 2013. Do Vouchers Lead to Sorting Under Random Private School Selection? Evidence from the Milwaukee Voucher Program. *Economics of Education Review* 34: 31–44; Bowen and Trivitt (2014).

[55] Rouse et al. (2013); Figlio and Hart (2014); Figlio et al. (2020).

[56] Bowen and Trivitt (2014).

[57] Figlio, D., C. M. D. Hart, and K. Karbownik. 2020. The Ripple Effect: How Private-school Choice Programs Boost Competition and Benefit Public-School Students. *Education Next* 22(1).

[58] Carr, M., M. Holley, and N. Gray. 2014. Understanding School Voucher Program Research: A Failure of Theory or Implementation? *International Journal of Educational Reform* 23(4): 242–257; Figlio et al. (2020); Lavertu, Stéphane, and John J. Gregg. The Ohio EdChoice Program's Impact on School District Enrollments, Finances, and Academics. Foreword by Aaron Churchill and Chad L. Aldis. *EdChoice*, December 14, 2022.

[59] Lavertu and Gregg (2022).

[60] Egalite and Catt.

[61] Canbolat, Yusuf. 2021. The Long-Term Effect of Competition on Public School Achievement: Evidence from the Indiana Choice Scholarship Program. *Education Policy Analysis Archives* 29.

[62] Egalite, Anna J., and Jonathan N. Mills. 2021. Competitive Impacts of Means-Tested Vouchers on Public School Performance: Evidence from Louisiana. *Education Finance and Policy* 16(1): 66–91.

[63] Trivitt, J. R., and C. DeAngelis. State and District Fiscal Effects of a Universal Education Savings Account Program in Arkansas (EDRE Working Paper No. 2017-04). *Social Science Research Network*, January 2017.

[64] Lueken, M. F. Fiscal Effects of School Choice: Analyzing the Costs and Savings of Private School Choice Programs in America. *EdChoice* November 3, 2021.

[65] Epple et al. (2017); Zimmer and Bettinger (2015).

[66] Egalite, A. J., J. N. Mills, and P. J. Wolf. 2017. The Impact of Targeted School Vouchers on Racial Stratification in Louisiana Schools. *Education and Urban Society* 49(3): 271–296.

[67] Sude, Y., and P. J. Wolf. 2019. Do You Get Cream with Your Choice? Characteristics of Students Who Moved into or out of the Louisiana Scholarship Program (EDRE Working Paper No. 2019-13). Social Science Research Network.

[68] Figlio et al. (2020).

[69] Waddington, R. J., R. Zimmer, and M. Berends. 2023. Cream Skimming and Pushout of Students Participating in a Statewide Private School Voucher Program. *Educational Evaluation and Policy Analysis, Online First.*

[70] Trivitt, J., and P. J. Wolf. 2011. School Choice and the Branding of Catholic Schools. *Education Finance and Policy* 6(2): 202–245; Cheng, A., J. R. Trivitt, and P. J. Wolf. 2016. School Choice and the Branding of Milwaukee Private Schools. *Social Science Quarterly* 97(2): 362–375.

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